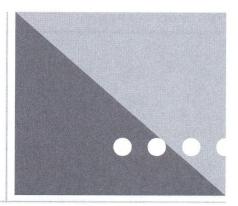
## Full Contents



Brief Conter	its		vii
List of Figure	25		xvii
List of Table	S		xxi
List of Boxes			xxiii
Preface			xxiv
Acknowledg	ement	2	xxvi
Part I	Fur	ndamentals of the Evolutionary Approach	1
1		orical Introduction: Evolution and Theories of Mind and aviour, Darwin and After The origin of species	3
	1.2	<ul> <li>1.1.1 New foundations</li> <li>The study of animal behaviour</li> <li>1.2.1 Comparative psychology and ethology: the 19th-century origins</li> <li>1.2.2 Ethology and comparative psychology in the 20th century</li> <li>1.2.3 Interactions between comparative psychology and ethology</li> </ul>	5 5 7
	1.3	<ul> <li>1.2.3 Interactions between comparative psychology and ethology</li> <li>Evolution and theories of human behaviour: Darwin and after</li> <li>1.3.1 Herbert Spencer (1820–1903)</li> <li>1.3.2 Evolution in America: Morgan, Baldwin and James</li> <li>1.3.3 Galton and the rise of the eugenics movement</li> </ul>	14 15 16 18
	1.4	<ul> <li>The triumph of culture</li> <li>1.4.1 Franz Boas</li> <li>1.4.2 The revolt against eugenics</li> <li>1.4.3 Behaviourism as an alternative resting place</li> <li>1.4.4 The 'cognitive revolution' and other challenges to behaviourism</li> </ul>	19 19 21 22 22
	1.5	<ul><li>The rise of sociobiology and evolutionary psychology</li><li>1.5.1 From sociobiology to evolutionary psychology</li><li>1.5.2 The influence of evolutionary psychology (EP)</li></ul>	<b>24</b> 24 26
2	Dar	winism, Inclusive Fitness and the Selfish Gene	30
	2.1	<ul> <li>The mechanism of Darwinian evolution</li> <li>2.1.1 The ghosts of Lamarckism</li> <li>2.1.2 The central dogma in a modern form</li> <li>2.1.3 Darwin's difficulties</li> </ul>	30 31 32 33
	2.2	Some basic principles of genetics 2.2.1 The genetic code	33

		2.2.2 From § 2.2.3 Herita	genes to behaviour: some warnings bility	40 41
	2.3		natural selection	42
	2.5		nit of selection: replicators and vehicles	42
	2.4	Kin selection		43
	2.1		ton's rule	44
			cient of relatedness	44
			ation of Hamilton's rule and kin selection	45
	2.5		on and discrimination	46
	2.6	Levels of altr		47
	2.0		genes and compassionate vehicles	47
			upidity of genes	48
3	Sex,	Sexual Sele	ction and Life History Theory	51
	3.1	Why sex?		51
		3.1.1 Why d	lo males exist?	51
	3.2	Sex and anis	ogamy	55
	3.3	Describing m	nating behaviour: systems and strategies	55
		3.3.1 Proble	ms with the concept of mating systems	56
	3.4	The sex ratio	: Fisher and after	57
		3.4.1 Why s	o many males?	57
		3.4.2 Fisher'	s argument	57
	3.5	Sexual select	ion	58
		3.5.1 Natura	l selection and sexual selection compared	58
			exual and intrasexual selection	59
			al investment	60
			ial reproductive rates: humans and other animals	61
		*	perational sex ratio	62
	20	1	perational sex ratio and contingent strategies	64
	3.6		es of sexual selection	64
			dimorphism in body size	64
			opulatory intrasexual competition: sperm competition genes and honest signals	66 67
	3.7	Life history th		69
	5.7	-	story variables	<b>6</b> 9
			ity and quality, mating and parenting	70
			lated activation of mental modules	72
		0	nd the demographic transition	72
			e, the menopause and the function of grandparents	74
4	Fou	dations of [	Darwinian Psychology	79
	4.1	Testing for ad	daptive significance	79
			of the adaptationist paradigm: 'Just So stories' and Pangloss	ianism 79
			sting of hypotheses	81
			ations and fitness: then and now	83
			ionary psychology or Darwinian anthropology?	85
	1.0		A: the land of lost content	87
	4.2	Urders of exp	olanation in evolutionary thinking	89

Part II	Hu	man	Evolution and its Consequences	93	
5	The Evolution of Homo Sapiens				
	5.1	Syster	natics	95	
		5.1.1	How to classify humans and their relatives	96	
	5.2	Origin	ns of the hominins	97	
		5.2.1		97	
		5.2.2	Hominin speciation	98	
		5.2.3	Bipedalism	100	
	5.3	Phylo	geny of the Hominoidea	101	
		5.3.1	Branching sequences and dates	101	
		5.3.2	Early hominins	103	
	5.4	Some	important features of hominin evolution	108	
		5.4.1	Body size	108	
		5.4.2	Brain size	109	
		5.4.3	Reduced sexual dimorphism	109	
	5.5	The su	upremacy of Homo sapiens	110	
		5.5.1	Out of Africa or multiregionalism?	110	
		5.5.2	Mitochondrial Eve and Y-chromosome Adam	112	
6	Ence	ephalis	sation and the Emergence of the Human Mind	115	
	6.1	The si	zes of animal brains	115	
		6.1.1	What makes humans so special?	115	
		6.1.2	Allometry	116	
		6.1.3	Ancestral brains and encephalisation quotients	117	
	6.2	Origir	ns of primate intelligence and theories of human brain enlargement	118	
		6.2.1	The energetic demands of brains	119	
		6.2.2	Environmental factors: lifestyle, food and foraging	120	
		6.2.3	Tool use	122	
		6.2.4	1	124	
		6.2.5		124	
			Hardware–software coevolution: the stimulus of language	130	
		6.2.7	Sexual selection and brain size: the display hypothesis Genomic imprinting and brain growth	131 131	
		6.2.8 6.2.9	Neoteny as a mechanism for brain growth	131	
	62			134	
	6.3	Langu 6.3.1		134	
		6.3.2	Natural selection and the evolution of language Localisation of language function in the human brain	134	
		6.3.3	Dating the origin of human language: anatomical evidence	136	
		6.3.4	Grooming coalitions and group size	137	
		6.3.5	Mirror neurons and the origin of language	139	
Part III	Cod	gniti	on and Emotion	145	
7			y, Cognition and Reasoning	147	
'	7.1		nodular mind	147	
	/.1	7.1.1	Epistemological dilemmas: rationalism or empiricism?	147	
		7.1.2	The localisation of brain function	149	
		7.1.3	The manifesto of Tooby and Cosmides	150	

		7.1.4 Some potential candidates for domain-specific modules	151
	7.2	Problems with rational thought	153
		7.2.1 The problem of optimisation	153
		7.2.2 Errors of thought and reasoning: heuristics and cognitive illusions	154
	7.3	Cognitive illusions and the adapted mind	156
		7.3.1 Bounded rationality and adaptive thinking	156
	7.4	Biases and fallacies revisited	159
		7.4.1 Overconfidence bias revisited	159
		7.4.2 The conjunction fallacy revisited	160
		7.4.3 The base rate fallacy revisited	160
	7.5	Case study: the Wason selection task: cognitive adaptations for	
		social exchange	161
		7.5.1 Logical reasoning and the social contract	161
		7.5.2 The Wason task and the payoff to the participant	164
	7.6	Sex differences in cognition	165
	7.7	Problems with the modular approach	167
8	Emo	otions	171
	8.1	Some early theories of emotions	172
	0.1	8.1.1 <i>The Expression of the Emotions in Man and Animals</i> (Darwin, 1872)	172
		8.1.2 The James–Lange theory	173
	8.2	The functionality of emotions	174
	0.1	8.2.1 The case for functionality	174
		8.2.2 Evidence of functionality	174
		8.2.3 Homology	175
		8.2.4 Universality	176
		8.2.5 Neurophysiological correlates	177
	8.3	Brain structure	178
		8.3.1 The central nervous system	178
		8.3.2 The two hemispheres	180
		8.3.3 The amygdala	181
		8.3.4 Mirror neurons and the understanding of emotions	183
	8.4	Emotions and some specific functions	184
		8.4.1 Emotion, commitment and decision-making	184
		8.4.2 Emotions as superordinate cognitive programmes	184
		8.4.3 Resolving the paradox of emotions	186
Part IV	Coo	operation and Conflict	189
9	Kin :	Selection and Altruism	191
	9.1	Kin and parental certainty	191
	9.2	Sibling affection and r values	192
	9.3	Discriminating grandparental solicitude	193
	9.4	The distribution of wealth: inheritance and kin investment	194
		9.4.1 Inheritance of wealth: practice in a contemporary Western culture	195
		9.4.2 Inheritance rules and marriage systems	196
		9.4.3 Paternity certainty, patrilineality and matrilineality	197
	9.5	Reciprocal altruism	198

		9.5.1 Mutualism, parasitism, altruism and spite	198
		9.5.2 Reciprocal altruism or time-delayed discrete mutualism	199
		9.5.3 Conditions for the existence of reciprocal altruism	200
	9.6	Game theory and the prisoners' dilemma	201
		9.6.1 The prisoners' dilemma	202
		9.6.2 Tit for tat	203
		9.6.3 Applications of game theory	205
		9.6.4 Indirect reciprocity and reputation	207
	9.7	Game theory and the moral passions	208
10	0 Con	flict Within Families and Other Groups	211
	10.1	Parent–offspring interactions: some basic theory	211
		10.1.1 Parental altruism	211
		10.1.2 Parent-offspring conflict and sibling rivalry	212
	10.2	2 Maternal–fetal conflict	213
		10.2.1 Conflicts over glucose supplied to the fetus	214
		10.2.2 Conflicts over decision to miscarry	214
		10.2.3 Conflicts over blood supply	216
	100	10.2.4 Conflict after parturition	216
	10.3	B Human violence and homicide	217
		10.3.1 Infanticide	218
	10.4	Human sexual conflicts	222
		10.4.1 Marriage as a reproductive contract: control of female sexuality	222
		10.4.2 Jealousy and violence	224
			005
		10.4.3 Divorce and remarriage	225
Part V	/ Ma	10.4.3 Divorce and remarriage	225 229
Part V			
	1 Hun	ting and Mate Choice	229
	1 Hun	<b>Ating and Mate Choice</b> <b>nan Sexual Behaviour: Mating Systems and Mating Strategies</b> Contemporary traditional or preindustrial societies 11.1.1 Cultural distribution of mating systems	<b>229</b> 231
	1 Hun	nting and Mate Choice nan Sexual Behaviour: Mating Systems and Mating Strategies Contemporary traditional or preindustrial societies	<b>229</b> <b>231</b> 231
	1 Hun 11.1	<b>Ating and Mate Choice</b> <b>nan Sexual Behaviour: Mating Systems and Mating Strategies</b> Contemporary traditional or preindustrial societies 11.1.1 Cultural distribution of mating systems	<b>229</b> 231 231 231
	1 Hun 11.1	<b>Ating and Mate Choice</b> <b>Inan Sexual Behaviour: Mating Systems and Mating Strategies</b> Contemporary traditional or preindustrial societies 11.1.1 Cultural distribution of mating systems 11.1.2 Hunter-gatherer societies Physical comparisons between humans and other primates 11.2.1 Body size dimorphism	<b>229</b> <b>231</b> 231 232 235 235
	1 Hun 11.1	<ul> <li>Ating and Mate Choice</li> <li>man Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1.1 Cultural distribution of mating systems</li> <li>11.1.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> </ul>	<b>229</b> <b>231</b> 231 232 235 235 235
	1 Hun 11.1 11.2	<ul> <li>Ating and Mate Choice</li> <li>Anan Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1.1 Cultural distribution of mating systems</li> <li>11.1.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> </ul>	<b>229</b> <b>231</b> 231 232 <b>235</b> 235 235 235 236
	1 Hun 11.1 11.2	<ul> <li>Ating and Mate Choice</li> <li>Anan Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1.1 Cultural distribution of mating systems</li> <li>11.1.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> </ul>	<b>229</b> <b>231</b> 231 232 235 235 235 235 236 240
	1 Hun 11.1 11.2	<ul> <li>Ating and Mate Choice</li> <li>man Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1.1 Cultural distribution of mating systems</li> <li>11.1.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> <li>11.3.1 Sex differences in long- and short-term mating strategies</li> </ul>	<b>229</b> <b>231</b> 231 232 235 235 235 235 236 240 241
	1 Hun 11.1 11.2	<ul> <li>Ating and Mate Choice</li> <li>Anan Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1.1 Cultural distribution of mating systems</li> <li>11.1.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> </ul>	<b>229</b> <b>231</b> 231 232 235 235 235 235 236 240
	<ol> <li>Hun 11.1</li> <li>11.2</li> <li>11.3</li> <li>Hun</li> </ol>	<ul> <li>Ating and Mate Choice</li> <li>Ana Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1 Cultural distribution of mating systems</li> <li>11.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> <li>11.3.1 Sex differences in long- and short-term mating strategies</li> <li>11.3.2 Sexual strategies in relation to context</li> </ul>	<ul> <li>231</li> <li>231</li> <li>231</li> <li>232</li> <li>235</li> <li>235</li> <li>236</li> <li>240</li> <li>241</li> <li>242</li> <li>247</li> </ul>
* 11	<ol> <li>Hun 11.1</li> <li>11.2</li> <li>11.3</li> <li>Hun 12.1</li> </ol>	<ul> <li>Ating and Mate Choice</li> <li>Ana Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1 Cultural distribution of mating systems</li> <li>11.1.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> <li>11.3.1 Sex differences in long- and short-term mating strategies</li> <li>11.3.2 Sexual strategies in relation to context</li> </ul>	229 231 231 232 235 235 235 235 236 240 241 242 247 248
* 11	<ol> <li>Hun 11.1</li> <li>11.2</li> <li>11.3</li> <li>Hun 12.1</li> </ol>	<ul> <li>Ating and Mate Choice</li> <li>Ana Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1.1 Cultural distribution of mating systems</li> <li>11.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> <li>11.3.1 Sex differences in long- and short-term mating strategies</li> <li>11.3.2 Sexual strategies in relation to context</li> </ul>	229 231 231 232 235 235 235 236 240 241 242 247 248 249
* 11	<ol> <li>Hun 11.1</li> <li>11.2</li> <li>11.3</li> <li>Hun 12.1</li> </ol>	<ul> <li>Ating and Mate Choice</li> <li>man Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1 Cultural distribution of mating systems</li> <li>11.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> <li>11.3.1 Sex differences in long- and short-term mating strategies</li> <li>11.3.2 Sexual strategies in relation to context</li> <li>man Mate Choice: the Evolutionary Logic of Sexual Desire</li> <li>Evolution and sexual desire: some expectations and approaches</li> <li>Questionnaire approaches</li> <li>12.2.1 Cross-cultural comparisons</li> </ul>	<ul> <li>231</li> <li>231</li> <li>231</li> <li>232</li> <li>235</li> <li>235</li> <li>235</li> <li>236</li> <li>240</li> <li>241</li> <li>242</li> <li>247</li> <li>248</li> <li>249</li> <li>249</li> </ul>
* 11	<ol> <li>Hun 11.1</li> <li>11.2</li> <li>11.3</li> <li>Hun 12.1</li> </ol>	Ating and Mate Choice nan Sexual Behaviour: Mating Systems and Mating Strategies Contemporary traditional or preindustrial societies 11.1.1 Cultural distribution of mating systems 11.1.2 Hunter-gatherer societies Physical comparisons between humans and other primates 11.2.1 Body size dimorphism 11.2.2 Testis size 11.2.3 Testis size and bodily dimorphism applied to humans Pluralistic sexual strategies 11.3.1 Sex differences in long- and short-term mating strategies 11.3.2 Sexual strategies in relation to context man Mate Choice: the Evolutionary Logic of Sexual Desire Evolution and sexual desire: some expectations and approaches 2 Questionnaire approaches 12.2.1 Cross-cultural comparisons 12.2.2 Urgency in copulation	<ul> <li>231</li> <li>231</li> <li>231</li> <li>232</li> <li>235</li> <li>235</li> <li>235</li> <li>236</li> <li>240</li> <li>241</li> <li>242</li> <li>247</li> <li>248</li> <li>249</li> <li>249</li> <li>250</li> </ul>
* 11	<ol> <li>Hun 11.1</li> <li>11.2</li> <li>11.3</li> <li>Hun 12.1</li> <li>12.2</li> </ol>	<ul> <li>Ating and Mate Choice</li> <li>Ating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1 Cultural distribution of mating systems</li> <li>11.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> <li>11.3.1 Sex differences in long- and short-term mating strategies</li> <li>11.3.2 Sexual strategies in relation to context</li> <li>And Mate Choice: the Evolutionary Logic of Sexual Desire</li> <li>Evolution and sexual desire: some expectations and approaches</li> <li>2.2.1 Cross-cultural comparisons</li> <li>12.2.2 Urgency in copulation</li> <li>12.2.3 A qualified parental investment model: the effect of levels of involve</li> </ul>	<b>229</b> <b>231</b> 231 232 235 235 235 236 240 241 242 <b>247</b> 248 249 249 249 249 250
* 11	<ol> <li>Hun 11.1</li> <li>11.2</li> <li>11.3</li> <li>Hun 12.1</li> <li>12.2</li> </ol>	<ul> <li>Ating and Mate Choice</li> <li>Ating Sexual Behaviour: Mating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1 Cultural distribution of mating systems</li> <li>11.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> <li>11.3.1 Sex differences in long- and short-term mating strategies</li> <li>11.3.2 Sexual strategies in relation to context</li> <li>And Mate Choice: the Evolutionary Logic of Sexual Desire</li> <li>Evolution and sexual desire: some expectations and approaches</li> <li>2.2.1 Cross-cultural comparisons</li> <li>12.2.2 Urgency in copulation</li> <li>12.2.3 A qualified parental investment model: the effect of levels of involve</li> <li>The use of published advertisements</li> </ul>	229 231 231 232 235 235 235 235 236 240 241 242 244 249 249 249 249 250 ement 251 252
* 11	<ol> <li>Hun 11.1</li> <li>11.2</li> <li>11.3</li> <li>Hun 12.1</li> <li>12.2</li> </ol>	<ul> <li>Ating and Mate Choice</li> <li>Ating Systems and Mating Strategies</li> <li>Contemporary traditional or preindustrial societies</li> <li>11.1 Cultural distribution of mating systems</li> <li>11.2 Hunter-gatherer societies</li> <li>Physical comparisons between humans and other primates</li> <li>11.2.1 Body size dimorphism</li> <li>11.2.2 Testis size</li> <li>11.2.3 Testis size and bodily dimorphism applied to humans</li> <li>Pluralistic sexual strategies</li> <li>11.3.1 Sex differences in long- and short-term mating strategies</li> <li>11.3.2 Sexual strategies in relation to context</li> <li>And Mate Choice: the Evolutionary Logic of Sexual Desire</li> <li>Evolution and sexual desire: some expectations and approaches</li> <li>2.2.1 Cross-cultural comparisons</li> <li>12.2.2 Urgency in copulation</li> <li>12.2.3 A qualified parental investment model: the effect of levels of involve</li> </ul>	229 231 231 232 235 235 235 235 236 240 241 242 244 249 249 249 249 250 ement 251 252

	12.4 The use of stimulus pictures to investigate body shape preferences 12.4.1 Waist to hip ratios (WHRs): male assessment of females	<b>254</b> 254
	12.4.2 Waist to hip ratios (WHRs): female assessment of males	255
	12.4.3 The cultural variability of attractiveness judgements	256
	12.4.4 The female breast	262
	12.5 Facial attractiveness: honest signals, symmetry and averageness	263
	12.5.1 Honest signals	263
	12.5.2 Symmetry and fluctuating asymmetry	264
	12.5.3 Averageness	265
	12.5.4 The enigma of the beard	266
	12.5.5 Other aspects of attractive faces	266
	12.5.6 Female facial preferences: a potential hormone-mediated adaptive design feature	268
13	Incest Avoidance and the Westermarck Effect	271
	13.1 Early views about inbreeding and the incest taboo	271
	13.2 Westermarck's alternative Darwinian explanation	272
	13.3 Testing Westermarck's hypothesis	273
	13.3.1 Inbreeding as injurious to offspring (inbreeding depression)	274
	13.3.2 Early association inhibiting inbreeding by generating an aversion	275
	13.3.3 Aversion through co-socialisation as an evolutionary adaptation	277
	<ul><li>13.3.4 Inbreeding depression and cultural norms: the representational problem</li><li>13.4 Keeping it in the family: incest, paternity confidence and</li></ul>	278
	social stratification	281
	13.5 Incest and morality	283
		285
Part VI 14	Mental Disorders: Some Theoretical Approaches	<b>285</b> 287
	Mental Disorders: Some Theoretical Approaches 14.1 Problems of taxonomy and definition	
	Mental Disorders: Some Theoretical Approaches 14.1 Problems of taxonomy and definition 14.1.1 DSM systems	<b>287</b> 287 287
	Mental Disorders: Some Theoretical Approaches 14.1 Problems of taxonomy and definition 14.1.1 DSM systems 14.1.2 Sociological considerations	<b>287</b> 287 287 288
	Mental Disorders: Some Theoretical Approaches 14.1 Problems of taxonomy and definition 14.1.1 DSM systems 14.1.2 Sociological considerations 14.2 Conceptual pluralism in psychology	<b>287</b> 287 287
	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> </ul>	<b>287</b> 287 287 288
	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts</li> </ul>	<ul> <li>287</li> <li>287</li> <li>287</li> <li>288</li> <li>289</li> </ul>
	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> </ul> </li> </ul>	<ul> <li>287</li> <li>287</li> <li>287</li> <li>288</li> <li>289</li> <li>291</li> <li>293</li> <li>293</li> </ul>
	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> </ul> </li> </ul>	287 287 288 289 291 293 293 293
	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> <li>14.4.3 The smoke detector principle</li> </ul> </li> </ul>	<ul> <li>287</li> <li>287</li> <li>288</li> <li>289</li> <li>291</li> <li>293</li> <li>293</li> <li>293</li> <li>294</li> </ul>
	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> <li>14.4.3 The smoke detector principle</li> <li>14.4.4 Preparedness theory</li> </ul> </li> </ul>	<ul> <li>287</li> <li>287</li> <li>288</li> <li>289</li> <li>291</li> <li>293</li> <li>293</li> <li>294</li> <li>295</li> </ul>
	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> <li>14.4.3 The smoke detector principle</li> </ul> </li> </ul>	<ul> <li>287</li> <li>287</li> <li>288</li> <li>289</li> <li>291</li> <li>293</li> <li>293</li> <li>294</li> <li>295</li> <li>299</li> </ul>
	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> <li>14.4.3 The smoke detector principle</li> <li>14.4.4 Preparedness theory</li> <li>14.4.5 The trait variation argument</li> </ul> </li> </ul>	<ul> <li>287</li> <li>287</li> <li>288</li> <li>289</li> <li>291</li> <li>293</li> <li>293</li> <li>294</li> <li>295</li> </ul>
	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> <li>14.4.3 The smoke detector principle</li> <li>14.4.4 Preparedness theory</li> <li>14.4.5 The trait variation argument</li> <li>14.4.6 Out of Eden hypothesis</li> <li>14.4.7 Design trade-offs</li> </ul> </li> <li>Mental Disorders: Some Case Studies</li> </ul>	287 287 288 289 291 293 293 293 293 294 295 299 299
14	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> <li>14.4.3 The smoke detector principle</li> <li>14.4.4 Preparedness theory</li> <li>14.4.5 The trait variation argument</li> <li>14.4.6 Out of Eden hypothesis</li> <li>14.4.7 Design trade-offs</li> </ul> </li> <li>Mental Disorders: Some Case Studies</li> <li>15.1 Depression</li> </ul>	<ul> <li>287</li> <li>287</li> <li>287</li> <li>288</li> <li>289</li> <li>291</li> <li>293</li> <li>293</li> <li>293</li> <li>294</li> <li>295</li> <li>299</li> <li>302</li> <li>305</li> </ul>
14	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> <li>14.4.3 The smoke detector principle</li> <li>14.4.4 Preparedness theory</li> <li>14.4.5 The trait variation argument</li> <li>14.4.6 Out of Eden hypothesis</li> <li>14.4.7 Design trade-offs</li> </ul> </li> <li>Mental Disorders: Some Case Studies</li> <li>15.1 Depression <ul> <li>15.1 Types of depression and their incidence</li> </ul> </li> </ul>	287 287 288 289 291 293 293 293 293 293 294 295 299 302 305 305 305
14	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> <li>14.4.3 The smoke detector principle</li> <li>14.4.4 Preparedness theory</li> <li>14.4.5 The trait variation argument</li> <li>14.4.6 Out of Eden hypothesis</li> <li>14.4.7 Design trade-offs</li> </ul> </li> <li>Mental Disorders: Some Case Studies</li> <li>15.1 Depression <ul> <li>15.1.1 Types of depression and their incidence</li> <li>15.1.2 Depression as an adaptive strategy</li> </ul> </li> </ul>	<ul> <li>287</li> <li>287</li> <li>287</li> <li>288</li> <li>289</li> <li>291</li> <li>293</li> <li>293</li> <li>293</li> <li>293</li> <li>294</li> <li>295</li> <li>299</li> <li>302</li> <li>305</li> <li>305</li> <li>307</li> </ul>
14	<ul> <li>Mental Disorders: Some Theoretical Approaches</li> <li>14.1 Problems of taxonomy and definition <ul> <li>14.1.1 DSM systems</li> <li>14.1.2 Sociological considerations</li> </ul> </li> <li>14.2 Conceptual pluralism in psychology</li> <li>14.3 Evolutionary classifications of mental disorders</li> <li>14.4 Evolutionary accounts <ul> <li>14.4.1 Genetically based disorders: mutations</li> <li>14.4.2 Defence mechanisms</li> <li>14.4.3 The smoke detector principle</li> <li>14.4.4 Preparedness theory</li> <li>14.4.5 The trait variation argument</li> <li>14.4.6 Out of Eden hypothesis</li> <li>14.4.7 Design trade-offs</li> </ul> </li> <li>Mental Disorders: Some Case Studies</li> <li>15.1 Depression <ul> <li>15.1 Types of depression and their incidence</li> </ul> </li> </ul>	287 287 288 289 291 293 293 293 293 293 294 295 299 302 305 305 305

	15.2	Psychopathology	311
		15.2.1 Psychopathy as psychopathology	311
		15.2.2 Evidence for psychopathy as design	312
		15.2.3 Psychopathy as a genetically based and adaptively functional	212
		single strategy	313
	15.0	15.2.4 Psychopathy as an environmentally contingent strategy	313
	15.3	Schizophrenia	313
		15.3.1 Biology and genetics of schizophrenia	314 315
		<ul><li>15.3.2 Evolutionary explanations of schizophrenia</li><li>15.3.3 The group-splitting hypothesis</li></ul>	316
		15.3.4 The brain lateralisation and language development hypothesis	317
	154	Autism	318
	13.7	15.4.1 Autism and mind blindness	318
		15.4.2 Autism and genomic imprinting	321
		15.4.3 Autism and mirror neurons	321
Part VII	Wic	ler Contexts	325
16	The	Evolution of Culture: Genes and Memes	327
	16.1	Modelling culture	327
		Culture as autonomous	328
	16.3	Cultural evolution as the natural selection of memes	329
		Dual inheritance theories	332
	10.1	16.4.1 Imitation and bias	332
		16.4.2 Changing environments and social learning	334
		16.4.3 Maladaptive cultural variants	334
		16.4.4 Culture and life history	335
	16.5	Gene-culture coevolution	336
	16.6	Culture as a consequence of genotype: culture as extended phenotype	338
		16.6.1 The extended phenotype	338
		16.6.2 Culture as sexual display	339
17	Ethio	CS	343
	17.1	Does Darwinism signal the end of ethics?	343
		17.1.1 The challenge of evolution	343
		17.1.2 Existence of God and a basis for objective moral standards	344
		17.1.3 Freedom of the will	345
		17.1.4 Transcendentalism, empiricism and the slide to relativism	348
		17.1.5 The fact–value dichotomy	349
	17.2	Prospects for a naturalistic ethics	350
		17.2.1 The naturalistic fallacy	350 352
		<ul><li>17.2.2 A Darwinian updating of Hume</li><li>17.2.3 The behavioural ecology of morality</li></ul>	354
		17.2.4 Game theory and moral philosophy	355
		17.2.5 Moral development	356
		17.2.6 But is it right?	358
	17.3	Applied ethics: moral problems	358

	Epilogue: The Use and Abuse of Evolutionary Theory	361
	18.1 Evolution and politics: a chequered history	361
	18.1.1 Race, IQ and intelligence	365
	18.1.2 A poisoned chalice	365
	18.2 The eugenics movement	366
	18.3 Evolutionary biology and sexism	366
	18.4 Evolutionary biology and racism	369
	18.5 The limits of nature	370
	18.5.1 Reductionism and determinism	370
	18.5.2 The perfectibility of man	371
	18.6 So human an animal	372
	18.6.1 Fine intentions	372
	18.6.2 Retrieving our humanity	373
Glossary		376
Bibliography		387
Index		411