

Problems

Abstract Entities

Being and Becoming

Chance

Coinciding Objects

Compo

Constitution

Contents

God and Im

Identity

Individuation

Mind-Body

Modality

Necessity or Contingency

Possibility and Actuality

Space an

Universals

Vagueness

Wave

Can Information Philo



Contents

Preface	xi
How To Use This Book With The Metaphysicist Website	1
1. Introduction	3
How We Proceed	11
2. Abstract Entities	13
Information as a Physical Cause	16; The Idea of Abstraction
Colors as Abstract Entities	17; 18
3. Being and Becoming	21
Being and Becoming in Modern Physics	22
4. Causality	25
What Counts as a Cause?	26; The Problem of Induction
Induction and the Scientific Method	30; 31
5. Chance	35
The Discovery of Ontological Chance	43
6. Change	47
Cosmic Change as the Growth of Information Structures	50
7. Coinciding Objects	55
An Information Analysis of “Coinciding Objects”	59
8. Composition	63
Temporal Parts	66; Mereology
Biomereological Essentialism	67; Mereological Essentialism
Emergence	69; 72; Composition as Holism and 73
9. Constitution	75
Is Constitution Identity?	75
10. Essentialism	79
Intrinsic Information as Essence	79; Natural Kinds and Mereological
Essentialism	80
11. Free Will	83
The Two-Stage Model of Free Will	85; Does Ontological Chance
Threaten Free Will?	92
12. God and Immortality	95
No Creator, But There Was/Is A Creation	96; The Ergod
The Problem of Immortality	97; 98
13. Identity	101
Information Identity	101; A Criterion for Identity
for Essence	101; A Criterion
Background of the Problem	103; Background of the Problem
Leibniz	104; Leibniz
Leibniz’s Laws	107; Leibniz’s
Frege	108; Frege
Peirce	109; Peirce
Principia Mathematica	111; Principia Mathematica
Wittgenstein	112; Wittgenstein
Frank Ramsey on Identity	113; Frank Ramsey on Identity
Willard Van Orman Quine on Identity	114; Willard Van Orman
Ruth Barcan Marcus	115; Ruth Barcan Marcus
David Wiggins	120; David Wiggins
Saul Kripke on Identity	121; Saul Kripke on Identity
Peter Geach on Relative Identity	122; Peter Geach on Relative Identity
	125;



David Lewis	126; Relative Identity	126; A = A	129;
Identity through Time	130; Changes in Time	131;	
Personal Identity	132; Identity and Biology	132; Vague Identity	133
14. Individuation			135
The History of Individuation	135; The Biology of Individuation	139;	
Individuation and Quantum Mechanics	140		
15. Mind-Body Problem			143
The Problem of Mental Causation	144; Mind as an Experience Recorder	and Reproducer	146; Consciousness a Property of Mind
	149		
16. Modality			151
Actual Possibles and Possible Possibles	155; The Many Possible Worlds in	Our Actual World	156; Necessity of Identity and the Limits of
Necessitism	157; Modal Realism and Possible Worlds	159	
17. Necessity (or Contingency)			161
The Logical Necessity of the Analytic and the <i>A Priori</i>	161; The Logical Ne-	cessity of Necessity	162; The Necessity of Identity
	165; Separating	Necessity from Analyticity and A Prioricity	167; Necessity and
Free Will	170; No Logical Necessity in the Material World	172;	Necessitism
	173		
18. Persistence			175
Perdurance	177; Endurance	179; Temporal Parts?	179
19. Possibility			181
Actual Possibles	183; Actualism	184; Possibilities in Quantum Mechan-	ics
	185; Shannon and Quantum Indeterminism	186; An Information	Interpretation of Quantum Mechanics
	189; Possible Worlds	190;	Other Possible Worlds
	193		
20. Space and Time			195
Space and Time in Quantum Physics	196; Nonlocality and Entangle-	ment	200; Visualizing Entanglement
	201; Can Metaphysics Solve the	EPR Paradox?	203
21. Universals			207
The One and the Many	211		
22. Vagueness			213
Vagueness and the Two-Slit Experiment	215		
23. Wave-Particle Duality			217
The Heart of the Puzzle	218; The History of Waves and Particles	221;	Dueling Wave and Particle Theories
	222;	Dirac on Wave-Particle Duality	225
24. The Debtor's Paradox			227
Information Philosophy Resolves the Debtor's Paradox	229		



25. Dion and Theon	233
What Chrysippus May Have Been Doing	234;
An Information Philosophy Analysis	237
26. Frege's Puzzle	241
Names and Reference	243; Quine's Paradoxes
The New Theory of Reference	246
27. The Growing Argument	249
28. The Infinite Regress	253
29. Porphyry's Fateful Question	257
30. The Problem of the Many	259
Peter Unger	261; Peter Geach
	262
31. The Ship of Theseus	265
How Information Philosophy Resolves the Paradox	265;
How to Make Two Ships Out of One.	266
32. Sorites Puzzle	269
Liar Paradox	271
33. The Statue and the Clay	273
How to Make Two Out of One	275
34. Tibbles, the Cat	279
35. Metaphysicians	285
David M. Armstrong	285; Michael Burke
	287; Rudolf Carnap
	292;
David Chalmers	293; Roderick Chisholm
	296; René Descartes
	298;
Peter Geach	300; David Hume
	302; Immanuel Kant
	304; Saul
Kripke	305; David Lewis
	315; E. Jonathan Lowe
	316; Ruth Barcan
Marcus	318; Trenton Merricks
	319; Huw Price
	323; Willard Van
Orman Quine	325; Michael Rea
	330; Alan Sidelle
	332; Ted Sider
	335;
Peter Unger	339; Peter van Inwagen
	340; Timothy Williamson
	349
36. A History of Metaphysics	353
The Presocratics	353; Socrates and Plato
	354; Aristotle
	354; The Sto-
ics	356; Academic Skeptics
	360; The Scholastics
	360; Descartes
	361;
Leibniz	361; The Empiricists
	364; Kant
	365; Positivisms
	366;
Linguistic Analysis	369; Modal Logic
	370; The Necessity of Identity
	374;
David Wiggins on Identity	375; Saul Kripke on Identity
	377; David
Lewis on Identity	378; Modal Logic and Possible Worlds
	379;
Why Modal Logic Is Not Metaphysics	381; The Return of Metaphysics
and Its Paradoxes	384
Great Problems Solved?	387
Bibliography	397
Index	404

