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978-1-107-07788-1 — Logical Modalities from Aristotle to Carnap
Edited by Max Cresswell, Edwin Mares, Adriane Rini
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Logical Modalities from Aristotle to Carnap

Interest in the metaphysics and logic of possible worlds goes back at least as far as Aristotle, but few books address the history of these important concepts. This volume offers new essays on the theories about the logical modalities (necessity and possibility) held by leading philosophers from Aristotle in ancient Greece to Rudolf Carnap in the twentieth century. The story begins with an illuminating discussion of Aristotle's views on the connection between logic and metaphysics, continues through the Stoic and mediaeval (including Arabic) traditions, and then moves to the early modern period with particular attention to Locke and Leibniz. The views of Kant, Peirce, C. I. Lewis and Carnap complete the volume. Many of the essays illuminate the connection between the historical figures studied and recent or current work in the philosophy of modality. The result is a rich and wide-ranging picture of the history of the logical modalities.

MAX CRESSWELL has taught philosophy at Victoria University of Wellington since 1963. His publications include three widely used texts on modal logic with G. E. Hughes, and most recently, with A. A. Rini, *The World–Time Parallel* (Cambridge, 2012).

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Logical Modalities from Aristotle to Carnap

The Story of Necessity

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CAMBRIDGE UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107077881

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First published 2016

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

Library of Congress Cataloguing-in-Publication Data

Names: Cresswell, M. J., editor.

Title: Logical modalities from Aristotle to Carnap : the story of necessity / edited by Max Cresswell, Victoria University of Wellington, Edwin Mares, Victoria University of Wellington, Adriane Rini, Massey University, Palmerston North.

Description: New York: Cambridge University Press, 2016. |

Includes bibliographical references and index.

Identifiers: LCCN 2016024207 | ISBN 9781107077881 (hardback)

Subjects: LCSH: Necessity (Philosophy) – History. |

Modality (Theory of knowledge) | Modality (Logic)

Classification: LCC BD417.L64 2016 | DDC 123/.7–dc23

LC record available at <https://lccn.loc.gov/2016024207>

ISBN 978-1-107-07788-1 Hardback

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Contents

| | |
|---|----------|
| <i>List of Figures and Tables</i> | page vii |
| <i>List of Contributors</i> | ix |
| <i>List of Abbreviations</i> | xiii |
| Introduction | 1 |
| MAX CRESSWELL, EDWIN MARES, AND ADRIANE RINI | |
| 1 Aristotle on the Necessity of the Consequence | 11 |
| ADRIANE RINI | |
| 2 Aristotle on One-Sided Possibility | 29 |
| MARKO MALINK | |
| 3 Why Does Aristotle Need a <i>Modal</i> Syllogistic? | 50 |
| ROBIN SMITH | |
| 4 Necessity, Possibility, and Determinism in Stoic Thought | 70 |
| VANESSA DE HARVEN | |
| 5 Necessity in Avicenna and the Arabic Tradition | 91 |
| PAUL THOM | |
| 6 Modality without the <i>Prior Analytics</i> : Early Twelfth Century Accounts of Modal Propositions | 113 |
| CHRISTOPHER J. MARTIN | |
| 7 Ockham and the Foundations of Modality in the Fourteenth Century | 133 |
| CALVIN G. NORMORE | |
| 8 Theological and Scientific Applications of the Notion of Necessity in the Mediaeval and Early Modern Periods | 154 |
| JACK MACINTOSH | |

| | | |
|----|--|-----------------|
| vi | | <i>Contents</i> |
| 9 | Locke and the Problem of Necessity in Early Modern Philosophy PETER R. ANSTEY | 174 |
| 10 | Leibniz's Theories of Necessity BRANDON C. LOOK | 194 |
| 11 | Leibniz and the Lucky Proof JONATHAN WESTPHAL | 218 |
| 12 | Divine Necessity and Kant's Modal Categories NICHOLAS F. STANG | 232 |
| 13 | Charles Sanders Peirce on Necessity CATHERINE LEGG AND CHERYL MISAK | 256 |
| 14 | The Development of C. I. Lewis's Philosophy of Modal Logic EDWIN MARES | 279 |
| 15 | Carnap's Modal Predicate Logic MAX CRESSWELL | 298 |
| | <i>Bibliography</i> | 317 |
| | <i>Index</i> | 339 |

Figures and Tables

Figures

| | | |
|------|---|-----|
| 5.1 | Squares of opposition for intensional and extensional predications | 108 |
| 5.2 | Logical relations among the four types of universal necessity-proposition | 111 |
| 12.1 | Kant's concepts of possibility | 248 |
| 13.1 | Alpha graphs: negation, implication, and conjunction | 267 |
| 13.2 | Alpha graphs: proof of $(a \supset (b \supset a))$ | 268 |
| 13.3 | Beta graphs: existential quantification | 268 |
| 13.4 | Beta graphs: numeric quantification | 268 |
| 13.5 | Gamma graphs: the broken cut | 270 |

Tables

| | | |
|-----|---|----|
| 2.1 | Opposed pairs of affirmations and denials at <i>Prior Analytics</i> 1.13 32a21–28 | 33 |
| 2.2 | Aristotle's square of modal expressions (<i>De interpretatione</i> 13 22a14–31) | 39 |
| 2.3 | Revised square of modal expressions (<i>De interpretatione</i> 13 22b10–28) | 45 |

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Abbreviations

Several of the chapters of this volume refer to the works of classical authors (i.e. authors up to the nineteenth century). We include here a list of some of the abbreviations and titles which contributors have used in referring to these works. A year number after the reference indicates that the edition or translation will be found by year under that author's name in the Bibliography.

Aristotle

- (De Int.) On Interpretation*
- (An. Pr.) Prior Analytics*
- (An. Post.) Posterior Analytics*
- (Top.) Topics*
- (SE.) Sophistical Refutations*
- (Phys.) Physics*
- (De Caelo) On the Heavens*
- (De Gen. et Cor.) On Coming to Be and Passing Away*
- (Met.) Metaphysics*
- (Nic. Eth.) Nicomachean Ethics*

Translations may be found in *The Complete Works of Aristotle: The Revised Oxford Translation*, ed. Jonathan Barnes, 2 vols. (Princeton: Princeton University Press, 1985).

Philodemus

- (Sign.) On Signs*

Cicero

- (Div.) On Divination, 1975*
- (Fat.) On Fate, 1975*
- (De Nat. Deor.) On the Nature of the Gods, 1933*

Plutarch

(*Comm. not.*) *On Common Conceptions*, 1976a
 (*St. Rep.*) *On Stoic Self-Contradictions*, 1976b

Epictetus

(*Diss.*) *Discourses*, 1916

Gellius

(*Noct.*) *Attic Nights*, 1968

Alexander of Aphrodisias

(*In Ar. An. Pr.*) *On Aristotle's Prior Analytics*, 1883
 (*In Ar. Top.*) *On Aristotle's Topics*, 1891
 (*Fat.*) *On Fate*, 1892

Sextus Empiricus

(*PH*) *Outlines of Pyrrhonis*, 1939–1949, Vol. 1
 (*M*) *Against the Mathematicians*, 1939–1949, Vol. 2

Ammonius

(*In Ar. De Int.*) *On Aristotle's On Interpretation*, 1897

Diogenes Laërtius

(*DL*) *Lives of Philosophers*, 1964

Boethius

(*In Ar. De Int.*) *On Aristotle's On Interpretation*, 1877
De Hypothesis Syllogismis, 1969
De Syllogismo Categorico, 2008

Anselm of Canterbury

Philosophical Fragments, 1936
 (*De casu diaboli*) *The Fall of the Devil*, 1968, Vol. I

Abbreviations

xv

Garland

Dialectica, 1959

Abaelard

Dialectica, 1970

Glossae Super Peri Hermenias, 2010

Aquinas (bibliographical entries under ‘Thomas Aquinas’)

(SCG) *Summa contra gentiles*, 1946

(QD *De Anima*) *The Soul*, 1949

(*De Veritate*) *On Truth*, 1952a, 1953, 1954

(*De Pot.*) *On the Power of God*, 1952b

(*In Peri.*) *On Aristotle’s On Interpretation*, 1962

(ST) *Summa Theologiae*, 1964–1981

Robert Grosseteste

De Libero Arbitrio, 1912

Gregori of Rimini

Lectures on the First and Second Sentences, 1979–1984

William of Ockham

(SL) *Summa Logicae*, Ockham 1974b, trans. Michael J. Loux, Part I 1974a, Part II, 1980a

(*Quodlibet*), *Quodlibetal Questions*, 1980b

Descartes

(AT) Adam and Tannery, 1964–1976 (ed.)

(CSMK) Cottingham, Stoothoff and Murdoch, 1985, 1991 (trans.)

Leibniz

(*Gerhardt*) 1961

(*Loemker*) 1969

(*New Essays*) 1981

Locke

(*Essay*) 1975

Boyle

(*Works*) 1999–2000

(*BOA*) 2006