

Contents

Illustrations	xi
Preface	xv
Introduction	3
1 Origins of Evolutionary Biology of Behavior	20
Controversies over Animal Instinct and Intelligence in the Seventeenth and Eighteenth Centuries	22
Erasmus Darwin's Sensationalist Interpretation of Instinct and Evolution	31
Cananis's Revision of Sensationalism	40
Lamarck: Behavior as Product and Instrument of Species Transformation	47
Reactions at the Muséum d'Histoire Naturelle	57
Conclusion	69
2 Behavior and Mind in Evolution: Charles Darwin's Early Theories of Instinct, Reason, and Morality	71
Preparations of an Evolutionary Thinker	74
Instinct and the Mechanisms of Species Change	83
The Roots of Rational Thought	105
The Evolution of Morality	110
Appendix	124
3 Contributions of Natural Theology to Darwin's Theory of the Evolution of Mind and Behavior	127
Disputes of Natural Theologians over Instinct and Intelligence	128
Contributions to Darwin's Emerging Theory of Behavior	135

	The Wonderful Instincts of Neuter Insects	142	
	Conclusion: Mind, Instinct, and Darwin's Delay	152	
4	Debates of Evolutionists over Human Reason and Moral Sense, 1859–1871		157
	Darwinian Disputes over Human Nature	161	
	Wallace and the Challenge of Spiritualism	176	
5	Darwin and the Descent of Human Rational and Moral Faculties		185
	Darwin's <i>Descent of Man</i>	190	
	Evolution of the Moral Sense and Intelligence	206	
	Response of the Critics	219	
	Expression of the Emotions	230	
	Conclusion: Utilitarian and Darwinian Moral Theories	234	
6	Spencer's Conception of Evolution as a Moral Force		243
	Early Life as a Nonconformist	247	
	Social and Moral Science as Foundation of Evolutionary Theory	253	
	The Development of Spencer's Theory of Evolution	267	
	Mental Evolution: Empiricized Kantianism	275	
7	Evolutionary Ethics: Spencer and His Critics		295
	Spencer's Ethical System	302	
	Critics of Evolutionary Ethics	313	
	Conclusion	325	
8	Darwinism and the Demands of Metaphysics and Religion: Romanes, Mivart, and Morgan		331
	Prayer and the Imperatives of Scientific Reason	334	
	Natural Selection and Natural Theology	342	
	The Evolution of Mind	346	
	Controversy with Mivart	353	
	Evolution, Metaphysics, and the Return to Religion	363	
	Morgan vs. Romanes on the Status of Comparative Psychology	375	
	The Monistic Framework of Morgan's Science	381	
	Morgan's Theory of Instinct	385	
	Mental Evolution and the Theory of Organic Selection	394	

Conclusion: Science, Metaphysics, and Religion	404	
Appendix	407	
9 The Personal Equation in Science: William James's Psychological and Moral Uses of Darwinian Theory		409
James's Depressive Period, 1865–1878	412	
The Psychological and Moral Uses of Darwinism	422	
Conclusion	447	
10 James Mark Baldwin: Evolutionary Biopsychology and the Politics of Scientific Ideas		451
Training in the Old Psychology for the New	452	
The Foundations of Baldwin's Psychological Science	456	
Genetic Psychology and the Theory of Imitation	460	
The Evolutionary Analysis of Consciousness in the Individual and the Race	469	
The Social Evolution of Knowledge and Morality	475	
Organic Selection and the Politics of Scientific Discovery	480	
Conclusion: Scandal and Professional Extinction	495	
11 Transformation of the Darwinian Image of Man in the Twentieth Century		504
Decline of Evolutionary Theory in the Social Sciences	505	
The Reactions of the Biological Community to Theories of Mental Evolution	511	
The Biology of Mind and Behavior in Germany: From Darwinism to Neo-Darwinism	519	
The Rise of Sociobiology	536	
Conclusion: Transformation in the Darwinian Image of Man and the Schism in Contemporary Evolutionary Theory	543	
Conclusion: Darwinism Is Evolutionary		549
Appendix 1 The Natural-Selection Model and Other Models in the Historiography of Science		559
Five Models in the Historiography of Science	560	
Evolutionary Models of Scientific Development	574	
Conclusion: The Natural Selection Model as a Historiographic Model	590	

Appendix 2 A Defense of Evolutionary Ethics	595
Constructing an Evolutionary Ethics	599
Objections to Evolutionary Ethics	605
The “Naturalistic Fallacy” Describes No Fallacy	612
Justification of Evolutionary Ethics	620
 Bibliography	 629
Index	663