## Contents

Preface	7
Preface to the Second Edition	11
Introduction	12
Chapter 1. Philosophy and Scientific Realism	21
1. Two Sides of 'Knowledge'	21
2. Three Traditions in the Philosophy of Science	24
3. The Transcendental Analysis of Experience	30
A. The Analysis of Perception	31
B. The Analysis of Experimental Activity	33
4. The Status of Ontology and Its Dissolution in	
Classical Philosophy	36
5. Ontology Vindicated and The Real Basis of Causal	
Laws	45
6. A Sketch of a Critique of Empirical Realism	56
Chapter 2. Actualism and the Concept of a Closure	63
1. Introduction: On the Actuality of the Causal	
Connection	63
2. Regularity Determinism and the Quest for a	0.0
Closure	69
3. The Classical Paradigm of Action	79
4. Actualism and Transcendental Realism: The	
Interpretation of Normic Statements	91
5. Autonomy and Reduction	105
6. Explanation in Open Systems	118
Appendix. Orthodox Philosophy of Science and	110
the Implications of Open Systems	127
Chapter 3. The Logic of Scientific Discovery	143
1. Introduction: On the Contingency of the Causal	1-73
Connection Continue Continue Causar	143

## 4 A Realist Theory of Science

2. The Surplus-Element in the Analysis of Law-like Statements: A Critique of the Theory of Models	148
3. Natural Necessity and Natural Kinds: The Stratification of Nature and The Stratification	
of Science	163
4. The Social Production of Knowledge by Means of	
Knowledge	185
5. Objections to the Account of Natural Necessity	
Proposed	199
6. The Problem of Induction	215
Appendix. Natural Tendencies and Causal Powers	229
Chapter 4. Metaphysics and the Philosophy of Science	239
Postscript to the Second Edition	251
Bibliography	263
Index of names	273
Index of subjects	275