

12TH EDITION

ROUTLEDGE

ARCHAEOLOGY

A BRIEF INTRODUCTION

BRIAN M. FAGAN
AND NADIA DURRANI

Archaeology

Archaeology is a jargon-free and accessible introduction to the field which details how archaeologists study the human past in all its fascinating diversity. Now in its twelfth edition, this classic textbook has been updated to reflect the latest research and new findings in the field. Reflecting the global scope of the discipline, the book has a truly international coverage of important discoveries and sites from many corners of the globe. Individual chapters examine archaeology and its history, considering the role of the archaeologist and how they discover, investigate and classify sites and artifacts.

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Archaeology

A Brief Introduction

TWELFTH EDITION

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and
Nadia Durrani

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To Lucia, Karen, and other friends at Whittier College, who first gave BF the idea for this book back in 1977. And, as usual, to BF's cats, who were as subversive as ever. They did everything to prevent him from revising the manuscript by stepping on it with muddy paws and dancing intricate ballet on the computer keyboard. As you can see, they failed!

Also dedicated to ND's physicist father, Saeed Durrani, who thought about becoming an archaeologist but was advised against it, by Mortimer Wheeler, who told him: "My boy, use physics for the good of archaeology." And so he went on to pioneer thermoluminescence and fission track dating. Thanks for all the good years!

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Brief Contents

1 Fossils, Cities, and Civilizations: The Birth of a Science	1
2 Introducing Archaeology and Prehistory	29
3 Culture and Context	56
4 Explaining the Past	76
5 Space and Time	100
6 They Sought It Here, They Sought It There: The Process of Research and Finding Archaeological Sites	127
7 Excavation	155
8 Archaeological Classification and Ancient Technologies	184
9 The Present and the Past	214
10 Ancient Climate and Environment	238
11 Come Tell Me How You Lived	259
12 Settlement and Landscape	280
13 The Archaeology of People	305
14 Managing the Past	337
15 So You Want to Become an Archaeologist?	357

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Contents

<i>List of Figures and Tables</i>	xvii
<i>Preface</i>	xxiii
<i>Acknowledgments</i>	xxvi
<i>Authors' Note</i>	xxvii
1 Fossils, Cities, and Civilizations: The Birth of a Science	1
<i>Discovery</i> Tutankhamun's Tomb, Egypt, 1922	5
<i>What Is Archaeology?</i>	6
<i>The Beginnings of Archaeology</i>	6
The Three Ages and the Antiquity of Humankind	8
<i>The Discovery of the Ancient Civilizations</i>	11
The Ancient Egyptians	11
The Assyrians and Sumerians	12
Troy and Mycenae	15
<i>Asia: Scrolls and Shoulder Blades</i>	17
<i>African Phoenicians?</i>	18
<i>Early American Archaeology</i>	19
The "Moundbuilders"	19
Maya Civilization	20
Southwestern Archaeology and the Direct Historical Approach	21
<i>Diversity, Diffusion, and Human Progress</i>	22
"From Them to Us": Unilinear Evolution	23
Diffusionism: How Did Civilization Spread?	23
<i>The Development of Modern Scientific Archaeology</i>	24
Scientific Excavation	24
Archaeology and Ecology	25
Scientific Methods	25
<i>"From Them to Us": Contemporary Archaeological Theory</i>	25
Ecological/Evolutionary Approaches	26
Historical Materialist Approaches	26
<i>Summary</i>	27
<i>Questions for Discussion</i>	28
<i>Further Reading</i>	28

2	Introducing Archaeology and Prehistory	29
	<i>The Tourist, the Collector, and the Archaeologist</i>	31
	Discovery The Jamestown Settlement	31
	<i>Who Needs and Owns the Past?</i>	34
	<i>What Do Archaeologists Do?</i>	39
	Anthropology, Archaeology, and History	39
	Archaeologists on the Job	40
	<i>Many Sites, Many Archaeologists</i>	41
	<i>Why Does Archaeology Matter?</i>	42
	Mysteries of the Past	44
	A Sideline: Pseudoarchaeology	45
	Archaeology and Human Diversity	45
	Archaeology as a Political Tool	47
	Archaeology and Economic Development	48
	The Irresistible Lure of the Past	49
	<i>The Prehistory of Humankind According to Archaeologists</i>	50
	Early Prehistory	51
	The Origins and Spread of Modern Humans	53
	The Origins of Food Production	53
	The Origins of States (Civilizations)	54
	European Expansion	54
	<i>Summary</i>	55
	<i>Questions for Discussion</i>	55
	<i>Further Reading</i>	55
3	Culture and Context	56
	<i>Human Culture</i>	57
	Discovery The Lords of Sicán, Peru, A.D. 900–1100	57
	<i>Cultural Systems</i>	60
	<i>Culture Change</i>	64
	<i>The Goals of Archaeology</i>	66
	Stewardship: Preserving the Past	66
	Constructing Culture History	68
	Reconstructing Ancient Lifeways	68
	Explaining Cultural and Social Change	69
	Understanding the Archaeological Record	70
	<i>The Archaeological Record</i>	70
	Archaeological Sites	70
	Artifacts, Features, and Ecofacts	72
	<i>Context</i>	74
	<i>Summary</i>	75
	<i>Questions for Discussion</i>	75
	<i>Further Reading</i>	75

4	Explaining the Past	76
	<i>Interpretation of Culture History</i>	78
	Invention	79
	Discovery Deciphering Hopewell (c. 200 B.C. to A.D. 400)	79
	Diffusion	82
	Migration	83
	Noncultural Models	85
	<i>Genetics and DNA</i>	86
	<i>Ecological/Environmental (Processual) Archaeology</i>	87
	Systems and Cultural Ecology	87
	Multilinear Cultural Evolution	88
	<i>Historical Materialist Approaches</i>	88
	<i>Cognitive-Processual Archaeology</i>	90
	<i>Archaeological Theory Today and Tomorrow: "Processual Plus"</i>	93
	Multidisciplinary Perspectives	94
	Alternative Histories	94
	DNA Studies	94
	Ecology and Evolutionary Theory	95
	Understanding the Role of the Human Mind	95
	External and Internal Constraints	96
	A General Theoretical Framework?	98
	<i>Summary</i>	98
	<i>Questions for Discussion</i>	99
	<i>Further Reading</i>	99
5	Space and Time	100
	<i>Space</i>	102
	The Law of Association	103
	Assemblages and Subassemblages	103
	<i>Time</i>	105
	Linear and Cyclical Time	107
	<i>Relative Chronology</i>	108
	The Law of Superposition	108
	Artifacts and Relative Chronology	110
	Cross-Dating	111
	Obsidian Hydration	112
	<i>Absolute Chronology</i>	112
	Historical Records and Objects of Known Age	113
	Tree-Ring Dating (Dendrochronology)	114
	<i>Chronometric Chronology</i>	117
	Radiocarbon Dating	117
	Luminescence Dating	121
	Electronic Spin Resonance	122
	Uranium Series Dating	122

Potassium-Argon Dating	122
Fission Track Dating	123
Discovery Eruption at Akrotiri, Greece, 1967	124
Summary	125
Questions for Discussion	125
Further Reading	125
6 They Sought It Here, They Sought It There: The Process of Research and Finding Archaeological Sites	127
<i>The Process of Archaeological Research</i>	129
Design and Formulation	129
Implementation	131
Data Acquisition	131
Processing and Analysis	132
Discovery The Nubian Kings of Kerma, Sudan, Early First Millennium B.C.	132
Interpretation	133
Publication	133
<i>Stages of Archaeological Fieldwork</i>	134
<i>Accidental Discovery</i>	134
<i>Remote Sensing, or Archaeological Survey in the Laboratory</i>	137
Google Earth	138
Aircraft and Satellite Imagery	138
Aerial Photography	142
<i>Archaeological Survey at Ground Level</i>	143
<i>Sampling and Archaeological Survey</i>	146
<i>Recording Archaeological Sites</i>	147
Geographic Information Systems (GIS)	148
<i>Assessing Archaeological Sites</i>	150
Surface Collection	150
<i>Subsurface Detection Methods</i>	151
Discovery Remote Sensing at Stonehenge, England	152
Summary	154
Questions for Discussion	154
Further Reading	154
7 Excavation	155
<i>Planned Excavation: Research Design</i>	156
Discovery The Princess of Khok Phanom Di, Thailand, 1984	157
<i>Types of Excavation</i>	161
Site Testing	162
The Process of Dissection	163
Vertical and Horizontal Excavation	165
<i>Digging, Tools, and People</i>	168
<i>Recording</i>	170

<i>Stratigraphic Observation</i>	170	
<i>Excavation Problems</i>	173	
Open Campsites and Villages	173	
Caves and Rockshelters	173	
Mound Sites	174	
Earthworks and Forts	176	
Shell Middens	177	
Ceremonial and Other Specialist Sites	178	
Burials and Cemeteries	180	
<i>Reburial and Repatriation</i>	181	
<i>Summary</i>	183	
<i>Questions for Discussion</i>	183	
<i>Further Reading</i>	183	
8 Archaeological Classification and Ancient Technologies		184
<i>Back from the Field</i>	186	
<i>Classification and Taxonomy</i>	186	
<i>Discovery</i> Exotic Islanders: <i>Homo floresiensis</i>	188	
<i>Typology</i>	190	
<i>Archaeological Types</i>	191	
The Concept of Types	195	
Attributes and Types of Types	196	
<i>What Do Assemblages and Artifact Patternings Mean?</i>	199	
<i>Units of Ordering</i>	201	
Components and Phases	201	
Larger Archaeological Units	203	
<i>Ancient Technologies</i>	203	
Stone	204	
Clay	206	
Metals and Metallurgy	208	
Bone, Wood, Basketry, and Textiles	210	
<i>Summary</i>	212	
<i>Questions for Discussion</i>	213	
<i>Further Reading</i>	213	
9 The Present and the Past		214
<i>Discovery</i> Ancient Pacific Navigation	216	
<i>The Archaeological Record Again</i>	217	
<i>Site-Formation Processes</i>	218	
<i>Preservation</i>	220	
Favorable Preservation Conditions	223	
<i>Middle-Range Theory and the Archaeological Record</i>	226	
<i>The Living Past</i>	228	
<i>Ethnographic Analogy</i>	229	

Living Archaeology (Ethnoarchaeology) 231
 The !Kung San 231
 Maya Metates 232
 Nunamiut Eskimos 233
 Tucson, Arizona: Modern Material Culture and Garbage 233
Experimental Archaeology 235
Summary 236
Questions for Discussion 236
Further Reading 236

10 Ancient Climate and Environment

238

Discovery Moche Human Sacrifice and El Niño, Huaca de la Luna,
 Peru, Sixth to Seventh Century A.D. 239
 Short-Term and Long-Term Climatic Change 241
 Long-Term Climatic Change: The Great Ice Age 241
 Deep-Sea Cores and Ice Cores 242
 The Pleistocene Framework 244
 Pollen Analysis 247
 Short-Term Climatic Change: The Holocene 249
 Centuries-Long Changes: The Younger Dryas and the Black Sea 249
 Short-Term Climatic Change: El Niño 250
 The Moche Civilization 251
 Tree Rings: Studying Southwestern Drought 253
 Geoarchaeology 256
 Summary 257
 Questions for Discussion 257
 Further Reading 258

11 Come Tell Me How You Lived

259

Evidence for Subsistence 260
 Ancient Diet 260
 Discovery The Göbekli Tepe Carvings, Turkey, 1994 262
 Animal Bones 264
 Faunal Analysis (Zooarchaeology) 265
 Comparing Bone Assemblages 265
 Species Abundance and Cultural Change 268
 Game Animals 268
 Domesticated Animals 269
 Ancient Butchery 269
 Plant Remains 272
 Birds, Fish, and Mollusks 275
 Rock Art 277
 Summary 277
 Questions for Discussion 278
 Further Reading 279

12 Settlement and Landscape	280
<i>Settlement Patterns</i>	283
Households	284
Discovery Households at Marki, Cyprus, c. 2200 B.C.	287
Communities	289
Distribution of Communities	292
Geographic Information Systems and Roman Wroxeter, England	294
<i>Population</i>	296
<i>The Archaeology of Landscapes</i>	296
<i>Sacred Landscapes: Mirrors of the Intangible</i>	299
Maeshowe and the Stones of Stenness	300
<i>Summary</i>	304
<i>Questions for Discussion</i>	304
<i>Further Reading</i>	304
13 The Archaeology of People	305
<i>Studying the Deceased: Bioarchaeology</i>	307
Sex and Age	307
Malnutrition, Stress, and Work-Related Injuries	308
Violence	310
Strontium and People's Lives	310
<i>Individuals</i>	311
Discovery The Ice Man of the Alps, c. 2400 B.C.	311
<i>Groups</i>	314
Social Ranking	315
Ethnicity and Social Inequality	316
<i>Gender</i>	321
The Engendered Past	322
<i>Wider Society: Prestate and State Societies</i>	324
<i>Interactions: Trade and Exchange</i>	325
Types of Trade	325
Studying Ancient Trade: Sourcing	328
Long-Distance Trade and the Uluburun Ship	329
<i>Interactions: Religious Beliefs</i>	330
Studying Religion and Ideology	332
<i>Summary</i>	335
<i>Questions for Discussion</i>	336
<i>Further Reading</i>	336
14 Managing the Past	337
<i>Legislating the Past</i>	339
Discovery African American Burial Ground, New York City, 1991	339
<i>What Is Protected?</i>	341
Laws Some Cultural Resource Management Legislation in the United States, 1960 Onward	342

<i>Assessment, Mitigation, and Compliance</i>	344
Phase 1: Identification and Preliminary Assessment	344
Phase 2: Assessing Significance	345
Phase 3: Management Plans and Mitigation	345
<i>Management versus Research</i>	345
<i>Strategies of CRM Research</i>	347
Geomorphology	348
Safety	348
Technology	349
<i>Management Challenges</i>	349
Issues of Quality	349
The Issue of Site Records	350
The Issue of Curation	350
The Issue of Publication and Dissemination	351
<i>Native Americans and CRM</i>	352
<i>Public Archaeology</i>	352
Archaeological Tourism	353
<i>Summary</i>	355
<i>Questions for Discussion</i>	356
<i>Further Reading</i>	356
15 So You Want to Become an Archaeologist?	357
<i>Archaeology as a Profession</i>	358
Deciding to Become an Archaeologist	359
Gaining Fieldwork Experience	360
Career Opportunities	361
<i>Academic Qualifications and Graduate School</i>	362
<i>Thoughts on Not Becoming a Professional Archaeologist</i>	363
<i>Our Responsibilities to the Past</i>	365
<i>A Simple Code of Archaeological Ethics for All</i>	366
<i>Summary</i>	367
<i>Further Reading</i>	367
<i>Sites and Cultures Mentioned in the Text</i>	368
<i>Glossary of Technical Terms</i>	375
<i>References</i>	385
<i>Index</i>	386

Figures and Tables

Figures

1.1	A reconstruction of the burial ceremony at the Royal Cemetery at Ur	4
1.2	Archaeologist Howard Carter cleans the sarcophagus of pharaoh Tutankhamun	5
1.3	Bronze Age barrows (burial mounds) near Stonehenge, England	8
1.4	A Thomas Nast cartoon from the British humor magazine <i>Punch</i> lampooning Charles Darwin's linking of apes to humans	10
1.5	Austen Henry Layard's workmen recover a human-headed lion from an Assyrian palace at Nimrud, Iraq	13
1.6	Gertrude Bell	14
1.7	Sophia Schliemann	15
1.8	A painting from the Caves of a Thousand Buddhas, Dunhuang, China	16
1.9	The Great Enclosure at Great Zimbabwe	18
1.10	Frederick Catherwood's painting of the Maya center at Tulum, Yucatán, Mexico	21
1.11	Pecos Pueblo with the ruins of a Spanish colonial church built close to ancient Pueblo kivas (subterranean chambers)	22
2.1	Excavating one of the colonist's house of Jamestown	32
2.2	The pyramids of Giza in Egypt	34
2.3	The archaeological sites mentioned in this book	35
2.4	A great bull on the walls of Lascaux Cave, painted about 17,000 years ago	38
2.5	The Parthenon in Athens	42
2.6	A mannequin wears the full regalia of a Moche lord of Sipán, northern coastal Peru, c. A.D. 400	43
2.7	Grotte de Chauvet, France: Horses and a woolly rhinoceros painted some 24,000 to 31,000 years ago by Cro-Magnon artists	44
2.8	The amphitheater at Epidaurus, Greece	49
2.9	Two hominins of the species <i>Australopithecus afarensis</i> walk across a soft bed of volcanic ash at <i>Laetoli</i> , Tanzania, 3.5 million years ago	52
3.1	Reconstructed gold mask of a lord of Sicán, Peru	58
3.2	Hopewell bird claw in mica	62
3.3	A wooden burial house from Leubingen, Germany	63
3.4	Burial chamber of a lord of Sipán, Peru	64
3.5	Changing automobile styles	65
3.6	Three primary scholarly goals of archaeology	67

3.7	The Acropolis complex at Copán, Honduras, as drawn by Tatiana Proskouriakoff	71
3.8	Mimbres painted vessel from the American Southwest showing a big horn sheep	73
4.1	A circular Hopewell mound and earthworks at Mound City National Monument, Ohio	81
4.2	Pharaoh Tutankhamun's iron-bladed dagger, also a gold dagger, both from his tomb, c. 1323 B.C.	82
4.3	The spread of a culture trait in time and space: the cone effect	83
4.4	A Chavín shaman transforms himself into a jaguar. From Chavín de Huantar, Peru	84
4.5	Reconstruction of the Veracruz enclave at Teotihuacán, Mexico	85
4.6	Angkor Wat, Cambodia, A.D. 1117	93
4.7	Moche gold ear ornament in hammered gold from the tomb of a lord of Sipán	97
5.1	The law of association	104
5.2	Burial groups divided into chronological groups by assessing associated artifacts	105
5.3	An iron arrowhead embedded in the backbone of a British warrior killed during a battle with Roman soldiers at Maiden Castle, England, in A.D. 43	106
5.4	The relative chronology of the cat called the Venerable Bede	109
5.5	The principle of superposition	110
5.6	Gravestones from around the time of the American Revolution from Shirley, Massachusetts, showing the cherub motif, which was most popular between 1780 and 1789	112
5.7	A classic pottery style seriation from the Tehuacán Valley, Mexico, showing many sites ordered into a single sequence	113
5.8	Major chronological methods in prehistory	114
5.9	Building a tree-ring chronology	115
5.10	Pueblo Bonito, New Mexico, a large Southwestern pueblo built and occupied between about A.D. 850 and 1130	116
5.11	The principle of the radiocarbon dating method: production, distribution, and decay of C-14	118
5.12	Accelerator mass spectrometry (AMS) radiocarbon dating	119
5.13	Olduvai Gorge, Tanzania	123
5.14	Two-story houses perfectly preserved under volcanic ash at Akrotiri, Santorini Island, Aegean Sea, Greece. The site is protected under a roof for tourists	124
6.1	The process of archaeological research	130
6.2	A royal tomb at Kerma, Sudan. People rush to complete the mound as burial takes place	133
6.3	Clovis Paleo-Indian points from the Great Plains of North America	135
6.4	A reconstruction of the central precinct of the Aztec capital, Tenochtitlán, with the great pyramid of the sun god Huitzilopochtli and the rain deity Tlaloc to the left	136

6.5	Some of the 15,234 gold and silver coins from a late Roman hoard of the late fourth century A.D.	137
6.6	The Jackson Stairway at Chaco Canyon, New Mexico	140
6.7	An illustration of LIDAR ‘removing’ vegetation cover around the eighth- to ninth-century A.D. mountain-temple of Rong Chen, in the Kulen Mountains, to the north of Angkor	141
6.8	Long-forgotten earthworks and burial mounds revealed by dark crop marks	143
6.9	Olive trees in Greece. Olive oil was a staple of ancient trade and exchange across the eastern Mediterranean world	146
6.10	Tools of the trade used by the Stonehenge Hidden Landscape Project, used to produce three-dimensional images of what lies below the surface	152
6.11	The henge-like monument with its large pits, perhaps holding wooden uprights, and ditches revealed by cutting-edge geophysical survey	153
7.1	Excavation at Khok Phanom Di, Thailand. The site yielded not only spectacular burials but important evidence for early rice cultivation	158
7.2	Excavations at Mound A, Shiloh Mound Complex, Tennessee	160
7.3	Flow chart of the organization of an archaeological excavation	161
7.4	A line of test pits at Quirigua, Guatemala, a Maya ceremonial center	162
7.5	Excavations under a high-rise building in the heart of the city of London	163
7.6	Mortimer Wheeler-style excavation using baulks and boxes at the Jinhsa site near Chengdu, China, c. 1000 B.C.	165
7.7	Vertical excavation on a British Iron Age hill fort and its fortifications in 1937	167
7.8	A reconstruction of an Iroquois longhouse from Ontario, Canada	168
7.9	Pithouses and courtyard groups at the Grewe site, Arizona	169
7.10	Recording under ideal (grossly simplified) conditions	171
7.11	Dating the construction and the destruction of a building at Colonial Williamsburg, Virginia, by its associated artifacts	172
7.12	Excavations on a hominin site at Bouri in Ethiopia’s arid Afar Depression	174
7.13	Klasies River Cave, South Africa	175
7.14	Streets and houses at Mohenjodaro, with the citadel in the background. A city of the Indus civilization, Pakistan, c. 1700 B.C.	176
7.15	The Iron Age hill fort at Maiden Castle, southern England	177
7.16	Australian Aboriginal shell mound, Tarkine coast, Tasmania	178
7.17	Teotihuacán, Mexico, looking down the Street of the Dead from the summit of the Pyramid of the Moon, with the Pyramid of the Sun at left	179
7.18	Involuntary burial. Earthquake victims at the Roman port of Kourion, Cyprus, killed in a giant temblor in A.D. 265	180
8.1	Classifying a potsherd collection. The basic stages of simple classification	187
8.2	Artist’s reconstruction of <i>Homo floresiensis</i>	189
8.3	Some common attributes of a clay vessel	191
8.4	Fine Pomo Indian basket being made in northern California	193
8.5	Tlingit wooden mask from the Northwest Coast	194
8.6	An Oldowan “chopping tool”	194

8.7	A Chavín carving on a pillar in the temple interior at Chavín de Huantar, Peru	195
8.8	11,000-year-old Mesolithic artifacts from Star Carr, England	197
8.9	Early Bronze Age Scandinavian flint daggers, c. 2000 to 1500 B.C.	198
8.10	Aztec warriors wearing elaborate uniforms signifying different ranks	199
8.11	Archaeological units in use	202
8.12	Three views of an Acheulian stone ax from Swanscombe on the River Thames, England	203
8.13	The earliest stoneworking techniques	205
8.14	Hopi woman making pottery with clay coils, Oraibi Pueblo, Arizona, 1903	207
8.15	A Celtic Iron Age helmet from the bed of the River Thames in London	209
8.16	Two silver Inka llamas	210
8.17	Part of a cotton funerary textile from the Paracas Peninsula, Peru, perhaps depicting a shaman in trance	212
9.1	Pacific navigation. The double-hulled <i>Hokule'a</i> off the island of Oahu, Hawaii	216
9.2	The throne of Egyptian pharaoh Tutankhamun	218
9.3	Site-formation processes	221
9.4	Plow marks on a cultivated field buried under a burial mound at South Street, Avebury, England	223
9.5	Perfectly preserved moccasins	225
9.6	The head of Tollund Man, Denmark	226
9.7	A reconstruction of a trackway in the Somerset Levels, England	227
9.8	Bodies smothered at Pompeii, Italy, recovered from a cavity in the volcanic ash with plaster of Paris	227
9.9	A Maya house at Cerén, El Salvador	228
9.10	A Fuegian (Ona) woman making a basket	230
9.11	A !Kung San brush shelter and windbreak in the Kalahari Desert, southern Africa	232
9.12	Ramon Ramos Rosario making a stone metate	234
10.1	Decapitated human sacrifice victims, Huaca de la Luna, Peru	240
10.2	Deep-sea core from the Solomon Plateau	243
10.3	Provisional chronology and subdivisions of the Ice Age	244
10.4	Distribution of major ice sheets in Europe and North America during the last Ice Age glaciation and the extent of land exposed by low sea levels	245
10.5	Map of the Bering Land Bridge	246
10.6	Pollen grains	247
10.7	A long-term pollen sequence for the Ice Age from Spain compared to oxygen-isotope curves taken from a deep-sea core in the nearby Bay of Biscay, showing the close correlation between the two	248
10.8	The worldwide effects of a strong El Niño, reconstructed on the basis of the 1982–1983 event	251
10.9	The Moche pyramid known as Huaca del Sol, capital of powerful Moche lords in the fifth century A.D	252
10.10	The climatic regimens of the American Southwest, showing the general configuration of rainfall across the region reconstructed with tree rings	254
11.1	Ground stone ax with a modern wooden handle, location unknown	261

11.2	Göbekli Tepe, Turkey	262
11.3	Some of the factors that affect animal bones found in archaeological sites	266
11.4	A dog skeleton with the most important body parts labeled from the bone identification point of view. A domestic ox jaw seen from below (upper jaw) and above (lower jaw)	267
11.5	Idealized mortality data based on molar crowns of two common South African mammals, the eland and the Cape buffalo	270
11.6	Recovering evidence for gathering and agriculture	273
11.7	Two Ancient Egyptian fishing boats raise a seine net on the Nile	278
12.1	Céide Fields, County Mayo, Ireland	282
12.2	Households and community: An artist's impression of houses and shrines from the town of Çatalhöyük, Turkey, in about 6000 B.C.	284
12.3	Plan of a house at Tierra Largas, Valley of Oaxaca, Mexico, from around 900 B.C., with selected artifacts plotted on the floor	286
12.4	Excavations at Abu Hureyra, Syria	287
12.5	House compounds at Marki, Cyprus	288
12.6	A reconstruction of the ziggurat temple at Eridu, Iraq	290
12.7	Pyramid of the Sun, Teotihuacán, Valley of Mexico	291
12.8	A site hierarchy in Mesoamerica	292
12.9	A simple example of site catchment analysis, not using GIS, from the Valley of Oaxaca, Mexico	293
12.10	GIS data and the survey of Roman Wroxeter	295
12.11	Landscaping as a statement of power. The William Paca house, Annapolis, Maryland	298
12.12	A LIDAR image of William Paca's 1790s plantation, called Wye Hall	299
12.13	A reconstructed hut at Skara Brae, Orkney Islands	301
12.14	The Stones of Stenness, Orkney Islands	302
12.15	Maeshowe burial mound, Orkney Islands, in the snow	303
13.1	A digital image of Tutankhamun reconstructed using facial reconstruction methods	308
13.2	Some categories of information that can be gleaned from human remains	309
13.3	The brutality of medieval warfare. A Towton soldier's skull with a fatal sword gash	311
13.4	A reconstruction of Ötzi the Ice Man wearing a grass cloak and carrying his weapons	312
13.5	The mummy of Egyptian pharaoh Rameses II (1279–1212 B.C.)	314
13.6	The pharaoh Rameses III makes offerings to the scribe god Thoth in a tomb in the Valley of the Queens, Luxor, Egypt	316
13.7	The central precincts at the Maya center at Tikal, Guatemala	317
13.8	A bronze couch on which the body of a 40-year-old chieftain lay, from the richly adorned Iron Age burial at Hochdorf, Germany, dating to about 550 B.C.	318
13.9	Reconstruction of a slave's quarters, at Monticello, Virginia	319
13.10	An Aztec woman teaches her daughter how to weave	322
13.11	An Aztec obsidian mirror	326

xxii *Figures and Tables*

13.12	A camel caravan	327
13.13	Obsidian trade in the eastern Mediterranean region	328
13.14	Excavations on the Uluburun ship, southern Turkey	330
13.15	A haunting ancestral figurine from 'Ain Ghazal, Jordan, dating to c. 7500 B.C., one of the earliest religious objects in the world	331
13.16	The Great Serpent Mound, Hopewell, Adams County, Ohio, built by the Mississippian people as a ceremonial earthwork	332
13.17	Four figures grouped deliberately to form a scene, found buried beneath a house of about 1200 B.C. at San José Mogote, Oaxaca, Mexico	333
14.1	Early excavations on the African American burial ground in New York City	340
14.2	Petroglyphs of humans, probably in trance, Coso Mountains, California	342
14.3	A sign demonstrating the protection of sites on federal land	343
14.4	CRM excavation goes on year-round. Excavations at the Howorth-Nelson site in southwestern Pennsylvania	347
14.5	The palace and stairway of the Apadana at Persepolis, Iran	354
14.6	Archaeologists uncovering a medieval rest stop in the middle of a village at Peissen, Germany	355
15.1	Stonehenge, Wiltshire, England	364
15.2	Two possibilities for the future of the past: Forks National Historic Site, Manitoba, Canada and a looted Nazca cemetery on the Peruvian coast	365

Tables

2.1	Major developments in human prehistory	51
5.1	Changes in accuracy of C-14 dating over the past 10,000 years generated from tree-ring calibrations	120

Preface

Archaeology is a romantic subject, redolent of lost civilizations and grinning skeletons dripping with gold, the realm of pith-helmeted men and women who are adventurers and scholars at the same time – of movies like the Indiana Jones adventures. But is this reality? Most archaeologists have never worn a pith helmet, have never discovered gold, and will never unearth a long-forgotten civilization. Nor do most archaeological sites yield rich treasure or even human remains. The romance is not always there, but the world of modern archaeology is deeply fascinating all the same. This book is a journey through that world in all its intriguing diversity. It is designed to give you some idea of how archaeologists go about studying human behavior in the past.

This twelfth edition of *Archaeology: A Brief Introduction* is a brief narrative introduction to the fundamental principles of method and theory in archaeology, beginning with the goals of archaeology, going on to consider the basic concepts of culture, time, and space, and discussing the finding and excavation of archaeological sites. The last six chapters summarize some of the ways in which archaeologists order and study their finds, as well as the management of the past for future generations. Throughout the book, we emphasize the ethics behind archaeology, ending with a discussion of careers in archaeology and how we should act as stewards of the finite records of the human past. This is a book with an ardently international perspective, for archaeology is the most global of all sciences, encompassing all humanity, not just, say, North America or Europe. To study archaeology solely from, say, a European, North American, or any other vantage point is pointless. You miss so much.

Most readers will encounter this simple book as a supplement to an introductory anthropology course or as part of a broader archaeology offering. It is designed for complete beginners, so every attempt has been made to keep technical jargon to a minimum. Inevitably, a book of this length and scope glosses over many complex problems and smoldering controversies. We have proceeded on the assumption that, at this stage, a positive overstatement is better than a complex piece of inconclusive reasoning. Errors of overstatement can always be corrected in class or at a more advanced stage.

If there is a theme to this volume, it is that the patterning of archaeological artifacts we find in the ground can provide valuable insights into human behavior in the past. In pursuing this theme, we have attempted to focus on the basic concepts of archaeology and leave the instructor to impose his or her own theoretical viewpoints on the various chapters that follow. In the interests of simplicity, too, we have drawn again and again on a few relatively well-known sites from New World and Old World archaeology, such as Olduvai Gorge and Teotihuacán, rather than distracting readers with a multitude of site names. Much of today's archaeology comes under the heading of cultural resource management (CRM) rather than purely academic research. In case any instructors are wondering why this book emphasizes the academic over CRM, it is because the basic

principles of the subject are common to both kinds of research. We believe that the reader is best served by discussions of well-known, classic sites, which he or she will encounter during courses anyhow. We have added brief descriptions of major sites in a special “Sites and Cultures” information section at the end of the book, where a glossary of technical terms will also be found.

Highlights of the Twelfth Edition

This is an exciting time to be writing about archaeology because major scientific advances in many fields are transforming our ability to reconstruct the remote past. Increasingly, archaeology is becoming a multidisciplinary field, and the twelfth edition of this book reflects this fact. In general, however, the book remains much the same because the basic principles of archaeology remain unchanged through the years, whatever new theoretical approaches or high-tech scientific methods are brought to bear on the past. These basic principles provide the foundation for all of the many research projects that archaeologists carry out, whether close to home or far afield, whether academic research or cultural resource management. And generations of instructors and students have told us that they like the current organization.

What’s New to This Edition

- *New perceptions of archaeology.* Chapter 4 includes a discussion of alternative perspectives on the past in archaeology, reflecting new thinking on this important topic and an update on contemporary archaeological theory.
- *Revised coverage of excavation methods.* These are becoming increasingly refined as archaeologists develop ever more sophisticated ways of dissecting sites.
- *Expanded coverage of ancient technologies.* In response to instructor and student requests, coverage of ancient technologies has been expanded within the space limits of the book.
- *Expanded coverage of environment and climate.* Chapter 10 summarizes ways in which scientists study long-term and short-term climatic change. The study of ancient climate and its impact on ancient societies has been revolutionized in recent years and reflects a major advance in archaeology.
- *Discussion of settlement and landscape.* Coverage of settlement and landscape has been updated extensively, especially to highlight an increasing interest in human conceptions of landscapes and ritual landscapes. We return to the archaeology of the intangible in Chapter 13, which deals with people of the past.
- *Discussion of bioarchaeology.* Bioarchaeology has expanded rapidly as a subspecialty in archaeology and is throwing important new light on both individuals and groups. We summarize its major contributions in Chapter 13, which is expanded throughout.
- *Management of the past.* Chapter 14 is a stand-alone discussion of cultural resource management and public archaeology at a basic level, reflecting an increasing interest in these subjects in beginning courses. It should be stressed, however, that the fundamental principles of archaeology apply to all kinds of archaeological research, whether purely academic or cultural resource management, now the dominant kind of field archaeology in many parts of the world.

- *Career advice.* Chapter 15 gives frank advice on archaeology as a career in an era when academic positions are shrinking and archaeology is becoming a profession. This turned out to be a very popular chapter in earlier editions.
- *Discovery boxes.* Feature boxes describing both well-known and recent discoveries have been added to each chapter. We have resisted the temptation to add more boxes on the grounds that they break up the narrative in a distracting way in a simple book like this one.
- *Revision and updating throughout.* The entire text and the Further Readings at the end of each chapter have been revised and updated on a page-by-page basis.

New and Revised Art Program

The twelfth edition's art program has been completely revised, with new photographs and fresh or revised line art. The new illustrations provide additional background on recent discoveries, amplify the narrative, or replace older art with new pictures. Some expanded captions serve to integrate the illustrations more closely into the text.

Acknowledgments

The twelfth edition has benefited over many years from the expertise of colleagues, too numerous to list here. We are deeply grateful for their encouragement and assistance, also the students who have taken the trouble to write suggesting changes, or pointing out errors.

Our thanks go to our editor, Matt Gibbons, also to Lola Harre, for much encouragement and many kindnesses; and also to the production team, who have turned a complex manuscript into an attractive book and have done all to minimize unexpected difficulties.

As always, we would be most grateful for criticisms, comments, or details of new work, which can be sent to us at venbed@gmail.com.

*Brian M. Fagan
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Authors' Note

Glossaries

Key terms defined in the Glossary of Technical Terms at the end of the book are highlighted in **bold** type throughout the book. Archaeological sites, cultures, and civilizations whose names are *italicized* at first main use in the book are described in the section on sites and cultures at the end of the book.

Dates

The following conventions are used in the text:

- Dates before 10,000 years ago are expressed in years Before Present (B.P.). This is common usage, although not commonly used in this particular book.
- Dates after 10,000 years ago are expressed in years Before Christ (B.C.) or Anno Domini (A.D.).

Another common convention is B.C.E./C.E. (Before Common Era/Common Era), which is not employed in this book. By scientific convention, "present" is A.D. 1950.

Please note that all radiocarbon dates and potassium-argon dates should be understood to have a plus-or-minus factor that is omitted from this book in the interests of clarity. They are statistical estimates. Where possible, radiocarbon dates have been calibrated with tree-ring chronologies, which adds a substantial element of accuracy (see Chapter 5). For tree-ring calibration of radiocarbon dates, see vol. 40, no. 3, of the journal *Radiocarbon*, 1998.

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1 Fossils, Cities, and Civilizations

The Birth of a Science

CHAPTER OUTLINE

What Is Archaeology?	6
The Beginnings of Archaeology	6
The Three Ages and the Antiquity of Humankind	8
The Discovery of the Ancient Civilizations	11
The Ancient Egyptians	11
The Assyrians and Sumerians	12
Troy and Mycenae	15
Asia: Scrolls and Shoulder Blades	17
African Phoenicians?	18
Early American Archaeology	19
The “Moundbuilders”	19
Maya Civilization	20
Southwestern Archaeology and the Direct Historical Approach	21
Diversity, Diffusion, and Human Progress	22
“From Them to Us”: Unilinear Evolution	23
Diffusionism: How Did Civilization Spread?	23
The Development of Modern Scientific Archaeology	24
Scientific Excavation	24
Archaeology and Ecology	25
Scientific Methods	25
“From Them to Us”: Contemporary Archaeological Theory	25
Ecological/Evolutionary Approaches	26
Historical Materialist Approaches	26