

CONTENTS

PART I

<i>Chapter</i>		<i>Page</i>
I	SCIENTIFIC OUTLOOK	I
II	EXPERIMENTS AND METHOD	9
III	THE CONTRAST BETWEEN GENERALISATION AND NON-INSTANTIAL HYPOTHESIS	23
IV	THE PRINCIPLE OF TESTABILITY	35
V	INDUCTION AND THE HYPOTHETICO-DEDUCTIVE SYSTEM	46
VI	HYPOTHETICO-DEDUCTIVE EXPLANATION	49
VII	TWO TYPES OF SIMPLICITY	60
VIII	DETERMINISM, ORDERLINESS, AND UNCERTAINTY	64
IX	OPERATIONALISM AND THE DESCRIPTIVE INTERPRETATION	74

PART II

X	THE TRADITIONAL APPROACH TO INDUCTION	85
XI	CRITERIA FOR CAUSAL DETERMINATION AND FUNCTIONAL RELATIONSHIP	86
	APPENDIX	101
XII	THE NATURE AND STRENGTH OF GENERALISATION, ANALOGY AND INDUCTION	104
XIII	INDUCTION BY REPETITION	114
XIV	THE LAW OF UNIFORMITY OF NATURE	118
XV	REQUIREMENTS FOR AN INDUCTIVE PRINCIPLE	130
XVI	FOUR PRINCIPLES OF INDUCTION	132
XVII	INDUCTION AS A SUCCESSFUL HABIT	157
XVIII	THE VERTICAL CAUSAL NEXUS	164
XIX	IMPASSE IN THE INDUCTIVE APPROACH	168

X FOUNDATIONS OF INFERENCE IN NATURAL SCIENCE

PART III

<i>Chapter</i>		<i>Page</i>
XX	SOME THEOREMS IN PROBABILITY	171
XXI	THE MEANING OF PROBABILITY	185
XXII	THE PROBABILITY OF A HYPOTHESIS	200
	APPENDIX: THE PROBABILITY CALCULUS AND KEYNES'S PRINCIPLE	204
XXIII	PROBABILITY AND INDUCTION	210

PART IV

XXIV	TRANSFORMATION OF THE PROBLEM OF INDUCTION	219
	LIST OF WORKS DIRECTLY CITED	233
	INDEX	237