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UNIT 1About Archaeologists and Archaeology

Unit Overview xviii

 The Awful Truth about Archaeology, Dr. Lynne Sebastian, Albuquerque Tribune, April 16, 2002

"You're an Archaeologist! That sounds soooo exciting!" Of course it sounds exciting because of the hyperbole and mystery perpetuated by TV shows, movies, and novels—professional archaeologists know better! Yes, the thrill of looking at the past is truly exciting, but *the process of discovery is slow, tedious, and frustrating,* especially when nothing is found. Digging square holes in the ground and carefully measuring artifacts, cataloging, taking notes, and hoping to publish something meaningful about the past—it is more of a work of love that has its inherent reward in knowledge.

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- 2. All the King's Sons, Douglas Preston, The New Yorker, January 22, 1996 A well-told narrative of modern archaeology, Douglas Preston's article is based on scientific archaeology. It is not, however, a typical "scientific" or "monograph" report common to academic archaeology. This tale of archaeology, with all the immediacy and punch of being in the field, is wish fulfillment for students or laypersons of archaeology because it is about a spectacular find—the biggest archaeological site in Egypt since King Tut's tomb. No "blah-blah Egypt, blah-blah dummy," here.
- 3. Lost City of the Maya, Chip Brown, Smithsonian, May 2011 Deep in the Guatemalan rainforest, an American archaeologist leads efforts to solve the mystery of El Mirador, a 2,500-year-old metropolis that is larger, more impressive, and even older than comparable sites in the classic Maya period. It may very well be the "cradle of Maya civilization."
- 4. Maya Archaeologists Turn to the Living to Help Save the Dead, Michael Bawaya, Science Magazine, August 26, 2005 By enabling local residents, rather than outsiders, to serve as custodians of their own
- Distinguished Lecture in Archaeology: Communication and the Future of American Archaeology, Jeremy A. Sabloff, American Anthropologist, December 1998

heritage, archaeologists have helped to instill in them a sense of identity and, instead

of looting and destroying valuable sites, they are now dedicated to preserving them.

Jeremy Sabloff discusses the role that archaeology should play in *public education* and the need for archaeologists to communicate more effectively with *relevant writing* for the public. He further suggests the need to recognize *nonacademic archaeologists* and to focus on *action archaeology*, or what is more usually termed *public archaeology*.

The concepts in bold italics are developed in the article. For further expansion, please refer to the Topic Guide.



UNIT 2Problem Oriented Archaeology

Init Overview 30		
6.	Prehistory of Warfare, Steven A. LeBlanc, <i>Archaeology,</i> May/June 2003 The state of <i>primitive warfare</i> is examined and found to be <i>endemic</i> to all such cultures as seen through archaeology. It is suggested that warfare might have occurred under conditions of <i>resource stress</i> and <i>poor climates</i> . It is surprising to learn that warfare has actually declined over time. <i>Foragers and farmers,</i> who constitute approximately 25% of the population, have much <i>higher death rates</i> than more complex societies.	33
7.	The Origin of War: New ¹⁴ C Dates from Ancient Mexico, Kent V. Flannery and Joyce Marcus, <i>Proceedings of the National Academy of Sciences</i> , September 30, 2003 An archeological study carried out in the area of Oxaca, Mexico, combined with a cross-cultural study of contemporary cultures, shows that the frequency of human conflict is correlated with the availability of resources, the complexity of the society, and the centralization of power.	38
8.	Who Were the First Americans?, Michael D. Lemonick and Andrea Dorfman, <i>Time</i> , March 13, 2006 The authors combine <i>archaeological</i> , <i>genetic</i> , and <i>linguistic</i> evidence to provide an overview of the multiple <i>migration</i> theories, as well as the controversies associated with the implementation of <i>NAGPRA</i> and its consequent risk to <i>scientific</i> research.	42
9.	Uncovering America's Pyramid Builders, Karen Wright, <i>Discover</i> , February 2004 As a United Nations World Heritage Site, <i>Cahokia</i> had one of the largest pyramids in the world and one of the most sophisticated societies in North America. Yet, we know very little about it—how it came into existence, how it functioned, and why it ultimately failed. As they try to stay ahead of the developers, archaeologists are scrambling to try to understand it.	48
10.	Disease and Death at Dr. Dickson's Mounds, Alan H. Goodman and George J. Armelagos, <i>Natural History</i> , September 1985 The <i>agricultural revolution</i> is usually thought of as an entirely positive development in the course of human history. However, a unique opportunity for archaeologists to study the <i>transition from hunting and gathering to farming</i> has shown that the <i>consequences of change may not always be beneficial</i> and, in fact, may lead to such things as <i>malnutrition</i> , <i>disease</i> , <i>trauma</i> , <i>and early death</i> .	52
11.	A Coprological View of Ancestral Pueblo Cannibalism, Karl J. Reinhard, American Scientist, May/June 2006 Cultural reconstruction can become easily colored by the projections of the archaeological community, combined with the inclination of the media to oversimplify and sensationalize. The finding of one coprolite and how it came to be considered as ironclad evidence of cannibalism among the Ancestral Pueblo people is one such cautionary tale.	56

12. New Women of the Ice Age, Heather Pringle, Discover, April 1998 By combining research on the roles of women in hunting and gathering societies with recent archaeological evidence, Heather Pringle offers an emerging picture of the women of Ice Age Europe as priestly leaders, clever inventors, and full-fledged hunters.

62

 Woman the Toolmaker, Steven A. Brandt and Kathryn Weedman, Archaeology, September/October 2002

Not only were **women leaders and hunters** in the Ice Age, but according to ethnoarchaeology, they are also **skilled toolmakers** in modern tribal societies. These female flintknappers again defy the stereotypical roles of men and women, showing that today's tribal women, as did women in the archaeological past, excel at toolmaking.

68

14. Yes, Wonderful Things, William Rathje and Cullen Murphy, from *Rubbish!* The Archaeology of Garbage, HarperCollins, 1992

One of the catchiest definitions of the word "archaeologist" is that archaeologists are people who dig up other people's *garbage. Modern garbology* is useful in that, *timely historical reconstruction* can be done by direct comparison of what people say they do and what their garbage indicates they, in fact, do.

70

15. Bushmen, John Yellen, Science, May 1985

This article examines a revealing experiment in which anthropologist John Yellen excavates *!Kung Bushmen campsites.* Comparing the *archaeological data* with information from living informants and historical resources, Yellen discovers a kind of lyrical "back to the future" experience. A whole *way of life and values* has disappeared, but the natives cannot permit themselves to confront these changes.

79

16. The Maya Collapses, Jared Diamond, from *Collapse: How Societies Choose to Fail or Succeed,* Viking, 2005

The best way to understand the *collapse of the Mayan civilization*, says Diamond, is to consider such factors as *population growth*, *environmental degradation*, *climate change*, *warfare*, and the *short-sightedness* of Mayan leaders. Not only did the same kind of precipitating factors bring down other great societies of the past, but they seem to be *leading the modern world down the same path*, *too*. Can we, and will we, take heed before it is too late?

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UNIT 3Techniques in Archaeology

Unit Overview 94

17. Lasers in the Jungle, Arlen F. Chase, Diane Z. Chase, and John F. Weishampel, *Archaeology*, July/August 2010

Until recently, *Maya sites* have been almost impossible to see as well as expensive and labor-intensive to map. Now, a *new remote-sensing technology* allows archaeologists to "see" ruins below the heavy canopy of trees. It stands to *replace traditional mapping* in tropical rainforests, *drive new archaeological research by revealing unusual settlement patterns*, identify new locales for on-the-ground work and, ultimately, revolutionize our understanding of Maya civilization.

96

18. Mayas Mastered Rubber Long before Goodyear, Thomas H. Maugh II, Los Angeles Times, May 31, 2010

Hundreds and perhaps thousands of years before Charles Goodyear discovered the *vulcanization process* that made commercial rubber viable, *Mesoamericans* were carrying out a similar process to *produce rubber artifacts* for a broad variety of uses.

19. How Climate Shaped Humanity, Andrew Grant, *Discover*, June 2010

Earth scientists and climatologists are joining forces with archaeologists and anthropologists to build a comprehensive understanding of the climate record that is written into our past. By studying such things as tree rings, ice cores, and clamshells, they are increasing our understanding of the climate's role in everything from the environment's influence on our evolutionary origins to the rise and fall of ancient civilizations.

101

20. Profile of an Anthropologist: No Bone Unturned, Patrick Huyghe, *Discover,* December 1988

Archaeologists have borrowed a method first used by physical anthropologists to develop a technique for learning the age, gender, possible ethnicity or ancestral relationships, etc. and the cause of death of extant human beings through analysis of skeletal remains. As long as there are bones, there is archaeological information to be gained, whether the person lived in ancient times or the more recent historic past. Determining the cause of death such as warfare, personal violence, criminal violence, suicide, cannibalism, or natural death sheds a great deal of light on the culture of the individual who is being studied.

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UNIT 4Pre-Historic Archaeology

Unit Overview 108

21. Twilight of the Neandertals, Kate Wong, *Scientific American,* August 2009

With their large brains and enormous strength, **Neandertals** were well suited to the rigors of hunting Ice Age mammals. But as the **climate changed** and **a new kind of human** appeared on the landscape, **their numbers dwindled** and they could no longer compete

110

22. Human Evolution: The Long, Winding Road to Modern Man, Chris Stringer, *The Guardian*, June 18, 2011

As Chris Stringer ponders the decades-long controversy regarding the *origin of modern humans*, he reviews his earlier position that *Africa was the only source* of our ancestral heritage. He then proceeds to reconcile this position with *recent genetic evidence* that modern humans expanding out of Africa did, in fact, breed to a modest extent with local populations in Europe and Asia—the co-called *"leaky replacement" model.*

115

23. A New View of the Birth of *Homo sapiens*, Ann Gibbons, *Science*, January 28, 2011

As in the previous article, Ann Gibbons discusses the question—did modern humans come out of Africa, spread around the world and replace, rather than mate with, the archaic humans they met? However, in this piece, she reviews the new genomic data in more detail and shows how the principle adversaries in the dispute—Chris Stringer and Milford Wolpoff—can each come away thinking they have been vindicated.

118

24. Refuting a Myth about Human Origins, John J. Shea, *American Scientist*, March/April 2011

For decades, archaeologists have believed that certain **sophisticated tools and foodgetting strategies** developed along with "**modern Homo sapiens.**" However, archaeological evidence is now showing that at least **some of our ancestors' capabilities**, most importantly the capacity for wide behavioral variability, actually occurred among people who lived much **further back in time**, particularly in Africa.

25. Paleolithic Cave Art in France, Jean Clottes, Adorant Magazine, 2002

The often beautiful and always enigmatic cave art of southern France has beguiled and bewildered generations of archaeologists. In this definitive and comprehensive analysis of prehistory's most unique art form—by one of the world's foremost authorities on the subject, Jean Clottes—we get a better understanding of what our anccestors were up to and why. In order to appreciate fully the magnificence of the cave paintings and sculptures, please take advantage of related audio-visual materials available at www .bradshawfoundation.com/clottes/index.php.

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26. Children of Prehistory, Bruce Bower, Science News, April 28, 2007 Until now, the activities of children at archaeological sites have been largely ignored. Upon close inspection, however, it seems that some of the European cave art may have

Upon close inspection, however, it seems that some of the European *cave art* may have been the playful experiments of children. Many of the rudimentary implements were also fashioned by kids taking early whacks at *tool production*.

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27. The Writing on the Cave Wall, Kate Ravillious, New Scientist, February 17, 2010

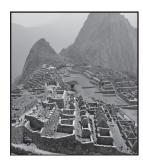
Some of the most **spectacular cave art of the Paleolithic** period is on the walls of Southern France. Understandably, little attention has been paid to the many seemingly mundane **signs**, **such as negative hands and dots**, that are also there, even though they are just as prolific and **may actually be more meaningful** in the abstract, symbolic sense. Are these the first glimpses of a **rudimentary language system?**

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28. Rethinking the Hobbits of Indonesia, Kate Wong, *Scientific American*, November 2009

New analyses of *Homo floresiensis*, popularly known as the "Hobbits," reveal the diminutive species to be even stranger than previously thought. Its skeleton and primitive tool-kit hint that major tenets of human evolution need revision. Some of the questions raised include: which species of our genus *Homo* was the first to migrate out of Africa and were there really two hominin species in existence as recently as 18,000 years ago?

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UNIT 5Historical Archaeology

Unit Overview 144

29. Uncovering Secrets of the Sphinx, Evan Hadingham, *Smithsonian*, February 2010

No human endeavor has been more associated with mystery than the huge, ancient lion with a human head that seemingly rests on the rocky plateau just a stroll from the great pyramids. After *a lifetime of archaeological sleuthing*, one man has helped confirm what others had speculated—that some parts of the *Giza complex*, the *Sphinx* included, make up *a vast sacred machine designed to harness the power of the sun* to sustain the earthly, as well as the divine, order.

147

30. Artful Surgery, Anagnostis P. Agelarakis, Archaeology, March/April 2006 Classic Greek sources offer little help in tracing the early development of medicine. But the story of a wounded young woman, two centuries before Hippocrates, will rewrite the history of the development of ancient medical practice.

31.	Home away from Rome, Paul Bennett, Smithsonian, June 2010
	Excavations of villas where Roman emperors escaped the office are giving archaeol-
	ogists new insights into the contrast between the emperors' official and private lives.
	The economic power of the larger villas, which tended to expand as Rome grew more
	politically unstable, may even have contributed to the empire's decline .

154

32. Carthage: The Lost Mediterranean Civilisation, Richard Miles, *History Today,* February 2010

Situated on the nexus of the two most important trans-Mediterranean trade routes, *Carthage* became the *pre-eminent maritime power of its time*. However, little remains of the great North African empire that was to become *Rome's most formidable enemy*. Only its *complete annihilation* could satisfy its younger rival.

157

 Lofty Ambitions of the Inca, Heather Pringle, National Geographic, April 2011

The Inca have been called the organizational geniuses of the Americas. They transformed fragmentary networks into interconnected highways, mastered high-altitude agriculture into sophisticated terracing and irrigation. They cultivated some 70 different kinds of crops and stockpiled three to seven years' worth of food, all the while maintaining inventory control. Having mobilized labor to build architectural masterpieces like Machu Picchu, it is no wonder that they awe visitors to this day.

162

34. Living through the Donner Party, Jared Diamond, Discover, March 1992. The infamous story of the Donner Party unfolds anew as an anthropologist invokes the dynamics of scientific thinking. In generating a new idea about an old problem, the predictability of human behavior that is necessary for cultural and historical reconstruction of the past is demonstrated.

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UNIT 6Contemporary Archaeology

Unit Overview 172

35. Earth Movers, Marion Lloyd, *The Chronicle of Higher Education,* December 3. 2004

In a challenge to anthropologist Betty J. Meggers' view that the Amazon region was a somewhat hostile region that supported relatively few people, some archaeologists are now claiming that Brazil's rainforest fostered large-scale communities, perhaps with cities that rivaled those of the Aztecs and the Mayas.

174

36. Lost Cities of the Amazon, Michael J. Heckenberger, *Scientific American*, October 2009

By developing a mix of land uses, soil-enrichment techniques, and long crop rotation cycles, the ancestors of the Kuikuro thrived in the Xingu region of the Amazon despite its infertile soils. The author has excavated a network of towns, showing that the region supported twenty times its present population and that the ancestors' accomplishments could inform efforts to reconcile the environmental and development goals of this region and other parts of the Amazon.

178

37. The Past as Propaganda, Bettina Arnold, Archaeology, July/August 1992 What happens when archaeologists lie? Nazi-driven archaeologists manipulated archaeological data to create a propaganda line that was ethnocentric, racist, and genocidal. The Nazi Party used this German-centered view of the past to justify expansionism and genocide.

38. Climate Change: Sites in Peril, Andrew Curry, *Archaeology,* March/April, 2009

Rising sea levels, increased rainfall, and melting ice are all having dramatic effects on *archaeological sites*. As archaeologists assess the *damage being inflicted by climate change* and search for solutions, they are beginning to realize that they cannot save them all. They will have to choose.

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Test-Your-Knowledge Form