

WHY ARCHAEOLOGY?

We've come to the end of our brief journey through archaeology and its workings. But why study the subject at all? What is the point of learning about six million years of the human past when everything seems to be shifting under our feet? We live in an era of simultaneous communication and instant gratification, while those who govern us seem to think of little else but the next election. Human societies everywhere are changing rapidly, as are the ways in which we relate to one another. This means that many of us believe that thinking of, and planning for, the long term is pointless. Why should we bother to plan for the distant future when we have no idea what rapid changes lie ahead? Of course we should bother, for major challenges to humanity as a whole lurk in both the near term and on the distant horizon.

Just pause for a moment and contemplate some of the difficulties confronting us: rising population densities, especially in today's megacities, the growing economic and social chasm between rich and poor, the haves and have-nots, racism and embracing social diversity, and a regular headline grabber—humanly caused global warming and climate change. If these challenges were not enough, we still have to deal with those who manipulate and invent the past to propagate their agendas—this apart from climate change deniers and their delusions.

BIG ISSUES

Our long-term perspective on the past makes archaeologists serious players in the arduous task of finding solutions to big global issues,

such as the ways in which humans have caused climate change, and how we embrace the overarching questions of living with, and embracing, human diversity. Arguably, the most fundamental trial we face is that of our warming world. This is a truly global problem that affects everyone on earth. The recent revolution in paleoclimatology has shown beyond all doubt that the climate changes unfolding around us are *not* simply natural cycles, similar to those that confronted our forebears. Now we live in what can be called uncharted waters, where we humans—with our fossil fuels, promiscuous deforestation, and ruthless environmental disruptions—are the dominant cause of climate change.

Pessimism and predictions of climatic Armageddon surround us on every side, but there is hope. In recent decades, we've acquired a far more sophisticated understanding not only of long- and short-term climate change through time, but of the impacts of such shifts on human societies large and small, whether hunter-gatherers, subsistence farmers, or pre-industrial city dwellers. We now know, for example, a great deal more about the roles of rising temperatures and sea levels, as well as vegetational change, in the first settlement of the Americas. Even more important, we are now achieving valuable insights into how different societies adapted to such phenomena as long-term droughts, El Niño events, and temperature changes caused by large volcanic eruptions. We've realized, too, that climate events had often major economic, political and social consequences, which could resonate for generations. Think of a pebble thrown into a calm pond. There's a plop and the stone vanishes. But concentric rings spread out from the point of impact, and then eventually subside and vanish.

What archaeologists do is study these "rings," the impacts of climate events, as well as such disasters as significant volcanic eruptions (think Pompeii) or hurricanes. We've discovered, for example, that ties of kin and links between different communities have a very long history—as cement that holds together human societies large and small. The same connections, often overlooked today, are powerful tools for surviving such climatic events as torrential rains brought to coastal Peru by major El Niños, or megadroughts in the North American Southwest, where mobility in the face of aridity was an ancient strategy. Time and time again, it has been local responses to climatic disasters that have been crucial,

even in the cities of today with their neighborhoods, churches, and other organizations to which people turn in stressful times.

Studying ancient climate change and its consequences requires an archaeology that draws on many disciplines. These range from anthropology to astronomy, climatology to physics, chemistry, and sociology—to mention only a few. This kind of team-based archaeology has a key role to play, as we confront the global warming of the future.

SOCIAL INEQUALITY AND DIVERSITY

Social inequality has a long legacy, which extends back long before the first pre-industrial civilizations appeared in Southwest Asia about 5,100 years ago. Such inequalities developed in many forms. Central European, Northwest Coast, and Polynesian chiefs on remote islands cemented their power by strategic gift-giving, to acquire loyalty from their followers. Sometimes they went to war. Invariably, they nurtured perceived kin ties with powerful ancestors. Egyptian pharaohs ruled because of their carefully cultivated divine ancestry. Temple after temple, tomb after tomb, pharaohs appear in the presence of the sun god Amun and other deities, always with the correct offerings in hand. Assyrian monarchs deployed armies of conquest and ruled by force. Ancient Maya lords relied on their spiritual ties and control of essential resources. Whatever the pre-industrial civilization, power and wealth always went together in an authoritarian formula that always seemed to work but was also dangerously volatile.

The greatest manifestation of social inequality in ancient times arose under the Roman Empire, where the gap between rich and poor was unimaginably wide. In this stratified society, the top two percent of the population absorbed almost all available surpluses beyond those for basic subsistence. As time passed and urban populations swelled, the Empire's vulnerability to hunger and social disorder reached unsustainable levels. In its later years, Roman Constantinople (now Istanbul) depended almost entirely on Egyptian grain to feed most of its citizens, one of the many reasons that the Empire eventually collapsed. It had become over-reliant on imported crops. When the Nile flood failed, famine and social order spread across much of the Eastern Empire.

We live in a socially complex global world, where the interconnections between nations are becoming so close that the notion of nation-states is gradually becoming an outmoded model for human society. Nationalism and nation-states came into being during the nineteenth century and have persisted ever since. Great empires and magnificent imperialism were a dominant model a century ago. Soon they became the basis for doctrines of racial superiority, often cloaked in the idea of a divine mission to bring God and Christianity to “savages.” All of this fell apart inexorably during the twentieth century, a consequence both of two world wars, and of a growing realization that human diversity was a central player in societies of all kinds. Doctrines of racial superiority still persist but are nevertheless falling by the wayside. The gradual realization of the equality of our diversity makes an understanding of its history essential for everyone.

Studying economic and social inequality is challenging. As we have seen, grave goods are a common measure of social ranking and inequality, but more sophisticated yardsticks are coming into use. Archaeologist Tim Kohler and others are using a measure of economic equality developed by Italian statistician Corrado Gini as long ago as 1912. His coefficient is commonly used today to measure health differences between members of society. It uses economic data provided by modern governments. The Kohler team has examined data from sixty-three locales across North and Central America, as well as Eurasia. They’ve found greater wealth disparities in the Old World than in the Americas during ancient times. This may be due to the presence of larger domesticated animals in the former, which helped multiply the impacts of human labor. Kohler’s fascinating, pioneer research is an example of the kinds of insights that can emerge from ancient societies that have considerable relevance in today’s world.

Combining this kind of research with the increasingly large data sets that are now available on such phenomena as bone health. This reveals nutritional problems, as well as pathologies resulting from years of hard labor. We now have more definitive information on a fundamental human problem: inequality. It is no longer possible to invoke divine mandates or guidance from ancestors, let alone precedents, as a basis for tolerating inequality of any kind. One of archaeology’s fundamental, emerging tasks is to focus on

the evils of economic and social inequality, as we grapple with them in today's industrialized world.

“PEOPLE WITHOUT HISTORY”

We have stressed how archaeology is a unique way of constructing unwritten history; also that we are all stakeholders in the past. Some figures from the past, like our old friend pharaoh Ramesses II or Roman conqueror Julius Caesar, were huge stakeholders. So were the Maya lord Pacal of Palenque and Shaka Zulu, a ruthless nineteenth-century chief in southern Africa. They are written large in histories of many kinds. But archaeology's greatest achievement has been, and will always be, its ability to write history from the material remains of the past found in the soil. We conjure up the lives of people who lived in the shadows of history, or served rulers whose names are forgotten, or whose written scripts remain undeciphered like those who lived in the Indus valley cities of Harappa or Mohenjo-Daro. The multidisciplinary archaeology of today is writing vast chapters of history for societies in every part of the world. We peer into a past that is not all great chiefs and generals, palaces and temples.

In many countries or places, such as Papua New Guinea or tropical Africa, we are illuminating past identities, and writing national histories. Such research relies on far more than archaeology. For example, indigenous archaeologists in Orokolo Bay on Papua New Guinea's southwestern coast call on local oral traditions to help interpret the past. The denser the signs of occupation along the beach, the older a site was in oral histories. Farmers along the shore have a deep knowledge of the subsurface that enables them to readily identify local houses and other structures. This type of archaeology helps identify the actions of ancestors, whether ancient or from the recent past. It is clear both from Orokolo Bay and other areas around the world that local peoples have been “reading” the past from both sites and finds, as well as landscapes, for many centuries.

Such research is far harder than it might appear. We don't just go into the Southwest, northern Canada, or Kenya and start digging. Today's fieldwork involves working closely not only with specialist scientists, but also with indigenous peoples and with local

communities. This research, which is based on intense dialogue and respect, involves working closely with those stakeholders whose histories are emerging from the ground. Their only voices are their bodies, their artifacts, and their oral traditions—and the record of their history is vanishing on every side. These fast-disappearing records are a vital source of information on the past.

Ever since the 1960s, and in some places even earlier, excavators have played much closer attention to social diversity, ethnic minorities, and other groups often ignored in the past. This research has intensified in recent years, partly because of political pressure, but also because of a realization that ancient societies were far more diverse than we once assumed. Inevitably, we have been accused of racism and cultural insensitivity, of “colonialist research.” Archaeology has, so far, mainly been a middle-class pursuit, and so many of us are white. But that does not mean that we are racist or colonialists. These labels do not have any relevance to people working on truly global archaeology. Our task is studying human diversity in all its fascinating variety. To label those of us racist is simply shoving us into artificial social boxes that are irrelevant to anyone studying ancient societies. The fact that most of us are still white will change gradually, as societies transform themselves, as they are doing. To accuse us of being racist is counterproductive. What a more diverse archaeological community will bring is differing perspectives on the past, which will be invaluable. In fact, judging from research in Papua New Guinea and elsewhere, some of them are already emerging.

PROTECTING THE PAST

From 1802 to 1812, English traveler Thomas Bruce, the 7th Earl of Elgin, employed workers to strip the marble sculptures off the face of the Parthenon on the Acropolis in Athens. Then he bribed local Turkish officials, who allowed him to export 75 meters of the sculptor Phidias’ masterpiece frieze, with which he planned to decorate his country house. After furious controversy, he sold them to the British government for about \$46,900. The debate over the so-called Elgin marbles has continued ever since, with the Greek government demanding their return. So far, the British Museum has refused. Our sense is that the marbles will eventually

return to a museum already built by the Greeks at the foot of the Acropolis for the day when they return.

The Elgin Marbles are a symbol of a lust for antiquities of all kinds that has engaged the outside world since classical times, and certainly since the eighteenth and early nineteenth centuries. Digging up the past for profit has been commonplace since the early days of excavations at Herculaneum and Pompeii. European landowners dug into burial mounds by the dozen in search of treasure, the finds celebrated with lavish dinners in the evening.

A French writer wrote many years ago that collecting was “not a pastime, but a passion, and often so violent that it is inferior to love and ambition only in the pettiness of its aims.” Unfortunately, he was right, for the market for archaeological finds of all kinds has mushroomed since World War II. Everything from stone projectile points to painted Southwestern pots and Maya bowls, even bottle tops or fragments of barbed wire, has value, depending on its desirability and rarity. The archaeological record is vanishing rapidly in many parts of the world, driven by rural poverty and rapacious dealers. The contexts of an object or its scientific value have little or no relevance to the antiquities marketplace. Today, much looting activity has gone underground, as governments tighten both laws and supervision of archaeological sites. Not that this has stopped the traffic. Thousands of artifacts vanished from the looted Baghdad Museum during the 2003 invasion, including a priceless collection of clay cuneiform tablets. Much of the loot then quietly turned up on the antiquities market months later.

Despite strenuous efforts at legislation and policing in most parts of the world, illegal looting continues unabated. Some successful efforts include the British Portable Antiquities Scheme, where archaeologists work closely with metal detectorists, with the Treasure Act of 1996 giving financial incentives for discoveries. There have been some spectacular results, including the Anglo-Saxon Staffordshire Hoard from central England described in Chapter 3. In recent years more systematic efforts involve local communities, archaeologists, collectors, and the police. The University of Kent’s Heritage Management Organization (HERITAGE) uses satellite monitoring and trained volunteers, but the task is enormous. In the final analysis, the most powerful weapon is public opinion, much of which originates among local stakeholders.

Strategies of close collaboration are often effective and must be if the illegal antiquities trade will be totally outlawed in the future. No one involved, least of all archaeologists, has any illusions as to the difficulty of the task. Conserving and saving the past for the future is now the number one priority for archaeologists everywhere. This is probably the hardest challenge facing the archaeologists of future generations.

CULTURAL TOURISM AND HERITAGE

Anyone who visits a well-known archaeological site like Machu Picchu, the Parthenon, the Pyramids of Giza, or Stonehenge in high tourist season confronts one of the central concerns of archaeology face to face. We live in the era of cruise ships, jumbo jets, and package tours, which bring more people to Giza in a month than once visited it in decades of ancient times. An average of two million visitors a year admire Angkor Wat in Cambodia (Figure 12.1). Crowds walk through narrow alleyways and brush against bas-reliefs on the walls. Lines of visitors shuffle through the narrow defiles in royal tombs in Egypt's Valley of the Kings. The sweat they generate is literally peeling paintings off the walls.



Figure 12.1 Angkor Wat, Cambodia. Sorin Colac/Alamy Stock Photo.

Cultural tourism, one of the fastest growing segments of international tourist trade, is loving the past to death.

Governments are starting to wrestle with what has become a serious problem. A generation or two ago, lesser known Greek temples were virtually deserted in August. Now they are jammed. How can one protect unique sites in the long term? Diverting people to lesser sites is not an answer, for everyone wants to visit Giza, Avebury, or Stonehenge; they are favorites on every visitor's bucket list. One solution is reproductions. The French and Spanish governments have created magnificent, stunningly accurate replicas of the Ice Age paintings—bison at Altamira, the bulls and other animals at Lascaux and the Grotte de Chauvet. The modern-day copies have proved highly successful, not least because the visitor can get close to the art and get a much better impression of the figures. Such replicas are extremely expensive—the one at Altamira cost \$70 million to create over six years.

Another solution is to limit access. Niaux, a magnificent painted cave in southern France, is open only three months a year, with visitation restricted to twenty people at a time, admitted eleven times a day. This allows the climate of the cave to recover. The visit is worth it, for you see panels of black-painted bison with bristling manes and straight legs. It is as if the artist and the visitor are standing above recently killed animals. But one wonders how long the site will remain open. A third solution is to drive tourists away from the hotspots to equally impressive sites elsewhere in the country. For example, the Peruvian tourist board has been actively promoting the wonderful sites on the northern coast of Peru (such as the Lords of Sipán site described in Chapter 4), rather than the traditional tourists' honeypot of Machu Picchu.

Machu Picchu in the Peruvian Andes is a dazzling example of Inca architecture in a dramatic mountain setting. A study in 2015 established that no more than 2,244 visitors a day was the site's sustainable maximum. The authorities are developing a visitor center, which will introduce the site and explain how people should behave in a sacred place. This should help conservation efforts, when combined with rules that limit visiting groups to twelve people and a guide. All this is still being developed, but there have been complaints from local businesses. A major problem here, and elsewhere, is getting both local residents and visitors to

understand that heritage conservation, whatever the site, is what makes tourism possible.

Until recently, the major emphasis in archaeology has been discovery, excavation, and research. These activities still lie at the center of what we do, but the archaeological record is vanishing before our eyes like melting snow. One day, there will be nothing to discover or excavate if we don't take major steps to act as serious stewards of the past. This means preserving our cultural heritage at all costs for future generations.

Cultural resource management (CRM) and its equivalents in other countries under various names, now dominate much of archaeology and have been in existence for decades. CRM in the United States began with the so-called River Basin Surveys of the 1930s that studied areas affected by Army Corps of Engineers projects in major river valleys in the Midwest and the east. Whatever its form, CRM is ultimately in the mitigation business—taking measures to minimize damage to archaeological sites in the way of development of all kinds. Such projects unfold within carefully framed guidelines, with the mitigation taking many forms—excavation and recording of the contents of a site before it is destroyed, moving the footprint of the development that threatens it, by, for example, moving a road or specific buildings.

Nearly everywhere in the world, both isolated finds and entire archaeological sites are the property of the state. But, in the United States, ownership of private land is vested in the constitution. This means that any site on privately owned land is the property of the owner. He or she is the stakeholder of record, even of land owned by a historically displaced group. Many landowners are responsible in their stewardship, but there are always some who will sell quietly their sites to the highest bidder or insist in a share of the profits from excavations on their land. There are also, of course, numerous historical examples of colonists or invading armies seizing valuable specimens or exploiting sites. Nigeria's Benin bronzes are one example. Bricks taken from the ruins of the Indus valley civilization city of Harappa served as the roadbed for 160 kilometers of a nearby railroad line. Fortunately, instances of such vandalism are now rare, but there are still outrageous examples, where churches and other buildings have been demolished in the face of industrial development.

CRM in various forms is now widespread, and in some countries, among them the United Kingdom, it is written into law. But this is very different from conservation, which is a permanent decision to preserve a site or archaeological finds in perpetuity. Many people believe that conservation takes place on-site or in museums. Discoveries like Tutankhamun or the gold- and silver-laden Lords of Sipán in Peru indeed required conservation from the moment they were discovered. But preserving discoveries, whether commonplace or spectacular, is a major responsibility for excavators. Over the years, conservation has become a highly specialized process, which relies heavily on high-tech science to preserve such delicate finds as fine textiles. Conservation means preserving our cultural heritage for the long-term future—permanently. Part of this process is not only looking after the finds and the site itself, but also preserving the archaeologist's records of the excavation. Many excavations remain unpublished and their records are regrettably virtually non-existent. It is no coincidence that a great deal of today's archaeological research is devoted to acquiring fresh information from old, often unpublished, excavations.

Cultural tourism means package tours and crowds, but there is far more to it for the more engaged visitor, especially if you allow your imagination to conjure up the past. The stadium at Olympia in Greece is the place where the Olympics began. Today, it is an empty space, where you can see the athlete's entrance and the runners' starting blocks. Your guide will recite the salient features of the stadium, the dates when it was built and abandoned, and the main features of the site. That is what they are trained to do, in the interests of historical accuracy. But wander a short distance away and close your eyes. Imagine the crowded stadium, jostling with drunken spectators. A gentle breeze wafts a cascade of scents—sweat, olive oil, wood smoke from sacrificial fires, the scent of cow dung. Sacrificial cattle low in the background; people laugh, quarrel, exchange fisticuffs. Then silence falls. A starting horn blows and the athletes burst from the starting blocks. People cheer and yell, chant paeans, stand and gesture, shout war cries. And so the events unfolded against a background of long-held city rivalries. But all that your imagination brings to life has vanished, leaving just a silent archaeological site in the background.

The past surrounds us on every side, revealing the amazing achievements of our forebears. As we have said many times, we are all stakeholders in humanity's cultural heritage. It is up to us to preserve it for our descendants.

THE FUTURE OF THE PAST

As archaeologists, we're guardians of the past, and we work hard to preserve it for the benefit of everyone. But, given the scourge of the illegal antiquities trade and looting, where is archaeology going to go next? Preserving the past and acting as stewards of cultural heritage for future generations are our most urgent priorities. There is likely to be a far greater global, and we stress global, emphasis on heritage management and tourism. A good portion of archaeological work will still be driven by university research and cultural resource management, but archaeology is now as much a profession as an academic discipline.

The next half century will witness a significant shift in archaeology toward preserving the past and presenting it not only to other archaeologists, but also to everyone. "Public outreach," as it is often called, involves far more than TV programs like *Time Team*, radio shows, movies, magazines, and books about the past for general audiences. Such activities reach broad groups of people interested in archaeology and the past, but this is very different from reaching out to every stakeholder in the past—all of us.

New generations of archaeological research will involve working closely with local communities, with indigenous groups, and people whose connections to the past may seem tenuous but are not. Such close involvement means not only participation in the research but taking account of the handling of collections and human remains and consulting local stakeholders every step of the way. They are increasingly being consulted about displays and site museums, about leaflets, and lectures. This can be a long but tortuous process, that often involves overcoming profound distrust of archaeology and archaeologists. Community archaeology like this requires developing respect on both sides of the dialogue—which is not necessarily an easy task. There are many takes on history; those of stakeholders are just as important as those of archaeologists.

This is the major change in the future, as community projects proliferate around the world in Hopi pueblos, in Australian Aboriginal towns, Malay quarters in Cape Town, South Africa, and neighborhoods in Alexandria, Virginia.

The archaeologists of the future will need far broader, and very different training from today's practitioners. Ideally, they will have a very broad training not only in archaeological methods and theories, but a strong multidisciplinary perspective. They'll need a high sensitivity to cultural diversity and to different approaches to the past, such as flourish, for example, in Australia and Papua New Guinea. Their training will require in-depth exposure to stakeholders and community archaeology, as well as a grounding in conservation and cultural heritage. Above all, they will have to realize, as will their instructors, that much of archaeology is not pure research, but dealing with the complex intersections between archaeology and the wider world. This is apart from a crying need for specialized technicians with experience in everything from ancient textiles to mud brick and radiocarbon dating.

Tomorrow's archaeology will involve multidisciplinary teamwork that presents the past as accessible and something we all share in. We owe the past not only to ourselves but to those who created it. To know ourselves fully, we have to understand our past and our diversity. That's what archaeology is all about.

FURTHER READING

We have written about the issues in this chapter in our *Bigger Than History: Why Archaeology Matters*, by Fagan and Durrani (London: Thames and Hudson, 2019). See also: James Deetz, *Invitation to Archaeology* (Garden City, NY: Natural History Press, 1967), the best short book on archaeology ever written; Jeremy A. Sabloff, *Archaeology Matters: Action Anthropology in the Modern World* (Abingdon: Routledge, 2008); and Paul Bahn, *Archaeology; A Very Short Introduction* (New York: Oxford University Press, 2012). Simon Mackenzie et al., *Trafficking Culture: International Criminal Markets and the Illicit Trade in Cultural Objects* (Abingdon: Routledge, 2018), contains useful essays. Cultural tourism: Dallen J. Timothy, *Cultural Heritage and Tourism: An Introduction* (Bristol: Channel View Publications, 2011). Indigenous and community

archaeology: Joe Watkins, *Indigenous Archaeology: American Indian Values and Scientific Practice* (Lanham, MD: AltaMira Press, 2013); as well as D. Rae Gould et al., *Historical Archaeology and Indigenous Collaboration: Discovering Histories That Have Futures* (Gainesville: University Press of Florida, 2020).