CONTENTS OF THE MANUAL

VOL. I.

Prefatory letter from Cardinal Mercier to the Translators. Preface to the English Edition by P. Coffey, Ph.D. Translators' Note to Third English Edition.

GENERAL INTRODUCTION TO PHILOSOPHY by Cardinal Mercier

COSMOLOGY
by D. Nys, S.T.B., Ph.D.(A Theory of Inorganic Being)
by D. Nys, S.T.B., Ph.D.PSYCHOLOGY
by Cardinal Mercier(A Theory of Organic Being)
(A Theory of "Thought-Being)CRITERIOLOGY(A Theory of "Thought-Being)

CRITERIOLOGY by Cardinal Mercier

GENERAL METAPHYSICS OR ONTOLOGY

by Cardinal Mercier

(A Theory of Being in General)

or Certitude)

Appendix to Cosmology by D. Nys, S.T.B., Ph.D.

VOL. II.

NATURAL THEOLOGY OR THEODICY (A Theory of First Being) by Cardinal Mercier

LOGIC

by Cardinal Mercier

ETHICS

(A Theory of Right Living)

(A Theory of Right Thinking)

GENERAL ETHICS by A. Arendt, Ph.D. (based upon Cardinal Mercier's Notes) SPECIAL ETHICS by J. Halleux, Ph.D.

HISTORY OF PHILOSOPHY (Other Theories) by M. de Wulf, Ph.D., LL.D., J.U.D.

Glossary of Scholastic Terms, by G. Simons, Ph.D. Synopsis in the form of the Principal Theses. Index.

ILLUSTRATIONS.

Facsimile of a Letter from Cardinal Mercier Five Physiological Plates Vol. I. Frontispiece. To face pp. 331-339



Analytical Contents of Volume I

PAGB

1

45

INTRODUCTION TO PHILOSOPHY

General view of Philosophy at present day (1)—Distinctive feature of thought the simplicity and universality of ideas. General notion of Philosophy (2)—Stages of human knowledge (3)— Definition of Philosophy (4)—Principles, causes or reasons of things (5)—Another definition of Philosophy (6)—General division: Speculative and Practical Philosophy (7)—Subdivision of Practical Philosophy (8), and of Speculative Philosophy according to the Scholastics and Modern Philosophy and the Particular Sciences (11)—Philosophy and Revealed Truth (12)—Prominent names in History of Philosophy (13)—Leading features of Thomistic Philosophy (14)—Some important Preliminary Ideas (15), especially from logic (16) and from ontology (17).

COSMOLOGY

(NTRODUCTION: Definition of cosmology (1)—Material and formal objects (2,3)—Division of cosmology (4)—Method followed in this treatise upon constituent causes of inorganic world (5)—Theories of constitution of matter (6)

PART I

Pure Atomism or Mechanism

CHAP. I. OUTLINE AND HISTORICAL DEVELOPMENT OF THE MECHANICAL THEORY OF THE UNIVERSE

Mechanism among the Ancients (7)--Mechanism after fifteenth century (8)--Mechanism in modern times (9)--Chemical atomism (10)--Philosophical atomism or modern mechanism (11)

xi

- 49

CHAP. H. EXAMINATION OF THE MECHANICAL THEORY

ART. I. FACTS OF CHEMISTRY

I. ATOMIC WEIGHTS: Diversity and constancy of atomic weights (12) -Examination of mechanical explanation (13)	55
II. CHEMICAL AFFINITY: Meaning of affinity, and criticism of mechan- ical conception of it (14)	56
III. VALENCE OR ATOMICITY: Meaning of valence, and criticism of mechanical explanation (15)	56
IV. CHEMICAL COMBINATION: First sign of a combination: appearance of new properties (16)—Second sign: thermal phenomena (17)—Third sign: laws of weight (18)	57
V. THE RECURRENCE OF CHEMICAL SPECIES : Statement of the fact (19) —Reasons for it (20)—Insufficiency of mechanical explanation	57
(21)	59
ART. II. PHYSICAL FACTS	
I. CRYSTALLINE FORM: Statement of the fact (22)—Criticism of mechanical explanation (23)	60
II. PHYSICAL FACTS PROPERLY SO CALLED: Statement of these facts and criticism of mechanical explanation (24) • • •	62
ART. III. MECHANICAL FACTS	
I. THE KINETIC THEORY OF GASES: Statement of the theory (25) Criticism (26)	63
II. GRAVITATION: Mechanical conception of gravitation (27)—Criti- cism (28)	64
ART. IV. PHILOSOPHICAL ASPECT OF MECHANISM	
Metaphysical analysis of local motion (29).	65
I. FIRST PRINCIPLE: LOCAL MOVEMENT IS A FORCE AND A CAUSE CAPABLE OF PRODUCING A MECHANICAL EFFECT: Criticism (30)—Two objections answered (31, 32)	
II. SECOND PRINCIPLE : MOVEMENT IS TRANSMISSIBLE FROM ONE	6 6
BODY TO ANOTHER: Criticism (33)	68
III. THIRD PRINCIPLE : LOCAL MOVEMENT TRANSFORMS ITSELF INTO HEAT, ELECTRICITY, LIGHT, MAGNETISM, ETC. : Criticism (34)	69
IV. CONCLUSION : General reasons for repudiation of mechanism (35) .	70

PART II

The Scholastic Theory

CHAP. I. HISTORICAL SKETCH

Historical Development of this theory from Aristotle to present day (36)

ART. I. PRIMARY MATTER

ART. II. SUBSTANTIAL FORM

Meaning and function of substantial form (45)—Does a substantial form admit of increase or decrease ? (46)—Classification of forms (47)—Can there be several forms in the same being ? (48)—Divisibility of forms (49)—Gradation of forms (50) . 76

ART. III. THE SUBSTANTIAL COMPOUND

ART. IV. PROPERTIES

- II. CLOSER STUDY OF PROPERTIES :---
 - § 1. Quantity : Definition (54)—Kinds of quantity (55)—The essence of quantity (56)—Real distinction between quantity and substance (57)—Every part of an extended thing is itself extended and indefinitely divisible (58)—Parts of a continuous whole not actual but potential (59)—Scientific definition of mass (60)— Criticism of this definition (61)—Philosophic definition of mass (62)—Inertia (63)—Impenetrability. Scientific interpretation (64)—Consequences of this interpretation (66)— Thomistic interpretation (66)
 - § 2. Forces or Active and Passive Powers: First classification (67)— Second classification (68)—Third classification (69)—Fourth classification (70)—Secondary aspect of physical forces (71) . 95

ART. V. THE PRODUCTION OF MATERIAL SUBSTANCES

What is substantial change? (72)—(a) Process preparatory to the reception of a new form (73)—(b) Actual reception of a new form, or act of generation (74)—(c) Result of generation (75) —Efficient cause of generation (76)

ART. VI. THE DESTRUCTION OF MATERIAL SUBSTANCES.

How do substantial forms disappear? (77)—Fate of accidents when substantial change occurs (78)

Ь

xiü

PAGE

98

101

. 129

.

.

.

ART. VII. THE VIRTUAL EXISTENCE OF ELEMENTS IN THE CHEMICAL COMPOUND

ART. VIII. IS THE ESSENTIAL UNITY OF THE COMPOUND A PRINCIPLE OR A MERE APPLICATION OF THE SCHOLASTIC THEORY ?

A modern opinion (80)—Criticism of it: (a) Sacrifice of essential unity of the compound does not free us from scientific difficulties (81)—(b) The new theory militates against many fundamental principles of Aristotelian system (82) 104

CHAP. III. HARMONY OF THE SCHOLASTIC THEORY WITH FACTS

ART I. FACTS OF CHEMISTRY

I. ATOMIC WEIGHTS : Difference of atomic weights (83)—Constancy of atomic weights (84)—	107
II. CHEMICAL AFFINITY: (a) Affinity normally exists only between heterogeneous bodies (85)—(b) Affinity is an elective tendency (86)—(c) Affinity considered as a force or chemical energy (87)	108
III. VALENCE : Relative constancy of valence (88)	100
IV. CHEMICAL COMBINATION : Essential distinction between combina-	;
tion and physical action (89)—The cause of the heat which accompanies combinations and of its constancy and intensity	
(90)	110
V. CHEMICAL DECOMPOSITION: Its nature (91).—A particular feature of it (92)—General conclusion (93)	111
ART II. PHYSICAL FACTS	
General outline (94)—Explanation of these facts (95)	113
CHAP. IV. PROOFS OF THE SCHOLASTIC THEORY	
 I. ARGUMENT DRAWN FROM IMMANENT FINALITY: (i) Order exists in the inorganic world (96)—(ii) This order is explained only on the supposition of immanent finality in material beings (97) — (iii) Conclusion (98)—Explanation of minor premiss (99)— Logical consequences of conclusion (100) 	114
II. ARGUMENT DRAWN FROM THE UNITY OF LIVING BEINGS: Statement and explanation of the fact (101)	119
III. EXAMINATION OF SOME OTHER ARGUMENTS: (a) Argument drawn from specific diversity of properties (102)—In what does the diversity of properties consist? Its importance in cosmology (103)—(b) Argument drawn from opposition observed between certain corporeal properties (104)—Value of above argument	

.

(105)—Conclusion (106)

PART III

Dynamic Atomism

Statement of this theory (107)-Criticism of dynamic atomism	4.
First principle : homogeneity of matter (108)—Second principle	
all material forces simply mechanical (109)-An objection	נ
(110)—Conclusion (111)	. 127

PART IV

Dynamism and Energism

ART. I. STATEMENT OF DYNAMISM

ART. II. CRITICISM OF DYNAMISM

I.	THER	e is	FORMAL	Exter	SION	IN THE	MATER	IAL WORLI	D: Proo	fs	
		dra	wn from	testime	ony of	f consci	ousness	(113)—An	objectio	n	
		(11.	4)—Proof	drawn	from	unity ()	15)—Ar	objection	(116)		131

ц.	THE	ESSENCE	OF	V RODA	IS	NOT	FOR	CE, NO	R A (COLLI	SCTION	OF	
		Forces :	IT	IMPLIES	A	Pas	SIVE	ELEMI	ENT :	An	object	io n	
		(117)—Cr	itici	ism (118)		•	•				•		13

III, 'ACTION AT A DISTANCE' IS PHYSICALLY IMPOSSIBLE : Meaning	
(119)—Insufficiency of 'a priori ' arguments brought forward	
to prove the absolute, or metaphysical, impossibility of	
'action at a distance' (120)-Hypothesis of 'action at a	
distance' physically impossible (121)	135

ART. III. STATEMENT OF THE THEORY OF ENERGISM

General	sketch	(122)	Leading	ideas	of	this	theory	(123))	
Indu	ictions j	peculiar	to certa	in sava	ants	(124)	•	•	•	137

ART. IV. CRITICISM OF THE THEORY OF ENERGISM

Points in its favour (125)—Its defects (126)—An objection (127) —The theory of energism, even were it established, would lead nither to negation of matter nor to phenomenalism nor to monism (128)—Relation of energism to dynamism (129) 139

RECAPITULATION AND CONCLUSION (130) 143

APPENDIX

Time and Space

ART. I. TIME

Definition of time (131)—Connexion between time and movement (132)—Why movement suggests idea of time (133)—Distinction between time and movement (134)—Abstraction necessary for the mind to arrive at the universal idea of time (135) —The parts of temporal duration (136)—Various acceptations of notion of time (137)

PAGB

ART. II. SPACE

I. INTERNAL PLACE: Definition of internal place (138)—Reality and nature of internal place (139)	150					
II. EXTERNAL PLACE: Definition (140)—Analysis of this definition (141)—Kinds of external place (142)	153					
III. SPACE : Facts of experience (143)—Analysis of facts, and defini- tion of space (144)—Connexion between space and external						
and internal place (145)—Is there only one space? (146) —Does notion of space imply a vacuum or a plenum? (147) .	155					

PSYCHOLOGY

INTRODUCTION : Object of psychology (1)-Method (2) . . . 161

PART I

Organic or Vegetative Life

CHAP. I. IDEA OF LIFE

I. Popular Idea of Life (4)	165
II. SCIENTIFIC IDEA OF LIFE: General conception (5)—Morphology (6) and physiology (7) of the cell—The human organism and its for the set of the	
its functions (8)Conditions of vital activity (9).	165
III. PHILOSOPHIC DEFINITION OF LIFE: Vital movement is continual and immanent (10)—Definition of living being (11)	. 6 .
and minimum (10)-Deminison of hving being (11) .	109
CHAP. II. NATURE OF LIVING BEING	
Ouestion stated (12)—Proof of Scholastic vitalism (13)—Unity of	

the living substance (14)—Divisibility of living beings (15) . 172

CHAP. III. ORIGIN OF ORGANIC LIFE

Immediate	origin	of	living	organisms	(16)—H	eredity	7 (17	·)	
Primar	y origin	of	living 1	beings (18)	•	•	•	•	176

PART II

Sensuous or Animal Life

CHAP. I. NATURE OF SENSUOUS LIFE

ART. I. ACTS OF SENSUOUS LIFE

I. SENSATION OR SENSUOUS COGNITION :---

§ 1. Anatomical and Physiological Aspect of Sensation: General sketch (20)—Anatomy of cerebro-spinal system (21)—Anatomy

P	AGE
of sympathetic system (22)—Histology of nervous system (23)—Nerves (24)—Sense-organs (25)—Physiology of nerv- ous system (26)—Physiology of senses (27)	181
§ 2. Cognitional A spect of Sensation or Sensuous Cognition in General: Meaning of sensuous cognition (28)—Cognition in general (29)—External and internal sensibility (30)	187
§ 3. Closer Investigation of the External Senses :-	
QUALITY OF SENSATIONS: Proper object of sight (32); of hearing (33); of smell (34); of taste (35); of touch (36)—The common sensibles (37)—The cognitional determinant (38)—Quali-	
tative character of sensation (39) QUANTITY OF SENSATIONS : Intensity measured by antecedents; Weber's law (40); measured by effects (41)—Duration of	191
psychical phenomena (42). LOCALIZATION AND EXTERIORIZATION OF SENSATIONS (43, 44)	197
sensibles (46) CEREBRAL CENTRES OF SENSATION: Theory of cerebral localiz- ation (47)	201
Atlon (47) NATURE OF SENSATION AND OF THE SENSITIVE FACULTY: Nature of sensation in general (48)—Nature of the sentient subject (49)—(i) Sensuous perception is a hyperphysical operation (50), but (ii) essentially in matter as its subject (51)	204 205
4. Special Study of the Internal Senses :	205
Соммон sense and internal sense : Existence of a common sense and of an internal sense (52)—Their natures (54) .	208
imagination (58) INSTINCT OR THE SENSE OF WHAT MAKES FOR WELL-BEING : Sen- suous experience (59)—Nature and origin of instinct ; mechan-	211
istic hypothesis (60)—A tentative explanation (61) SENSUOUS MEMORY: Recognition; reference to past (62)— Memory in animals (63)	214 217
II. SENSUOUS APPETITION AND THE SENSUOUS APPETITE :	
§ 1. Meaning of Sensuous Appetency: Cognition and appetency (64) —Natural inclination and spontaneous inclination (65)— Emotion or 'passion' (66)—Classification of lower emo-	
 tions (67) § 2. Nature of the Sensuous Appetite : It is superior to the natural inclination of brute bodies and of vegetables (68), yet only an organic faculty (69)—Sensuous appetency in animals (70) 	218
Its organ; not the heart (71)	222
II. SPON TANEOUS MOVEMENT : § 1. Anatomical and Physiological Aspect of Movement: The loco-	
motive apparatus (72)—Muscular contraction (73) § 2. Psychological Aspect of Movement: Reflex, automatic and spon-	225
taneous movement (74)—Existence of spontaneous movement in man and animals (75)—Its causes (76)	226

.

ART. II. NATURE AND PROPERTIES OF THE FIRST PRINCIPLE OF SENSUOUS LIFE

I. The first subject of sensibility is a single but compound subject (78-80)—II. The first subject of sensibility is of a higher nature than that of the vegetable (81)—Deduced properties of sensitive nature (82)

CHAP. II. ORIGIN OF SENSUOUS LIFE

PART III

Rational Life

CHAP. I. NATURE OF THE HUMAN SOUL

ART. I. ACTS AND FACULTIES PECULIAR TO MAN

- I. INTELLECTUAL COGNITION AND THE INTELLECT :---
 - § 1. Object of Intellectual Knowledge: Material and formal objects: common and proper objects (87)—I. The common formal object of the intellect is being (88)—II. The proper object (i) is derived from sense-data, but (ii) is abstract and universal (89-91)—Universality and other properties of the abstract idea (92)—Answers to objections (93)
 - § 2. Genesis of Intellectual Ideas: General sketch of Aristotelian and Thomistic ideogeny (94)—Chief historical theories of knowledge (95)—I. The intelligence is a passive faculty (96): Criticisms of Platonic idealism, ontologism, Descartes' ideology, theory of innate ideas (97-100)—II. The imagination and active intellect produce, as a prerequisite of intellection, a conceptual determinant of the cognitive intellect (101)—III. When determined to action the intellect apprehends what a thing is (103)—IV. The intellect knows its determinant indirectly and, through it, its own nature (104)
 - § 3. Process of Intellectual Development: Regarded objectively, knowledge, (1) of substances and corporeal essences (106);
 (2) of the soul or self (107); (3) of God (108).

II. VOLITION AND THE WILL :---

- Attendants of the Voluntary Act—Emotions, Sentiments : Pleasure and pain (121)—Feeling not a distinct faculty (122)—Nature of emotion (123)

PAGE

-	AGE
III. COMPARATIVE PSYCHOLOGY OF ANIMAL AND MAN: Proofs that man knows the universal (125), and that the animal does not (126), and conclusion therefrom (127)	2 8 I
ART. II. MUTUAL INFLUENCES OF SENSITIVE AND SUPERSENSITIVE LIFE	
1. THE SENSES AND REASON: Solidarity of the senses and reason, and its laws (129)—The waking state (130)—Sleep, dreaming, hallucination (131)—Madness and delirium (132)—Natural somnambulism (133)—Suggestion and auto-suggestion (134)— Hypnotism (135)—Mental suggestion; telepathy (136).	284
II. THE WILL AND THE OTHER ACTIVITIES OF THE SOUL: Influence of the different operations of the soul upon the will (137); of the will upon the other operations (138); of the will upon itself. Its normal action. The virtues (139)—Abnormal or patho- logical states of the will (146)	2 91
ART. III. NATURE OF THE FIRST PRINCIPLE OF LIFE IN MAN	
 I. SPIRITUAL CHARACTER OF THE RATIONAL SOUL: Substantiality of the ego (141)—First principle of life a material substance (143) —First principle of rational life spiritual: explanation and proof (143, 144)—Meaning of simplicity (145); (i) The soul is not composed of quantitative parts (146), (ii) nor of constitutive parts (147)—Explanation of how spiritual acts of the soul depend upon matter (148) 	294
II. THE ECO A SUBSTANTIAL UNIT COMPOSED OF RATIONAL SOUL AND BODY: Explanation (150)—Cartesian view of the union of soul and body (151)—Modern view: psycho-physical parallel- ism and monism (152)—Proof of (i) substantial unity (153); and (ii) that the rational soul is the substantial form of the body (154, 155)—Difficulties (156)—Man has but one soul, and one form (157)—Consequences of this doctrine (158)— Erroneous theories of personality (159)—Manner of the soul's presence in the body (160)	302
CHAP. II. ORIGIN OF THE HUMAN SOUL	
Statement of the question (161)—Proof of creationism (162)— Time of the soul's creation discussed (163)—Origin of the	

body (164)—Unity of the human species (165) . . . 316

CHAP. III. DESTINY OF MAN

ART I. THE EXISTENCE OF AN IMMORTAL LIFE, OR THE IMMORTALITY OF THE SOUL

I. The soul is by its nature immortal (167)—II. The soul will really survive the body (168)—III. The soul will live for ever (169)

xix

ART. II. NATURE OF IMMORTAL LIFE, OR THE FUTURE DESTINY OF THE SOUL

Natural end of human nature, as distinct from a supernatural end (170)-Length of the time of trial : re-incarnations and metempsychosis (171)-Natural need of a resurrection (172) -Declaration of faith concerning the supernatural resurrection (173) 324 **RECAPITULATION AND CONCLUSION (174)** 329 .

CRITERIOLOGY

INTRODUCTION:	Object o	of this	treatise,	and	its	place	in	phil-	
osophy (1)-I	Division o	f the	treatise (:	2) .	•	•	•	•	343

PART I

General Criteriology

CHAP. I. PROBLEMS TO BE SOLVED

I. TERMS: Common meaning of 'true' and 'truth '(4)—Ontological truth implies a relation between two terms (5)—Logical truth or the truth of the judgment (6)—God is the foundation	
of all truth (7)—'Evidence' and 'certitude' (8).	346
II. STATEMENT OF THE PROBLEMS: General statement (9)—False statement of the question in philosophy of Descartes (10)	
-The problems of criteriology (11)	350
CHAP. II. SOLUTION OF THE PRELIMINARY PROBLEM CONCERNING THE INITIAL STATE OF THE MIND	:
I. UNIVERSAL DOUBT: Real doubt and fictitious doubt (13)—Real scepticism (14)—Descartes' Methodic Doubt (15)—Criticism of real scepticism (16)—Criticism of Descartes' Methodic Deable (12)	
	353
II. EXAGGERATED DOGMATISM: Theory of Three Primary Truths (18) and criticism (19)	357
III. MITIGATED OR RATIONAL DOGMATISM : The true initial state of the	
mind (20)—Data of the problem of epistemology (21) .	359

CHAP. III. OBJECTIVITY OF PROPOSITIONS OF THE IDEAL ORDER

- I. ESSENTIAL CONDITIONS OF THE CRITERION OF TRUTH :----
 - § 1. It must be intrinsic : Traditionalism : Exposition (24) and criticism (25), and conclusion therefrom (26). . . • 363

xxi	
-----	--

PAGR

 § 2. It must be objective: The subjective criterion of the Scottish Philosophers, of Jacobi and neo-Kantians (27)—Criterion of Herbert Spencer (28)—Conclusion (29) § 3. It must be immediate: The mediate criterion of Descartes 	365
and the Ontologists (30)—General conclusion (31) .	367
II. OUR IMMEDIATE JUDGMENTS OF THE IDEAL ORDER ARE OBJECTIVE: Meaning (32) — Fundamental thesis (33) — Corroborative proof drawn from the successive states through which the mind passes (34)—Conclusion: The mind is capable of know- ing truth (35)	368
III. VALUE OF OUR JUDGMENTS OF THE IDEAL ORDER: Qualities belonging to truths of the ideal order (36)—Importance of such truths (37)—Criticism of Positivism (38)—Kant's Theory of analytic and a priori synthetic forms (39), and criticism (40) .	371
CHAP. IV. OBJECTIVE REALITY OF OUR CONCEPTS	
Meaning of the Chapter (41)—The Phenomenalism of Kant (42) —The Thomistic Theory (43); negative (44) and positive proofs (45)—Reply to two objections (46)—Refutation of the Phenomenalism of Kant (47)—Analysis of notions of Time and Space (48)—A question of method (49)—Conclusion of General Criteriology (50)	377
PART II	
Special Criteriology or	
An Analysis of the different kinds of Certitude	
CHAP. I. GERTITUDE OF IMMEDIATE EVIDENCE	
I. PRINCIPLES: Definition and division of principles (52)—Formative principles of the sciences (53)—First principles or regulative principles of all thought (54)	386
II. TRUTHS OF CONSCIOUSNESS OR OF INTERNAL EXPERIENCE: Truths of consciousness admit of no proof (55)—Objects of internal perception (56)	
	388
CHAP. II. CERTITUDE OF MEDIATE EVIDENCE	388
CHAP. II. CERTITUDE OF MEDIATE EVIDENCE I. SCIENTIFIC CONCLUSIONS OF THE IDEAL ORDER, OR CERTITUDE OF THE RATIONAL SCIENCES : Science ; Rational and experimental sciences (57)—Value of the syllogism (58)	388 391
 I. SCIENTIFIC CONCLUSIONS OF THE IDEAL ORDER, OR CERTITUDE OF THE RATIONAL SCIENCES: SCIENCE; Rational and experimental sciences (57)—Value of the syllogism (58). II. SCIENTIFIC CONCLUSIONS OF THE REAL ORDER, OR CERTITUDE OF THE EXPERIMENTAL SCIENCES:— § 1. Certitude concerning the Existence of the External World: 	•
 I. SCIENTIFIC CONCLUSIONS OF THE IDEAL ORDER, OR CERTITUDE OF THE RATIONAL SCIENCES: Science; Rational and experimental sciences (57)—Value of the syllogism (58) II. SCIENTIFIC CONCLUSIONS OF THE REAL ORDER, OR CERTITUDE OF THE EXPERIMENTAL SCIENCES : 	•

PAGE

CHAP III. HISTORICAL CERTITUDE AND THE CER-TITUDE OF FAITH

CHAP. IV. COMPARISON OF THE DIFFERENT KINDS OF CERTITUDE

Various kinds of certitude (70)-Order	of	subordin	nation	amor	ıg	
different kinds of certitude (71).	•	•	•	•	•	402
RECAPITULATION AND CONCLUSION (72) .	•	•	•	•	•	404

METAPHYSICS

PART I

Being

I. METAPHYSICAL OBJECTS OF THOUGHT AND THE ASSUMPTIONS OF AGNOSTICISM: Present-day prejudice against metaphysics (6)—Object of metaphysics individual substance (7)—Two difficulties (8), and their solution: metaphysics strictly scientific (9, 10)-Substance the adequate object of metaphysics (11)-No special science of immaterial beings (12) . 413 II. GENERAL ANALYSIS OF THE IDEA OF FIRST SUBSTANCE (13) 419 III. EXISTENCE: Meaning of 'being' and 'actual' (14) 420 . 1V. ESSENCE: Meanings of essence (15)-Abstract and concrete essence (16)—Synonyms for abstract essence (17) **4**2 I V. POSSIBLE BEING (18)-Ground of extrinsic possibility (19) and of intrinsic (20)-Corollaries (21) . 422 VI. CLOSER ANALYSIS OF FIRST SUBSTANCE : Order of the questions (22) --Ideas from cosmology (23)--The individual presents three distinct points of view (24)-It is known chiefly by its dimensions in space (25)-Formal reason of individuality a being's own entity (26)-Elements essential to constitution of an individual (27)-Principle of individuation (28, 29)-Preliminary ideas concerning distinction (30)-Distinction between essence and existence (31)-Proofs, direct and indirect, of real composition of essence and existence (32, 33) -Recapitulation of the metaphysical analysis of first substance (34) ٠ . . 426 . .

1	PAGE
VII. VARIOUS MEANINGS OF BEING: Principal sense and derived senses (35)—Reconsideration of the object of general meta- physics (36)	439
PART II	
The Transcendental Properties of Being	
I. GENERAL SKETCH: Introductory (37)-Enumeration of the tran-	
scendentzi attributes of being (38)—Division of Part II (39) .	44 3
II. DISTINCTION: Genesis of the ideas of non-being, distinction, plurality (40)	445
SII. UNITY:	
§ I. Transcendental Unity and Kindred Notions: Unity is the in- division of a being (41)—Every being is a unit (42)—Being and nonentity, distinction, indefinite plurality and unity, multitude (43)—Unicity (44)—Identity (45)—The problem of unity of composition (46)—Meaning of composition (47)— Various kinds of distinction (48)—Unity taken in its secondary	
or accidental sense (49) § 2. Unity Compatible with Composition : I. Metaphysical composition	446
not incompatible with unity (50); II. Physical composition not incompatible with substantial unity (51)—Simplicity	
(52)	453
§ 3. Transcendental Unity and Predicamental Unity: Unity, multitude, number (53)—Infinite and Indefinite (54)—Predicamental unity, the unity of measure; number, the expression of measured units (55)—Two meanings of number (56)—Numerical unity (57)—The unity of a continuum (58)—Recapitulation (59).	
IV. TRUTH:	
§ 1. Analysis of the Idea of Truth : Popular meaning (60)—Ontological truth is a relation of conformity with an ideal type abstracted from sensible reality (61)—Ontological truth and logical	
truth contrasted (62)	459
§ 2. Truth is a Transcendental Property of Being : Inductive and a priori proofs (63, 64)—Are there false things in nature ? (65)	4 61
V. Goodness :	
§ 1. Analysis of the Idea of Goodness : Popular meaning (66)-Phil-	
osophically (i) Good is what serves as the object of some natural tendency (67); and (ii) it is the adaptation of a being to its end (68)—Combination of these two ideas (69) —The end belonging to each being perfects its nature (70)— How the good perfects the nature of a thing (71)—Different	
kinds of goods (72) . § 2. Goodness is a Transcendental Property of Being : Every being is good : Meaning (73) and proof (74)—Evil is relative, and is the privation of a good (75) .	463 468
VI. BEING AND ITS TRANSCENDENTAL PROPERTIES: Distinction	•

between being and its transcendental properties (76)—There are three and only three transcendental properties (77) . 471

xxiii

PAGE

VII. FIRST PRINCIPLES: Meaning (78)— There are three first principles (79)—The Principle of Contradiction prescinds from time (80) 473

PART III

Substance and its Determinations or The Principal Divisions of Being

CHAP. I. SUBSTANCE AND ITS ACCIDENTS

I.	SUBSTANCE: General meaning of substance and accident (82)-	
	Existence of substances (83)—Nature of substance (84)—Its	
	relation to its accidents (85)—First substance and second	
	substance (86)—Substance, nature and essence contrasted (87)	
	-First substance and subsisting being or person (88)-I. The	
	formal reason of subsistence or of personality (89)—The	
	human soul is not a person (90)—II. Individual substance	
	and existence (91)	478
tI.	ACCIDENT : Meaning (92)—Existence of accidents (93)	487

IV. KINDS OF ACCIDENTS :

- § 1. Quality: Introductory (97)—Meaning of Quality (98)—Classification of qualities (99)—Characteristics of qualities (100)—Qualities of the first class: habits and dispositions (101)—Qualities of the second class (102)—Proof of real distinction between a substance and its powers (104)—Classification of faculties (105)—Qualities of the third and fourth classes (106) . . . 492

CHAP. II. ACTUAL BEING AND POTENTIAL BEING

Introductory (112)—' Movement' or evolution. Matter and Form (113)—Analysis of the metaphysical ideas of potential being and actual being (114)—' Nothing can move itself; the potential cannot actualize itself ' (115)—Various kinds of potentiality and, accordingly, of actuality (117)—Potentiality and actuality in their relation to efficiency (118)— Double meaning of 'act and power' contrasted (119)— Consequence of ignoring the metaphysical distinction of 'act and power' (120)—Conclusion of Part III (121).

CHAP. III. CREATED BEINGS AND THE UNCREATED BEING

Potential, contingent, dependent and finite beings (122)—The purely Actual, Necessary, Inde pendent and Infinite Being (123) 517

xxiv

CHAP. IV. THE UNITY OF THE OBJECT OF METAPHYSICS.

General conclusion of first three Parts of the Treatise (124)-The principal object of metaphysics is substance (125)-The various kinds of being have in common a certain analogousness (126) 519

PART IV

The Causes of Being

CHAP. I. GENERAL OUTLINE

A glance at the material universe (127)- 'Movement' in nature (128)-Stability in nature (129)-Two opposite conceptions of the order of the universe: Mechanism and Aristotelian Naturalism (130) 523 . .

CHAP, II. ANALYSIS OF THE FOUR CAUSES

- 1. THE MATERIAL AND FORMAL CAUSES: Reason for this inquiry in general metaphysics (131)-The Peripatetic-Scholastic account of accidental and substantial changes (132)-Nature and causality of the material cause (133)-Applications of material causality (134)-Nature and causality of the formal cause (135) --Applications of formal causality. Subsistent forms (136) --Relations between 'power and act' (137)-Form as the principle of unity (138) .
- II. THE EFFICIENT CAUSE: Its nature and causality (139)-Condition and cause (140)-Occasion and cause (141)-The cause in the proper sense and the accidental cause (142)-Various kinds of efficient causes (143)-The action of a created agent is in the patient (144)-Has Aristotle's theory of movement, of actio st passio, a universal application ? (145)-Sense in which immanent action is movement (146)-Creative action (147)-Action in general (148)-Occasionalism (149)-Criticism (150)-Principle of Causality (141)
- III. THE FINAL CAUSE: Introductory (152)-Fuller concept of final cause: Voluntary and physical finality (153)-Nature of its causality (154)-Meaning of 'nature' (155)-Teleological conception of natural law (156)-Accidental effects (157)-Corollary: three meanings of natural law (158)-Necessity of the laws of nature (159)-Comparison of ways in which material beings may act (160)—Chance, or fortune (161) 54I

IV. THE EXEMPLARY CAUSE : Meaning (162)-Nature of its causality (163) . .

V. COMPARISON OF THE FOUR CAUSES : Cause in general (164)-Principle; cause; element; reason (165) 552

XXV PAGE

55 I

533

PAGE

.

CHAP III. THE RELATIONS OF THE FOUR CAUSES TO ONE ANOTHER

CHAP. IV. THE GENERAL EFFECT OF THE CAUSES : THE ORDER OF NATURE

ART. I. THE IMMEDIATE EFFECT OF THE CAUSES: THE INHERENT ORDER IN THE WORKS OF NATURE

 THE IDEA OF ORDER: Meaning of Order (168)—Teleological order and aesthetical order, or of subordination and of co-ordination. General Definition (169)—Order in the universe proves existence of final causes (170)—Purpose is a sign of intelli- gence (171)—Specific form is the principle of a being's inherent 	
purpose (172)	557
II. PERFECTION, THE FULFILMENT OF ORDER: Meaning. The per- fection of beings (173)—Absolute perfection (174)—Kinds of	
perfection (175)	562
III. THE BEAUTIFUL, THE EXPRESSION OF ORDER AND PERFECTION: Method of procedure (176)—Analysis of our experience of the beautiful (177)—Objective factors of the beautiful (178)— Definition of beauty (179)—The connexion between art and	
morality (180)	564
ART. II. THE MEDIATE EFFECT OF THE CAUSES OR THE ORDER OF THE UNIVERSE	
I. THE RELATIVE END OF THE UNIVERSE (181)	571
II. THE IMMANENT RELATIVE END OF THE UNIVERSE (182)	572
III. THE TRANSCENDENT RELATIVE END OF THE UNIVERSE (183)	572

APPENDIX TO COSMOLOGY

MODERN CONCEPTIONS OF THE ATOM

I. The	ATOMIC	THEORY	•	•	•	•	•	•	•	•	574
II. THE	ELECTR	NONIC THE	ORY:	Electro	olysis-	-Cath	ode 1	Rays-	-Posit	live	
		-Radioactiv									
		ity—Isoto									
		charge-									
	-	atomic mod									575
III. TE	IE QUAN	TUM THEO	RY: H	Bohr's	Conce	ption	of t	he at	om—'	The	
	Bohr-S	ommerfeld	atom	•	•	•	•	•	•	•	581