

CONTENTS

Preface

I: Empiricism and Ontology

- 1. Consequences of Necessity 3
- 2. Practice and Ontology 6
- 3. Moderate Empiricism 11
- 4. Realism and Materialism 18

II: The Ground of Necessity

- 1. The Identity of Physical with Logical Necessity 24
- 2. Laws in Ontological Perspective 28
- 3. Possible Worlds Controlled by Population 35
- 4. Natural Necessity 39
- 5. Natures and *de Dicto* Necessity 42

III: Nature and Sameness

- 1. The One and the Many 49
- 2. Natures the Same as Things 58
- 3. Natural Kinds and the Primacy of Individuals 64
- 4. Ontological and Methodological Essentialism 71

IV: Induction and the World

- 1. Reasonable Practice 75
- 2. Inductive Support 80
- 3. Conditional Support and Support for Conditionals 84
- 4. Necessities for Evidence Individuals 87
- 5. The Possible-Histories Approach 92

V: The Structure of Physical Individuals

- 1. Limited Independent Variety 98
- 2. Natural Kinds and the Multiplicity of Generators 104
- 3. Relations and Limited Variety 110
- 4. Levels of Limited Variety 112
- 5. The Statistical Case and Limited Variety 118

VI: Analytic and a Priori

- | | |
|---|-----|
| 1. Truth and Rules of Meaning | 123 |
| 2. Reference and Inadequate Concepts | 127 |
| 3. Are Logical Concepts Adequate to Logical Properties? | 135 |
| 4. The Factual Content of Logical Truths | 139 |
| 5. Two Classical Arguments for the Apriority of Necessities | 144 |

VII: The Myth of Relations

- | | |
|--|-----|
| —1. Necessities and Relations | 150 |
| 2. Relational Properties and Their Foundations | 156 |
| 3. Asymmetry Without Relations | 161 |
| 4. The Interconnection of the World | 165 |
| 5. Sameness and Unity | 170 |

VIII: Action and Time

- | | |
|--|-----|
| —1. Necessities Across Time | 174 |
| 2. Temporal Atomism and Temporal Holism | 177 |
| 3. Progressive and Complete Actions | 182 |
| 4. Components and Conditions | 186 |
| 5. Action as Required by Temporal Separation | 193 |

IX: Temporal Asymmetry

- | | |
|--|-----|
| 1. Actions Versus Sequences of Conditions | 197 |
| 2. The Vectoral Character of Action | 201 |
| 3. Results of Actions | 207 |
| 4. The Foundations of Temporal Asymmetry | 210 |
| 5. The Impossibility of Counterdirected Action | 216 |
| 6. The Branch Hypothesis as Superfluous | 223 |

X: Capacities and Natures

- | | |
|---|-----|
| 1. The Stimulus-Response and Fine-Structure Models for Capacities | 229 |
| 2. A Regress Problem for the Fine-Structure Model | 232 |
| 3. Conditional Causality | 238 |
| —4. Causality and Necessity | 241 |
| 5. Fine Structures and Natures | 248 |

XI: Things and Conditions

1. The Incompatibility of Necessary Connections with
an Ontology of Conditions 257
2. Things as Individuals with the Capacity to Act 264
3. Capacities, Conditions, and Components 266
4. Sameness and Existence for Conditions 271
5. The Dialectic of Sameness 277

Notes 281

Index 293