
Contents

Acknowledgments *xiii*

1 THE HIERARCHY	1
Introduction	1
Pattern and Process	3
The Pattern: Linnaeus	6
The Opposition: Buffon	7
The Process: Lamarck	10
The Synthesis: Darwin	11
The Place of Humans in Nature	12
Anchoring the Emergence of Humans	18
The Great Chain in Cultural Evolution	18
Emergence of the Modern Culture Theory	19
Change without Progress: The Biological and Social History of the Human Species	22
 2 PROCESSES AND PATTERNS IN THE EVOLUTIONARY HISTORY OF OUR SPECIES	 25
Narrative as a Scientific Medium	25
Adaptation Stories	26
Disturbing the Conservative Nature of Heredity	28
Reproduction of Organisms: Meiosis	29
Reproduction of Populations: The Gene Pool	32
Microevolutionary Processes	33
Macroevolutionary Processes	37
Evolutionary Narratives	38
Human Macroevolution	40
Linking Data into Histories	42
Patterns in the Evolution of Species and Culture	44

3 PHYSICAL ANTHROPOLOGY AS THE STUDY OF HUMAN VARIATION	49
Notes	60
4 THE HISTORY OF BIOLOGY AND THE BIOLOGY OF HISTORY	63
History as Inborn Propensities: Arthur de Gobineau	64
History, Biology, and the Theory of Progress	66
Social Selection: Biological Progress as Social Progress	68
Survival of the Fittest: Parallel Progressive Processes	69
Competition of a Different Sort: Progress in History without Biology	70
Divorce of Race and Culture: Progress as an Illusion	71
The Culture Concept Nudges Out the Race Concept	73
5 THE EUGENICS MOVEMENT	77
A Simple Plan for Making Life Better	77
Mendelism in Eugenics	80
American Eugenics: The Peril of the Huddled Masses	81
Eugenics: Science and Pseudoscience	86
Eugenics in National Socialist Germany	88
Why Eugenics Failed	89
Lessons for Our Time	92
6 RACIAL AND RACIST ANTHROPOLOGY	99
Racism and Eugenics	99
Human Diversity	101
Racist Studies	102
Racial Studies	104
What do Differences among Human Groups Represent?	106
Performance and Ability	109
Race as a Social Construct	110
The Linnaean and Buffonian Frameworks	113

7 PATTERNS OF VARIATION IN HUMAN POPULATIONS	117
The Phenotype in Racial Studies	117
Developmental Plasticity: The Skull in Racial Studies	120
Genetics and the Human Races	125
Blood Group Allele Frequencies in Populations	130
Genetics of the Human Species	133
8 HUMAN MOLECULAR AND MICROEVOLUTIONARY GENETICS	137
Genes and Proteins	137
The Genome	139
Hemoglobin	142
Genome Structure and Evolution in the Globin Genes	143
The Comparison of Genetic Regions	144
Hemoglobin Variation in the Human Species	146
Thalassemia	147
Genetic Screening	148
Modern Eugenics	150
Hereditarianism	151
9 HUMAN DIVERSITY IN THE LIGHT OF MODERN GENETICS	157
Differences among the "Three Races"	158
The Social Nature of Geographical Categories	161
Patterns of Genetic Differentiation	165
Mitochondrial Eve	169
Patterns of Genetic Diversity	172
The Genetics of Individuality	173
The Human Genome Project	174
Who Is Related to Whom?	176

10 THE ADAPTIVE NATURE OF HUMAN VARIATION	183
Patterns of Gene Flow	185
Adaptation	187
Genetic Adaptation	191
Human Variation as Phenotype Adaptation	193
Nutritional Variation	195
Uniquenesses of Human Adaptation	196
Cultural Selection	198
Culture as a Social Marker	199
 11 HEALTH AND HUMAN POPULATIONS	 203
Demographic Transitions	204
Demography versus Eugenics	204
Economics and Biology	204
The Cultural Nature of Disease	209
Ethnic Diseases	211
Culture and Biology: AIDS	213
Culture as Technological Fix	215
 12 HUMAN TRAITS: HERITAGE OR HABITUS?	 219
Aesop and Darwin	220
Sex and the Single Fruitfly	224
Rape as Heritage or Habitus	226
Proximate and Ultimate Cause in Biology	228
The Asphalt Jungle	231
Human Behavior as Heritage	232
 13 GENETICS AND THE EVOLUTION OF HUMAN BEHAVIOR	 237
On the Number of Michael Jordans in the Known Universe	237
Comparing Groups of People	238
Where Are the Great Jewish Boxers?	240
How do we Establish the Genetic Base of a Behavior?	243
The Genetics of Deviance	244

The Hereditarian Jumble	246
The Genetic Basis of Sexual Deviance	250
Genetic Behavior: Here Today, Gone Tomorrow	253
Platonism and the Search for Human Nature	255
Was Hammerstein Wrong?	258
Race, Xenophobia, and Lessons of History	260
 14 CONCLUSIONS	 265
 Appendix: DNA Structure and Function	 279
 Index	 314