

Contents

<i>Preface</i>	xiv
<i>Acknowledgements</i>	xix
<i>The Plan of this Book</i>	xxi

PART I

The Nature of Philosophy 1

1 The Main Features of Philosophy 3

- 1.1 *Philosophy as a conceptual and reflective discipline* 3
- 1.2 *The main areas of Philosophy* 4
 - 1.2.1 *Metaphysics* 5
 - 1.2.2 *Epistemology* 7
 - 1.2.3 *Logic* 8
 - 1.2.4 *Ethics* 11
 - 1.2.5 *Aesthetics* 13
- 1.3 *Philosophical questions as concerned with fundamentals* 14

2 Philosophy's History and Legacy 17

- 2.1 *The historical sweep of Philosophy* 17
- 2.2 *The current legacy* 21

3 The Philosophical Temperament 25

- 3.1 *Keeping an open mind* 25
- 3.2 *Philosophy contrasted with Mathematics and Science* 25
- 3.3 *Scientific questions* 26
- 3.4 *Mathematical questions* 27
- 3.5 *Philosophical questions (by contrast)* 27
- 3.6 *Realism v. Anti-realism* 28
- 3.7 *Example of a philosophical question: does God exist?* 29
- 3.8 *Adopting a philosophical position* 30

3.9	<i>Undergoing a philosophical education</i>	30
3.10	<i>The need to avoid dogmatism</i>	31
3.11	<i>The need to avoid fallacious thinking</i>	32
3.12	<i>The need for dispassionate contemplation</i>	36
3.13	<i>Abilities demanded by Philosophy</i>	38
4	Important Concepts and Distinctions	40
4.1	<i>The appearance/reality distinction</i>	41
4.2	<i>The mind/body distinction</i>	43
4.3	<i>The objective/subjective distinction</i>	44
4.4	<i>The abstract/concrete distinction</i>	46
4.5	<i>The descriptive/normative distinction</i>	48
4.6	<i>The empirical/rational distinction</i>	49
4.7	<i>The distinctions between the necessary and the true, and between the false and the impossible</i>	52
4.8	<i>The theory/evidence distinction</i>	55
4.8.1	<i>The empirical case</i>	55
4.8.2	<i>The mathematical case</i>	56
5	Kant's Two Distinctions	63
5.1	<i>The distinction between a priori and a posteriori knowledge</i>	63
5.2	<i>The analytic/synthetic distinction</i>	65
6	Important Opposing '-Isms'	73
6.1	<i>Realism v. [Anti-realism, Idealism, Irrealism, Instrumentalism, Eliminativism, Solipsism]</i>	74
6.2	<i>Substantialism v. Deflationism about Truth</i>	75
6.3	<i>Descriptivism v. Projectivism</i>	76
6.4	<i>Transcendentalism v. Positivism</i>	76
6.5	<i>Absolutism v. Relativism</i>	77
6.6	<i>Objectivism v. [Subjectivism/Psychologism]</i>	78
6.7	<i>Cognitivism (in ethics) v. Emotivism</i>	79
6.8	<i>Theism v. [Atheism/Naturalism]</i>	79
6.9	<i>Determinism v. Libertarianism</i>	80
6.10	<i>Rationalism v. Empiricism</i>	81
6.11	<i>Foundationalism v. [Anti-foundationalism/ Coherentism]</i>	81
6.12	<i>Dualism v. [Monism/Materialism]</i>	82
6.13	<i>Reductionism v. Anti-reductionism</i>	83
6.14	<i>Innatism v. [Behaviorism/Environmentalism]</i>	85
6.15	<i>Essentialism and Necessitarianism v. Anti-essentialism and Accidentalism</i>	86
6.16	<i>Philosophy as a priori ('first philosophy') v. Philosophy as continuous with science and common sense</i>	87
6.17	<i>Individualism v. Communitarianism</i>	87
6.18	<i>Skepticism and Revisionism v. Quietism</i>	88

- 6.19 *Evolutionism v. Saltationism* 88
- 6.20 *Mentalism v. Linguisticism (concerning relative priority of thought and language)* 90

PART II

Philosophy and Method	91
7 What is Logic?	93
7.1 <i>The basics of symbolizing sentences in logical notation</i>	93
7.2 <i>Arguments</i>	94
7.3 <i>Philosophical notions employed in the study of logic and language</i>	100
7.3.1 <i>Token-reflexiveness</i>	100
7.3.2 <i>Semantic closure</i>	101
7.3.3 <i>Vacuous terms</i>	101
7.3.4 <i>Vagueness and ambiguity</i>	101
7.3.5 <i>Referential opacity</i>	102
7.3.6 <i>Paradoxes of relevance</i>	106
8 Inductive Reasoning	109
8.1 <i>The structure of arguments</i>	109
8.2 <i>Inductive arguments</i>	109
8.3 <i>A Leitmotif</i>	110
8.4 <i>Inductive arguments (resumed): Hume's 'old riddle' of induction</i>	112
8.5 <i>How probability figures in scientific reasoning: Reichenbach's straight rule</i>	118
8.6 <i>How probability figures in scientific reasoning: making hypotheses more probable</i>	120
8.6.1 <i>The various interpretations of the notion of probability</i>	120
8.6.2 <i>The axioms of the theory of probability</i>	121
8.6.3 <i>A theorem about probability that is philosophically significant</i>	122
9 The Method of Conceptual Analysis	125
9.1 <i>Conceptual analysis as provision of necessary and sufficient conditions</i>	125
9.2 <i>X knows that p</i>	127
9.2.1 <i>Plato's analysis</i>	127
9.2.2 <i>Gettier counterexamples to Plato's analysis</i>	128
9.3 <i>The Paradox of Analysis</i>	129
9.4 <i>The analysis of the notion of valid argument</i>	130
9.5 <i>Russell's analysis of the truth-conditions of sentences of the form 'The F is G'</i>	130
9.6 <i>Grice's analysis of meaning in terms of belief and intention</i>	132
9.7 <i>Mackie's analysis of 'event A caused event B'</i>	132
9.8 <i>Frege's analysis of the notion of number</i>	133

9.9	<i>Lewis's analysis of conventions</i>	134
9.9.1	An afterword on the form of Lewis's analysis of conventions	137
10	The Method of Conceptual Explication	139
10.1	<i>Conceptual explication provides a precise theoretical substitute for an informal concept</i>	139
10.2	<i>The intuitive notion of a computable function</i>	139
10.2.1	The diagonal argument: preliminaries	140
10.2.2	The diagonal argument, first version	141
10.2.3	The diagonal argument, second version	142
10.3	<i>Explicating the notion of computable function</i>	144
10.3.1	Gödel's general recursive functions	144
10.3.2	Turing machines	146
10.3.3	Other explications of computable functions	148
10.3.4	The Turing–Church Thesis	148
10.4	<i>Explication of the notion of cognitive significance</i>	150
11	The Method of Thought-Experiment	152
11.1	<i>The role of thought-experiments in philosophical critique</i>	152
11.2	<i>Some famous thought-experiments in analytical philosophy</i>	156
11.2.1	The ship of Theseus	156
11.2.2	Descartes's evil demon	156
11.2.3	Putnam's brain-in-a-vat	157
11.2.4	Putnam's Twin-Earth	157
11.2.5	Gettier-type examples	157
11.2.6	Williams's example of 'character and memory switch'	157
11.2.7	The problem of the inverted spectrum	157
11.2.8	Jackson's scientist Mary	158
11.2.9	Kripke's standard meter-rod	158
11.2.10	Ayer's universe of sounds	158
11.2.11	Searle's 'Chinese room' argument	158
11.2.12	Block's 'China brain'	159
11.2.13	Zombies as a possible refutation of physicalism	159
12	Intellectual Creativity and Rigor	161
12.1	<i>Creativity and rigor in intellectual pursuits</i>	161
12.2	<i>General principles, rules and methods</i>	163
12.3	<i>Philosophy's perennial fascination with Mathematics</i>	163
12.3.1	Mathematical truths are necessarily true	164
12.3.2	Mathematical truth seems to rest on a few primitive, self-evident truths (so-called 'axioms')	164
12.3.3	Mathematical truth is knowable without sensory experience	164

12.3.4	Mathematical objects are in an eternal realm other than that of space-time	164
12.3.5	Mathematics begins with very simple concepts, and builds up much more complicated ones by means of definitions	165
12.3.6	Mathematical concepts are the most 'ideal' types in science	166
12.3.7	Mathematics is full of vivid metaphor at the informal level; but can be treated in a rigorous, symbolic, fully formalized way as well	166
12.3.8	Really powerful mathematical intuition or insight appears to be a gift of genius granted to but a few	167
12.3.9	Mathematical knowledge is one of the best available examples of objective knowledge	167
12.3.10	Mathematical knowledge is one of the best examples of knowledge that can be accommodated in an increasingly generalized conceptual framework	168
12.3.11	Mathematics is curiously applicable to reality	168
12.3.12	Mathematics, at times of conceptual convulsion, can produce paradoxes	168
12.4	<i>How Mathematics needs Logic</i>	169
12.5	<i>Logical reasoning v. creative or inventive insight</i>	171
12.6	<i>Rigor</i>	171
12.7	<i>The nature of dialectic</i>	174
13	Deduction in Mathematics and Science	177
13.1	<i>Proof, truth and falsity</i>	177
13.2	<i>The foundational method in Mathematics</i>	180
13.3	<i>Logic and the axiomatic method in Mathematics</i>	182
13.4	<i>Logic and scientific method</i>	187
13.5	<i>Theory revision</i>	192
13.5.1	<i>The Quine–Duhem problem</i>	193
13.6	<i>Desiderata of a scientific theory</i>	193
13.7	<i>A look ahead to the Argument from Design</i>	194
14	The Methodological Issue of Reductionism	196
14.1	<i>Levels of reality</i>	196
14.2	<i>Reductionism</i>	198
14.2.1	<i>Does supervenience imply reductionism? An investigation of the philosophical implications of Beth's Definability Theorem</i>	199
14.3	<i>Emergentism and epiphenomenalism</i>	204
14.4	<i>Towards a tolerant synthesis</i>	207
14.5	<i>An alternative to the 'web of belief'</i>	207
14.6	<i>Adequacy conditions on any methodological view</i>	208

PART III
The Existence of God 211

15 A Priori Arguments for the Existence of God 213

15.1 The Ontological Argument 214

- 15.1.1 The original Latin version of Chapter 2 of Anselm's Proslogion 214
- 15.1.2 A canonical English translation of Chapter 2 of Anselm's Proslogion 215
- 15.1.3 Our own, slightly more rigorous, English version of Anselm's argument 215
- 15.1.4 Exegesis 216
- 15.1.5 First objection: Anselm tacitly uses a mistaken principle about linguistic understanding 217
- 15.1.6 Second objection: Anselm mistakenly treats existence as a property of things 219
- 15.1.7 Third objection: The Ontological Argument keeps bad company. There are other arguments, of the same form, for patently unacceptable conclusions 219
- 15.1.8 Fourth objection (raised by the anti-realist): The Ontological Argument uses a strictly classical form of *reductio ad absurdum* to which the anti-realist would object 220
- 15.1.9 A completely rigorous regimentation of the argument 221
- 15.1.10 A translation manual for Anselm's primitives, into suitable logical notation 222
- 15.1.11 Translating Anselmian chunks into logical notation 225
- 15.1.12 Further reading on the Ontological Argument 227

15.2 The Cosmological Argument 227

- 15.2.1 Exegesis 227
- 15.2.2 First objection: there can be causal over-determination 227
- 15.2.3 Second objection: Aquinas commits the quantifier-switch fallacy 228
- 15.2.4 Third objection: even in the Big Bang model, there is, strictly speaking, no first cause 229
- 15.2.5 Fourth objection: why should a first efficient cause, if there is one, be God? 229

16 The Argument from Design 231

16.1 Main presentations of the Argument from Design 231

16.2 The Anthropic Principle 233

16.3 The explanatory role of the theistic hypothesis 233

16.4 Theory choice 234

- 16.4.1 Simplicity 235
- 16.4.2 Ontological parsimony 235
- 16.4.3 Wide explanatory scope 236

16.5	<i>Revolutionary theory-change: a biological analogy</i>	236
16.6	<i>Evolution of ideas, concepts, theories and methods</i>	238
16.7	<i>The relation between theory and evidence</i>	238
16.8	<i>The Darwinian theory</i>	239
16.9	<i>The New Synthesis</i>	241
16.10	<i>On choosing between the theistic and naturalistic theories</i>	242
17	The Argument from Contemporary Creationism	245
17.1	<i>Naturalism v. Creationism</i>	245
18	Pascal's Wager	253
18.1	<i>Background: the theory of rational decision-making</i>	253
18.1.1	<i>Rational decision-making without uncertainty</i>	253
18.1.2	<i>Rational decision-making under conditions of uncertainty</i>	255
18.2	<i>Exposition of Pascal's Wager</i>	258
18.3	<i>The first criticism of Pascal's Wager</i>	259
18.4	<i>The second criticism of Pascal's Wager</i>	260
19	The Problem of Evil	263
19.1	<i>Exposition of the Problem of Evil</i>	263
19.2	<i>Responses to the Argument from the Problem of Evil</i>	264
19.2.1	<i>The 'Polarity' response</i>	264
19.2.2	<i>The Leibnizian response</i>	265
19.2.3	<i>The 'Cosmic Justice' response</i>	265
19.2.4	<i>The Libertarian response</i>	266
19.2.5	<i>The 'Reconceptualization' response</i>	266
19.2.6	<i>The 'Incommensurability' response</i>	267
19.2.7	<i>The 'Deep Constraint' response</i>	267
PART IV		
	Mind, Body and External World	269
20	The Pivotal Figure of Descartes: Dualism and Skepticism	271
20.1	<i>Cartesian coordinates</i>	271
20.2	<i>Cartesian dualism</i>	272
20.3	<i>Cartesian skepticism</i>	273
20.4	<i>The structure of the reasoning in the first two Meditations</i>	276
20.4.1	<i>Meditation I: On what can be called into doubt</i>	276
20.4.2	<i>Meditation II: On the nature of the human mind, which is better known than the body</i>	277
20.5	<i>Descartes's resort to the existence of God</i>	279
21	Problems about Mind	285
22	Cartesian Dualism v. Logical Behaviorism	294

22.1	<i>Cartesian dualism</i>	294
22.2	<i>Ryle's critique of Cartesian dualism</i>	297
22.2.1	Category mistakes	297
22.2.2	Invoking supervenience	299
22.3	<i>Ryle's Logical Behaviorism</i>	299
22.3.1	Dispositional properties	299
22.3.2	Dispositional analyses of mental states	300
22.4	<i>Criticisms of Logical Behaviorism</i>	301
23	Materialism and Supervenience	304
23.1	<i>The gradual emergence of Materialism about mind</i>	304
23.2	<i>Supervenience as central to Materialism</i>	305
23.3	<i>The main Materialist accounts of mind</i>	307
23.3.1	Logical Behaviorism	307
23.3.2	Biological Essentialism	308
23.3.3	Functionalism	308
23.4	<i>Identity theories</i>	309
23.4.1	Anomalous Monism	310
23.4.2	Eliminative Materialism	310
24	Functionalism	312
24.1	<i>Machine Functionalism</i>	312
24.2	<i>Causal Functionalism</i>	315
24.3	<i>Criticisms of Functionalism</i>	318
24.3.1	The Disentanglement Problem	318
24.3.2	The Problem of Sensory Qualia	319
24.3.3	The Knowledge Argument	320
24.3.4	The Problem of Semantic Qualia	321
24.3.5	The Chinese-Room Argument	322
24.3.6	The Out-Gödelizing Argument	323
25	Free Will v. Determinism	326
25.1	<i>A form of compatibilism that is more deterministic than libertarian</i>	329
PART V		
	Representation, Inference and the Elusive Infinite	335
26	Representation and Evaluation	337
26.1	<i>Verifying a sentence in a situation</i>	342
26.2	<i>Falsifying a sentence in a situation</i>	344
26.3	<i>An example to motivate rules for the conditional connective</i>	345
26.4	<i>What is the role of inference in understanding the representational content of a sentence?</i>	347

26.4.1	Isomorphisms among models	348
26.5	<i>The rules of verification and falsification</i>	350
26.5.1	Rules of verification	351
26.5.2	Rules of falsification	352
26.5.3	The semantic upshot of the rules of verification and falsification	354
27	From Evaluation to Deduction	356
27.1	<i>From evaluation to deduction</i>	356
27.2	<i>An evolutionary perspective: how could language have acquired its logic?</i>	362
27.3	<i>Communication</i>	363
27.4	<i>Harmony and truth-telling</i>	364
27.5	<i>Inference and truth-preservation</i>	366
28	Paradoxes	369
28.1	<i>Inductive paradoxes</i>	369
28.1.1	Hempel's Paradox	369
28.1.2	Goodman's Paradox; or, the 'New Riddle' of Induction	370
28.2	<i>The Sorites Paradox</i>	375
28.3	<i>Logical or semantical paradoxes</i>	375
28.3.1	The Liar Paradox	376
28.3.2	The Postcard Paradox	377
28.3.3	Grelling's Paradox	377
28.4	<i>Mathematical Paradoxes</i>	377
28.4.1	Zeno's Paradox	377
28.4.2	Richard's Paradox	378
28.4.3	Russell's Paradox	378
28.4.4	The Burali-Forti Paradox	380
28.4.5	Skolem's Paradox	384
29	Description v. Deduction: The Clash of Ideals	389
29.1	<i>The Noncompossibility Theorem</i>	389
29.2	<i>The foundational consequences of noncompossibility</i>	395
30	The Incompleteness of Arithmetic	397
Appendix A	The History of Western Philosophy	405
Appendix B	Formal Results in the Theory of Probability	410
	<i>Bibliography</i>	416
	<i>Index</i>	426