

# TABLE OF CONTENTS

Introductory Note	v
Acknowledgements	ix

## PART I / PHILOSOPHY OF SCIENCE

I. A Picture Theory of Theory-Meaning	3
II. On Elementary Particle Theory	50
III. Some Philosophical Aspects of Contemporary Cosmologies	60
IV. Stability Proofs and Consistency Proofs: A Loose Analogy	75

## PART II / HISTORY OF SCIENCE

V. Leverrier: The Zenith and Nadir of Newtonian Mechanics	103
VI. The Contributions of Other Disciplines to 19th Century Physics	127

## PART III / GENERAL PHILOSOPHY

VII. On Being in Two Places at Once	141
VIII. Copernicus' Rôle in Kant's Revolution	155
IX. It's Actual, so It's Possible	165
X. On Having the Same Visual Experiences	178
XI. Mental Events Yet Again: Retrospect on Some Old Arguments	190

## PART IV / LOGIC

XII. Imagining the Impossible	215
XIII. On the Impossibility of Any Future Metaphysics	222
XIV. Good Inductive Reasons	234
XV. A Budget of Cross-Type Inferences, or Invention is the Mother of Necessity	249
XVI. The Irrelevance of History of Science to Philosophy of Science	274
XVII. The Idea of a Logic of Discovery	288

## PART V / RELIGION

XVIII. The Agnostic's Dilemma	303
XIX. What I Don't Believe	309

## PART VI / THE THEORY OF FLIGHT

Introduction, by <i>Edward MacKinnon, S.J.</i>	335
XX. Lecture One: The Discovery of Air	337
XXI. Lecture Two: The Shape of An Idea	358
XXII. Lecture Three: The Idea of a Shape	375