Contents

Preface / xi
Acknowledgments / xix
List of Abbreviations / xxi

PART I PHENOMENOLOGY AND SCIENCE IN GERMANY

EDMUND HUSSERL

- Phenomenology as the Science of Science
 Theodore J. Kisiel / 5
- 2 / The Mathematization of Nature in Husserl's Last Publication, Krisis Joseph J. Kockelmans / 45
- 3 / Husserl on the History of Science Theodore J. Kisiel / 68

HERMANN WEYL

- 4 / On Time, Space, and Matter / 93
- 5 / Subject and Object (The Scientific Implications of Epistemology) / 100

OSKAR BECKER

6 / Contributions toward the Phenomenological Foundation of Geometry and Its Physical Applications / 119

MARTIN HEIDEGGER

7 / Heidegger on the Essential Difference and Necessary Relationship Between Philosophy and Science Joseph J. Kockelmans / 147

x / Contents

- 8 / Science, Phenomenology, and the Thinking of Being Theodore J. Kisiel / 167
- 9 / The Era of the World-as-Picture Joseph J. Kockelmans / 184

WILHELM SZILASI

10 / Experience and Truth in the Natural Sciences / 205

PART II PHENOMENOLOGY AND SCIENCE IN FRANCE

Eugène Minkowski

11 / Prose and Poetry (Astronomy and Cosmology)
/ 239

MAURICE MERLEAU-PONTY

- 12 / Merleau-Ponty on Philosophy and Science Theodore J. Kisiel / 251
- 13 / Merleau-Ponty on Space Perception and Space Joseph J. Kockelmans / 274

GASTON BACHELARD

14 / Epistemology and History of the Sciences / 317

JEAN CAVAILLÈS

15 / On Logic and the Theory of Science / 353

SUZANNE BACHELARD

- 16 / Phenomenology and Mathematical Physics / 413
- 17 / The Specificity of Mathematical Physics / 426

Jean Ladrière

- 18 / Mathematics in a Philosophy of the Sciences / 443
- 19 / Mathematics and Formalism / 466

Selected Bibliography / 501 Index to Names / 509 Index to Subjects / 513