

Contents

Part I Historical Approaches to Hunter-Gatherers

1 Progressive Social Evolution and Hunter-Gatherers	3
Introduction	3
The Developmental Model: Hunter-Gatherers as Primitives	5
The Ecological Model: Hunter-Gatherers in Harmony with Environment	6
Discussion	7
Social Evolution and Primitive Hunter-Gatherers: Progress to Perfection	10
Progressive Social Evolution as Political Theory	11
Social Policy and Progressive Evolutionary Theory	14
Primitives, Environment, and British Social Evolution	17
Theories of Environment	18
Conjectural Fieldwork	20
Spencer’s Case for the Importance of Environment	21
British Hunter-Gatherer Research: Ethnography	22
The Priority of Theory	24
British Hunter-Gatherer Research: Archaeology	25
Conclusion	28
References	28
2 The History of Americanist Hunter-Gatherer Research	33
The Early Years: 1600–1880	33
Jefferson on Primitives and the New World Environment	35
Morgan	36
Environment and Ecology in Early American Anthropology: 1880–1920	37
Powell and Social Progress	38

- The Museum Connection 39
- Technogeography and Social Evolution 40
- McGee’s Seri Ethnography 41
- After Powell 44
- Materialism and Evolution in American Archaeology: 1920–1960 45
 - The Pecos Classification 45
 - The Midwestern Taxonomic System 46
- Summary 46
- Research After 1960: Hunter-Gatherers as Ecologists 47
 - The Archaeological Connection 50
 - Discussion 52
 - The Troubles of Neofunctionalism 56
- Conclusion 58
- References 59

Part II Theories of Limited Sets

- 3 Middle-Range Theory and Hunter-Gatherers 67**
 - Introduction 67
 - The Tradition of Middle-Range Research in Archaeology 68
 - Defining Middle-Range Theory in Archaeology 70
 - Foragers and Collectors 70
 - Foragers 72
 - Collectors 73
 - Great Basin Foragers and Collectors 76
 - The Processes of Site Formation 78
 - Nunamiut Butchering 78
 - The Scavenging Hypothesis 80
 - Late Prehistoric Mountain Sheep Kills in the Great Basin 81
 - The Myth of Middle-Range Theory 81
 - References 87
- 4 Hunter-Gatherers as Optimal Foragers 91**
 - Simple Models of Optimal Foraging 91
 - The Diet Breadth Model 92
 - The Patch Choice Model 96
 - Patch Residence Time: The Marginal Value Theorem 99
 - Central Place Foraging 105
 - Storage: The Front–Back Loaded Model 109
 - Model of Technological Investment 113
 - Applications of Simple Optimal Foraging Models 116
 - Diet Breadth: Alternative Rankings, Currencies, and Constraints 118
 - Intensification and the Transition to Agriculture 120
 - Mobility: The Ideal Free Distribution 122
 - Travelers and Processors 125

Criticism of Optimal Foraging Theory 128

 The Middle-Range Critics of Optimal Foraging Theory 129

 Other Criticisms of Optimal Foraging Theory 133

Discussion 134

References 135

5 More Complex Models of Optimal Behavior Among Hunter-Gatherers 139

Foraging Currencies and Multiple Resource Constraints 140

 Noncontingency Optimality: Linear Programming 141

Resource Variability and Risk 147

 The Z-score Model 148

 The Social Context of Foraging in Relation to Variability: Sharing 151

 Discussion 154

Forager/Foraged-for Interaction: Carrying Capacity 155

References 158

Part III Theories of General Sets

6 Marxist and Structural Marxist Perspectives of Hunter-Gatherers 163

The Necessity of General Theory 163

Historical Materialism, Marxism, and Structural Marxism 164

 Historical Materialism and Capitalism 164

 Marxism and Hunter-Gatherers 167

Structural Marxism 168

 Applications: Ethnography 170

 Applications: Archaeology 172

Marxism, Structural Marxism, and Neofunctionalism 173

 Hunter-gatherers and the Penetration of Capitalism 175

 Marxists and the Environment 176

Conclusions and Implications 177

References 180

7 Neo-Darwinian Theory and Hunter-Gatherers 187

Darwinian and Non-Darwinian Social Theories 187

Evolutionary Archaeology 190

Human Behavioral Ecology 193

 The Problem of Altruism 194

 The Prisoner’s Dilemma 195

 Competing Interests: Individuals Versus Groups 197

 Inclusive Fitness 199

 Tit-for-Tat Strategists 200

Testing the Models of Evolutionary Ecology 202

 Solution of the Problem Through Analysis of Opportunity Costs 205

 Aché Food Sharing and Inclusive Fitness 208

 Modeling Reproductive Payoffs for Aché-like Situations 211

 Costly Signals, Cheap Signals 222

The Genetic Basis for Evolutionary Ecological Explanation 231

References 233

8 Hunter-Gatherers and Neo-Darwinian Cultural Transmission 239

 A Neo-Darwinian Model of Cultural Transmission 239

 Principles of Cultural Transmission 240

 Guided Variation 244

 Content or Direct Bias 246

 Discussion 248

 Context-Biased Social Learning 252

 Frequency-dependent Bias 253

 Model-Based Bias 254

 The Evolution of Ethnic Markers 257

 “Folk Theorem” and Coordinated Punishment 260

 Empirical Support 262

 Cultural Transmission and Ethnography: The Aché Revisited 263

 Cultural Transmission and Archaeology:

 The Upper Paleolithic Transition 265

 Cultural Transmission and Archaeology:

 Great Basin Projectile Points 268

 Summary and Implications 271

 References 274

9 Hunter-Gatherers: Problems in Theory 279

 Theories About Consequences 279

 Theories About Processes 286

 Evolutionary Ecology 286

 Cultural Transmission 288

 References 289

Index 291



<http://www.springer.com/978-1-4899-7580-5>

Hunter-Gatherers

Archaeological and Evolutionary Theory

Bettinger, R.L.; Garvey, R.; Tushingham, S.

2015, XV, 304 p. 25 illus., Hardcover

ISBN: 978-1-4899-7580-5