



WORKING
FROM
WITHIN

*The Nature and Development
of Quine's Naturalism*

SANDER VERHAEGH

Working from Within

Working from Within

*The Nature and Development
of Quine's Naturalism*

SANDER VERHAEGH

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trade mark of Oxford University Press in the UK and certain other countries.

Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America.

© Oxford University Press 2018

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, by license, or under terms agreed with the appropriate reproduction rights organization. Inquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above.

You must not circulate this work in any other form
and you must impose this same condition on any acquirer.

Library of Congress Cataloging-in-Publication Data
Names: Verhaegh, Sander, author.

Title: Working from within : the nature and development of Quine's naturalism /
Sander Verhaegh.

Description: New York, NY, United States of America : Oxford University Press, [2018] |

Includes bibliographical references and index.

Identifiers: LCCN 2018016072 (print) | LCCN 2018028844 (ebook) |
ISBN 9780190913168 (online content) | ISBN 9780190913175 (updf) |
ISBN 9780190913182 (epub) | ISBN 9780190913151 (cloth : alk. paper)

Subjects: LCSH: Quine, W. V. (Willard Van Orman) | Naturalism.

Classification: LCC B945.Q54 (ebook) | LCC B945.Q54 V47 2018 (print) |
DDC 191—dc23

LC record available at <https://lccn.loc.gov/2018016072>

1 3 5 7 9 8 6 4 2

Printed by Sheridan Books, Inc., United States of America

Cover picture by Marjorie Boynton Quine (1947). Reprinted with permission from
Douglas B. Quine, Ph.D., Quine Literary Estate.

It is understandable [...] that the philosopher should seek a transcendental vantage point, outside the world that imprisons [the] natural scientist and mathematician. He would make himself independent of the conceptual scheme which it is his task to study and revise. "Give me $\pi\omicron\upsilon$ $\sigma\tau\omega$ [a place to stand]," Archimedes said, "and I will move the world." However, there is no such cosmic exile. [...] The philosopher is in the position rather, as Neurath says, "of a mariner who must rebuild his ship on the open sea."

—W. V. Quine (notes for *Sign and Object*, November 5, 1944)

CONTENTS

Preface xi

List of Abbreviations xv

1. Introduction 1

- 1.1. HISTORICAL BACKGROUND 1
- 1.2. NATURALISM AND ANALYTIC PHILOSOPHY 4
- 1.3. WORKING FROM WITHIN 6
- 1.4. READING QUINE IN HISTORICAL CONTEXT 8
- 1.5. PLAN 10

PART I NATURE

2. Naturalizing Epistemology 15

- 2.1. INTRODUCTION 15
- 2.2. FROM CERTAINTY TO STRAIGHT PSYCHOLOGY 18
- 2.3. TWO STRATEGIES 24
- 2.4. SELF-SUFFICIENT SENSORY LANGUAGES 26
- 2.5. QUINE'S RESPONSE TO THE SKEPTIC 30
- 2.6. REINTERPRETING "EPISTEMOLOGY NATURALIZED" 32

3. Naturalizing Metaphysics 36

- 3.1. INTRODUCTION 36
- 3.2. INTERNAL AND EXTERNAL EXISTENCE CLAIMS 39
- 3.3. TWO DISTINCTIONS 42

- 3.4. QUINE ON METAPHYSICAL EXISTENCE CLAIMS 46
- 3.5. SCIENTIFIC SENSE AND METAPHYSICAL NONSENSE 50
- 3.6. CONCLUSION 53

4. *In Mediis Rebus* 54

- 4.1. INTRODUCTION 54
- 4.2. THREE COMMITMENTS 56
- 4.3. A QUIRK OF USAGE 62
- 4.4. DEFLATION, DEFLATION, DEFLATION 66
- 4.5. THE BOUNDS OF SCIENCE 69
- 4.6. IMMANENCE AND TRANSCENDENCE 71
- 4.7. ARTIFICIAL LANGUAGES 74
- 4.8. CONCLUSION 75

PART II DEVELOPMENT

5. *Sign and Object* 79

- 5.1. INTRODUCTION 79
- 5.2. PHILOSOPHICAL BACKGROUND 81
- 5.3. STARTING AT THE MIDDLE 84
- 5.4. THE NATURE OF METAPHYSICAL JUDGMENTS 85
- 5.5. A PRAGMATIC INTERPRETATION OF POSITIVISM 88
- 5.6. THE PHILOSOPHER'S TASK 90
- 5.7. TWO PROBLEMS 93
- 5.8. "TWO DOGMAS" 96
- 5.9. LANGUAGE AND KNOWLEDGE 100
- 5.10. CONCLUSION 101

6. Analytic and Synthetic 103

- 6.1. INTRODUCTION 103
- 6.2. EARLY DEVELOPMENTS 106
 - 6.2.1. Narrow and Wide Holism 106
 - 6.2.2. Mathematical Objects and Mathematical Knowledge 111
 - 6.2.3. The Principle of Tolerance 114
 - 6.2.4. A Behavioristically Acceptable Definition 116

6.2.5. Triangular Correspondence	120
6.2.6. Quine on Asemiotism	122
6.3. AFTER “TWO DOGMAS”	125
6.3.1. “The Whole of Science”	127
6.3.2. Maximal Integration	129
6.3.3. Universal Revisability	132
6.3.4. Maximal Inclusion	136
6.4. CONCLUSION	139
7. Science and Philosophy	141
7.1. INTRODUCTION	141
7.2. ORDINARY LANGUAGE AND THE LANGUAGE OF SCIENCE	142
7.3. PHILOSOPHY AND SCIENCE; SCIENCE AND PHILOSOPHY	147
7.4. THE RECEPTION OF QUINE’S NATURALISM	151
7.5. ADOPTING AN “ISM”	155
7.6. CONCLUSION	161
8. Conclusion	162
<i>Appendix</i>	165
A.1. <i>Editorial Introduction</i>	165
A.1.1. <i>Editorial Remarks</i>	166
A.2. <i>Logic, Mathematics, Science (1940)</i>	167
A.3. <i>Sign and Object; or, The Semantics of Being (1944)</i>	172
A.3.1. <i>The Reality of the External World</i>	172
A.3.2. <i>Things and Events</i>	173
A.4. <i>An Extensionalist Definition of Meaning (1949)</i>	177
A.5. <i>The Present State of Empiricism (1951)</i>	180
A.6. <i>The Sophisticated Irrational (1965)</i>	189
<i>Bibliography</i>	191
<i>Index</i>	209

PREFACE

This book is the result of almost nine years of thinking and writing about Quine's naturalism. The project started with a term paper on the Carnap-Quine debate for Jeanne Peijnenburg's inspiring course on the history of analytic philosophy in 2008 and gradually evolved into a dissertation about the relation between holism and naturalism in Quine's philosophy, which I defended in Groningen in 2015. Encouraged by the warm support of my colleagues and a number of fellow Quine scholars, I spent the last three years revising and extending the manuscript. Having acquired a serious case of "archive fever," a significant chunk of this period was spent at the W. V. Quine Papers at Houghton Library, Harvard University. Using his published corpus as well as thousands of letters, notes, draft manuscripts, lectures, grant proposals, teaching materials, and annotations collected at the archives, I have aimed to write a book that reconstructs both the nature and the development of Quine's naturalism. The notes, letters, and lectures that have most influenced my views about (the development of) Quine's naturalism are transcribed and collected in the appendix.

Parts of this book have been published elsewhere. I thank the respective journals for granting me permission to reprint these papers:

Quine's argument from despair (2014). *British Journal for the History of Philosophy*, 22(1), 150–73. (Chapter 2)

Blurring boundaries: Carnap, Quine, and the internal-external distinction (2017). *Erkenntnis*, 82(4), 873–90. (Chapter 3)

Boarding Neurath's boat: The early development of Quine's naturalism (2017). *Journal for the History of Philosophy*, 55(2), 317–42. (Sections 4.1–4.2, 6.2, and 6.6)

Quine on the nature of naturalism (2017). *Southern Journal of Philosophy*, 55(1), 96–115. (Section 4.5)

Sign and object: Quine's forgotten book project (forthcoming). *Synthese*. <https://doi.org/10.1007/s11229-018-1693-z>. (Chapter 5)

Quine's "needlessly strong" holism (2017). *Studies in History and Philosophy of Science, Part A*, 61(1), 11–20. (Sections 6.8–6.11)

Setting sail: The development and reception of Quine's naturalism (forthcoming). *Philosophers' Imprint*. (Chapter 7)

Still, this book aims to be more than a collection of papers. Many sections have been revised, extended, and rewritten for the purposes of this book. Moreover, an introductory chapter, a conclusion, several new sections (i.e., 4.3–4.4, 4.6–4.8, 5.5, 6.3–6.5, 6.7), and an appendix have been included to fill the gaps and to present a comprehensive account of Quine’s naturalism.

Much of this research has been funded by the Netherlands Organisation for Scientific Research (grants 322-20-001 and 275-20-064). My research visits to Harvard University, Houghton Library, Bethel, Connecticut, and the Harvard University Archives have been funded by a Kristeller-Popkin Travel Fellowship from the *Journal of the History of Philosophy*, a Rodney G. Dennis Fellowship in the Study of Manuscripts from Houghton Library, and a Travel Bursary from the Evert Willem Beth Foundation. I am very grateful for this financial support.

Finally, it is my great pleasure to thank the many people without whom I could not have completed this book: Jeanne Peijnenburg, Allard Tamminga, Lieven Decock, Gary Ebbs, Hans-Johann Glock, Peter Hylton, Gary Kemp, Fred Muller, Martin Lenz, and two anonymous referees for Oxford University Press who commented on earlier versions of this book; Harvard’s Department of Philosophy, Nyasha Borde, Monique Duhaime, Juliet Floyd, Warren Goldfarb, Leslie Morris, Mark Richard, Thomas Ricketts, and the staff at Houghton Library and the Harvard University Archives for their warm welcome during my research visits; Douglas and Maryclaire Quine for welcoming me into their house to examine the remaining fifty-seven boxes of unprocessed archive material; Hannah Doyle, Lucy Randall, Richard Isomaki, Leslie Johnson, and Tharani Ramachandran at Oxford University Press and Newgen for smoothly guiding my manuscript through the editing and production process; Jody Azzouni, Richard Creath, Fons Dewulf, Dagfinn Føllesdal, James Levine, Eric Schliesser, Andrew Smith, Serdal Tumkaya, Thomas Uebel, Wim Vanrie, the members of the EPS seminar in Tilburg, the members of the PCCP and the WiP seminars in Groningen, and audiences in Amsterdam, Athens, Bloomington, Bologna, Calgary, Chicago, Denver, Edinburgh, Groningen, Konstanz, Manchester, Milan, Modena, Munich, Rotterdam, Tampa, Tilburg, and Zurich for their comments on various papers and chapters in various stages; Reto Gubelmann, Frederique Janssen-Lauret, Gary Kemp, and Sean Morris for their wonderful Quine workshops in Denver, Glasgow, Manchester, and Zurich; and Douglas B. Quine (W. V. Quine Literary Estate) and Catherine Z. Elgin (Literary executor for Nelson Goodman) for granting me permission to publish some of Quine’s and Goodman’s papers, notes, and letters in an appendix to this book. Of course, the above individuals do not necessarily agree with my conclusions, and they are not responsible for any residual errors or omissions.

A note on citation and transcription: Unless specified differently, the unpublished documents I refer to in this book are part of the W. V. Quine Papers, collection MS Am 2587, Houghton Library, Harvard University. In the main text and in the footnotes, I refer to these documents by citing dates (if known) and item numbers. A letter of Quine to the American Philosophical Association, for example, could be referred to as (January 1, 1950, item 31). For quick reference, the item numbers are listed in the list of abbreviations. The items' full titles and box numbers are provided in the bibliography. In transcribing Quine's autograph notes, drafts, and letters, I have aimed to minimize editorial interference and chosen not to correct ungrammatical shorthand. In referring to Quine's *published* work, I use abbreviations (listed in the list of abbreviations) as well as the year in which the paper or book was first published. If the paper is incorporated in one of Quine's collections of papers, the page numbers will refer to this collection. The first page of "Two Dogmas of Empiricism," for example, will be referred to as (TDE, 1951a, 20). The details of Quine's published work cited in this book are provided in the bibliography.

In his autobiography, *The Time of My Life*, Quine argues that science and history of science appeal to very different tempers: "An advance in science resolves an obscurity, a tangle, a complexity, an inelegance, that the scientist then gratefully dismisses and forgets. The historian of science tries to recapture the very tangles, confusions, and obscurities from which the scientist is so eager to free himself" (TML, 1985a, 194). I hope this book accomplishes a bit of both; although I will show that Quine faced many tangles, confusions, and obscurities in developing his naturalism, I also hope to convey that the system he created is one of great clarity and elegance.

Sander Verhaegh
June 2018

ABBREVIATIONS

This section provides a list of abbreviations used in this book to refer to W. V. Quine's published and unpublished work. Detailed references can be found in the bibliography. A complete list of Quine's publications up to approximately 1997 (including reprints and translations) can be found in Yeghiayan (2009). For an overview of papers, books, reprints, and translations after 1997, see Douglas B. Quine's website <http://www.wvquine.org>. Most of Quine's unpublished papers, letters, lectures, and notebooks can be accessed at Houghton Library, Harvard University. The documents' call numbers, box numbers, and item numbers are provided in the bibliography. A finding aid for much of Quine's unpublished work can be found at <http://oasis.lib.harvard.edu/oasis/deliver/~hou01800>. Archival sources from Quine's unprocessed papers, Quine's library, and the papers of Nelson Goodman are not listed here because they are not properly itemized. Details about these sources are listed in the bibliography.

Archival Sources

Item 31	Correspondence with the American Philosophical Association (1936–1986)
Item 40	Correspondence Ap- through As- (various dates)
Item 86	Correspondence with Lars Bergström (1988–1996)
Item 96	Correspondence with Evert Willem Beth (1947–1964)
Item 205	Correspondence with the Center for Advanced Study in the Behavioral Sciences (1955–1979)
Item 224	Correspondence with Alonzo Church (1935–1994)
Item 231	Correspondence with Joseph T. Clark (1951–1953)
Item 234	Correspondence Co- (various dates)
Item 248	Correspondence with Columbia University (1949–1970)

- Item 254 Correspondence with James Bryant Conant (1951–1979)
- Item 260 Correspondence with John Cooley (1932–1962)
- Item 270 Correspondence with Richard Creath (1977–1998)
- Item 287 Correspondence with Donald Davidson (1957–1997)
- Item 293 Correspondence with Grace De Laguna (1950–1954)
- Item 306 Correspondence Di- through Do- (various dates)
- Item 315 Correspondence with Burton Dreben (1948–1997)
- Item 336 Correspondence Er- through Ez- (various dates)
- Item 370 Correspondence with Philipp Frank (1951–1967)
- Item 420 Correspondence with Nelson Goodman (1935–1994)
- Item 471 Correspondence with Harvard University, Department of Philosophy (1930–1994)
- Item 473 Correspondence with Harvard University, Faculty of Arts and Sciences (1931–1998)
- Item 475 Correspondence with Harvard University, Grants (1941–1988)
- Item 479 Correspondence with Harvard University, President's Office (1937–1998)
- Item 499 Correspondence with Carl Gustav Hempel (1936–1997)
- Item 529 Correspondence with Christopher Hookway (1988)
- Item 530 Correspondence with Paul Horwich (1991–1992)
- Item 545 Correspondence with the Institute for Advanced Study (1955–1965)
- Item 553 Correspondence Ir- through Iz- (various dates)
- Item 570 Correspondence with the *Journal of Symbolic Logic* (1936–1996)
- Item 616 Correspondence with Imre Lakatos (1964–1974)
- Item 637 Correspondence with Michele Leonelli (1966–1998)
- Item 643 Correspondence with Clarence Irving Lewis (1929–1996)
- Item 675 Correspondence with Joseph Margolis (1967 and undated)
- Item 724 Correspondence with Hugh Miller (1948–1952)
- Item 741 Correspondence with Charles W. Morris (1936–1947)
- Item 755 Correspondence with John Myhill (1943–1985)
- Item 758 Correspondence with Ernest Nagel (1938–1964)
- Item 885 Correspondence with Hilary Putnam (1949–1993)
- Item 921 Correspondence with the Rockefeller Foundation (1945–1980)
- Item 958 Correspondence Sc- (various dates)
- Item 972 Correspondence with Wilfrid Sellars (1938–1980)
- Item 1001 Correspondence with B. F. Skinner (1934–1998)
- Item 1005 Correspondence with J. J. C. Smart (1949–1998)

- Item 1014 Correspondence with Ernest Sosa (1970–1995)
- Item 1200 Correspondence with Paul Weiss (1937–1972)
- Item 1213 Correspondence with Morton White (1939–1998)
- Item 1221 Correspondence with Donald Cary Williams (1940–1994)
- Item 1237 Correspondence with Joseph Henry Woodger (1938–1982)
- Item 1239 Correspondence with the World Congress of Philosophy (1952–1998)
- Item 1244 Correspondence with Morton G. Wurtele (1938–1997)
- Item 1263 Correspondence concerning requests to publish or for copies (1950–1959)
- Item 1355 Editorial correspondence with D. Reidel Publishing Company (1960–1982 and undated)
- Item 1391 Editorial correspondence concerning *Mathematical Logic* (1939–1940)
- Item 1401 Editorial correspondence concerning *Methods of Logic* (1947–1950)
- Item 1422 Editorial correspondence concerning *Ontological Relativity* (1968–1988)
- Item 1423 Editorial correspondence concerning *On Translation* (1956–1959)
- Item 1443 Editorial correspondence concerning *On What There Is* (1948–1975)
- Item 1467 Editorial correspondence concerning *Theory of Deduction* (1946–1949)
- Item 1488 Editorial correspondence concerning *Word and Object* (1952–1960)
- Item 1489 Editorial correspondence concerning *Word and Object* (1959–1980 and undated)
- Item 1490 Editorial correspondence concerning *Words and Objections* (1966–1974)
- Item 2388a Quine's annotated copy of Putnam's *Meaning and the Moral Sciences* (undated)
- Item 2441 Epistemology Naturalized; or, the Case for Psychologism (1968)
- Item 2498 In conversation: Professor W. V. Quine. Interviews by Rudolf Fara (1993)
- Item 2733 Russell's Ontological Development (1966–1967)
- Item 2756 Stimulus and Meaning (1965)
- Item 2829 *A Short Course on Logic* (1946)
- Item 2830 *Theory of Deduction* (1948)

- Item 2836 Foreword to the Third Edition of *From a Logical Point of View* (1979)
- Item 2884 Questions for Quine by Stephen Neale (1986)
- Item 2902 For Rockefeller Lecture (1968)
- Item 2903 For symposium with Sellars (1968)
- Item 2928 The Inception of “New Foundations” (1987)
- Item 2948 Kinds (1967)
- Item 2952 Levine seminar questions for Quine (1982)
- Item 2954 Logic, Math, Science (1940)
- Item 2958 Mathematical Entities (1950)
- Item 2969 Nominalism (1937)
- Item 2971 The Notre Dame Lectures (1970)
- Item 2994 Ontological Relativity (1967)
- Item 2995 Ontological Relativity (1968)
- Item 3011 The Place of a Theory of Evidence (1952)
- Item 3015 The Present State of Empiricism (1951)
- Item 3102 Word and Object Seminar (1967)
- Item 3158 Philosophy 148 (1953)
- Item 3169 Early Jottings on Philosophy of Language (1937–1944)
- Item 3170 Erledigte Notizen (various dates)
- Item 3181 Ontology, Metaphysics, etc. (1944–1951)
- Item 3182 Philosophical notes (various dates)
- Item 3184 Pragmatism, etc. (1951–1953)
- Item 3225 Miscellaneous papers (1925–1931)
- Item 3236 Papers in philosophy (1930–1931)
- Item 3254 General Report of My Work as a Sheldon Traveling Fellow 1932–1933 (1934)
- Item 3266 Philosophy 148 (ca. 1947)
- Item 3277 Oxford University Lectures (1953–1954)
- Item 3283 Oxford University Lecture: Philosophy of Logic (1953–1954)

Published Works

- ANM Animadversion on the Notion of Meaning (1949)
- AWVQ Autobiography of W. V. Quine (1986)
- CA Carnap (1987)
- CB Comment on Berger (1990)
- CCE *Confessions of a Confirmed Extensionalist and Other Essays* (2008)

CD	Contextual Definition (1995)
CGC	A Comment on Grünbaum's Claim (1962)
CLT	Carnap and Logical Truth (1954)
CNT	Comments on Neil Tennant's "Carnap and Quine" (1994)
CPT	Carnap's Positivist Travail (1984)
CVO	Carnap's Views on Ontology (1951)
DE	Designation and Existence (1939)
EBDQ	Exchange between Donald Davidson and W. V. Quine Following Davidson's Lecture (1994)
EESW	On Empirically Equivalent Systems of the World (1975)
EN	Epistemology Naturalized (1969)
EQ	Existence and Quantification (1968)
FHQP	Four Hot Questions in Philosophy (1985)
FLPV	<i>From a Logical Point of View</i> (1953/1961)
FM	Facts of the Matter (1977)
FME	Five Milestones of Empiricism (1975)
FSS	<i>From Stimulus to Science</i> (1995)
GQW	Nelson Goodman, W. V. Quine and Morton White: A Triangular Correspondence (1947)
GT	Grades of Theoreticity (1970)
IA	Autobiography of W. V. Quine (1986)
IOH	Identity, Ostension, Hypostasis (1946)
IQ	The Ideas of Quine. Interview by B. Magee (1978)
ITA	Indeterminacy of Translation Again (1987)
IV	Immanence and Validity (1991)
IWVQ	Interview with Willard Van Orman Quine. Interview by L. Bergström and D. Føllesdal (1994)
LAOP	A Logistical Approach to the Ontological Problem (1939)
LC	Lectures on Carnap (1934)
LDHP	Lectures on David Hume's Philosophy (1946)
LP	Linguistics and Philosophy (1968)
ML1	<i>Methods of Logic</i> . First edition (1950)
ML4	<i>Methods of Logic</i> . Fourth edition (1982)
MSLT	Mr. Strawson on Logical Theory (1953)
NEN	Notes on Existence and Necessity (1943)
NK	Natural Kinds (1969)
NLOM	Naturalism; Or, Living within One's Means (1995)
NNK	The Nature of Natural Knowledge (1975)
NO	Nominalism (1946)
OI	Ontology and Ideology (1951)
OME	On Mental Entities (1953)

ONAS	On the Notion of an Analytic Statement (1946)
OR	Ontological Relativity (1968)
ORE	<i>Ontological Relativity and Other Essays</i> (1969)
ORPC	Ontological Remarks on the Propositional Calculus (1934)
ORWN	Ontological Reduction and the World of Numbers (1964)
OW	Otherworldly (1978)
OWTI	On What There Is (1948)
PL	<i>Philosophy of Logic</i> (1970/1986)
PPE	The Pragmatists' Place in Empiricism (1975)
PPLT	Philosophical Progress in Language Theory (1970)
PR	Posits and Reality (1955)
PT	<i>Pursuit of Truth</i> (1990/1992)
PTF	Progress on Two Fronts (1996)
QCC	The Quine-Carnap Correspondence (1932–1970)
QD	<i>Quine in Dialogue</i> (2008)
QSM	Quine Speaks His Mind. An interview by E. Pivcevic (1988)
QU	<i>Quiddities</i> (1987)
QWVO	Quine/'kwain/, Willard Van Orman (b. 1908) (1996)
RA	Responses to Articles by Abel Bergström, Davidson, Dreben, Gibson, Hookway, and Prawitz (1994)
RC	Reply to Chomsky (1968)
RCP	Reply to Charles Parsons (1986)
RE	Reactions (1995)
RES	Responses to Szubka, Lehrer, Bergström, Gibson, Miscevic, and Orenstein (1999)
RGE	Response to Gary Ebbs (1995)
RGH	Reply to Geoffrey Hellman (1986)
RGM	Responding to Grover Maxwell (1968)
RHP	Reply to Hilary Putnam (1986)
RJV	Reply to Jules Vuillemin (1986)
RMW	Reply to Morton White (1986)
ROD	Russell's Ontological Development (1966)
RR	<i>The Roots of Reference</i> (1973)
RRN	Reply to Robert Nozick (1986)
RS1	Reply to Stroud (1968)
RS2	Reply to Stroud (1981)
RSM	Reply to Smart (1968)
RST	Reply to Stenius (1968)
RTD	Reply to Davidson (1968)
RTE	Responses to Essays by Smart, Orenstein, Lewis and Holdcroft, and Haack (1997)

SCN	Steps toward a Constructive Nominalism (1947)
SLP	<i>Selected Logic Papers</i> (1966/1995)
SLS	The Scope and Language of Science (1954)
SM	Stimulus and Meaning (1965)
SN	Structure and Nature (1992)
SSS	The Sensory Support of Science (1986)
STL	<i>Set Theory and its Logic</i> (1963/1969)
TC	Truth by Convention (1936)
TDE	Two Dogmas of Empiricism (1951)
TDR	Two Dogmas in Retrospect (1991)
TI	Three Indeterminacies (1990)
TML	<i>The Time of My Life</i> (1985)
TR	Truth (1994)
TT	<i>Theories and Things</i> (1981)
TIPT	Things and Their Place in Theories (1981)
VD	Vagaries of Definition (1972)
VITD	On the Very Idea of a Third Dogma (1981)
WB	<i>The Web of Belief</i> (with J. S. Ullian 1970/1978)
WDWD	Where Do We Disagree (1999)
WIB	What I Believe (1984)
WO	<i>Word and Object</i> (1960)
WP	<i>The Ways of Paradox and other essays</i> (1966/1976)
WPB	What Price Bivalence? (1981)
WRML	Whitehead and the Rise of Modern Logic (1941)
WW	The Way the World Is (1986)

INDEX

- a posteriori, 60, 108, 117n
a priori, 3, 5, 15, 56, 60, 107–108, 117n, 134, 136n, 155
Alspector-Kelly, Marc, 37n, 39n, 45n, 47n
analysis, paradox of, 120–121
analytic philosophy, 2n, 4–6, 8–10, 79–80, 102, 104, 111, 152, 161–162, 164
and ahistoricism, 8
and antipsychologism, 5–6 (*see also* antipsychologism)
historical turn in, 8–9, 79–80
linguistic turn in, 150–151
naturalistic turn in, 3–6, 9–10, 69, 161, 163–164
analytic-synthetic distinction, 6, 10, 12, 40–42, 44, 80, 83n, 93–94, 96–99, 101, 103–141, 143, 147, 154, 186–187
argument against the, 6, 103
and logic and mathematics, 94, 103, 107, 111, 115, 117, 132–135, 139
vs. radical reductionism, 103–104, 106, 114, 166, 180 (*see also* “Two Dogmas of Empiricism”)
search for an alternative to, 93–94, 96–98, 101, 106–113
semantic version of, 105, 139
analyticity, 12, 74, 94, 98, 102–109, 114–126, 133–136, 139–140, 148, 150, 165–166, 179, 183–186, 188–189
behavioristically acceptable definition of, 12, 57, 74–75, 94, 96, 98, 103, 105, 115–125, 139–140, 166, 188
definition in terms of synonymy, 94, 111n, 118
epistemic vs. psychological interpretation, 117
as a gradual notion, 110–111
modal characterization of, 118
stimulus analyticity, 125
as truth, 179
vegetarian notion of, 125, 140
antifoundationalism, 1, 3. *See also* foundationalism
antipsychologism, 5–6. *See also* psychologism
Apostel, Leo, 148
Archimedean point, 32, 92, 176. *See also* cosmic exile; transcendence
Archimedes, 92, 176
argument from despair, 10, 16–18, 28–30, 32–35, 58, 60, 69n, 162
Aristotelian ontology, 185
arithmetic, 94, 109n, 113, 168, 170. *See also* mathematics
Arnold, Jack, 126n, 133–134, 136n
artificial language, 74–76, 115, 119–120, 144, 146, 164, 184, 187
asemiotism, 122–125, 179–180
astrological naturalism, 131
axioms, 56n, 108, 117n, 130, 169–170, 185, 187

Bar-Hillel, Yehoshua, 166, 187–188
Barrett, Clifford, 165, 167
Baylis, Charles, 165, 167
behaviorism, 57–58, 87n, 116–117, 148–149, 157, 189. *See also* definition, behavioristic
Bennett, Albert, 165, 167
Bentham, Jeremy, 19–20
Bergmann, Gustav, 48n, 166, 184–186
Bergström, Lars, 66n
Berkeley, George, 19, 28–29
Bernays, Paul, 170
Beth, Evert Willem, 148
Bridgman, Percy, 99, 166, 187
Bruner, Jerome, 148n
Bryant, Lynwood, 154n
Buck, Paul, 80n, 142n
Bundy, McGeorge, 148

Carnap, Rudolf
“Empiricism, Semantics, and Ontology”, 36–40, 43, 45

- Carnap, Rudolf (*Cont.*)
 as a first philosopher, 34–35, 164
 holism, 107n
 internal-external distinction, 11, 36–50, 53,
 87, 164
 linguistic framework, 36, 39–46, 49, 53, 150
 logic of science, 5n, 147
Der Logische Aufbau der Welt, 9n, 20–24, 28, 95,
 102, 160, 181, 189
Logische Syntax der Sprache, 5n, 87n, 88–89,
 107n, 147, 160
 phenomenalism, 21, 95, 154n, 172, 181
 principle of tolerance, 114–116
 protocol sentences, 21, 95, 180–181, 189
 quasi-syntactical approach to metaphysics,
 81, 86–89
 rational reconstruction, 15–16, 24–26, 32–34
 reduction sentences, 23, 181
 second-order nominalism, 88–90
 semantical rules, 41, 74–75, 115–120, 185, 187
 verificationism, 154n
- Cartesian dream, 18, 30, 32–33, 55, 60, 67, 164.
See also certainty
- certainty, 16–18, 20, 34, 55, 188. *See also*
 Cartesian dream
- charity, principle of, 134–135
- Chomsky, Noam, 149, 156–157, 158n
- Church, Alonzo, 74–75, 80n, 89–90, 112,
 119–121, 146
- clairvoyance, 57n
- Clark, Joseph, 97–98
- classes, 31, 37, 82, 92n, 155, 169, 171–173, 175,
 178, 183–184. *See also* object, abstract; sets;
 universals
- cognitive content, 36, 39–40, 43, 45, 87, 96, 111n.
See also meaningfulness, criterion of
- Columbia naturalism, 159
- common sense, 6, 16n, 70, 84–85, 92, 115n, 142,
 146, 162–165, 172, 174, 176–177
- common-sense philosophy, 162–164. *See also*
 ordinary language philosophy
- Conant, James, 27, 99n
- conceptual scheme, 11, 26–27, 29, 31, 42, 44,
 49, 54, 62–63, 65, 73–74, 86, 91–92, 95n,
 98–99, 107, 110, 112, 138n, 150, 153, 176,
 184–185, 187
 definition of, 26n
- conditioning, 110n, 148–149
- confirmation, 99, 134, 172, 181, 183, 187
- conservatism, 110, 134n, 153, 184, 189. *See also*
 pragmatic maxims
- conventionalism, 44–45, 83n, 107–109, 117n,
 135, 154n, 170
- Cooley, John, 21n, 166, 187
- cosmic exile, 31, 73, 92, 176. *See also* Archimedean
 point; transcendence
- Cowan, James, 111n
- Creath, Richard, xii, 79n, 104, 117n, 120, 122
 criterion of significance, 23, 50–53, 89. *See also*
 meaningfulness, criterion of
- Darwin, Charles, 2
- Davidson, Donald, 148n, 152n
- De Caro, Mario, 2n, 69n
- Decock, Lieven, xii, 45n, 57n, 74n, 79n, 130n
 definition
 behavioristic, 12, 57, 103, 105, 115–125,
 139–140, 166
 contextual, 19–20, 58, 109n, 167
 elimination by, 21n, 23–24, 82, 171–172
 operational, 51, 89
 partial, 22–24, 181
- deflationism, 11, 64–69, 71, 76, 164. *See also*
 justification, deflationary theory of; truth,
 deflationary theory of
- demarcation, problem of, 51n
- denotation, 46, 87n, 90n, 147. *See also* designation;
 reference
- Descartes, René, 18n, 33, 56n
- designation, 118, 169. *See also* denotation;
 reference
- Dewey, John, 2–4, 61, 63, 66, 73, 156, 158–159
- diachronic contextualism, 189. *See also* holism
- Ding an sich*, 49, 73
- dispositions, 23n, 188
- Dreben, Burton, 79n, 104n, 111n, 145n, 149, 152n
- dualism, 2, 159
- Dubislav, Walter, 182n
- Duhem, Pierre, 23n, 59, 106, 136–137, 154,
 182, 189
- Duhem-Quine thesis, 138n, 154. *See also* holism
- Ebbs, Gary, xii, 5n, 6n, 41n, 50n, 52, 68n, 69n, 79n,
 83n, 117n, 118n
- Einstein, Albert, 115n, 174, 182
- empirical content, 23n, 24, 32, 50–52, 58, 103n,
 104n, 106, 139n, 181, 183–184, 189
 definition of, 24n
- empiricism
 behaviorist variant of, 57, 116, 120
 classical, 19–20, 22, 60
 constructive, 109n
 externalized, 157–158
 holistic, 27, 41–42, 103n, 106, 111–114, 124–
 126, 182–183
 justification of, 57
 pragmatist variant of, 61
 tabula rasa, 60n, 63n, 189
- epistemic priority, problem of, 26, 28n, 95–96, 141
- epistemology
 conceptual program, 15–16, 19–20, 24, 34
 descriptive, 67–69
 doctrinal program, 15–16, 19, 24, 34
 genetic, 7, 79, 101–102, 148–149, 163

- naturalized, 15–35, 55–57, 67–68, 99–100, 158n (*see also* Epistemology Naturalized)
- normative, 67–69, 162
- problem of justification, 1, 3, 5–6, 11, 16–17, 21n, 25, 30, 55, 67–69, 115n, 162, 164 (*see also* justification)
- skepticism, 16–18, 30–32, 55, 162
- traditional, 1, 10–11, 15–19, 23–24, 27–30, 32, 34, 54, 60, 73, 162 (*see also* first philosophy)
- “Epistemology Naturalized”, 6–7, 10, 15–35, 67, 156–158, 160–161
- first drafts of, 6n, 33n, 156–157
- as a public address, 17n, 160
- Etemad, Shapour, 158n
- Euclid, 168, 170
- evidence, 29, 31, 37, 61, 70, 72, 128, 134–135, 137n, 146–147, 182n
- definition, 146–147
- relation between theory and, 10, 15, 19, 23–24, 31, 58, 60, 68, 128, 139 (*see also* holism)
- self-evident, 18n, 56n
- sensory, 19, 34, 111 (*see also* experience; observation; sense data)
- excluded middle, law of, 65–66, 132. *See also* logical laws
- experience
- adverse (or recalcitrant), 59, 98, 106–108, 115n, 117, 126, 138, 181, 184
- color, 22, 72
- confirmatory, 99, 172, 181, 187 (*see also* confirmation)
- elementary (or *elementarerlebnisse*), 21, 28
- future, 62n, 182
- immediate (or primary sense), 20, 24, 26, 34n, 60n, 94, 100, 109n, 172, 181 (*see also* phenomenalism; sense data)
- past, 29, 100, 187
- scientific analogue (*see* stimulation, sensory)
- tribunal of, 27, 109, 137n, 182
- explication, 47–48, 57–58, 94, 99, 103n, 109n, 116–117, 124–125, 183, 188
- as a method in philosophy, 144–147, 150
- extensionalism, 84, 109n, 123, 143, 177–179
- definition of, 168
- fact, matters of, 6, 45n, 89, 104, 141, 164, 186
- facts, atomic, 189
- fallibilism, 31n, 57, 61–62, 66
- falsifiability thesis, 58n. *See also* falsification thesis
- falsification thesis, 58–60, 127–129
- Feigl, Herbert, 48, 166, 186
- finitism, 82, 165
- first philosophy, 6, 10, 15–18, 30, 32, 34–35, 54n, 130, 155–156, 159, 164. *See also* epistemology, traditional
- moderate, 17, 73n
- Floyd, Juliet, xii, 9n, 80n
- Føllesdal, Dagfinn, xii, 3, 57n, 79n
- foundationalism, 1, 10, 16–18, 25, 29–30, 33–34, 55–56, 60, 67, 100. *See also* first philosophy
- four dimensionalism, 174, 185
- Frank, Philipp, 166, 182n, 184, 187–188
- Frege, Gottlob, 5n, 8n, 34n, 121
- Friedman, Michael, 9n, 21n
- Frost-Arnold, Gregory, 79n, 82–83, 95n, 105, 109n, 117–119, 165
- Galanter, Gene, 149n, 152
- Geach, Peter, 152n, 154n
- genetic approach, 7, 79, 101–102, 148–149, 163
- geometry, 115n, 119n, 170
- gestalt psychology, 100, 157, 189
- Gibson, Roger F., 6n, 16, 28n, 60n, 69
- Glock, Hans-Johann, xii, 3, 5, 8, 42, 69n
- Gödel, Kurt, 160, 169–170, 172
- Goldfarb, Warren, xii, 6n, 75n
- Goodman, Nelson, 12, 48n, 80n, 82–83, 93, 95, 106n, 110, 112–113, 120–124, 140, 155, 165–167, 177–178
- analyticity, 121–122
- definition of meaning, 121–124, 177–178 (*see also* asemiotism)
- phenomenalism, 95
- Grize, Jean-Blaise, 149n
- Haack, Susan, 31n, 41–43, 69n, 134n
- Hacker, P. M. S., 3n, 5, 16
- Hanson, N. R., 157, 166, 189
- Hare, Peter, 152
- Harvard Logic Group, 82–83, 85n, 95, 108–109, 112, 117–118, 165, 168n
- Hempel, Carl Gustav, 23n, 95, 182n
- Heraclitus, 174
- historical turn, 8–9, 79–80
- holism, 12, 22–24, 55–56, 58–62, 105–110, 114–115, 120, 126–140, 163, 189
- Carnap’s, 107n
- duhemian, 23n, 106, 136–137, 182, 189 (*see also* Duhem-Quine thesis)
- and empiricism, 27, 41–42, 103n, 106, 111–114, 124–126, 182–183
- extreme, 126n, 137n
- falsification thesis, 58–60, 127–129
- justification of, 59–60
- maximal inclusion, 127–129, 136–139
- maximal integration, 127–129, 136–139
- moderate, 126n, 137–139
- nonholistic languages, 59–60
- prediction thesis, 58–60, 127–129
- scope, 105, 107–110, 120, 126–140, 163
- Tarski’s, 108–109
- as a trivial thesis, 138n
- universal revisability, 126–129, 132–136, 138–139

- Hook, Sidney, 2, 159
 Hookway, Christopher, 67n, 69–70
 Horwich, Paul, 115n
 Huntington, Edward, 168, 170
 Hylton, Peter, xii, 5–6, 8–9, 50–51, 57–58, 65n, 79n, 107n, 117n, 125n
- idealism, 2n, 5n, 21n, 94, 173, 180, 182
 ideas, 18–19, 173, 178
 innate, 18–19
 immanence, scientific, 7, 11, 30–31, 54–56, 62–71, 76, 162–164
 justification of, 63–66, 69
 immanence-transcendence distinction, 54, 162–164. *See also* immanence, scientific; transcendence
 immanentalism, 63n, 157–158, 189. *See also* involuntarism
 impressions, 19–20, 158, 184n. *See also* sense data
 indeterminacy of translation, 134–135, 154
 indexicals, 143
 induction, problem of, 15, 19
 inquiry, model of, 63, 66, 75, 85, 115
 instrumentalism, 4, 61, 63, 66–67, 73–74
 intelligibility, 31, 38, 49, 119–120, 122, 144n, 147, 172
 intensional notions, 116, 118, 121–123. *See also* analyticity; meaning; modality; synonymy
 interpretivism, 129
 introspection, 28
 intuitionism, 51, 88–89, 169–170
 involuntarism, 63–64, 157–158, 166, 189. *See also* immanentalism
 Isaac, Joel, 79n, 105, 107n, 116n, 120
 Isaacson, Daniel, 116n
 isms, 154–155
- Jakobson, Roman, 101, 142, 144n, 147, 149n
 James, William, 3, 61, 63, 66, 73, 151n, 183
 Jeffreys, Harold, 171
 Johnsen, Bredo, 17n, 34n, 68n
 Johnstone, Henry, 152n, 154n
 justification
 coherence theory of, 82n, 182
 deflationary theory of, 11, 66–69, 71, 76
 of empiricism, 57
 epistemological problem of, 1, 3, 5–6, 11, 16–17, 30, 55, 66–69, 115n, 162, 164
 of holism, 59–60
 of logic, 111, 117, 132–135, 139
 of mathematics, 111, 115, 117, 129–132, 139
 minimalist conception of, 68n, 164
 of nominalism, 85
 of realism, 62–66
 of science, 1, 7, 15–16, 55, 57, 66–69, 71, 79, 130–132
 substantive theory of, 68
- Kant, Immanuel, 49, 86, 96, 111n
 Ding an sich, 49, 73
 Katz, Jerrold, 58n
 Kemp, Gary, xii, 6n, 9n, 79n
 Kim, Jaegwon, 2–3, 5n, 17n, 67
 knowledge, 1, 3–4, 18, 63n, 96, 128, 141, 155n, 159
 a priori, 108 (*see also* a priori)
 extrascientific sources of, 56 (*see also* a priori)
 foundations of, 34 (*see also* foundationalism)
 logical and mathematical, 10, 80, 93, 101, 103, 106–114, 139 (*see also* logic; mathematics)
 scientific, 1, 16–17, 21, 25, 28–30, 32, 36, 60n, 70, 162 (*see also* science)
 sources of, 57 (*see also* empiricism)
 theory of, 18, 30, 97n, 101, 154n, 183–184 (*see also* epistemology)
 types of, 70
 web of, 7 (*see also* web of belief)
- Koller, Alice, 142
 Koppelberg, Dirk, 74n
 Kuhn, Thomas, 157, 166, 189
- Laguna, Grace de, 111
 language
 artificial, 74–76, 115, 119–120, 144, 146, 164, 184, 187
 as a conceptual scheme, 26n (*see also* conceptual scheme)
 holistic vs. nonholistic, 59–60 (*see also* holism)
 metalanguage, 72
 natural or ordinary, 30n, 74–75, 115, 119–120, 142–147, 164, 187
 nominalistic, 47, 82–83, 109n, 112 (*see also* nominalism)
 phenomenalistic, 17, 19, 25–28, 30, 32–34, 73, 163 (*see also* sense data)
 philosophy of, 81, 89n, 93, 97n, 101, 142
 scientific, 40n, 43, 59, 82, 119, 142–144, 151
 study of, 58n (*see also* linguistics)
- language game, 132
 language learning, 7n, 59–60, 98, 101, 148–149.
 See also genetic approach
 language use, 68–69
 Laplace, Pierre-Simon, 52n
 Leonelli, Michele, 61n
 Leśniewski, Stanisław, 82, 88
 Levine, James, xii, 110n
 Lewis, C. I., 21n, 82n, 117n, 121, 151, 165, 167
 linguistic framework, 36, 39–46, 49, 53, 150
 linguistic turn, 150–151
 linguistics, 118, 141–142, 145–151, 153, 157, 163, 187
 Locke, John, 8n, 19
 logic
 as an a priori discipline, 107–108, 117n, 134, 136n (*see also* a priori)

- as an artificial language, 74–76, 115, 119–120, 144, 146, 164, 184, 187
- consequence relation, 133n (*see also* logical consequence)
- deviant, 133, 135
- elementary, 64n, 83n, 168, 180
- justification of, 111, 115, 117, 132–135, 139
- many-valued, 187
- modal, 154 (*see also* modality)
- necessity of, 110, 115n
- protosyntactic, 167–170
- revisability of, 108, 110, 132–135 (*see also* universal revisability)
- logical consequence, 170, 188
- logical constant, 167, 185
- logical empiricism, 105. *See also* logical positivism
- logical knowledge, 10, 80, 93, 101, 103, 106–114, 139
- logical laws, 103, 110, 113, 126, 132–134
- law of excluded middle, 65–66, 132
- law of noncontradiction, 126
- logical positivism, 5, 36–37, 50–51, 88–89, 142–143, 145–147, 150, 152–154, 157, 162, 164, 166, 172, 189
- logical truth, 5, 94n, 104–105, 115n, 132–139, 168–170, 185
- syntactical definition of, 169
- logicism, 25n
- Lotze, Hermann, 34n
- Macarthur, David, 2–3, 56n, 69n
- Maddy, Penelope, 16, 130–131, 134n
- Malcolm, Norman, 176n
- Mancosu, Paolo, 45n, 48n, 79n, 82–83, 104, 108n, 113n
- Marcellinus, Amiannus, 2n
- Margenau, Henry, 99, 166, 187
- Marhenke, Paul, 165, 167
- materialism, 2n, 154, 159, 173. *See also* physicalism
- mathematical knowledge, 10, 80, 93, 101, 103, 106–114, 139
- mathematical objects, 26, 111–113, 120, 140, 175. *See also* object, abstract
- mathematics
- as an a priori discipline, 107–108, 117n (*see also* a priori)
- inapplicable parts of, 131n
- justification of, 111, 115, 117, 130–132, 139
- necessity of, 110, 115n
- norms in, 130–132
- maxim of minimum mutilation, 134–135. *See also* conservatism; pragmatic maxims
- maximal inclusion, 127–129, 136–139. *See also* holism, scope
- maximal integration, 127–130, 132, 136–137, 139, 148. *See also* holism, scope
- Maxwell, Grover, 160n
- meaning, 3–6, 8n, 19, 23n, 40, 47, 57, 84, 93, 104, 113–114, 119, 122–123, 141, 149n, 159–160
- changes of, 114–115, 133–135, 186 (*see also* analyticity)
- cognitive, 96, 111n (*see also* cognitive content)
- definition of, 122–123, 177–180, 182
- empirical, 23–24, 126n, 136–137 (*see also* empirical content)
- and extensionalism, 122–123, 177–180
- sameness of, 94n, 123, 177–180 (*see also* synonymy)
- stimulus, 148
- theory of, 68n, 122–123, 149n, 153–154, 179
- truth in virtue of, 125, 134 (*see also* analyticity)
- verification theory of, 189 (*see also* verificationism)
- meaningfulness, 23n, 36, 43, 47, 52, 89n, 168, 180
- criterion of, 38n, 50–51, 164 (*see also* criterion of significance)
- meaninglessness, 23n, 50–53, 89, 121–122. *See also* nonsense
- of metaphysics, 11, 36–47, 49–53, 89–90 (*see also* metaphysics)
- meanings, 121, 138n, 176–180, 187
- mentalism, 116. *See also* behaviorism
- metaontology, 37n
- metaphilosophy, 3, 6–7, 9, 12, 79, 104, 141–143, 145, 149–150, 152, 157n, 159–161
- linguistic turn, 150–151
- method of explication, 47–48, 57–58, 94, 99, 103n, 109n, 116–117, 124–125, 183, 188
- naturalistic turn, 3–6, 9–10, 69, 161, 163–164
- ordinary language philosophy, 5, 142–147, 150, 152n, 162–164
- relation between science and philosophy, 1–3, 5–6, 10, 12, 54n, 80, 91–92, 104, 141–151, 159–164
- metaphysics, 1, 7, 9–12, 36–55, 63–67, 80–81, 83, 85–94, 102, 152–153, 162–163, 165
- and a priori, 108 (*see also* a priori)
- category-subclass distinction, 40–41
- existence claims, 11, 36–53, 86–87, 89 (*see also* ontology)
- internal-external distinction, 11, 36–50, 53, 87, 164
- as meaningless, 11, 36–47, 49–53, 89–90 (*see also* meaninglessness)
- metaphysical judgments, 81, 85–87, 92–93
- naturalized, 36–53, 91–93
- vs. ontological commitment, 46–47, 85–90, 93n
- quasi-syntactical approach, 81, 86–89
- traditional, 1, 10–11, 37, 44–50, 52–54, 66, 71, 86n, 163
- as useless, 39, 51–53, 62, 119
- metatheory, 54, 168–169
- methodological pluralism, 129–132

- methodology
 of everyday inquiry, 70, 110n (*see also* common sense)
 of logic and mathematics, 130, 134, 176
 of philosophy, 3, 119, 144, 152, 162, 176 (*see also* explication; metaphilosophy; naturalism)
 plank-by-plank, 74 (*see also* conservatism; holism; naturalism)
 of science, 2, 5n, 54–57, 62, 66, 68–70, 76, 129–130, 144, 176
- Mill, John Stuart, 2n, 5n
 Miller, George, 149n
 Miller, Hugh, 94, 113
 Millikan, Max, 144n
 Mises, Richard von, 166, 185, 188
 modality, 118, 146, 154, 168
 Moore, G. E., 2n, 5n, 162, 176n
 Morris, Charles, 2, 93, 188
 Morris, Sean, xii, 79n, 81–83, 117n
 MURPHEY, MURRAY, 27n, 79–80, 95n, 117n, 120, 149n
 Myhill, John, 152
 mysogynism, 112n
- Næss, Arne, 176n
 Nagel, Ernest, 2–3, 159, 166, 185–187
 Nagel, Thomas, 73
 Napoleon, 52n
 naturalism, 1–7, 9–12, 15, 25, 54–76, 79–81, 141–142, 150–152, 155–165
 as circular, 1, 15–16, 33–34, 57
 Columbia, 159
 components of, 11, 54, 69, 71, 76
 definition of, 1–8, 54–76, 162–164
 dialectical, 16n
 harmless, 69
 mathematical, 129–132
 metaphysical, 2–3, 36–53, 159
 methodological, 2–3, 129–132, 159
 naive, 69
 naturalistic turn in contemporary philosophy, 3–6, 9–10, 69, 161, 163–164
 nonscientistic, 69
 open minded, 69
 as opposed to nonnaturalism, 2–3, 55, 63
 as opposed to skepticism, 30–32, 55
 as opposed to supernaturalism, 2–3, 69n, 159
 origins of, 2–6
 pluralistic, 69
 reception of Quine's, 7, 11, 69, 79–80, 141, 151–155, 161–162
 soft, 69
 starting at the middle, 7, 11, 62–63, 66, 70, 76, 84–85, 91, 163–164
 strict (or reductive), 70, 162
 as working from within, 6–7, 11, 55–56, 62–76, 79, 81n, 85, 92n, 141, 146, 162–164
- naturalized epistemology, 6–7, 10, 15–35, 55–57, 67–68, 156–158, 160–161
 naturalized metaphysics, 36–53, 91–93
 natural language. *See* ordinary language
 necessity, 103, 110, 123, 176n
 Neumann, John von, 170
 Neurath, Otto, 5n, 21n, 62–63, 74, 92, 129, 148n, 176, 187, 189
 Neurath's boat metaphor, 62–63, 92, 129, 152n, 176
 nominalism, 45n, 47–48, 82–85, 87–90, 109n, 111–114, 155, 169, 173
 justification of, 85
 mental vs. physical, 112
 vs. particularism, 48n
 purposes of, 89
 second-order, 88–90
 nominalistic language, 47, 82–83, 109n, 112
 non-falsifiability thesis, 58n. *See also* falsification thesis
 non-separability thesis, 58n. *See also* prediction thesis
 noncontradiction, law of, 126. *See also* logical laws
 nonnaturalism, 2–3, 55, 63. *See also* naturalism
 nonsense, 11, 37, 50–51, 53. *See also* meaningfulness
 norms, 68–70, 130–131
 for belief revision, 59n
 for everyday inquiry, 70
 for logic, 59n
 for mathematics, 130–132
 phonetic, 148
 for scientific inquiry, 70, 72, 131
- Nozick, Robert, 59
 numbers, 36–39, 41n, 49, 171, 175, 184. *See also* object, abstract; sets; universals
- object, 20, 26, 29, 36, 49, 62, 73, 75, 84, 87n, 100, 169–171, 179, 183–184
 abstract, 39, 45, 48n, 82–83, 88, 90, 112–113, 155, 173, 175 (*see also* sets; universals)
 external, 100n, 146–147, 158, 183
 mathematical, 26, 111–113, 120, 140, 175 (*see also* sets; universals)
 physical (or concrete), 26–27, 29, 31, 47, 61, 87, 92n, 95n, 109, 112, 173–175, 183–184
 observation categorical, 51, 58–59, 127–128, 132, 137–139
 definition of, 24n
 observation sentence, 15, 19, 23–24, 59, 98, 125n, 148, 157, 189
 observationality, criterion of, 148
 ontological commitment, 38n, 44–49, 82–83, 85–90, 93, 146, 154–155, 163
 vs. metaphysical judgment, 46–47, 85–90, 93n
 "Ontological Relativity", 156, 158, 160n
 first draft of, 156

- ontology, 11, 26, 36, 40–42, 44–48, 55, 61, 64, 80–93, 113, 142, 150–151, 170, 173–176, 180, 183, 186, 189
 Aristotelian, 185
 category-subclass distinction, 40–41
 vs. epistemology, 95n, 173–174
 existence claims, 11, 36–53, 86–87, 89
 internal-external distinction, 11, 36–50, 53, 87, 164
 of logic, 169
 structuralist, 54n
 and unity of science, 129n (*see also* unity of science)
 “On What There Is”, 26–27, 46, 86n, 95n, 99n, 113, 177, 179–180
 ordinary language, 30n, 74–75, 115, 119–120, 142–147, 164, 187
 ordinary language philosophy, 5, 142–147, 150, 152n, 162–164
 Osgood, Charles, 149n
- paradox, 56n, 64n, 81, 84–85, 89n, 91–92, 121, 172, 174, 176–177
 particularism, 48n. *See also* nominalism
 Peijnenburg, Jeanne, xi–xii, 8n
 Peirce, Charles Sanders, 3, 182–183
 perception, 57, 73
 extrasensory, 57n (*see also* empiricism)
 as a state of a physical object, 95n
 perceptions, 94, 173. *See also* sense data
 phenomenalism, 17, 21n, 26–28, 32, 60n, 73, 94–95, 97, 99–100, 153–154, 160n, 181
 reductionistic, 97, 99n (*see also* radical reductionism)
- phenomenology, 152n
- philosophy
 American, 4, 96
 analytic, 2n, 4–6, 8–10, 79–80, 102, 104, 111, 152, 161–162, 164 (*see also* analytic philosophy)
 as an a priori discipline, 3, 5, 15, 56, 60, 155 (*see also* a priori)
 common-sense, 162–164 (*see also* ordinary language philosophy)
 empiricist, 56 (*see also* empiricism)
 first, 6, 10, 15–18, 30, 32, 34–35, 54n, 130, 155–156, 159, 164 (*see also* first philosophy)
 linguistic (*see* linguistic turn)
 as the logic of science (*see* Carnap, Rudolf)
 methods of (*see* metaphilosophy)
 naturalistic, 2–4, 55, 61–62 (*see also* naturalism)
 naturalistic turn in, 3–6, 9–10, 69, 161, 163–164
 pragmatist, 2 (*see also* pragmatism)
 relation to science, 1–3, 5–6, 10, 12, 54n, 80, 91–92, 104, 141–151, 159–164
 science-minded, 11, 154n, 162 (*see also* naturalism)
 task of, 145, 165 (*see also* metaphilosophy)
 traditional, 3, 72, 162 (*see also* first philosophy)
- physicalism, 71n, 162
 physicalistic (observation) languages, 21n, 26–29, 95n, 181
 physics, 1–2, 29n, 69–70, 92, 94, 99n, 106–107, 112–115, 128, 135n, 141, 156, 172–174, 182–185
 physiology, 29n
 Piaget, Jean, 148–149
 Plato, 18n
 platonism, 45n, 84, 89, 155, 169, 178
 Poincaré, Henri, 189
 Popper, Karl, 51n, 63n, 95, 189
 posit, 1, 26, 28–29, 33, 60–61, 64, 95, 99–100, 112–113, 130, 146, 153n, 184, 187–188
 positivism, 2n. *See also* logical positivism
 pragmatic maxims, 59n. *See also* conservatism; simplicity
 pragmatism, 2–5, 61, 109–110, 150–154, 180, 183
 prediction thesis, 58–60, 127–129
 Presley, C. F., 152, 154n
 Price, Huw, 37–38, 41n, 44n, 53
 principle of charity, 134–135
 principle of tolerance, 95n, 113–116
 proof theory, 113n
 propaedeutic, 3, 15, 155. *See also* foundationalism
 propositional attitudes, 154
 propositions, 82, 121
 protocol sentences, 21, 95, 180–181, 189
 protosyntax, 167–168, 170. *See also* logic
 psychologism, 5–6, 33–34, 157–158
 psychology, 1–2, 5, 8, 15, 17–24, 29n, 33–34, 67–69, 96, 117, 142–143, 148–149, 152n, 163, 172, 176n, 185, 188
 behavioristic, 57–58, 87n, 116–117, 148–149, 157, 189
 gestalt, 100, 157, 189
 Putnam, Hilary, 17n, 51n, 67n, 69n, 155
- qualia, 94, 173. *See also* phenomenalism; sense data
 quality spaces, prelinguistic, 148
 quantification, 37, 39, 45n, 144, 167–170, 183
 quantum mechanics, 41, 84–85, 108, 132, 187
 Quine, Douglas, xii, xv, 148
 Quine, Margaret, 148
 Quinton, Anthony, 5n, 154–155
- rational reconstruction, 15–16, 24–26, 32–34
 rationalism, 18–19, 56, 60n
 realism, 21n, 55–56, 61–63, 65–67, 93–94, 153–154, 169, 173
 justification of, 62–66
 unregenerate, 61, 63, 65–66, 94

- reality, 20, 36, 71–73, 100, 109, 172–173
 internal and external questions about, 36–40, 42–45, 49 (*see also* Carnap, Rudolf; internal-external distinction)
 naturalistic (scientific) conception of, 2–3, 6, 31, 49, 54, 64, 66–69, 71–73, 76, 93–94, 141, 163–164, 172–173 (*see also* immanence, scientific; naturalism)
 philosophical (metaphysical) conception of, 1, 3, 11, 37–38, 49, 52, 54–56, 61, 66–69, 71–73, 79, 94, 147, 160n, 163–164, 172–173 (*see also* immanence-transcendence distinction; metaphysics; transcendence)
- reduction, 162, 171, 173, 186. *See also* definition
 elimination by, 22–24, 27, 181 (*see also* definition, elimination by; translation)
 nominalistic, 45n, 89, 112 (*see also* nominalism)
 partial, 22–24, 181
 to sense experience, 16, 22–28, 30n, 32, 35, 59–60, 67, 96–97, 99n, 110n, 158, 163, 189 (*see also* reductionism, radical)
 statement-by-statement, 183 (*see also* reductionism, radical)
- reduction sentences, 23, 181
- reductionism, radical, 12, 97, 99n, 103–106, 109n, 114, 120, 166, 180–181, 183, 186–187
 vs. analytic-synthetic distinction, 103–104, 106, 114, 166, 180 (*see also* “Two Dogmas of Empiricism”)
- reference, 50n, 155. *See also* denotation; designation
- regimentation, 71, 151, 163, 168, 170
- Reichenbach, Hans, 109n
- relativism, 113, 157, 189
- relativity, theory of, 115n, 141, 174
- revelation, 57n
- Richardson, Alan, 9n, 21n
- Ricketts, Thomas, xii, 5n, 27n, 71, 75n
- Rockefeller Foundation, 93n, 96, 111n
- Rodriguez-Consuegra, Francisco, 107n
- Rorty, Richard, 5n, 9n, 153
- Russell’s paradox, 89n. *See also* set theory, paradoxes in
- Russell, Bertrand, 5, 8n, 10, 20, 51, 82, 89n, 94–95, 109n, 156n, 162, 173, 176n
 egocentric particulars, 143 (*see also* indexicals) *Principia Mathematica*, 21n, 81, 116
 theory of descriptions, 145
 type theory, 172
- Ryle, Gilbert, 147. *See also* ordinary language philosophy
- Santayana, George, 2
- Schiller, Ferdinand, 61, 63, 66, 73
- Schlick, Moritz, 160
- Schuldenfrei, Richard, 154n
- science
 broad vs. narrow interpretation, 9, 69–71, 163
 vs. common sense, 6, 16n, 70, 84–85, 92, 115n, 142, 146, 162–165, 172, 174, 176–177
 compartmentalization of, 128–130, 136
 justification of, 1, 7, 15–16, 55, 57, 66–69, 71, 79, 130–132
 language of, 40n, 43, 59, 82, 119, 142–144, 151
 as a language game, 132
 logic of (*see* Carnap, Rudolf)
 as a man-made fabric, 49, 99, 129, 138n, 183, 186
 methodology of, 2, 5n, 54–57, 62, 66, 68–70, 76, 129–130, 144, 176
 as a monolith, 186
 norms in, 70, 72, 131
 progress of, 51, 64, 186, 189n
 relation to philosophy, 1–3, 5–6, 10, 12, 54n, 80, 91–92, 104, 141–151, 159–164
 underdetermination of, 61, 110, 172
 unified, 41–42, 99n, 114–115, 129n (*see also* maximal integration; unity of science)
 vs. *Wissenschaft*, 69
- scientism, 69–71, 162–163
- Sellars, Roy Wood, 2–3
- Sellars, Wilfrid, 153, 155–156, 184
- semantic ascent, 72–73, 153n
- semantic mass, 126, 136. *See also* empirical content
- semantical rules, 41, 74–75, 115–120, 185, 187
- semantics, 47, 65, 81, 93–94, 101, 109n, 116, 118–119, 167–168, 170, 172, 176
 mentalistic (*see* mentalism)
- sensa, 173. *See also* sense data
- sensationalism, 112. *See also* phenomenalism
- sense data, 16–17, 24–30, 32–33, 60, 73, 95, 99–100, 113, 134, 146–147, 162 (*see also* evidence, sensory; experience, immediate; impressions; perceptions; qualia; sense)
 as posits, 28–29, 33, 60, 99–100
 scientific analogue (*see* stimulation, sensory)
- sentence
 analytic, 114, 125 (*see also* analyticity)
 eternal, 64n
 as name, 82 (*see also* propositions)
 observation, 15, 19, 23–24, 59, 98, 125n, 148, 157, 189
 protocol, 21, 95, 180–181, 189
 standing, 125n
 theoretical, 23–24, 58–59, 127–128, 138
- separability thesis, 58n. *See also* prediction thesis
- set theory, 15, 20, 25n, 34, 52, 81, 89n, 130, 143n, 150
 paradoxes in, 56n, 81, 84–85 (*see also* Russell’s paradox)
 principle of abstraction, 84
- sets, 20, 36, 51, 132, 175. *See also* classes; object, abstract; set theory; universals

- Shapiro, Stewart, 126n, 133–134, 136n
 Shatz, David, 16n
 Sheldon travel fellowship, 82n
 Siegel, Harvey, 17, 69n, 73n
Sign and Object, 11–12, 79–102, 104, 109n, 142, 165, 172–177
 significance, criterion of, 23, 50–53, 89. *See also* meaningfulness, criterion of
 simplicity, 26, 40, 66n, 82n, 112–113, 130, 182–185, 189. *See also* pragmatic maxims
 Sinclair, Robert, 68n, 79n, 107n, 116–117
 skepticism, 16–18, 30–32, 55, 162
 Skinner, B. F., 80n, 93n, 109n, 149, 157. *See also* behaviorism
 Skolem-Löwenheim theorem, 83
 Sluga, Hans, 8n
 sociology, 1, 185
 Sommerfelt, Alf, 149n
 Sosa, Ernest, 66n
 statement, normal, 167–168
 Stetson, Raymond, 116
 stimulation, sensory, 25, 27, 33, 58n, 60n, 63, 69, 95, 99, 101, 125
 Strawson, P. F., 8n, 68n, 99n, 153
 metaphilosophy, 145 (*see also* ordinary language philosophy)
 soft naturalism, 69–70
 structuralism, 54n
 supernaturalism, 2–3, 69n, 159
 superstition, 70. *See also* common sense
 synonymy, 57, 68n, 74–75, 94, 96, 103, 111n, 118–123, 188
 behavioristically acceptable definition of, 57, 74–75, 94, 118, 120
 intensional, 121, 123
 structural, 121
 syntax, 88n, 167
 tabula rasa, 60n, 63n, 189
 Tacitus, 2n
 Tamminga, Allard, xii, 133–134
 Tarski, Alfred, 82, 95, 108–109, 114, 117–118, 120, 140, 167, 179
 holism, 108–109
 theory of truth, 64n, 157, 185, 189
 tautology, 108, 185
 telepathy, 57n
 Tennant, Neil, 21n, 117n, 130–131
 Thomson, William, 112
 time, 84, 115n, 141, 143, 174, 185
 Tooke, John Horne, 19n
 transcendence, 7, 10–11, 30–34, 54–56, 62, 64–67, 71–76, 92, 141, 160, 162–164, 176.
 See also Archimedean point; cosmic exile;
 immanence-transcendence distinction
 harmless, 54n, 71–72 (*see also* semantic ascent)
 translation, 15, 22, 134–135, 167–168, 181
 indeterminacy of, 61n
 truth
 a priori, 117n (*see also* a priori)
 analytic, 104, 109n, 123–125 (*see also* analyticity)
 correspondence theory of, 189
 deflationary theory of, 64–69, 71, 76, 164
 disquotational theory of, 50n, 64–65
 legalistic, 137–139 (*see also* holism)
 logical, 5, 94n, 104–105, 115n, 132–139, 168–170, 185
 substantive theory of, 65, 68
 Tarski's theory of, 64n, 157, 185, 189
 transcendental theory of, 62–66
 truth paradox, 64n
 "Truth by Convention", 83n, 107, 109n, 117n
 "Two Dogmas of Empiricism", 12, 27, 31n, 40n, 44, 67n, 70n, 79, 81, 96–100, 102–106, 109–111, 116, 120, 122–129, 132–133, 136–139, 140, 166, 180–184
 central argument of, 6, 103, 106n
 phenomenalism in, 27, 99–100
 Quine's dissatisfaction with, 6n, 81, 97–99, 104
 relation between the two dogmas, 104n, 114, 166, 180
 type theory, 89n, 172
 underdetermination, 61, 110, 172
 as a corollary of holism, 61n
 unity of science, 82, 85, 129n. *See also* maximal integration; science, unified
 universal revisability, 126–129, 132–136, 138–139
 universals, 47–48, 83, 89–90, 112, 169, 171, 186.
 See also object, abstract; sets
 problem of, 47, 83, 89
 verificationism, 154n
 Vienna Circle, 37n, 154n, 160. *See also* logical positivism
 view from nowhere, 73–74. *See also* Archimedean point; cosmic exile; transcendence
 view from somewhere else, 73–74, 163. *See also* transcendence
 Waismann, Friedrich, 160
 Wang, Hao, 5n, 166, 188
 Warburton, William, 2n
 Watson, John B., 116
 web of belief metaphor, 7, 107n, 129–132, 134
 Weber, Pearl L., 4n, 158n
 Weiss, Paul, 97–99
 Wells, Rulon, 152
 White, Morton, 67n, 108, 110, 120–123, 165, 177n
 Whitehead, Alfred N., 116, 171
 Williams, D. C., 80n, 84n, 159, 165, 167

- Wittgenstein, Ludwig, 5, 39, 80n
 language game, 132
 metaphilosophy, 145, 150n, 152 (*see also* ordinary
 language philosophy)
- Woodger, Joseph H., 104, 113
- Word and Object*, 6, 12, 27, 31n, 79, 81, 84–85,
 92–93, 98n, 101–102, 104, 125, 138,
 140–142, 144, 146–155, 158n, 161,
 163–165
- first draft of, 141–147 (*see also* *Sign
 and Object*)
 reception of, 151–155
- World War, Second, 9, 11, 90
- Wurtele, Morton, 80n, 91n
- Yablo, Stephen, 37, 42n
- Zermelo, Ernst, 172