

Contents

<i>Preface</i>	<i>page</i> vii
<i>References to Descartes' works</i>	viii
Introduction	I
1 Before the <i>Principia</i>	5
'Physico-mathematics'	6
The <i>Regulae</i>	7
<i>Le Monde</i> and <i>L'Homme</i>	10
<i>La Discours</i> and <i>Les Essais</i>	24
Metaphysics and the legitimation of natural philosophy	28
<i>La Recherche de la vérité</i> versus the <i>Principia</i>	30
2 The <i>Principia</i> and the Scholastic textbook tradition	32
The problem of natural philosophy	35
Theology, metaphysics, and natural philosophy	43
The unity of Aristotelian philosophy: the textbook tradition	48
Content and ordering	54
The structure of the <i>Principia</i>	58
3 <i>Principia</i> , Part I: The principles of knowledge	64
The project of the <i>Principia</i>	64
Doubt and knowledge	69
Essence and existence	73
Clarity and distinctness	79
The metaphysics of substance	85
4 <i>Principia</i> , Part II: The principles of material objects	93
Matter theory and mechanics	93
Material extension	97
The nature of motion	103
The first two laws of motion	114
The third law of motion	121
The mechanisation of matter theory: solids and fluids	130

5	<i>Principia</i> , Part III: The visible universe	135
	Celestial motions	136
	Planetary motion	142
	Celestial matter and the transmission of light	146
	Vortex theory	150
	Comets, planets, and moons	153
6	<i>Principia</i> , Part IV: The Earth	161
	The nature of the Earth	162
	The formation of the Earth	166
	Air, water, earth, and fire	169
	Magnetism and related phenomena	173
7	<i>Principia</i> , Part V: Living things	180
	Basic physiology	184
	Developmental physiology	190
	Animal psycho-physiology	196
	Affective states in animals	213
8	<i>Principia</i> , Part VI: Man	215
	Cognition	216
	The fragmentation of the soul	222
	The philosopher as sage	236
	The morality of philosophers	239
	<i>Bibliography</i>	247
	<i>Index</i>	255