

Contents

| | |
|----------------------------|-------|
| Foreword | xi |
| Preface | xv |
| Acknowledgments | xvii |
| List of Figures and Tables | xxi |
| Abbreviations | xxvii |

Part I

| | |
|--|----------|
| Documenting a long-term archaeological problem: Concepts and observations | 1 |
|--|----------|

Chapter 1

| | |
|---|----------|
| Relics to artifacts and monuments to assemblages: Changing conceptual frameworks | 3 |
| The Relic and Monument Phase | 4 |
| The Artifact and Assemblage Phase | 6 |

Chapter 2

| | |
|--|-----------|
| Middle-range research and the role of actualistic studies | 21 |
| The Paradigm—One's Guide to Describing the World | 23 |
| Theory—One's Guide to Explaining the World | 25 |

Part II

Middle-range research— In search of methodology

31

Chapter 3

Patterns of bone modifications produced by nonhuman agents

35

| | |
|--|----|
| Previous Approaches to Understanding the Significance of Broken and Modified Bone | 37 |
| Skeletal Disarticulation | 42 |
| Tooth Marks | 44 |
| Other Sources of Surficial Modifications on Bone | 49 |
| Bone Breakage and Destruction by Animals | 51 |
| Modifications by Anatomical Part | 60 |
| Breakage Unrelated to Consumption: Trampling and Bone Manipulation | 77 |
| Bone Modifications and Methodology | 81 |

Chapter 4

Human modes of bone modification

87

| | |
|---|-----|
| Previous Approaches to Understanding Broken and Modified Bone | 88 |
| The Control Data | 90 |
| Dismembering Strategy | 91 |
| Butchering Marks | 96 |
| Cut Marks: Their Form and Placement on Specific Bones | 105 |
| Chopping, Bone Breakage and Butchering Techniques | 142 |
| Gnawing by Humans | 147 |
| Marrow-Bone Breakage | 148 |
| Control Collections | 163 |
| Breakage Related in Other Forms of Bone Processing | 166 |
| Man-to-Man Comparisons, or Alternative Human Behaviors | 166 |
| Comparing Man and Beast | 169 |
| Morphology of Bone Breakage | 171 |
| Summary | 177 |

Chapter 5

Assemblage composition: Patterns of association stemming from the behavior of man versus that of beast

183

| | |
|--|-----|
| New World Beginnings—Man as the Agent | 184 |
| African Problems and Assemblage Composition | 189 |
| Other Types of Assemblage Variability | 195 |
| Studies of Assemblage Composition Caused by Beasts | 196 |
| Observations of Wolves and Their Behavior | 197 |
| Information on Lair Behavior | 202 |
| Information on Kill Behavior and Comparisons | 207 |
| Control Collections of Animal-Structured Assemblages | 210 |
| Summary | 237 |

Part III

Putting our knowledge to work: Seeking to know the past

243

Chapter 6

Application: A new look at Olduvai Gorge

249

| | |
|---|-----|
| Olduvai Gorge, a Challenge to Our Methods | 253 |
| Analysis of Olduvai Fauna | 256 |
| Evaluating the Degree of Destruction Suffered by the Olduvai Assemblages | 261 |
| Assemblage Composition—Olduvai Gorge | 262 |
| Summary | 278 |

Chapter 7

General conclusions

287

| | |
|------------|-----|
| References | 297 |
| Index | 311 |