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The Origin of Civilization

Course Guidebook

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Scott MacEachern, Professor of Anthropology at Bowdoin College in Brunswick, Maine, is an archaeologist with field experience in Cameroon, Chad, Nigeria, Kenya, Ghana, Canada, and the United States. He received his B.A. with Honors in Anthropology at the University of Prince Edward Island and his M.A. and Ph.D. in Archaeology from the University of Calgary. At Bowdoin, Professor MacEachern teaches courses on a variety of topics: African and world archaeology, African ethnography, ethnoarchaeology, and critical studies of race in anthropology. He is also an Adjunct Professor of Archaeology at the University of Calgary, has been a Visiting Researcher at Université Laval in Québec, and participated in an Archaeological Institute of America lecture series in 2009–2010. He has presented invited lectures and seminars at Harvard, Stanford, UCLA, the School for Advanced Research in Santa Fe, Université de Paris I (Panthéon-Sorbonne), the University of Cape Town, and Université de Yaoundé I, among others.

Professor MacEachern's archaeological interests extend in a number of different directions. His primary research focus since completing his doctoral work in the northern Mandara Mountains of Cameroon has involved the archaeology of the southern Lake Chad Basin, a fulcrum for cultural and political developments in Central Africa for at least the past 3,000 years. He is especially interested in research on state formation in this region. This interest has led him to excavate a number of Iron Age village sites in both Cameroon and Nigeria, as well as to conduct ethnographic research among modern communities in the Mandara Mountains, with the goal of improving the archaeological understanding of how artifacts were used in the past. Most recently, he has received National Science Foundation funding for research on enigmatic stone architecture sites in the Mandara Mountains, with the goal of understanding how mountain people related to precolonial states over the past 1,000 years.

Professor MacEachern is also involved in African cultural resource management initiatives—namely, the use of archaeology in industrial and development projects with the aim of protecting the cultural heritage of African countries. This effort has especially involved his work with the Exxon-led Chad Export Project, where Professor MacEachern and other archaeologists conducted surveys and excavation along a 700-mile oil

pipeline right-of-way in Chad and Cameroon. The coauthored, bilingual report on that research, *Komé-Kribi: Rescue Archaeology along the Chad-Cameroon Oil Pipeline, 1999–2004/De Komé à Kribi: archéologie preventive le long l'oléoduc Tchad-Cameroun, 1999–2004* (Africa Magna Verlag) was published in 2009. In addition, Professor MacEachern maintains an active research interest in African and global historical genetics and in the challenges of reconciling archaeological and genetically based accounts of human history.

Professor MacEachern has published scholarly articles in *Antiquity*, *Current Anthropology*, *The Journal of African History*, *Journal of African Archaeology*, *African Archaeological Review*, *Journal of World Prehistory*, *American Journal of Physical Anthropology*, *World Archaeology*, and *Journal of Social Archaeology*, as well as in numerous edited volumes.

Professor MacEachern finds that fencing and biking are a good change of pace from academic work and has been a competitive fencer since he was 17 years old. When taking time off from academic reading, he reads British science fiction and mysteries and spends a fair amount of time helping his daughter with her horse.

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Scope:

In more or less our current form, we *Homo sapiens* have walked the Earth for more than 150,000 years—the vast majority of this time as hunter-gatherers living in small, mobile groups. However, beginning around 10,000 years ago, humans developed agriculture and began to settle in larger and more complex communities. Between 5,000 and 6,000 years ago, people began to live together in urban settings, establishing social and political structures that were often hierarchical and centralized, creating laws to govern these structures and developing cultures and political systems that set them apart from their ancestors. This transformation of human life marked the appearance of state-level societies and regional civilizations with new cultural and political forms that changed the world so that today we all live in a world of states. The origins and development of these first states and civilizations in different parts of the world will be the focus of this course.

Although archaeology began as the study of the great accomplishments of Greece and Rome, we sometimes lose track of how recent, in archaeological terms, these particular ancient states and their extraordinary monuments really are. We also sometimes forget that this process of state formation happened in many different places across the globe: the first city-states in Mesopotamia; Chinese civilization on the North China Plain; the enigmatic Harappan cities in the Indus Valley; the spectacular Egyptian civilization in the Nile Valley; Minoan and Mycenaean civilizations on the islands and coastlines of the Aegean; the stones of Axum and Great Zimbabwe in Africa; and the great New World civilization of Mesoamerica and South America. What caused these new forms of cultural and political complexity to appear beginning five millennia ago and eventually dominate the globe? Why did they appear in these particular areas? Were the processes that led to states the same in different parts of the world, or did states in China, South America, or Africa originate and develop in entirely different ways?

This course brings together knowledge accumulated through archaeology to examine these questions and thus to enlarge our understanding of early human civilizations in a global sense. It does so by investigating the origins and development of states and civilizations across the world from a comparative and analytical perspective. Such an approach allows us to

broaden our consideration beyond the widely known civilizations of the Nile Valley, Mesopotamia, Greece, and Rome, familiar to us in large part because of their great literary traditions and their role in European history. We examine early states in other parts of the world that are perhaps less well known, where states might have developed in different ways from more famous examples.

This approach also allows us to search for common factors in the development of early states worldwide, factors that might be important to state formation whenever and wherever it occurs. This involves, for example, consideration of the roles that economic development, urbanism, ideology, ceremonialism, art and architectural styles, and writing systems played in early states. We also investigate the question of whether early states were necessarily despotic, or whether alternative, more widely dispersed networks of political power may have existed in some cases.

The course begins with a short introduction to the history of archaeological research on ancient states, to the theories that archaeologists call on when we consider questions of ancient state formation, and to the complexities of archaeological analysis of these topics. We will briefly examine ethnographic and archaeological examples of communities that illustrate those complexities. Then we will examine the archaeological evidence for early state development and the spread of the regional systems of culture that we call civilizations. Our approach will be broadly chronological and regional: We begin with the earliest evidence for state formation in the world, in Mesopotamia and the Nile Valley, and consider the ways states developed in those areas over centuries and millennia. Where possible, we compare contemporary instances of state formation to identify general trends and contrasts, as in the case of Egypt and Mesopotamia. We then move on to regions of the Old World where states developed somewhat later: the eastern Mediterranean and Aegean, the Indus Valley, China, Southeast Asia, and Africa. Our focus then moves to the New World and to state formation in highland and lowland Mesoamerica and South America. In all of these cases, our concerns will be to identify the natural and cultural environments in which states developed and the ways they transformed themselves through time.

Lecture One

Ancient States and Civilizations

Scope: What does the study of ancient states and civilizations encompass? This lecture examines the definitions of the terms "ancient state" and "civilization," as well as their usefulness in archaeological research on ancient societies. "Civilization" is a term that has somewhat fallen out of use in archaeology because of its analytical imprecision; archaeologists now study how political systems, known as states, developed in ancient times. There is a long-standing tension within archaeology between research on the spectacular remains of ancient rulers and nobles and examination of the day-to-day lives of common people. To get the most detailed picture of the origins of ancient states, we need to investigate both sides of this relationship.

Outline

I. The course examines ancient states in different parts of the world. We will look at a variety of examples of early states from different regions.

II. We need to recognize the relationship between the terms "civilization" and "state."

- **A.** The term "civilization" can be confusing because it implies that such cultures are civilized in a normative sense; it is also difficult to analyze because it is not precisely defined politically, culturally, or economically.
- **B.** Thus archaeologists conceive of their research as the study of ancient state formation, defined primarily in political terms such as the appearance of centralized governmental systems, a monopoly over the legitimate use of force internally and externally, the existence of bureaucratic forms of state control, and usually some kind of redistributive systems.

C. Archaeologists use the term "civilization" to define cultural, political, and ideological systems shared between different states in a region.

III. The course begins by considering why archaeologists spend so much time thinking about the origins of state-level societies.

A. We will examine archaeological and ethnographic cases.

B. We will also briefly consider some of the theoretical challenges of examining state origins in different parts of the world.

IV. We will examine the development of the earliest states, proceeding regionally because it is useful to consider the particular environmental circumstances and historical trajectories in different areas.

A. We will look at Egypt in the Nile Valley and Mesopotamia in the Near East, explicitly comparing the states in these two areas and considering why they turned out rather differently.

B. Our attention will then turn to successor states in these areas, especially the Minoan and Mycenaean civilizations in the eastern Mediterranean. We will consider the Greek Dark Ages and look at how archaeologists interpret mechanisms of state collapse.

C. We will examine early states in other areas of the Old World, including the Indus Valley, the North China Plain, and Southeast Asia.

V. Statehood developed in other parts of the world after, and in many cases in response to, these precocious examples.

A. We will examine the trajectories toward statehood and civilization in later sub-Saharan Africa, including the Horn of Africa, the Inland Niger Delta of West Africa, Great Zimbabwe, and the southern Lake Chad Basin.

B. We will examine the indigenous states and civilizations of the New World, first in highland and lowland Mesoamerica.

C. Finally, we will consider how states originated along the Pacific Coast of South America, including new data that indicates people were building large ceremonial centers along the coast of Peru at the same time that state formation was beginning in Egypt and Mesopotamia.

VI. The course concludes with a reconsideration of some of the themes we began with.

A. We will look at the way a comparative approach allows us to think about the different trajectories through which states have formed throughout the world.

B. We must remember that every topic examined in this course is a field of study on its own, with many practitioners and often significant debate.

C. My own perspective on the issues that we will look at is, I hope, fairly mainstream, but other perspectives exist. That is as it should be: Analysis and debate are the basis of any fruitful investigation of the human past.

Suggested Reading:

Feinman and Marcus, *Archaic States*.

Scarre and Fagan, *Ancient Civilizations*.

Questions to Consider:

1. What are the differences between states and civilizations?

2. Why is a comparative approach so important in trying to understand the origins of states and civilizations in different parts of the world?

Lecture Two
The History of Archaeological Research

Scope: Archaeology's beginnings as a professional discipline coincided with the increase of European influence in the Ottoman Empire in the early 19th century. Napoleon's invasion of Egypt in 1798 provided archaeologists with unprecedented insights into ancient Egyptian culture, and further excavations on sites known from the Bible and Homer brought archaeology to the attention of the European public. Throughout the 20th century, research efforts extended into other areas of the world, where archaeologists discovered states either entirely unknown or known only through fragmentary historical texts. The results of these efforts have led researchers to question traditional assumptions about the development of early states and civilizations.

Outline

I. Research on ancient states and their origins still commands a disproportionate amount of attention in archaeology, both among professional archaeologists and the general public.

- **A.** In part, this is because we have now lived for centuries in a world of states, and so these social/political forms are both very familiar and of great interest to us.
- **B.** This interest is also tied to the ways in which anthropology and archaeology developed as academic disciplines.

II. Ibn Khaldun's *Muqadimmah*, completed in the mid-14th century, was the first systematic application of scientific methods to social relations.

- **A.** Napoleon's invasion of Egypt in 1798 provided European intellectuals with unprecedented insights into ancient Egyptian culture, notably through the eventual decipherment of hieroglyphics.
- **B.** Mid-19th- and early 20th-century excavations provided a further association between archaeological research and the development of ancient states and civilizations.

C. Much of this interest in excavation lay in the verification of well-known historical texts such as the Bible, the *Iliad*, and other works of classical authors.

III. The investigation of states and the confirmation of historical sources continues in many other areas of the world.

A. In China, sites of the Shang dynasty were among the first to see major excavations.

B. In Mesoamerica and South America, archaeology tends to begin with the traces of states and the lives of their rulers and elites and only later focuses on nonstate societies and the lives of common people.

C. For most of the past century, sub-Saharan Africa has been best known for research on our hominid ancestors, but now the study of state formation and civilization in Africa is a central element in African archaeology.

IV. This pattern of attention to states and their rulers is understandable, but it can result in a distorted view of ancient societies, one that accords too much weight to the lives and preoccupations of elites and not enough to the experiences of the vast majority of common people living in a state.

V. Many archaeologists have advanced the study of origins of states and civilizations through their theoretical contributions and/or fieldwork.

A. V. Gordon Childe is an important synthesizer and theoretician on the development of urbanism and origins of states and civilizations; he is especially known for his deployment of Marxist concepts.

B. Bruce Trigger is an archaeologist and a protean scholar who wrote the primary text on the development of archaeological theory; he is known for comparative work on the origins and developments of states in different parts of the world.

C. Ian Hodder became one of the foremost archaeological theorists in the 1980s and is now director of the Çatalhöyük Archaeological Project.

D. Gregory Possehl is a long-time researcher on Indus Valley sites in Pakistan who developed really interesting ideas about the workings of Indus Valley societies 4,500 years ago.

E. Rod McIntosh and Susan Keech McIntosh excavated Jenné-jeno in the Inland Niger Delta of Mali, which revolutionized our understanding of the development of complex societies and urbanism in West Africa.

F. Michael Moseley's maritime foundations hypothesis began with studies of the Pacific Coast of South America, raising the question of the contributions that maritime resources could play in supporting complex societies before much contribution from domesticated plants.

Suggested Reading:

Childe, "The Urban Revolution."

Hodder and Hutson, *Reading the Past*.

Orme, "Archaeology and Ethnography."

Questions to Consider:

1. Why has the development of archaeology been so intimately associated with the study of ancient states?
2. What role did the Mediterranean Basin and the Near East play in archaeology's development?

Lecture Three
Studying the Origins of States

Scope: Archaeologists study the development of ancient states and civilizations through the analysis of their material traces. Throughout the 19th and early 20th centuries, research on ancient states concentrated on monumental architecture and the lives of the elites. However, that kind of research focus does not prepare us to study the origins of states in earlier, less-hierarchical communities. A vital change in research strategies throughout the 20th century led to increased analysis of the lives of common people living in early states. Just as importantly, this research increasingly focused on the functioning of entire communities in a regional context, allowing us to think about social, political, and economic systems. From the 1950s onward, radiocarbon and other absolute dating techniques provided archaeologists with an alternative to historical dates for ancient events, allowing us to compare historical and archaeological chronologies.

Outline

I. Archaeology has often concentrated on the rulers and elites of ancient civilizations without paying sufficient attention to the lives of nonelites further removed from the centers of power.

II. Recent archaeological research has attempted to remedy this imbalance by examining diverse topics.

- **A.** Archaeologists study the places where common people lived and worked, including nonelite areas of capitals and urban centers; smaller communities and rural areas beyond those capitals; and communities in frontier zones and other areas not under permanent state control.
- **B.** They study regional settlement and economic patterns, including the forms of urban organization in different states.
- **C.** They study the biological consequences of life in ancient states for people, both elites and nonelites.

D. They have developed alternative theories of social systems that give equivalent weight to the horizontal, unranked ties between individuals and groups, as opposed to the ranked social and political hierarchies that are supposed to define states and civilizations.

III. Dating techniques allow archaeologists to assemble relatively precise chronologies of cultural change.

A. Since these are independent of historical sources, they allow us to check the sources for accuracy.

B. They allow us to understand change over time in contexts not written about, either because writing had not yet been invented or because they were not deemed important by chroniclers.

C. They permit archaeologists to look at the ways in which states interacted with one another regionally and with communities that might be organized at very different levels of social and political centralization.

IV. The relations between states and nonstates are an important element in the constitution of many early states but are often unrecognized because we are not accustomed to thinking of the existence of nonstate societies on the frontiers of states.

A. Frontier zones were often areas of significant resistance to state development, as well as zones of exploitation.

B. Understanding states as interrelated systems allows us to more accurately conceive of the processes that lead from less-centralized societies to states.

V. How does this work get done?

A. In northern Cameroon in the summer of 2008, my fieldwork involved research on the DGB-1 site, 1 of a class of 16 such sites found in the Mandara Mountains.

B. The central issue is always moving dirt: How many cubic meters of soil can about 20 people move in eight weeks, and where should those people be deployed to get the maximum data? Determining this involves a careful initial survey of the site, drawing on experience at other sites in the region and observation of how people use the local landscape.

C. Since much of the site is stone architecture, work includes digging with trowels, local hoes, and finer digging tools, as well as carefully recording the positions of and removing stone walls, stairs, and other architectural features, as we attempt to understand the building sequence for the site.

D. One vital factor here is that we want to understand the site, not destroy it, so we take care not to destabilize architectural features and fill units in again after we excavate.

Suggested Reading:

MacEachern, "Beyond the Belly of the House."

Renfrew and Bahn, *Archaeology*.

Questions to Consider:

1. What are the drawbacks of archaeologists' traditional preoccupation with states, rulers, capitals, and great monuments?

2. Why would the frontier zones of ancient states have been so important in their evolution through time?

Lecture Four
Archaeological Interpretation—Çatalhöyük

Scope: Çatalhöyük is a Neolithic site in Anatolia, Turkey, dated to 7400–6000 B.C. It is remarkable for its large population and for the relatively well-preserved remains on the site. After its first excavation in the early 1960s, it was described as a Neolithic town, with certain areas set aside for religious activities. A very large-scale archaeological project, undertaken on the site since 1993 and directed by Ian Hodder, provides a different and more complex view of life at Çatalhöyük. The site was not laid out as a town as we understand the word today, and much of the day-to-day and ritual activity at Çatalhöyük seems to have been focused on the individual households, with relatively little evidence for communal activity. Çatalhöyük was not the precursor to any state, but research on the site demonstrates that ancient life in even quite large communities could be organized in ways very different than we expect.

Outline

I. Much of the archaeological discussion of ancient states and civilizations has to do with questions of social scale and coordination: How can a large number of people live and cooperate in a single, interrelated social and political system?

- **A.** The appearance of early states often coincides with the appearance of urbanism.
- **B.** However, the two do not always go together: We can have towns without states, and states without towns.
- **C.** The challenge for archaeologists lies in determining the nature of governance in ancient societies, particularly in those precursors to states where rulers—and their convenient habits of material display—did not yet exist.
- **D.** These challenges are well illustrated by the site of Çatalhöyük, a Neolithic settlement in Anatolia, Turkey.

II. Çatalhöyük is the largest known Neolithic settlement in the world, with a population of perhaps 5,000–8,000 people.

- **A.** They lived in very densely packed households with entrances only in the roofs. When occupied, the site probably looked something like a pueblo community in the American Southwest.
- **B.** When first excavated in the early 1960s, Çatalhöyük was described as a Neolithic town, with certain areas set aside for religious activities.
- **C.** Political organization in the town was not described, but it was often assumed to involve some kind of central leadership, perhaps as a very early chiefdom.

III. A very large-scale archaeological project, started in 1993 and directed by Ian Hodder, provides a different and more complex view of life at Çatalhöyük.

- **A.** The site was not laid out as a town as we understand the word today; Çatalhöyük can perhaps better be thought of as an extremely large farming village.
- **B.** There is some evidence for feasting on the site, and this is indeed the most obvious form of communal activity.
- **C.** Much of the day-to-day and ritual activity at Çatalhöyük seems to have been focused on the individual households, with relatively little evidence for cooperative activity at the community level.

IV. The houses were the focus of extraordinary ritual activities, often engaged in repeatedly over months, years, and decades.

- **A.** Rooms were cleaned and replastered at very frequent intervals—up to 450 times over the 75–100 year lifespan on a house!
- **B.** Beyond being cleaned and replastered, houses were carefully rebuilt on the same ground plans, sometimes more than five times in a century.
- **C.** Incorporated in household shrines were ritual items, often including animal elements like wild bull skulls with horns attached.
- **D.** Dead family members were buried under the floors of the home and then periodically disinterred for ceremonies.

E. We can see how this might make sense ideologically: Çatalhöyük's people seem to have associated the bodies of people with the bodies of houses.

V. Hodder believes that the rituals performed in the houses provided a potent mechanism for socialization of community members.

A. The concept is that the intensive repetition and memory making trained people to live together in a community far larger and more permanent than had ever existed before.

B. It is almost as if people were being domesticated at the same time as their crops and their herd animals.

C. Çatalhöyük was not the precursor to any state, but research on the site demonstrates that life in even quite large communities could in ancient times be organized in different ways than we expect.

Suggested Reading:

Balter, *The Goddess and the Bull*.

Hodder, *The Leopard's Tale*.

Lewis-Williams, "Constructing a Cosmos."

Questions to Consider:

1. Should we think of Çatalhöyük as an urban center or not?

2. Why would people at Çatalhöyük need to have been domesticated, and what are some of the mechanisms by which that domestication seems to have taken place?

Lecture Five
Stepping Stones to Civilization

Scope: If early states developed out of simpler political units, what did those earlier societies look like, and how did they function? Researchers frequently supplement their archaeological data with ethnographic information from modern communities when trying to answer this question. Archaeologists have identified chiefdoms, or intermediate societies—smaller-scale societies with weakly developed mechanisms of political power and coercion—as an evolutionary stage before the state, but the pathways between these political units and full-fledged states are debated. Nevertheless, these earlier, simpler political units do share some general characteristics worldwide.

Outline

I. The earliest civilizations must have developed out of less-centralized and less-hierarchical political and social units.

- **A.** What did the ancestors of the first states look like, and how did the state-building process happen?
- **B.** Is there a single or are there multiple evolutionary trajectories along which states can develop?
- **C.** Can we identify modern societies to study ethnographically or historically to get a better idea of how state formation worked?

II. Over the past century, the evolutionary schema has dominated theories of political development in archaeology.

- **A.** One very influential view, developed and elaborated in the 1960s and 1970s, saw the smallest scale of social and political organization as the band that, through time, led to tribes, chiefdoms, and states.
- **B.** Under this evolutionary model, archaeologists should probably search for and examine chiefdoms if they want to understand the origins of early states.
- **C.** Ethnographers have identified a large number of recent societies in different parts of the world as chiefdoms.

III. Many archaeologists think it is useful to examine recent or modern societies to gain some idea of what the origins of states might have looked like.

- **A.** The small state of Wandala reached its greatest extent between the 1780s and 1820s, when it supposedly dominated much of the southern Lake Chad Basin. The eclipse of Wandala power came at the end of the 19th century, when the state was incorporated within the German colony of Kamerun.
- **B.** Between the 1580s and 1900, historical sources inform us that the Wandala progressively assumed the trappings of Sudanic statehood.
- **C.** The Wandala borrowed the physical trappings of majesty in the Central Sudan when the ruler began living in a rectangular palace, instead of the round compounds of the common people.

IV. What does Wandala look like archaeologically?

- **A.** Wandala material culture is in many ways indistinguishable from the material culture of non-Muslim mountain people.
- **B.** We cannot detect the most important sociopolitical dichotomy of the late precolonial period, that between Muslim Wandala and non-Muslim mountain people.
- **C.** Once we look away from elite historical accounts and the palace, the idea of a Wandala state begins to dissolve.

V. The state in Wandala was the product of two separate political traditions. These two traditions existed simultaneously in Wandala, but they did not interact a great deal.

- **A.** One was indigenous, existing over long periods, and depended on relations between leaders and local powerful supernatural forces. It did not generate political units more than a few kilometers wide.
- **B.** The second was Islamic, centered on the court and associated with elite resource extraction (via slave raiding) and display.
- **C.** The Wandala elite presented the latter face to the outside world as a mechanism for support of the court. That court used elite material culture to appropriate the form of stateliness.

Suggested Reading:

Cohen and Service, *Origins of the State*.

MacEachern, "Selling the Iron for Their Shackles."

Yoffee, "Too Many Chiefs?"

Questions to Consider:

1. What are the possible dangers of using recent ethnographic data to try and understand the characteristics of ancient states?
2. Was precolonial Wandala a state or not?

Lecture Six
Trajectories of Cultural Development

Scope: Do states evolve from one form to another? If so, do they always evolve in the same way? Influenced by Charles Darwin's theory of natural selection and Herbert Spencer's views of cultural progress,19th-century theorists erected complex models of global, unilinear cultural evolution. These models held that all societies could be placed at different stages along a single evolutionary trajectory and that each of these stages involved a particular combination of technological, economic, social, and political characteristics. It became obvious through the 20th century that these lockstep models were not realistic, but the broader question remained: Are there consistent pathways toward the state in different parts of the world?

Outline

I. There are uncertainties associated with the concept of chiefdom, especially with the degree of political and social variability among societies designated in that way.

- **A.** This is inevitable if we think of chiefdoms as, among other things, intermediate forms between relatively egalitarian tribes and relatively nonegalitarian states.
- **B.** If chiefdoms vary so much, does this mean that the definition actually incorporates fundamentally different kinds of political systems that should not be lumped together?
- **C.** This may also reflect wider problems with the idea of a single evolutionary trajectory from bands to states.

II. For more than a century, evolutionary schemes have been very important in archaeology.

- **A.** They allow researchers to think analytically about cultural change through time and to classify myriad ancient communities into a limited number of categories.
- **B.** These evolutionary models were influenced to some degree by the success of theories of biological evolution in the mid-19th century.

C. The earliest influential evolutionary models in anthropology were unilinear: They posited a single evolutionary trajectory for all human societies, everywhere and always.

III. The evolutionary theory developed by Edward Tylor and refined by Lewis Henry Morgan had three successive stages.

A. These stages were further divided into three substages with different technological, economic, social, political, and religious characteristics assigned to each division, including savagery, barbarism, and civilization.

B. One characteristic of this system was that late 19th-century societies across the world could then be placed on this evolutionary ladder beside ancient communities according to their cultural characteristics, as determined by ethnography and archaeology.

C. This equivalence between prehistoric and contemporary communities often meant that certain societies, particularly those whose people were still hunter-gatherers in the late 19th century, were seen as living relics of earlier times.

D. By the early 20th century, it was becoming obvious that these unilinear models did not accurately reflect the cultural diversity of societies across the globe.

IV. Tylor and Morgan's unilinear evolutionary theories were gradually abandoned, but the search for precise definitions for human advance and human civilization were not.

A. Between the 1920s and 1950s, V. Gordon Childe developed significantly more sophisticated models for the origins of states and civilizations.

B. First, increases in agricultural productivity through time led to food surpluses and population growth; these in turn led to the appearance of occupational specialists, who could devote themselves full-time to craft production, religious pursuits, or trade.

C. The centralization necessary to successfully coordinate these more complex economic and social systems led to the appearance of urban centers, controlled by elites through the accumulation of tributes and taxation.

D. This ultimately led to the appearance of states and their rulers and many of the accoutrements of states that we are familiar with: monumental architecture, writing systems, formal systems of law, military forces, and so on.

V. Archaeologists have criticized Childe's models because they may not account for the details of state formation everywhere in the world.

A. The band-tribe-chiefdom-state succession could also be seen as a unilinear evolutionary model, but it is much more general than that produced in the 19th century by Tylor and Morgan.

B. It is not useful to think of the band-tribe-chiefdom-state succession as a set-in-stone evolutionary sequence. It is more useful as a heuristic that aids in discussing general trends in state formation.

Suggested Reading:

Childe, "The Urban Revolution."

Fabian, *Time and the Other*.

Wenke, "Explaining the Evolution of Cultural Complexity."

Questions to Consider:

1. What are some of the strengths and weaknesses of evolutionary models as they are used to analyze the processes by which ancient states appeared in different parts of the world?

2. What elements did V. Gordon Childe see as central to the evolution of ancient states?

Lecture Seven
When Is a State a State?

Scope: One of the challenges that archaeologists face when studying the origins of ancient states is quite simple: How do we decide, using only material data, that something called a state has appeared from some nonstate ancestor? This is a particularly challenging if we do not expect to find unlinear pathways toward statehood around the world, because in that case the predecessors of states can potentially look rather different. Such challenges lead to widespread disagreements about whether particular ancient societies did or did not make the transition to statehood. This lecture discusses current thinking about the detection and definition of early states and the criteria that archaeologists use in such decisions.

Outline

I. One of the challenges that archaeologists face when studying the origins of ancient states is how to decide, using only archaeological data, that a state has appeared from some nonstate ancestor.

- **A.** In some cases, we have written evidence about kings, wars, diplomacy, or the functioning of the state, but this may not always be the case.
- **B.** In most cases, writing seems to appear in already existing states; it does not provide us with much evidence on their development from earlier political forms.
- **C.** Evolutionary models may help us determine when states appear in the archaeological record, but they require that we accept these models as generally accurate when applied to the real world.

II. This has been an issue of significant debate in archaeology over the past 10–15 years, after decades of general acceptance of models of evolutionary succession between bands, tribes, chiefdoms, and states.

- **A.** Note that the cases from which the band-tribe-chiefdom-state succession model was formulated are all recent ethnographic or historical cases. We know of relatively few cases where succession between these stages has been observed.
- **B.** This does not invalidate the model, but it does increase the risk of circular reasoning, where we may detect such cases because they are what the model tells us to expect.
- **C.** Chiefdoms might be an alternative political form to the state, not necessarily an ancestral one. In some cases, there seems to be a regular cycling between states and other political forms, without any form of state collapse.

III. In Central Africa, where I work, the same situation seems to hold.

- **A.** From archaeological and historical evidence, it seems that the degree of political centralization and social hierarchy is somewhat dependent on local economic and political circumstances.
- **B.** Communities can move back and forth along a spectrum of political integration, from relatively centralized to relatively decentralized and back, according to changes in those circumstances.
- **C.** It may be possible to move directly from simple chiefdoms, or even tribal levels of political organization, to at least simple states, without passing through a stage of more complex chiefdoms.
- **D.** Archaeologists must consider whether societies can be states without some of the characteristics that are said to define a state: centralized government systems, a monopoly over the legitimate use of force internally and externally, bureaucracies, and redistribution systems.

IV. Norman Yoffee's rule states that "If you can argue about whether a society is a state or isn't, then it isn't."

A. He also believes the following ideas about the archaic state accepted pretty uncritically by most archaeologists are actually myths.

1. All early states were basically the same kind of thing.

2. Ancient states were totalitarian regimes.

3. The earliest states enclosed large regions and were territorially integrated.

4. Typologies can be used to analyze states on a ladder of progressiveness.

5. We can correlate ancient types with modern societies.

6. Structural changes in political and economic systems were the only engines for the evolution of early states.

B. Yoffee believes that there is significantly more variability in early states than can be accounted for in simple systems of cultural evolution.

Suggested Reading:

David and Sterner "Wonderful Society."

Yoffee, *Myths of the Archaic State*.

Questions to Consider:

1. Do processes of political evolution always have to run in one direction, from less to more complex and centralized?

2. What were some of Norman Yoffee's myths of the archaic state?

Lecture Eight
A Complex Neolithic—Halafian and Samarran

Scope: By the 6th millennium B.C., agriculture was well established throughout the Near East. The small food surpluses that farming provided even then would lay the groundwork for later experiments in social and political elaboration. After 5500 B.C., elaborate, widely produced pottery styles began to appear in the northern Tigris and Euphrates river drainages. These new ceramic styles imply some degree of craft specialization and trading systems. They are associated with substantial farming villages and two-tier settlement hierarchies, with large villages surrounded by smaller ones. The political basis of these settlements remains unclear, but archaeologists have sometimes identified the largest Halafian and Samarran sites as the centers of small chiefdoms.

Outline

I. Let's examine the origins of states in the Near East.

- **A.** By the 6th millennium B.C., village-based farming was firmly established from Nea Nikomedia in Cyprus to Mehrgarh in Pakistan.
- **B.** In all these cases, it appears that political authority remained local and dispersed, with little evidence of social hierarchy.
- **C.** Local trading systems existed over much of this region.

II. In northern Mesopotamia from 6250 to 5300 B.C., farming communities were often grouped under the Hassunan tradition.

- **A.** Small villages and local trading systems characterize the Hassunan; there is no evidence of any real social differentiation within villages.
- **B.** There were freestanding structures, quite unlike the aggregated settlement at Çatalhöyük.
- **C.** Tell Hassuna is the type-site for this tradition: individual houses for groups of 15-20 people and a large central building, possibly used for communal storage. This may imply some degree of centralized coordination of labor.

D. One characteristic class of artifact found on Hassunan and related sites is the token—a small object made of clay, often in a geometric form. It has been suggested that these form part of an inventory system that would ultimately lead to the development of writing.

III. The agricultural expertise of Hassunan and contemporary farmers made possible all of the social and political developments that would follow.

A. Their craftspeople made elaborately decorated pottery, a practice also found in later farming communities in this region.

B. The Hassunan was overlapped/succeeded by the Halafian culture within the same territory, dated to 5500–4700 B.C.

C. The Halafian was economically similar to the Hassunan, without evidence for large villages or much wealth differentiation. Again, the agricultural system was rain-fed.

D. One primary difference lay in the widespread nature of the Halafian pottery tradition. This appears to have been a luxury ware, very heavily decorated, and the designs appear to be similar to those on later textiles from the region.

IV. Halafian ceramics appear to have been made by specialists; the vessels are very standardized.

A. Analysis of the clays and tempers indicates that at least some of this pottery was distributed over regions of 1,000 kilometers.

B. Since ceramics are heavy and fragile, this implies a widespread and efficient trading network.

C. Halafian pottery may have been an elite item, and its distribution may indicate the spread of a common elite aesthetic through relatively large parts of the Near East.

V. The Hassunan/Halafian traditions in northern Mesopotamia are paralleled further to the south by the Samarran culture at places like Tell es-Sawwan and Choga Mami, in what is now central Iraq.

A. Samarran may be at least in part descended from the Hassunan culture.

B. Samarran pottery found over a wide area probably had generally similar uses as a luxury good and a valued possession of elites.

C. One crucial difference between Samarran and the traditions to the north is that in central Mesopotamia, Samarran communities used irrigation agriculture.

D. Flax was grown on at least some Samarran sites, laying the basis for an export in textiles—an important element in later Mesopotamian trading systems.

E. Samarran sites are in some cases substantially larger than those found further to the north, housing 800–1,200 people.

F. A characteristic of the larger Samarran sites are T-shaped buildings, probably storehouses for seed and food grain, indicating a possible form of communal ownership of productive land.

G. Tell es-Sawwan and Choga Mami appear to have been fortified through part of their occupation, implying the necessity of defense against attack by other communities.

Suggested Reading:

Campbell, "The Halaf Period in Iraq."

Oates, "The Background and Development of Early Farming Communities in Mesopotamia and the Zagros."

Questions to Consider:

1. Why is the study of ceramics so important to our understanding of the development of social and political hierarchy in the Near Eastern Neolithic?
2. Why do archaeologists pay so much attention to cemeteries when studying ancient social systems?

Lecture Nine
Hierarchy and Urbanism—'Ubaid Mesopotamia

Scope: As the Halafian and Samarran spread in northern Mesopotamia, we see the first evidence of intensive agriculture and larger populations in the alluvial floodplains of the southern Tigris-Euphrates system. 'Ubaid sites like Eridu in southern Iraq show the first evidence of the specialized temple buildings that would play a central role in later Mesopotamian cities and variation in house size and richness, indicating significant differences in wealth and social status within single communities. In comparative terms, archaeologists often consider these 'Ubaid centers chiefdoms. 'Ubaid artifacts and architecture are found over a large area of the Middle East, from the Arabian Peninsula to southern Turkey. This may indicate the first extension of the trading networks that would become so characteristic of the succeeding Uruk period.

Outline

I. We know rather little about the early history of human occupation of the alluvial floodplains of the Tigris and Euphrates river valleys of southern Mesopotamia.

- **A.** This is in large part because deep deposits of alluvial silt and clay have accumulated through this area over the past 10 millennia.
- **B.** In addition, in many cases later centers were built on top of earlier settlements. There may be many meters of cultural deposits to excavate before archaeologists reach the traces of the earliest settlement in the area.

II. Settlement seems to have been quite sparse in southern Mesopotamia compared to the north until perhaps 5000 B.C.

- **A.** The earliest culture known on the alluvium of southern Mesopotamia is called the 'Ubaid tradition, dating from about 5800 to 4000 B.C.
- **B.** Historically, there was always a lot of controversy about where settlement in southern Mesopotamia originated: from the north or from Arabia, where we find a whole set of 'Ubaid sites along the Persian Gulf from Iraq to Qatar.

C. Excavations at the Tell Oueli site, near Larsa in southern Iraq, uncovered ceramics and architecture very similar to those of the Samarran tradition.

III. The earliest ‘Ubaid communities were fairly small in size, with perhaps 300–600 inhabitants and no evidence for any significant amount of internal social or economic differentiation.

A. This changed quickly. Irrigation of the alluvial soils of southern Mesopotamia seems to have supported significant population densities compared to areas to the north.

B. ‘Ubaid settlement patterns display a classic two-level settlement system, with large villages of a thousand or more people surrounded by smaller hamlets.

C. By 4500 B.C., the ‘Ubaid settlement of Eridu had a population of approximately 5,000 people.

D. Eridu was a town in 4500 B.C., while Çatalhöyük, with the same population 2,000 years earlier, was not.

E. There is remarkably little evidence for warfare on ‘Ubaid sites. In contrast to Samarran sites to the north, none are fortified.

IV. ‘Ubaid material culture eventually spread over a very large area of the Near East.

A. This spread probably does not indicate migration or colonization, except in quite local areas. Thus earlier Halafian sites to the north continued to display some Halafian characteristics throughout the ‘Ubaid period.

B. Instead, this represents the first extension of the complex Mesopotamian trading systems that characterize the succeeding Uruk period, as well as the selective adoption of some ‘Ubaid cultural elements by local communities in other areas.

C. This adoption may well have been related to the cultural prestige and craft expertise found in the large ‘Ubaid sites of southern Mesopotamia.

V. Excavations at ‘Ubaid sites like Abada indicate substantial variation in house sizes and contents, implying some differences in wealth at least at the family or household level.

A. Archaeologists have had to rethink how these societies were deploying wealth. Trade seems important very early on and seems to precede much wealth differentiation between individuals.

B. It has sometimes been assumed that ‘Ubaid sites indicate some degree of political centralization, with power radiating outward from religious authorities and mediated by an elite.

C. This is almost certainly not the case. There is no evidence of any palaces or political authority at this point.

VI. At sites like Eridu and Abada, we find evidence of social ranking.

A. Ritual and economic authority may have been vested in the people who occupied the large buildings and maintained the temple at the center of Eridu. However, it remains debatable whether this translated into political power, and whether that authority was vested in individuals or in elite kin groups.

B. Again, archaeologists frequently designate ‘Ubaid towns as the seats of simple chiefdoms—although use of the term may obscure the complexity and variability of ‘Ubaid political organization.

Suggested Reading:

Frangipane, “Different types of Egalitarian Societies and the Development of Inequality in Early Mesopotamia.”

Pollock, *Ancient Mesopotamia*.

Stein and Ozbal, “A Tale of Two Oikumenai.”

Questions to Consider:

1. How did farming populations occupy southern Mesopotamia during the ‘Ubaid period, and what was the cultural significance of that occupation?
2. Do we see evidence for social and political hierarchies during the ‘Ubaid period, and what level of political centralization seems to have existed at that time?

Lecture Ten
The Uruk World System

Scope: During the Uruk period, small states based around real cities began to develop, first in southern Mesopotamia and then further to the north and east, on the Iranian Plateau. By 3100 B.C., the city of Uruk itself probably housed nearly 20,000 people and was ruled by a king. During this period, Uruk was one of perhaps two dozen urban centers in southern Mesopotamia. There is abundant evidence for Uruk artifacts and architecture well beyond Mesopotamia, but this seems to be largely the result of the founding of Uruk trading colonies from Turkey to western Iran. These colonies controlled trade routes for the import of raw materials into Mesopotamia and then sold high-prestige manufactured goods back to local people. This is the first case of such commercial and economic dominance known anywhere in the world.

Outline

I. The period succeeding the ‘Ubaid in Mesopotamia is called the Uruk period, after the largest site of the time.

- **A.** It dates from about 4000 B.C. to approximately 3000 B.C.
- **B.** Uruk sites in southern Mesopotamia from the 4th millennium B.C. are recognizably descended from earlier ‘Ubaid occupations, although in areas beyond Mesopotamia ‘Ubaid sites are often succeeded by local innovations.

II. There were important economic changes during the Uruk period.

- **A.** With the extension of irrigation canal systems came the plow and increased use of barley and date palm.
- **B.** Large communities appeared and were often walled.
- **C.** Public buildings, especially temples, became much larger and more elaborate.
- **D.** The first beveled-rim bowls appeared.

III. These phenomena imply pretty massive population mobilization and an important redistributive system.

- **A.** In later Sumerian ideology, land was the property of the gods, and the temples and priests were their representatives. It is likely that an early form of this ideology was held in Uruk times as well.
- **B.** At approximately 3300 B.C., complex recording systems developed through an early form of writing sometimes called proto-cuneiform.
- **C.** By the end of the Uruk period, there were written references to rulers in southern Mesopotamian urban centers, which can probably best be thought of as small city-states.

IV. Long-distance trade is one of the most striking characteristics of the Uruk period.

- **A.** This was hugely important in this area, because the alluvium of southern Mesopotamia is poor in most resources: stone, wood for building, metals, and other raw materials.
- **B.** The region's strength lay in the productivity of its alluvial soils under irrigation and the expertise of its large numbers of craftsmen.
- **C.** During the last half of the 4th millennium B.C., Uruk trade networks were extensive.
- **D.** For the first time that we know of anywhere, trade involved fairly massive movements of not merely luxury items but staples—wood, stone, bitumen, copper, and other goods— over distances of many hundreds of kilometers.
- **E.** This Uruk expansion also involved the establishment of Uruk settlements at significant points on this trade route.

V. In most regions, trade relationships probably involved interactions with indigenous populations, which often adopted elements of Uruk material culture.

- **A.** Relations between indigenous people and Uruk immigrants and traders are often interpreted in terms of modern core-periphery theory, where a developed center with power dominates and exploits weaker peripheries.

B. However, core-periphery theory was developed to explain 19th-century European-colonial relationships. Can we really generalize from recent capitalist systems to the societies of the 4th millennium B.C.?

Suggested Reading:

Algaze, "The Uruk Expansion."

Rothman, *Uruk Mesopotamia and Its Neighbors*.

Stein, "The Political Economy of Mesopotamian Colonial Encounters."

Questions to Consider:

1. What roles did temples play in Uruk Mesopotamia?
2. What is the significance of the Uruk trading system? Do we see analogies for such trading systems today?

Lecture Eleven

Sumer and Afterward

Scope: After 3000 B.C., warfare between Mesopotamian city-states seems to have been endemic as kings tried to extend their rules over larger territories. Rural areas around Mesopotamian city-states were depopulated as people moved into the urban centers for protection and full participation in civic life. The spread of writing and accounting systems at this time provide us with more information on politics, economies, and religion in Mesopotamia. We can thus speak of a cultural area that can be described as a Mesopotamian civilization, even if rule was situated at a much more local level.

Outline

I. The Uruk period ends at about 3000 B.C., and the Early Dynastic period begins around 2900 B.C.

II. Sumerian Mesopotamia was a culture of city-states.

- **A.** There were about 12 major cities in the region during this period, with 20–30 smaller centers. Most had already been occupied for centuries or millennia.
- **B.** There was a three-level settlement hierarchy in Mesopotamia: cities, surrounded by smaller towns, which in turn were surrounded by rural hamlets.
- **C.** By the end of the Early Dynastic period, there were approximately 50,000 people living in Uruk/Warka.

III. Evidence suggests cultural differences between city-states; Mesopotamia was a multiethnic, multilinguistic region.

IV. Evidence of central rule in the Early Dynastic city-states is abundant.

- **A.** Temples continued to play a central role in Mesopotamian ideological and economic life, but there was an emergence of secular rule.
- **B.** Political organization was centered in the individual urban city-states; there was no wider unification across southern or central Mesopotamia beyond loose and temporary alliances.

C. At the same time, there seems to have been a good deal of agreement among the populations of these city-states about how elite rule should work and how it was justified religiously.

V. There is evidence for massive stratification of wealth and power in these city-states.

A. Rulers and elites were burying a great deal of their predecessors' wealth and thus displaying their own wealth and power.

B. In royal tombs, servants and retainers accompanied a dead ruler into the afterlife in an exceptionally striking illustration of the difference in status between king and subjects.

VI. One extraordinary phenomenon of the Early Dynastic period was what is known as hyperurbanism.

A. Farmers began to abandon rural areas for cities. The great majority of these people remained farmers, who travelled long distances each day to get to their fields.

B. This phenomenon may have been caused by warfare between city-states, which often endangered people not sheltered behind city walls.

VII. During this Early Dynastic period, political power was fragmented among the Sumerian city-states, but this would soon change as rulers in different city-states tried to conquer neighbors and unite larger areas.

Suggested Reading:

Crawford, *Sumer and the Sumerians.*

Van de Mieroop, *A History of the Ancient Near East.*

Questions to Consider:

1. What were the characteristics of Mesopotamian civilization in the 3rd millennium B.C.?

2. What is hyperurbanism, and what does it indicate about political relations during the Early Dynastic period?

Lecture Twelve
Civilization and Pastoralism in Mesopotamia

Scope: Beyond the Mesopotamian countryside lay a different landscape: the semiarid plains and hills of the peripheries, often occupied by nomadic pastoral populations. These pastoralist societies frequently appear as savage raiders in the histories of settled peoples, but in fact the economies and social systems of farmers and herders were closely intertwined. Pastoralists traded meat and animal products for surplus items produced by farmers, thus optimizing exploitation of different environments. They also played an active, and often dominant, role in the political life of many Mesopotamian states. Although pastoral populations tend not to be very visible archaeologically, archaeologists have recently paid more attention to some of the peripheries of Mesopotamia, for example the Zagros Mountains of western Iran.

Outline

I. Beyond the Tigris-Euphrates floodplains lay the semiarid plains and the hills of the Mesopotamian peripheries that were often occupied by nomadic, pastoral populations.

II. The economies and social systems of farmers and herders were probably closely intertwined in Mesopotamia.

- **A.** It appears to be impossible for pastoral populations to survive purely on products of their herds for substantial periods.
- **B.** Almost inevitably, herders will have some economic relations with farming populations, often involving exchange of products.

III. The semiarid plains of Mesopotamia are not well suited for agriculture away from water sources.

- **A.** Pastoralism in Mesopotamia may have developed in symbiosis with irrigation agriculture, because the latter dramatically decreases the mobility of farmers.
- **B.** On the borders of Mesopotamia, historical sources show that nomads were often closely related to more sedentary farmers and would leave produce and other goods in storage with them.

IV. Pastoralists and states can be conceptualized in two ways.

A. What role did pastoralists play on the peripheries of early agricultural states?

1. Some pastoralists, like the Amorites living in what is now Syria, existed on the edges of Mesopotamian city-states.

2. In many cases, it would seem they were integrated into Mesopotamian communities.

B. How did political complexity develop among pastoralists?

1. The Amorites, as one example, established kingdoms in Mesopotamia at the end of the 2nd millennium B.C. during a period of political fragmentation in the region.

2. The geographical territories of those kingdoms seem to be larger than those of the Early Dynastic city-states.

V. Pastoral populations, with their mobility and relatively impermanent material culture, tend not to be very visible archaeologically.

A. Researchers working in Mesopotamia have not often tried specifically to locate pastoralist sites; however, archaeologists have paid more attention to some of the peripheries of Mesopotamia, for example the Zagros Mountains of western Iran.

B. Over the past 20 years, researchers have done intensive surveys in regions of the Zagros where the Guti nomads may well have originated.

VI. Complex interdependencies between Zagros farmers and pastoralists evolved, allowing a more complete exploitation of local environments than would have been possible with either adaptation on its own.

Suggested Reading:

Abdi, "The Early Development of Pastoralism in the Central Zagros Mountains."

Cribb, *Nomads in Archaeology*.

Zagarell, "Pastoralism and the Early State in Greater Mesopotamia."

Questions to Consider:

1. Can pastoralists exist independently of farmers? How would the relations between these different populations vary?
2. How do pastoralists seem to have interacted with ancient Mesopotamian states?

Lecture Thirteen
The Development of Writing in Mesopotamia

Scope: In the late 4th millennium B.C., writing began to appear in Mesopotamia, in part derived from systems of tokens and seals used in accountancy. The original symbols were pictographs, simple depictions of objects or concepts, but they quickly became abstract to represent more complex ideas. The use of writing extended into different realms of human activity, reflecting the activities of priests, diplomats, poets, and propagandists. From this point onward, history will supplement archaeology in the study of human affairs. The cuneiform script developed in Mesopotamia was adopted by speakers of a variety of Near Eastern languages, and the use of clay tablets as a writing surface ensured that a variety of different texts were preserved for archaeological interpretation. At almost the same time, a quite different, hieroglyphic script developed in Egypt, but the use of papyrus to record hieroglyphics means that far fewer Egyptian texts are known.

Outline

I. One of the most epochal events in human history was the invention of writing, which first appeared in Mesopotamia and the Nile Valley just over 5,000 years ago.

II. How did Mesopotamian writing systems originate?

- **A.** Some archaeologists believe that Mesopotamian writing developed over a long period from record-keeping systems.
- **B.** Other archaeologists believe that cuneiform writing developed very quickly, more or less as an invention without any earlier precursors.

III. Small clay tokens appear at Hassunan sites and are a common feature of later farming societies in the area; these seem to have been used as an inventory system.

IV. In the late Uruk period, at around 3300 B.C., tablets appear inscribed with signs designated as proto-cuneiform.

- **A.** These are largely pictographic—they represent actual objects—but they were made with a wooden stylus, not by the impression of the actual objects on the clay.
- **B.** A related script, proto-Elamite, appears slightly later in southwestern Iran. Some signs seem to be borrowed from proto-cuneiform, so we should probably think of these scripts as parallel innovations originating in a common cultural milieu.
- **C.** However, proto-cuneiform and proto-Elamite tablets do not record language per se; they are inventories—combinations of pictograms and symbols designating quantities.

V. The processes by which proto-cuneiform became a real writing system seem to date to around 3000 B.C.—the beginning of the Early Dynastic period.

- **A.** This may be associated with the increased demand for different kinds of record keeping and communication in and between larger and more complex city-states.
- **B.** The process involved the transformation of signs from referring to particular things in an inventoried hierarchy to referring to more abstract ideas or, increasingly, sounds corresponding to meaning in spoken language.
- **C.** To some degree, the restriction and standardization of signs became necessary as they less directly depicted concrete things and as they began to be used in more domains of communication.

VI. Which hypothesis for how writing originated best fits the data?

- **A.** I find it hard to believe that the quite complex recording systems of the Uruk period did not play a role in the appearance of proto-cuneiform at about 3300 B.C.
- **B.** By the early 3rd millennium B.C., the script had been considerably standardized and the signs continued to evolve.
- **C.** We cannot forget that Mesopotamian civilization of the time was multiethnic and multilinguistic, and the development of cuneiform reflected that. Indeed, we can see this complexity in the parallel development of proto-cuneiform and proto-Elamite.

D. The use of cuneiform spread far beyond its point of origin in southern Mesopotamia and adjoining Iran.

Suggested Reading:

Glassner, *The Invention of Cuneiform*.

Oates, "Early Writing in Sumer."

Schmandt-Besserat, *How Writing Came About*.

Questions to Consider:

1. Does the Mesopotamian writing system seem to have evolved slowly, over a period of millennia, or relatively quickly?
2. From the available evidence, what was the primary use of the Mesopotamian writing system?

Lecture Fourteen
The Gift of the Nile

Scope: As in Mesopotamia, agriculture, settled life, and states developed in Egypt in a river valley, the Nile. However, the early histories of settlement and farming in the two areas are quite different. In Egypt, agriculture began later than in the Near East, dating to about 6000 B.C., with plant domestication coming from west of the Nile in Nabta Playa. In the Nile Valley itself, farming seems to have begun perhaps 1,500 years later, with domesticated plants and animals originating from the Near East. As a result of this late development of agriculture, population densities in the Nile Valley were relatively low through the 4th millennium B.C. when compared to Mesopotamia.

Outline

I. Because states and their accoutrements appeared in the Nile Valley at almost exactly the same time as they did in Mesopotamia, the two cases are often compared with one another.

II. Throughout the last 10,000 years, climates and environments changed in and around the Nile Valley

- **A.** At the beginning of the Holocene, about 12,000 years ago, rainfall levels increased dramatically over most of Africa, significantly above modern levels and far above the levels of the preceding Terminal Pleistocene Hyperarid phase.
- **B.** The increase in rainfall led to exceptionally high Nile floods with periods of higher flooding thereafter. Lands east and west of the Nile became less desertlike and thus more attractive to human occupation.

III. This had significant implications for the development of farming in the Nile Valley vis-à-vis the Near East.

- **A.** Whereas in the latter area there is a continuous history of agriculture from more than 10,000 years ago onward, in the Nile Valley that history only began between 7,000 and 6,000 years ago—that is, between about 5500 and 4000 B.C.

B. The time depth of farming in the Nile Valley is more shallow than in Mesopotamia, which may help to account for some differences in the historical development of the two regions.

IV. The first undoubted evidence of farming in Egypt does not come from the Nile Valley.

A. At Nabta Playa in southern Egypt, west of the Nile, archaeologists have found substantial settlements of farmers cultivating barley, dating to about 6000 B.C.

B. Further to the north, the first evidence for agriculture comes from the Fayum Depression, at approximately 4400 B.C in what was then a lake west of the Nile.

V. Population densities along the Nile seemed to be quite low at this date.

A. Sites contemporary with Merimde may have existed along the Nile, but if so their remains are buried under alluvial sediments, deposited in the annual Nile floods.

B. The Fayum settlements seem to have been quite large communities, while Merimde was much smaller, with houses dug into pits in the ground and then roofed over.

C. There is no evidence for significant degrees of social differentiation at any of these sites.

Suggested Reading:

Bard, *An Introduction to the Archaeology of Ancient Egypt*.

Wenke, *The Ancient Egyptian State*.

Wetterstrom, "Foraging and Farming in Egypt."

Questions to Consider:

1. How do chronologies of farming and settled life in the Nile Valley contrast with those in Mesopotamia?
2. How did climate change affect the relative attractiveness to humans of the Sahara and the Nile Valley through the last 12,000 years?

Lecture Fifteen
The Egyptian Predynastic Period

Scope: Early in the Egyptian Predynastic period, the Nile Valley was occupied by a large number of farming communities, each controlling a length of fertile land along the river and a hinterland toward the desert, where hunting and herding could take place and where the dead were buried. By the middle of the 4th millennium B.C., a small number of large chiefdoms dominated long stretches of the river valley. Toward the end of the millennium, Predynastic cemeteries show evidence of a striking increase in wealth and status differences between individuals.

Outline

I. The Predynastic period marks the first appearance of states in the Nile Valley.

II. The Predynastic was evidently a period of quite radical change for Nile Valley societies.

- **A.** Most explanations of the adoption of agriculture and increasing social and political complexity in the Nile Valley have been primarily ecological.
- **B.** Egypt had lower population densities, and thus there appears to have been far less potential for competition for arable land.
- **C.** There is relatively less information on trade in the Nile Valley, in part because not as much research has been done on the topic as in Mesopotamia.
- **D.** Most trade certainly would have taken place along the Nile. It would have been a linear, down-the-line trading system, where goods were passed via middlemen from one community to the next.
- **E.** By the late 5th and 4th millennia B.C., farming communities and the small territories they controlled were strung out along the Nile in both Upper and Lower Egypt.

III. There were important cultural differences between Upper and Lower Egypt during the Predynastic period, differences that were more or less erased after the unification of Egypt.

IV. It is possible that a need for fortification was associated with environmental and political changes in the late Predynastic period.

- **A.** By 3500 B.C., drying climates were making the lands east and west of the Nile less tenable for human habitation, forcing occupying populations to move into the Nile Valley.
- **B.** This probably would have caused conflicts and helped consolidate and legitimize the power of chiefs, especially paramount chiefs capable of commanding military forces and defeating foreign raiders.
- **C.** By the end of the Predynastic period, these different centers were small states, each with a supreme ruler, an effective military force, and at least a nascent bureaucracy.

V. There is evidence for social differentiation and political hierarchy in late Predynastic Upper Egyptian communities, primarily from the cemeteries in the area.

- **A.** Urban centers were not as important in early Egyptian cultural and political developments as they were in contemporary Mesopotamia.
- **B.** This is probably in part due to lower original population densities in the Nile Valley as compared to southern Mesopotamia, which can in turn be ascribed to the later development of farming in Egypt.

Suggested Reading:

Adams and Cialowicz, *Protodynastic Egypt*.

Hassan, "The Predynastic of Egypt."

Savage, "Some Recent Trends in the Archaeology of Predynastic Egypt."

Questions to Consider:

1. How has the overwhelming presence of the Nile Valley structured archaeological explanations for the rise of the Egyptian state?
2. How important was urbanism in the Predynastic Nile Valley as compared to Mesopotamia at the same time?

Lecture Sixteen
The Unification of Upper and Lower Egypt

Scope: At approximately 3100 B.C., developments of the late Predynastic period in the Nile Valley culminated in the unification of Upper and Lower Egypt in a single state. It is likely that this process of unification was quite gradual, taking place with some reversals over the period between 3200 and 2900 B.C. To some degree, this is not surprising: Egyptian rulers were faced with a more challenging exercise in governance than rulers of Mesopotamia, being responsible for control over many populations along 1,000 kilometers of the Nile.

Outline

I. The relatively sudden political and social developments of the late Predynastic period in the Nile Valley culminated in the unification of Upper and Lower Egypt in a single state.

- **A.** This process has often been conceived of as the gradual cohesion of Predynastic agricultural communities of two protokingdoms, and the subsequent conquest of the kingdom of Lower Egypt by the king of Upper Egypt.
- **B.** Egyptian dynastic histories say that around 3100 B.C., Upper and Lower Egypt were united, when King Narmer of Nekhen/Hierakonpolis defeated the army of Lower Egypt.
- **C.** This version of events may also find some support on the so-called Palette of Narmer, a flat, intricately carved stone found in Nekhen/Hierakonpolis.

II. It is easy to see how the Palette of Narmer can be interpreted as a commemorating a conquest of Lower Egypt by a king of Upper Egypt, but there are other possible interpretations as well.

- **A.** The traditional and historically centered view sees war as the origin of the Egyptian state, the merging of two earlier kingdoms into a single state stretching along the Nile for perhaps 1,200 kilometers.

B. Such a view is closely tied to the conventional role given in later times to the person of the pharaoh, as the center of the state and the representative of the forces of order and civilization.

C. However, there are problems with this view because it is unclear whether Narmer was actually connected with Nekhen/Hierakonpolis or with the area further to the north.

D. This imputes later characteristics of the Egyptian ruler, the pharaoh, to a Predynastic period before the Egyptian state—and the ideologies that governed it—had come into being.

E. It assumes that the unification of Upper and Lower Egypt was a single event. However, alternative readings of the texts imply a more gradual period of consolidation, and some of the rulers succeeding Narmer may not in fact have ruled over all of Egypt.

F. This is the sort of question that cannot be answered easily through archaeological research, because it relies on transient relations between more-or-less equal political units that probably will not translate directly into material culture.

III. The Early Dynastic or Archaic period lasted from roughly 3100 B.C. to approximately 2680 B.C., the beginning of the Old Kingdom. It is not the same as the Early Dynastic period in Mesopotamia.

A. This involved a move of the center of the Egyptian states from This to a new capital, at Memphis, on the border of Upper and Lower Egypt.

B. The are relatively few excavated archaeological sites from this period, and most of what we know concerns royals and the elite.

Suggested Reading:

Wengrove, "Rethinking 'Cattle Cults' in Early Egypt."

Wilkinson, *Genesis of the Pharaohs*.

Questions to Consider:

1. What does the the Narmer Palette say, and why is it important?

2. Was the unification of Egypt a single event or a process that took place over centuries?

Lecture Seventeen
Divinity and Display in Dynastic Egypt

Scope: The unification of Egypt was brought about by both the ease of transportation and communication along the Nile and the successful spread of an ideology linking the social and spiritual health of the Nile Valley and its inhabitants with the person of the ruler, the pharaoh. An administration system, probably based on the territories of Predynastic chiefdoms, was imposed, and a literate bureaucracy developed after 3000 B.C. The most striking physical manifestation of the Egyptian state is certainly the Pyramids at Giza, dating to the middle of the 4th millennium B.C. Labor on the pyramids linked Egyptians to their state and its ruler in a variety of ways, most obviously by providing a place of protection for the pharaoh's body after death. Over the period between 3100 and 332 B.C., there would be a remarkable continuity in the forms and ideologies of state rule: Even foreign usurpers assumed the role of pharaoh when they sought to rule the country.

Outline

I. After the Early Dynastic period, Egyptian history is traditionally divided into the Old, Middle, and New Kingdoms, which are further divided into dynasties.

II. Extension and consolidation of state control in Egypt, from the Nile Delta in the north to the cataracts beyond Aswan in the south, took place gradually after 3000 B.C. and were complete by the end of the Early Dynastic period.

- **A.** This core remained culturally and ethnically Egyptian. Egypt was generally monolingual and monocultural, albeit with some differences in practices and beliefs.
- **B.** An administration system was imposed and controlled directly from the court of the pharaoh.
- **C.** Over time, a literate bureaucracy developed to provide the institutional support for an extensive and centralized system of territorial governance.

III. The unification of Egypt was facilitated by the ease of transportation and communication along the Nile, but it also involved the successful spread of an ideology of rule that linked the social and spiritual health of the Nile Valley and its inhabitants with the ruler, the pharaoh.

- **A.** The pharaoh was seen, first, as having a supernatural identification with the Nile and its floods.
- **B.** This was a different justification for rule than existed in contemporary Mesopotamia, where particular gods were seen as controlling the destiny of their communities and priests and rulers acted as their human representatives.
- **C.** While most pharaohs were male, some Egyptian rulers were women.
- **D.** After death, the pharaoh would take his place in the divine pantheon, watching over Egypt, and the vital identification would pass to his successor.
- **E.** This necessitated particular care for the body of the ruler after his death. The body would be mummified but still needed to be protected.

IV. The Pyramids at Giza, dating to the middle of the 3rd millennium B.C., are perhaps the most famous archaeological remains in the world.

- **A.** In Egyptian royal ritual, pyramids were built to protect the sepulcher and the body of the ruler. They were conceived as a divine mountain, from which the pharaoh could ascend into heaven.
- **B.** Archaeologists have also suggested that the pyramids were designed to knit together the multitude of Egyptian communities in a single communal effort for the glorification of the ruler and the state.
- **C.** Workers from all over the country took part when agricultural tasks were minimal, and during the time that they worked they received rations from the state.

Suggested Reading:

Bard, "Toward an Interpretation of the Role of Ideology in the Evolution of Complex Society in Egypt."

O'Conner, *Abydos*.

Trigger, *Early Civilizations*.

Questions to Consider:

1. How did religious beliefs concerning the Egyptian Pharaoh serve to support his rule?
2. What were the ritual and political functions of the pyramids of Egypt?

Lecture Eighteen
Why So Different? Mesopotamia and the Nile

Scope: States developed in Mesopotamia and the Nile Valley at almost the same time, toward the end of the 4th millennium B.C., and there is some evidence of at least trading contacts between the two areas. The results of this process were, however, very different. In Mesopotamia, states were centered on different cities, territories were small, and many states coexisted and competed along the Tigris and Euphrates. In Egypt, a territorial state developed relatively quickly out of Predynastic chiefdoms, and it united all of the lands along the Nile, from the Delta to Aswan. Moreover, these differences persisted for centuries in the two regions: Political fragmentation seemed to be the norm for Mesopotamia, while political unity was characteristic of the Egyptian Nile Valley.

Outline

I. States developed in Mesopotamia and the Nile Valley at almost the same time, and there is some evidence of at least trading contacts between the two areas. The results of this process were, however, quite different.

II. Mesopotamian civilization had the following characteristics.

- **A.** Early dynastic developments involved 12 major cities, with 20–30 smaller centers arranged along the Tigris and Euphrates rivers.
- **B.** Many people lived in the urban center, particularly given the hyperurbanism characteristic of settlement patterns at this time.
- **C.** Political organization was oriented around individual urban centers and the leaders and elites in each.
- **D.** There were later attempts at unification. However, rule over larger territories was unstable.
- **E.** The common cultural and political forms linked many of these city-states, especially in southern Mesopotamia.
- **F.** Mesopotamian city-states were significantly multiethnic within this larger common cultural sphere.

III. Classical Egyptian civilization looked very different.

- **A.** Egyptians saw the Egyptian state as a territorial entity extending along the Nile for more than 1,200 kilometers.
- **B.** Egyptian unification after 3100 B.C. resulted in a nearly unparalleled continuity of political and ritual institutions.
- **C.** The state was heavily centralized under the pharaoh.
- **D.** There were substantial urban centers, but they were generally smaller, and usually just two or three were important at a time. The vast majority of people did not live in cities, and urbanism was not a dominating feature of the territory as a whole.
- **E.** There is less evidence for a merchant group or complex trading systems.
- **F.** Ethnic differences do not seem to have been as important in Egypt, which was more homogeneous both culturally and linguistically than Mesopotamia.

IV. Archaeological theorists like Bruce Trigger have identified important contrasts between city-states and territorial states.

- **A.** City-states control smaller territories, usually with higher population densities.
  1. They are often more amenable to control over such short distances by less elaborate bureaucracies.
  2. They are often associated with more intensive agricultural systems and a higher proportion of specialist producers.
  3. Economic relations between such neighboring centres encouraged the roles of public markets and widespread trading systems, and so the economic systems of city-states tended to be more efficient and responsive to change.
- **B.** Territorial states control larger areas, usually through more elaborate bureaucratic hierarchies.
  1. Their population densities are lower and are often associated with less intensive agricultural systems.
  2. Urban centers are not so important because they are not the foci of settlement and authority; capitals are small, and they move around periodically.

3. These larger states are more dependent on bureaucratic systems of control, and so local populations exist less disturbed by the center.
4. They are subject to breakup, at which point political control reverts to more local levels.
5. Economic systems are less efficient than in city-states, but because territorial states are larger in absolute terms, they can control greater quantities of resources and use them on, for example, larger building projects.

V. Why would this distinction come into being in the Nile River Valley and Mesopotamia?

A. These differences may be related to the initial population densities relative to arable land. Higher densities yield a web of closely spaced centers, giving rise to city-states in Mesopotamia, while lower densities result in a territorial state in Egypt.

B. In addition, the physical configuration of the two areas leads to difference. Egypt is more isolated than Mesopotamia, and almost all areas are easily accessible from the Nile.

Suggested Reading:

Algaze, "Expansionary Dynamics of Some Early Pristine States."

Frankfort, *The Birth of Civilization in the Near East*.

Trigger, *Understanding Early Civilizations*.

Questions to Consider:

1. What were the most important geographical and political differences between ancient states in Mesopotamia and the Nile Valley?
2. What are the major differences between city-states and territorial states? How may the different histories of Egypt and Mesopotamia account for the differing developments in those regions?

Lecture Nineteen
Borders and Territories of Ancient States

Scope: The clear contrast between an Egyptian territorial state and Mesopotamian city-states may obscure the complexities of state control in some other areas of the world. For the most part, ancient states did not have the resources and communication abilities that nation-states enjoy today, and so there was often a significant difference between claims of state dominion and the day-to-day realities on the ground. In many cases, it may be more useful to think of concentric zones of empire around state capitals, rather than fixed boundaries and territories. These zones of empire often included an inner zone under day-to-day state control; a tributary zone, loosely integrated with the state's administration, from which resources flowed to the state center; and an outer predatory zone, in which the writ of the state was exercised only by force.

Outline

I. As we have seen, there were significant differences in the ways in which early states formed in Mesopotamia and the Nile Valley.

- **A.** Thinking about original environmental and economic conditions, and their consequences over millennia, may help explain these rather different pathways of state formation.
- **B.** At the same time, we have to remember that the realities of state control in prehistory were often very different from those we accept as natural today, and must seek to understand those differences.
- **C.** The contrast between an Egyptian territorial state and multiple Mesopotamian city-states may obscure the complexities of state functioning among these early states more generally.

II. Today, Westerners in particular are accustomed to states with clear borders, where the writ of the state runs up to the border and then stops, and where almost everyone has a pretty unambiguous identity as a citizen of one, or sometimes multiple, states.

- **A.** The experiences of people in other areas of the world may be quite different: State boundaries are important to everyone, but they do not function in ways that Westerners are used to.
- **B.** People living close to borders may have obtained identity cards from both countries. The exact location of a border in some areas is less important than the existence of a border zone.

III. It is unlikely that these modern examples of state territories and boundaries offer us a very realistic guide to the functioning of early states in Mesopotamia, the Nile Valley, or elsewhere.

- **A.** For the most part, the first states did not have the resources and communication abilities that modern nation-states enjoy. In particular, they often found it difficult to exert significant military or political power at a distance.
- **B.** Thus, there was often a significant difference between propagandistic claims of state dominion and the realities of life on the ground, where states often failed to or were unable to exert the power that they claimed to have.
- **C.** In addition, states were not the norm; they were bordered not only by other states but also by territories occupied by communities organized according to very different sociopolitical logics.
- **D.** In theory, individuals or groups dissatisfied with their lot could leave and go somewhere else.

IV. There is really no parallel to this situation in the world today, except perhaps in lawless areas in, for example, parts of Africa or Asia.

- **A.** We have to be careful about using the models of statehood accepted today when thinking about ancient states.
- **B.** In many cases, it may be more useful to think of concentric zones of empire around ancient state capitals, rather than fixed boundaries or territories.
- **C.** These zones of empire might frequently have included an inner zone immediately around the capital, a tributary zone, and an outer predatory zone.

V. These models are perhaps more applicable to territorial states than to city-states.

A. Early Dynastic hyperurbanism in Mesopotamia may be an example of this kind of zonation at a very small scale.

B. Among the territorial states, Egypt was a partial exception given its very unusual shape: Most of its territory was only a few kilometers away from the long reach of the Nile, which made it easy to move goods or troops over long distances.

Suggested Reading:

Green and Perlman, *The Archaeology of Frontiers and Boundaries*.

Kopytoff, "The Internal African Frontier."

Lightfoot and Martinez, "Frontiers and Boundaries in Archaeological Perspective."

Questions to Consider:

1. What are zones of empire, and how do they help us think about ancient states and their relationships to one another?

2. In what ways are frontier areas like ecotones?

Lecture Twenty
The Levantine Copper and Early Bronze Ages

Scope: The habits of statehood spread relatively quickly from Mesopotamia and the Nile Valley in the 3rd millennium B.C. The Levant, lying between those two early centers of state formation, would have been exposed to those habits very quickly but also seem to have acted at times as a frontier zone. Urban centers appeared in what are now Israel, Palestine, Lebanon, and Jordan in the early 3rd millennium, with complex trading relations extending along land routes and, it appears, increasingly across the eastern Mediterranean. The Copper and Bronze Ages in this area seemed to involve oscillation between periods of political centralization and urbanism and dispersed settlement and political fragmentation. After 2000 B.C., Canaanite Hazor, in what is now Israel, was probably the dominant urban center in this part of the Levant, but the southern Levant was increasingly coming under Egyptian influence.

Outline

I. The habits of statehood spread quickly from Mesopotamia and the Nile Valley in the 3rd millennium B.C.

II. By perhaps 4000 B.C., farmers of the Ghassulian culture occupied the area behind the eastern shores of the Mediterranean in what are now Israel and Jordan, in the southern Levant.

- **A.** Ghassulian communities practiced a broad-based agricultural system, with a focus on wheat and barley.
- **B.** There is botanical evidence for the introduction of simple forms of irrigation and fruit growing to the region at this time.

III. Craft production of copper artifacts, stone sculpture, and prestige ceramics expanded considerably between 4000 and 3500 B.C.

- **A.** This period is known as the late Chalcolithic, or Copper Age.
- **B.** Copper is relatively easy to smelt and form, but because of its softness, it tends to be used for prestige and ceremonial items, not utilitarian tools.

IV. At the same time, the political environment of this part of the Levant became more complicated: Larger settlements like Tuleilat el-Ghassul, Gilat, and Shiqmim appeared, and there is increased evidence for complex shrines and cemeteries in different parts of the area.

A. This system seems to have broken down at about 3500 B.C., which marks the beginning of the regional Bronze Age.

B. Large communities were abandoned, and the population either declined or shifted to more mobile settlement patterns that are not easily detectable by archaeologists.

V. Thomas Levy has developed a model that may help to explain these processes.

A. In the late 5th millennium B.C., growing populations led to changes in farming technologies, expanding trade routes, and increases in craft specialization; this increased territoriality and competition between leaders in different communities.

B. According to this model, the collapse of the settlement and political system came about because of climatic change and the subsequent breakdown of complex and intensive sociocultural systems, associated with the breakdown of long-distance exchange and trading systems and with warfare.

C. However, intensified agriculture and efficient pastoralism remained in place, so there remained the potential for further periods of population growth and urbanism.

VI. Bronze Age history in this area is characterized by a complex series of oscillations between periods of political centralization and urbanism and times of dispersed and mobile settlement and political fragmentation.

Suggested Reading:

Golden, Levy, and Hauptmann, "Recent Discoveries Concerning Chalcolithic Metallurgy at Shiqmim, Israel."

Joffe, Dessel, and Hallote, "The 'Gilat Woman.'"

Levy, *The Archaeology of Society in the Holy Land.*

Questions to Consider:

1. What technological advances are associated with economic expansion in the Levant during the 5th millennium B.C.? How did community leaders manage the political complexities that these advances made possible?
2. How do these factors help explain the cycling between periods of population aggregation and dispersal that characterize this area in later periods?

Lecture Twenty-One
Hierarchy and Society in the Aegean

Scope: The expansion of maritime trade during the Bronze Age increasingly knit the different societies of the eastern Mediterranean into an integrated web of political, ideological, and economic relationships. By the late 3rd millennium B.C., small population centers—large villages or small towns—could be found on the islands in the Aegean and, slightly later, on the Greek mainland. In the latter area, these centers were often fortified. Early Bronze Age communities frequently included large central buildings of unclear function—but their presence is usually taken to indicate the existence of some central political authority, in part by analogy to later Minoan palaces.

Outline

I. There is good archaeological evidence for trade connections between the Levant and the island societies of the eastern Mediterranean during the Copper and Bronze ages.

II. Central to the study of these trading systems is the systematic analysis of goods that can be traced to original, discrete sources, especially certain types of stone.

- **A.** Stone tools made of obsidian can often be traced chemically to the particular volcanic flows that they were taken from.
- **B.** Obsidian from eastern Turkey is found on some of the earliest Neolithic sites on Cyprus, while obsidian sources on the Greek island of Melos provided materials for communities on both the mainland and the Aegean islands.
- **C.** These island farming communities interacted in a widespread web of economic and cultural interchange while still developing their own unique characteristics.
- **D.** Cultural influences from the different mainlands around the eastern Mediterranean were important at different periods in prehistory.

III. Anatolian influences around the Aegean led to a number of developments in different parts of the eastern Mediterranean between approximately 3200 B.C. and 2100 B.C.

IV. Evidence from tombs indicate that some degree of social hierarchy existed, at least at the larger sites throughout the region.

- **A.** Copper and, later, bronze artifacts were deployed in a network of prestige, exchange, and competition between community elites.
- **B.** Early Bronze Age communities frequently included large central buildings of unclear function, but their presence is usually taken to indicate the existence of some central political authority. On the Greek mainland, these population centers were often fortified.
- **C.** The form of this central authority is unclear; researchers working in this area often suggest that during the 3rd millennium B.C., chiefdoms appeared in the eastern Mediterranean.

V. Other researchers working on cemeteries from the Copper and Early Bronze ages detect social tensions in these societies between communal identities and individual or group claims for elite status.

Suggested Reading:

Blake and Knapp, *The Archaeology of Mediterranean Prehistory*.

Broodbank, *An Island Archaeology of the Early Cyclades*.

Finkelberg, *Greeks and Pre-Greeks*.

Questions to Consider:

1. Why might we expect to find different social and political systems on different islands in the eastern Mediterranean?
2. What evidence do burial sites provide us of the development of hierarchy in this region?

Lecture Twenty-Two
Early Minoan and Mycenaean Civilizations

Scope: Because Crete was at the center of a vibrant maritime trading system and because of the agricultural potential of its fertile plains, a remarkable political and cultural life developed there during the early 2nd millennium B.C. This includes the first undoubted palaces in the Aegean. The distribution of palaces across Crete makes it likely that small, autonomous states partitioned the island at this time, while the profusion of different scripts—Cretan hieroglyphics, the Phaistos Script, Linear A—indicates substantial linguistic and cultural diversity. There is still a great deal of debate about how Minoan culture influenced the development of Mycenaean states on the Greek mainland. One focus of debate involves the question of whether Minoan civilization was substantially less militaristic than that of the Mycenaean mainland—or indeed of most contemporary states in the eastern Mediterranean.

Outline

I. By the end of the 3rd millennium B.C., cultural processes in the eastern Mediterranean were developing toward greater scales of political centralization and social hierarchy.

II. The position of Crete at the center of a vibrant maritime trading system and the agricultural potential of the island's fertile plains led to a remarkable development of political and cultural life there during the early 2nd millennium B.C.

- **A.** On Crete, the period between about 2100 B.C. and 1450 B.C. is known as the Palatial period, which is named after the palaces that appear at this time.
- **B.** The interpretation of the initial phase of palace building is complicated by the fact that there was a general destruction of palaces at about 1750 B.C.
- **C.** There has been a great deal of debate about what caused this destruction: Foreign invasion and warfare have both been suggested, but it was more likely caused by an earthquake.

D. The distribution of palaces across Crete makes it likely that small, autonomous states partitioned the island at this time.

III. One striking characteristic of Minoan archaeology is the profusion of different scripts: Cretan hieroglyphs, Linear A, and probably the symbols on the Phaistos Disc.

A. Cretan hieroglyphs and the Phaistos Disc symbols have never been deciphered. Their cultural associations, uses, and languages remain a mystery.

B. Linear A uses the same symbols as an archaic form of Greek from later Mycenaean times called Linear B. However, the symbols of Linear A and Linear B do not correspond to the same sounds; the language Linear A records is unknown.

IV. Minoan culture seems to have been influential on the islands of the Greek Cyclades and the Dodecanese from 2000 to 1600 B.C.

A. The two likely Minoan colonies in the area at this time were at Kastri on Kythera and Trianda on Rhodes.

B. It is not clear whether settlements like Akrotiri on Thera/Santorini were colonies or were simply very heavily influenced by Minoan culture.

V. Mycenaean culture looks different from that of the Minoans in a number of respects, although it is arguable that the same dynamic of population growth and elite competition was at work in both areas during the Bronze Age.

A. Palaces are found in both Minoan and Mycenaean political centers.

B. Mycenaean palaces were more focused on the throne room than their Minoan equivalents, and the political centers were most often heavily fortified.

C. Later Linear B texts give us a limited amount of information on the organization of the Mycenaean state.

VI. The difficult topography of the Greek mainland makes it hard to directly compare the territories that these different centers controlled, but we should think of them as small territorial states.

Suggested Reading:

Castleden, *Mycenaeans*.

Dickinson, *The Aegean Bronze Age*.

Hamilakis, *Labyrinth Revisited*.

Questions to Consider:

1. How many scripts have archaeologists found at Minoan sites on Crete, and what is their significance?
2. How do archaeologists understand the relationship between the Protopalatial and Neopalatial periods on Minoan Crete?

Lecture Twenty-Three
Palace and Countryside on Crete

Scope: How did Minoan civilization actually function? Palaces played a central role in the economic systems of larger territories, including storing food surpluses and trade goods and redistributing these goods through the state's population, but the relations between palaces and associated urban areas are not well understood. The identification of large structures, often called villas, in Minoan urban areas and the countryside testify to the linkages between palatial and rural Minoan life. One significant question about Minoan civilization involves the relative lack of evidence for warfare and military activities at Minoan sites, a state of affairs that contrasts strikingly with that in the Near Eastern and Egyptian states and even more so with Mycenaean society.

Outline

I. The most striking archaeological features of Minoan civilization are the palaces.

- **A.** As in other areas of the world, archaeologists' concentration on the Minoan palaces delayed archaeological investigation of smaller and less spectacular sites.
- **B.** This has hindered analysis of settlement systems and thus the understanding of Minoan political organization more generally.

II. What do we know about the functioning of Minoan palaces?

- **A.** The palaces seem to have had multiple uses, including as elite living quarters, administrative centers, areas for communal gatherings, banquet halls, shrines, work areas, and storage areas.
- **B.** Storage was especially important because the palaces would have been vital resources during periods of crop failure. Up to one-third of the area of Minoan palaces was devoted to storage facilities.

III. There is also diversity in the settlement patterns within which these palaces are embedded.

- **A.** In some cases, as at Knossos and Malia, palaces are found at the centers of substantial towns, with separate areas for what was probably housing for elites and for common people.
- **B.** In other cases, as at Phaistos, palaces are found at the centers of smaller towns, with little evident social differentiation beyond the palace.
- **C.** Other towns exist without palaces at all, such as Palaikastro in eastern Greece.

IV. There are two primary theories about state government on Crete during the Minoan period.

- **A.** One is that Minoan Crete was a single state, governed by a ruler at Knossos with regional administrative centers in other parts of the island.
- **B.** The other is that Minoan Crete was a constellation of small independent states, with Knossos merely one of those states or, perhaps, *primus inter pares*.
- **C.** The first hypothesis was occasioned by the size of both the palace and the community at Knossos. A preeminent position of Knossos was probably related to the agricultural productivity of the area around the center and the proximity of a harbor just to the north.
- **D.** However, in recent years the second hypothesis has become more widely accepted. In large part, this is due to the duplication of administrative architecture and functions at the different palaces.

V. One significant question about Minoan civilization involves the relative lack of evidence for warfare and military activities at Minoan sites.

- **A.** There are fortifications at a number of Minoan sites, especially coastal ones, and weapons including swords and spears have been recovered from excavations.
- **B.** However, there does not seem to be a great deal of this material, and there are virtually no representations of warfare in Minoan art.

C. This state of affairs contrasts strikingly with the Nile Valley and the Near East and with Mycenaean society. This may be in part due to the island situation of Minoan civilization, and an attendant use of naval forces in military.

D. This is not to say that Minoan culture was necessarily peace loving and non-violent; there is reasonably good archaeological evidence for human sacrifice in Minoan civilization.

Suggested Reading:

Adams, "Power Relations in Minoan Palatial Towns."

Branigan, *Urbanism in the Aegean Bronze Age*.

Cadogan, *Palaces of Minoan Crete*.

Questions to Consider:

1. What seem to have been the functions of Minoan palaces?
2. Is there evidence for warfare in Minoan society, and if so what does that evidence say about Minoan culture more generally?

Lecture Twenty-Four
How Things Fall Apart—The Greek Dark Ages

Scope: In the middle of the 2nd millennium B.C., Minoan political life may have changed substantially with the widespread destruction of palaces. The elites who rebuilt the palaces after this destruction had close cultural ties to the Mycenaean centers, including writing in Linear B—a form of archaic Greek already used on the Mycenaean mainland. States and civilizations rise, but they also decline, in power and influence. In the late 2nd millennium B.C., Mycenaean sites on the Greek mainland and Crete suffered extensive destruction, and the cultural unity of Mycenaean civilization seems to fall apart over a period of about a century. The nature of this decline is much debated: Did it involve migrations and invasion by the ancestors of the Dorian and Ionian Greeks, changes in warfare, disruption of the economy, environmental changes, or some combination of factors? What was the nature of Greek political and social life over the next 400 years, during the Greek Dark Ages—and would ordinary people have perceived this process as a collapse of civilization, or not?

Outline

I. The Protopalatial period on Crete is separated from the Neopalatial by an episode of palace destruction at about 1750 B.C., possibly as the result of an earthquake.

II. Even more damaging was the gigantic volcanic eruption on the island of Thera/Santorini; the eruption contributed a great deal to archaeological knowledge of Minoan civilization, as it preserved the town of Akrotiri under meters of volcanic debris.

III. Around 1500 B.C., Crete seems to enter into a period of political and social upheaval, one that lasted perhaps 50 years and marks the end of the Neopalatial period.

IV. The time between about 1450 B.C. and 1200 B.C. is called the Postpalatial period on Crete.

- **A.** This has often been interpreted as a takeover of the Minoan political system by Mycenaeans, who would rule Crete for the next three centuries.
- **B.** Some archaeologists, however, see cultural continuity on Crete before and after 1500 B.C. Analysis of strontium isotopes in skeletons from Cretan burials indicates that the people buried there were born and raised on the island.

V. In the 13th and 12th centuries B.C., communities on the Greek mainland and on Crete experienced extensive disruption, and the cultural unity of Mycenaean civilization seems to fall apart over a period of about a century.

- **A.** Mycenaean and Cretan political centers were abandoned.
- **B.** There is extensive evidence for destruction on sites through the eastern Mediterranean.
- **C.** The art of writing was lost, and would not be rediscovered until the 8th century B.C.
- **D.** The sophisticated Mycenaean and Minoan art styles vanished as well.
- **E.** Trading routes contracted; Cretan and island communities were more isolated from networks of economic and political interchange over the next four centuries.
- **F.** There is widespread evidence of population declines through the whole region.
- **G.** These Greek Dark Ages would last until about 750 B.C.

VI. These are the archaeological signatures of a collapse of a civilization and are of great interest to archaeologists trying to understand state development.

VII. Archaeologists debate a number of questions concerning the Dark Ages.

A. How dark were they? Some communities continued to exist through this period of disruption and destruction. Nevertheless, there is a great deal of evidence during this time period for real, widespread, and often, violent processes of political and social disruption.

B. Did Mycenaean culture persist in some areas, and in what form? There is some evidence for cultural continuity. On Crete, for example, occupation at Knossos continued into the 10th century B.C.

C. What was the nature of Greek political and social life during the Dark Ages?

Suggested Reading:

Forsyth, *Thera in the Bronze Age*.

Osborne, *Greece in the Making*.

Snodgrass, *The Dark Age of Greece*.

Questions to Consider:

1. What challenges do we find in reconciling historical and archaeological information on the date of the volcanic eruption at Santorini?

2. What political and social transformations took place at the beginning of the Greek Dark Ages?

Lecture Twenty-Five
First Farmers in the Indus Valley

Scope: The rise of states and civilizations was not restricted to the Near East and the eastern Mediterranean. By the middle of the 3rd millennium B.C., scribes in Mesopotamia were writing about Meluhha, a place-name that probably refers to the rich and powerful Harappan cities of the period. Harappan civilization has its origins in local agricultural settlements like Mehrgarh, located in Pakistan. By the 6th millennium B.C., Mehrgarh's farming system was based on Near Eastern domesticates, but it prospered over the centuries as a waypoint in an extensive trading network, which linked the Indus Valley to Afghanistan, Tajikistan, and the Arabian Sea. By 3000 B.C., small urban centers existed at a number of places in and around the Indus Valley, including Kot Diji, Amri, and Rehman Dheri. Five centuries later, a sophisticated urban civilization flourished along the Indus Valley.

Outline

I. Most of us are not very familiar with the sophisticated urban civilization that appeared in and around the Indus Valley, in India and Pakistan, in the 3rd millennium B.C.

A. We know relatively little about the Harappan civilization, at least in comparison to Mesopotamia and the Nile Valley.

B. Most of our evidence for sedentism and the development of agriculture in southwest Asia comes from the edges of the Afghanistan Plateau as well as from excavations undertaken in northern Afghanistan in the 1960s and 1970s.

C. It is unclear whether equivalent settlements existed along the Indus River at the same time but are now buried under many meters of riverine sediments in those regions.

D. For the past 75 years, researchers have remarked on the parallel development of state systems and urbanism in dry floodplain environments during the 3rd millennium B.C. That development is unlikely to be a coincidence.

II. Harappan civilization has its ultimate origins in local agricultural settlements like Mehrgarh, a substantial farming community occupied between about 7000 and 2500 B.C.

III. There are interesting questions about the domesticated plants and animals in use at Mehrgarh.

- **A.** In the earliest levels of the site, excavators found evidence for wheat, barley, dates, and jujube, as well as cattle, sheep, and goats.
- **B.** Cotton may have been used during the earliest period of occupation at Mehrgarh as well. If so, this would be the earliest known domestication of cotton in the world.
- **C.** One continuing puzzle is the appearance of sorghum and millet in Harappan sites after about 2500 B.C.; both of these cereals are African domesticates, and we do not know how they arrived in Pakistan and India at such an early date.
- **D.** Agriculture at Mehrgarh was thus a hybrid activity, with some local domesticates and some adopted from far away.

IV. Trade seems to have been important at Mehrgarh also.

- **A.** Lapis lazuli and turquoise probably came from Afghanistan or central Asia, while conch would have come from the Arabian Sea. On the other hand, local copper would have been a valuable trade good for export to other communities.
- **B.** After 5000 B.C., there is some evidence of craft specialization at the site, both ceramic production and weaving.

V. Mehrgarh is important in South Asian archaeology because there are so few comparable sites excavated to this point.

- **A.** There are approximately 20 sites in Pakistan that probably date to 7000–5000 B.C., but very few have been excavated.
- **B.** This period probably saw the development of a complex relationship between agricultural and pastoralist activities.
- **C.** Site numbers increase steadily after 5000 B.C., in part reflecting an increase in the population of the region and in the size and stability of settlements.
- **D.** Thus, for the period between 3800 and 3200 B.C., more than 250 sites are known, and many of these are much larger and more complex than in earlier times.

VI. There is general cultural continuity and population growth throughout the subsequent Early Harappan period, dating from about 3200 to 2600 B.C. Almost 500 settlement sites are dated to this period through radiocarbon dating and/or ceramic chronologies.

Suggested Reading:

Jarrige and Meadow, "The Antecedents of Civilization in the Indus Valley."

Possehl, *The Indus Civilization*.

Weber and Belcher, *Indus Ethnobiology*.

Questions to Consider:

1. Why are Westerners relatively uninformed about Harappan civilization, especially compared to those of Mesopotamia, the Nile Valley, or Mesoamerica?
2. What domesticates seem to have been in use at Mehrgarh, and why are their origins significant?

Lecture Twenty-Six
Cities along the Indus

Scope: In many ways, Harappan civilization remains the least known and most enigmatic of early state-level societies, in part because less archaeological work has taken place in the area and in part because the Indus Valley script has never been deciphered. At least a dozen large urban sites, and well over 1,000 settlement sites in general, are known from survey and excavation in India and Pakistan. The urban sites show considerable investment of effort in town planning and city life, with large citadels overlooking residential neighborhoods, advanced sewage and drainage systems, and areas given over to craft production. Whether these urban centers functioned as independent city-states or as components in a larger, territorial state is still unknown.

Outline

I. By 2600 B.C., farmers had settled many areas in and around the Indus Valley and were moving into the Indian Punjab. Between 2600 and 2500 B.C., there is evidence of community destruction by fire at a number of large Early Harappan sites.

II. At the same time, sites for the succeeding Mature Harappan period were established in places with little or no evidence of earlier settlements.

- **A.** Many innovations occurred in a space of only about a century: new kinds of ceramics and metal artifacts, including bronze artifacts, were created; bead making began; stamp seals and writing became widespread; and iconography and artwork changed.
- **B.** Most importantly, urbanism developed in entirely new forms that vastly exceeded anything that came before them.

III. What could cause these changes in a society over such a short period of time?

- **A.** The Mature Harappan phase is recognizably related to—though transformed from—its Early Harappan predecessor.

B. Gregory Possehl interprets these changes as an ideological revolution in the Harappan cultural sphere between 2600 and 2500 B.C. He sees people during the transitional period literally burning down their settlements and beginning anew.

C. This is, of course, a conception of social development unlike anything we have seen to date, but it does have parallels in modern times, with the advent of revolutionary political or religious regimes.

IV. At least a dozen large urban sites, and well over 1,000 Mature Harappan sites, are known from survey and excavation in India and Pakistan.

A. The urban sites show considerable investment of effort in town planning and city life, with large citadels overlooking residential neighborhoods, advanced water-control systems, and areas given over to craft production.

B. The populations of the largest sites, like Harappa and Mohenjo-daro, were between 30,000 and 40,000 people.

C. There is some degree of planning evident at many Harappan centers, especially the virgin soil centers like Mohenjo-daro.

V. There was a real preoccupation with water management in Harappan centers.

A. Flood control seems to have been an important issue given the frequent violent flooding of the Indus.

B. Household and communal bathing facilities were widely distributed on Harappan sites and were sometimes very elaborate.

C. Harappan centers were well equipped with wells, which served more or less all of the urban areas uncovered during excavation.

D. Similarly, water-drainage systems are found throughout Harappan urban neighborhoods.

VI. One striking feature of the Harappan civilization is the lack of evidence for great internal social differentiation.

VII. One important reason for our uncertainty in talking about Harappan society lies in the fact that the Harappan writing system has not yet been deciphered.

A. Harappan written signs become far more common with the beginning of the Mature Harappan period at about 2500 B.C., although there are a few earlier examples.

B. The Harappan script tends to appear only on seals and only includes a few characters at a time, which makes decipherment difficult.

C. Archaeologists do not agree on what language the script was written in, although many experts think a language related to the modern Dravidian languages is most likely.

Suggested Reading:

Kenoyer, *Ancient Cities of the Indus Valley Civilization*.

Parpola, "The Indus Script."

Wright, *The Ancient Indus*.

Questions to Consider:

1. What makes the appearance of the Mature Harappan culture so unusual?

2. What are the challenges involved in deciphering the Harappan writing system, if it is a writing system at all?

Lecture Twenty-Seven
Seeing What We Expect—Power and Display

Scope: In Mesopotamia and the Nile Valley, state formation was expressed architecturally, in the form of temples and palaces, which provided the theological justification for rule and an impressive backdrop for the activities of the ruler. In the urban centers of the Indus Valley, no such structures exist; moreover, there is little evidence for great differences in wealth, either in domestic areas or in burials. How then were the Harappan cities ruled, and what form did social hierarchy take? At this point, we have no certain answer to those questions, but political developments in the Indus Valley seemed to provide a different pathway to state formation and rule than those in Mesopotamia and Egypt.

Outline

I. Harappan civilization has a number of features that tend to distinguish it from other contemporary civilizations.

- **A.** The appearance of the Mature Harappan phase seemed to be quite abrupt, taking place over about a century.
- **B.** There is little evidence for the material signs of rule. It is difficult, on Harappan urban sites, to decide where political power was exercised or in what form.
- **C.** There is little evidence for warfare within Harappan history.

II. The extent and nature of Harappan trading systems are not well understood, but it does appear that Harappan traders ventured far.

- **A.** Harappan traders seem to have moved by ship along the coasts of the Arabian Sea.
- **B.** Archaeologists have found evidence for Harappan contact with Early Dynastic Mesopotamia. Seals with Harappan writing have also been found in Mesopotamian sites.
- **C.** Mesopotamian texts from the period refer to a place called Meluhha, which was located far to the east, beyond the Strait of Hormuz. It seems likely that Meluhha refers to the Indus Valley and thus to the Harappan culture.

III. How were the Harappan cities ruled, and what form did their social hierarchy take?

A. There is no evidence that the whole area of Harappan culture was ruled as a single territorial state. It is more likely that political control existed at the individual urban center level.

B. Leadership in Harappan communities may have been based more on heterarchic principles. Groups exercising power might be, for example, merchant guilds or religious organizations.

C. The abrupt reorganization of Harappan society at the beginning of the Mature Harappan period seems to have involved an intensely ideological element.

IV. Many Harappan settlements were abandoned at approximately 1900–1800 B.C., about 600 years after they were originally established.

A. During the same time, population densities were reduced all over the region, and there seems to have been a widespread disruption in economic and trading systems in and around the Indus Valley.

B. Elements of Harappan culture persisted in some areas for many centuries, especially in the Punjab of northwestern India. Urbanism, however, more or less disappeared.

V. One persistent question involves the degree to which the Harappan culture influenced the course of later Indian Vedic culture. There are some aspects of Harappan ideology and artwork that seem to have persisted into later Hindu belief and practice.

Suggested Reading:

Cork, "Peaceful Harappans?"

Kenoyer, "Wealth and Socioeconomic Hierarchies in the Indus Valley Tradition."

Possehl, "Sociocultural Complexity without the State."

Questions to Consider:

1. How does Harappan civilization differ from the other civilizations we have examined to this point in terms of the display of wealth and power?

2. How might concepts of heterarchy be useful in understanding the workings of Harappan cities and states?

Lecture Twenty-Eight
Sedentism and Agriculture in Early China

Scope: The origins of Chinese agricultural systems are quite different from those of the Near East and the Indus Valley. In China, experiments with rice domestication probably date to the early or mid-Holocene, but it is really after 4000 B.C. that archaeologists start to find evidence for increasing population densities and larger villages. Over the next 1,000 years, different farming cultures coexisted, probably forming the basis of some of the later ethnic diversity of the country. After about 3000 B.C., there is evidence of political and social changes spreading along the valley of the Huang He River. Sites of this Longshan culture were larger than earlier farming communities, often with earthen fortifications, and there is far more evidence for social hierarchy, centralization of political power, and warfare.

Outline

I. Europeans traditionally conceived of Chinese high culture as a culture of the pen and mostly paid attention to the development of writing systems. However, this concentration does not get us back to the beginnings of Chinese civilization when writing was only being invented.

II. In China, various crops were domesticated, including rice and foxtail millet.

- **A.** By 6000 B.C., small rice-farming communities existed throughout central and southern China.
- **B.** At about the same time, farming communities grew millet in and around the valley of the Huang He River to the north.
- **C.** At villages like Banpo and Jiangzhai, people lived in groups of 300–500 people, occupying dwellings clustered around large buildings that may have served as communal houses.
- **D.** On some of these sites, houses and cemeteries are found together in distinct spatial clusters. This may indicate that communities were organized into corporate groups, probably on a kinship basis.

III. Further to the south, there is no evidence for wealth or status differences between households in Yangshao communities.

- **A.** Yangshao sites were usually surrounded by defensive ditches and sometimes palisades, suggesting that conflict between communities was a danger at this time.
- **B.** Yangshao villages were succeeded by Longshan culture sites, which date to between about 2900 and 1900 B.C. and shared some cultural characteristics with earlier traditions in the same area.

IV. Throughout the Longshan period, rice seemed to increasingly supplement millet as an important cereal crop; wheat and cattle were also introduced into local economies. These new crops may have allowed increased population densities and site growth.

- **A.** Longshan occupations tended to be larger and internally more complex than were earlier Yangshao sites; some could have accommodated thousands of people.
- **B.** In a number of areas, there is evidence of three-level regional site hierarchies, with larger Longshan centers surrounded by smaller villages and hamlets.
- **C.** Longshan central sites are sometimes surrounded by pounded-earth ramparts, indicating an increasing need for defence against external attack.

V. Archaeologists sometimes speak about a Longshan cultural sphere or Longshanoid tradition. This would be an elite tradition of ceremony, spectacle, feasting, and burial, first developed in Longshan communities and then adopted by elite populations in different parts of China.

- **A.** Most archaeologists would identify these Longshan polities as chiefdoms. In this formulation, the leaders of these chiefdoms would be some of the people inhabiting the larger houses on platforms in Longshan population centers.
- **B.** At the same time, status differences were quite marked, and Longshan leaders seem to have cultivated ties with other elites over significant areas.

VI. One unfortunate tendency in Chinese archaeology has been to somewhat ignore areas of southern, western, and northern China often assumed to be peripheral to state development.

A. It is likely that cultural and political processes parallel to those along the Huang He and Yangtze rivers were taking place in other parts of China at the same time, especially in the south.

B. However, we do not as yet have a picture of cultural history in those regions comparable to that in the Huang He and Yangtze valleys.

Suggested Reading:

Liu, *The Chinese Neolithic*.

Stark, *Archaeology of Asia*.

Questions to Consider:

1. How does the traditional Western exoticization of Chinese history hinder archaeological understanding of the origins of Chinese civilization?

2. What role did the Longshan culture play in the development of states in ancient China?

Lecture Twenty-Nine
State Formation in Ancient China

Scope: The Longshan elite eventually provided an ideological and political template for state rule over large areas of modern China. Later Chinese historical documents refer to a semilegendary Xia dynasty, probably correlating to the late Longshan period, housing more than 20,000 people. By the middle of the 2nd millennium B.C., urban centers acted as the capitals of intensely hierarchical states. Yinxu was the capital of the Shang state, notable for its literacy and for its place within later Chinese dynastic histories, but Shang was probably first among a number of competing states over this period. The royal burials at Yinxu provide striking evidence for the material sophistication of Shang life and for the life-and-death control that Shang elites held over those they ruled, since the 11 known royal tombs are accompanied by thousands of human sacrifices.

Outline

I. Development toward urbanism and statehood in the Huang He River Valley seems to have been a gradual process, involving steady increases in the size of settlements and the complexity of social and political relations.

II. The most striking site of this period is Erlitou, which probably housed more than 20,000 people. Erlitou was a true urban center, the first one known in China.

- **A.** This site does not seem to have been walled, although the area around the palaces was walled off.
- **B.** Between 1800 and 1600 B.C., palaces were built on platforms on the site, and there is evidence for specialized workshops. Extremely rich burials also date from this period.
- **C.** One important class of findings from Erlitou are bronze vessels called *jue*. The presence of these vessels at Erlitou suggests that elite practices were already part of the culture along the Huang He.

D. All of this suggests that leaders at Erlitou had crossed a sociopolitical threshold: They were now kings of a Chinese state, living in an urban capital.

III. The Shang dynasty is conventionally dated to about 1600–1046 B.C.

A. The initial stage of the Shang is probably best represented by the archaeological site of Erligang, near modern Zhengzhou, occupied between about 1650 and 1400 B.C.

B. Erligang included an immense walled area that seems to have housed members of the elite and a constellation of commoner habitation sites around the walled area.

IV. Yinxu is the best known of the Shang capitals and was occupied between about 1400 B.C. and the end of the Shang.

A. It is also the site of a modern city, Anyang, which complicates archaeological research. Excavations at Anyang in the 1920s provided the first real proof that the Shang existed—that the dynasty was not a mythical one.

B. Yinxu generally resembled Erligang, with more elaborate palaces and temples on pounded-earth platforms. The same kinds of commoner households, workshops, and cemeteries surrounded this central area.

C. One of the most important finds at Yinxu was a burial complex, including 1,222 small graves and 13 large royal burials. The latter are very elaborate; archaeologists have estimated that each took about 7,000 working days to dig.

V. In Bruce Trigger's terms of territorial and city-states, Shang would be a large-scale territorial state.

A. One of the characteristics of early territorial states is the movement of capitals from one place to another, which seems to be true in China.

B. This involved a physical demarcation of space, with urban clusters instead of compact urban areas and elites living in houses on rammed-earth platforms.

C. This may equate to a social organization around powerful descent groups, with royal and other specialized lineages living in different areas.

Suggested Reading:

Chang, *Shang Civilization*.

Liu and Xu "Rethinking Erlitou."

Trigger, "Shang Political Organization."

Questions to Consider:

1. How does the Xia dynasty fit into archaeological models of state formation in ancient China?
2. Archaeology on the Shang dynasty in China is very much an archaeology of state capitals, but should we think of Shang political units as city-states or territorial states?

Lecture Thirty
Origins of the Chinese Writing System

Scope: The contexts of early Chinese writing are quite different from those of Mesopotamia and Egypt. Shang writings are found either as monographs on bronze vessels or as texts concerned with divination, inscribed on ox scapulae or turtle shells. These provide a fascinating insight into the political and ideological concerns of members of the ruling elite. The challenge lies in locating the origins of this writing system, which by Shang times was fully developed. While a variety of pictographs are known from earlier Neolithic and Bronze Age sites, the connections between those signs and later Chinese script, if any, are still unknown.

Outline

I. One of the most significant finds during excavations at Yinxu/Anyang were what are known as oracle bones.

- **A.** More than 150,000 oracle bone fragments have been recovered from excavations, providing an extraordinarily important corpus of the earliest Chinese writing.
- **B.** It is possible that symbols found on pottery from Erlitou are precursors to the oracle bone symbols, and there is some limited archaeological evidence for earlier Chinese writing.
- **C.** Thus, Chinese culture has generated the longest continuous written tradition in the world.

II. The contexts and questions on Chinese oracle bones provide a great deal of information on the workings of Shang leadership and the ideological basis of state rule.

- **A.** The oracle bone inscriptions seem to have been the province of the ruler and, to a limited degree, other members of the high nobility and concern the doings of the court.
- **B.** It is possible that Shang texts of other sorts were recorded on more perishable materials, such as some form of paper or strips of bamboo.

C. The questions written on the oracle bones tended to ask whether particular initiatives on the part of the ruler would go well. These might include military campaigns, embassies, tours of the country, sacrifices, or hunts.

III. Another interesting set of oracle bone questions address the issue of music at the court.

A. Music was seen as a primary way of adjusting the balance of natural forces in the world, in part because it is a human analogue to the natural forces of the wind.

B. Thus, playing the wrong sort of music at various times could bring on drought or storms, while playing favorable music could produce the benign climates important to agriculture and other economic activity.

IV. Shang writing occurs in one other context as well: as characters cast onto the exterior of bronze ritual vessels from the late Shang period. Bronze vessels were used for serving food and drinking during courtly ceremonies and were exceptionally valuable objects, not to be destroyed.

Suggested Reading:

Keightley, *The Ancestral Landscape*.

———, *Sources of Shang History*.

Boltz, *The Origin and Early Development of the Chinese Writing System*.

Questions to Consider:

1. In what contexts is the earliest Chinese writing found, and how does this differ from those found in the Nile Valley and Mesopotamia?
2. In the Shang dynasty, what was the role of music in state ceremonies and state governance?

Lecture Thirty-One
From Human Sacrifice to the Tao of Politics

Scope: Archaeological investigations of Shang urban centers provide us with quite different perspectives on the Shang state. On the one hand, the deaths of Shang rulers involved human sacrifice on a scale equaled by few other early states. On the other hand, the divination texts yield a picture of the ruler more recognizable to later Chinese scholars: the *wang*, the intermediary between heaven and earth, who ensured the stability of the realm through sacrifices to the ancestors, his own initiatives, and even the right kind of court music. During the succeeding Zhou period, historical texts attested to the progressive transformation of Shang practices in different political environments, until the great flourishing of political and social theorizing of the mid-1st millennium B.C.

Outline

I. According to historical sources, the last ruler of the Shang dynasty was defeated in battle by the king of Zhou, a neighboring state, in the middle of the 11th century B.C.

- **A.** Later histories say the Zhou defeat of Shang was due to the immorality and cruelty of the last Shang king, Zhou Shang. Archaeological investigations of Shang urban centers provide us with a different perspective on the Shang state.
- **B.** The deaths of Shang rulers involved human sacrifice on a scale equaled by few other early states. It may be that the place of the supreme ruler is precarious in early states.
- **C.** At the same time, the oracle bone texts yield a picture of the ruler more recognizable to later Chinese scholars: the *wang*.

II. One central element in Shang rule was monopoly over the linkages to the gods and ancestors.

- **A.** Researchers often conceive of Shang rulers as essentially the chief magicians or shamans of the royal court and thus of the state as a whole.
- **B.** If lineage groups organized around descent from a common ancestor were important social institutions in China, then we can imagine that commoner and noble lineages would have used ritual ties with their own ancestors as conduits to the supernatural.
- **C.** In an agrarian society, the relationship between agricultural success and the favor of the gods would be perfectly clear—and vitally important.

III. We may begin to get a sense of the ways in which the different aspects of kingly and noble behavior came together by looking at written accounts from some centuries after the end of the Shang rule, during the Zhou period.

- **A.** This was a feudal period, with segmentary systems of authority and a ruler who was first among a set of noble equals. Society was highly stratified and had a complex system of distinguishing different grades of social rank.
- **B.** During this period, in the 8th and 7th centuries B.C., the great political activities of the state were sacrifice and warfare.
- **C.** Closely associated with these two activities was hunting, which was seen both as a close analogy for warfare and a way of procuring animals for sacrifice.
- **D.** It was seen as improper for a ruler or a member of the nobility to hunt for other than those two reasons; hunting for food was the duty of commoners.

IV. At that time, bronze was still really the only utilitarian metal in China. It was used for making serving vessels for sacrifices and feasts, weapons, and the implements used for making chariots, the military vehicles of the nobility.

V. Political power was diffused through all of the nobility, and Zhou government should be thought of as a set of competing noble lineages with their dependents.

Suggested Reading:

Chang, *Art, Myth and Ritual*.

Flad, "Divination and Power."

Lewis, *Sanctioned Violence in Early China*.

Questions to Consider:

1. How did the ritual roles of the Shang ruler ensure the continuation of the state?
2. During the Zhou dynasty, what were the conceptual relations between hunting, war, and sacrifice?

Lecture Thirty-Two
Spread of States in Mainland Southeast Asia

Scope: Ancient states in Southeast Asia were situated between the competing influences of Chinese and Indian civilizations, but they evolved their own distinctive ideologies and approaches to government. The first traces of these states are found in modern Vietnam, where burial sites have yielded evidence for influences from China and trading relations with Indonesia in the 1st millennium B.C. Steady development of rice agriculture, population growth, and political centralization increased the scale of Vietnamese states in the 1st millennium A.D. This culminated in the appearance of the Angkor state, with its remarkable capital around the Angkor Wat, in the 9th century A.D.

Outline

I. What were the dynamics of sociopolitical development in Southeast Asia, and what role did external states play in that development?

- **A.** Throughout this area, rice agriculture seems to have been the dominant agricultural system in the 1st millennium B.C., and there is some evidence for trading networks linking different regions.
- **B.** Charles Higham sees highly stratified chiefdoms appearing in different parts of Southeast Asia during the last half of the 1st millennium B.C. He relates these developments to an increase in agricultural productivity deriving from the introduction of plowing.

II. It is perhaps between 300 B.C. and A.D. 300 that Indian and Chinese influences were most important in Southeast Asia.

- **A.** This is the period of the Han dynasty in China and the Mauryan Empire in India—both powerful, confident, and expansionistic states.
- **B.** To a great degree, China's concerns in the area regarded the rule by the Chinese state, while merchants, missionaries, and adventurers spread Indian influence.

III. We do not fully understand the nature of the state in this region in the early to mid-1st millennium A.D.

A. Contemporary Chinese sources write of a powerful state called Funan, covering much of southern Vietnam and Cambodia.

B. However, a centralized, multiethnic empire in Southeast Asia in this early period seems unlikely; perhaps more likely is a set of individual political centers.

IV. By the late 1st millennium A.D., states were appearing throughout Southeast Asia. Most striking was the Khmer state, which developed from the 9th century A.D. onward.

A. The Khmer state was the culmination of the accretion of political and ritual power to paramount rulers and the increasing potential of sophisticated rice agriculture.

B. The Khmer state was the first in the area to extend its rule to people of other ethnic and cultural backgrounds—to become not merely a territorial state, but an empire.

C. The ritual status of the Khmer ruler, identified closely with both Hindu gods and the Buddha, was central to maintenance of state legitimacy.

V. Certainly the most striking manifestation of Khmer rule was the extraordinary ritual and ceremonial complex around Angkor, in the northwest of modern Cambodia.

A. The temple of Angkor Wat is only one of thousands of temples, palaces, reservoirs, and other structures found the area.

B. As stunning as Angkor is, its magnificence has tended to distract archaeologists from examination of the social and economic workings of the state below the elite level. We have almost no idea of the size of the urban population at Angkor or how common people lived.

Suggested Reading:

Allard, "Stirrings at the Periphery."

Higham, *The Civilization of Angkor*.

O'Reilly, *Early Civilizations of Southeast Asia*.

Questions to Consider:

1. How did agricultural advances set the stage for state formation in mainland Southeast Asia?
2. What role does the concept of the *mandala* play in the archaeology of Southeast Asia?

Lecture Thirty-Three
Axumite Civilization in Ethiopia

Scope: Like the Southeast Asian states, Ethiopia was influenced by the political developments in nearby civilizations—namely in the Nile Valley and the Arabian Peninsula—but also evolved its own distinct political and cultural traditions from both foreign and indigenous elements. Inscriptions refer to a pre-Axumite state called Daamat, but the extent of its power is unknown. Throughout the 1st millennium A.D., the powerful Axumite state, with its center at Axum on the Ethiopian Plateau, flourished in part through its control of trade routes along the Red Sea and with the African interior.

Outline

I. We begin our survey of African states by looking at the development of civilization on and around the Ethiopian Plateau.

- **A.** Ethiopian culture lay poised between different cultural worlds, influenced by developments in the Nile Valley and the Arabian Peninsula, but forged its own distinct political and social traditions from indigenous and foreign elements.
- **B.** Archaeologists working here have found evidence for pastoral and farming populations from the 4th millennium B.C. onward and substantial agricultural villages settled between about 3500 and 1000 B.C.

II. By the early 1st millennium B.C., a number of Ona culture sites existed around Asmara, the capital of Eritrea, with large, permanent villages and stone architecture.

- **A.** Their architecture and other material culture marks them as largely indigenous to the area.
- **B.** Ona people were farmers and pastoralists, cultivating a mix of indigenous Ethiopian and foreign cereal crops.

III. By the same period, complex settlements had appeared in Tigre, what is now northeastern Ethiopia. Sites like Yeha are often called pre-Axumite and are usually dated to between about 500 B.C. and A.D. 1.

A. Relatively little archaeology has been done in this region, but there is some evidence for contact with the Sabaean culture in Yemen.

B. Perhaps most striking about the prehistory of this part of northeastern Africa is the evidence for large-scale interactions over large areas, from the Nile Valley in Sudan to Yemen.

IV. Early in the 1st century A.D., there was an undoubted state in the region around Axum in northern Ethiopia.

A. The heyday of the state was in the 3rd and 4th centuries A.D.: This was the period of maximum Axumite influence, as the state controlled areas of Sudan, Yemen, and Arabia, as well as in Ethiopia and Eritrea.

B. This was also the period when Axum's trading networks were most extensive and sophisticated.

C. In a major economic advance, the state issued its own coinage, making the states internal workings and trade more efficient.

D. First the ruler, then the wider populace, converted to Christianity, tying Axum to international networks of cultural and political interchange; this acted as an important unifying force in Ethiopia throughout the next 1,600 years.

V. By the 3rd and 4th centuries A.D., there is evidence for important increases in population densities and larger communities with increased social differentiation—as witnessed in the prevalence of monumental architecture, palaces, and extraordinary stelae.

VI. The Axumite kingdom ruled most of the Ethiopian Plateau and lasted until the 7th or 8th century A.D.

A. Its last two centuries were a time of contraction, as trade routes were progressively severed by Persians and Arabs.

B. As a result, there was a gradual shift of the population and the political center of gravity of the Ethiopian state further into the highlands.

Suggested Reading:

Finneran, *The Archaeology of Ethiopia*.

Phillipson, *Ancient Ethiopia*.

Stahl, *African Archaeology*.

Questions to Consider:

1. What are the different geographical and cultural areas that played a role in the development of the Axumite state?
2. What economic and political changes played a role in the maximum extension of Axum in the 3rd and 4th centuries A.D.?

Lecture Thirty-Four
Inland Niger Delta—Hierarchy and Heterarchy

Scope: States in West and Central Africa have traditionally been assumed to be the result of contact with North Africa and the Near East from the late 1st millennium A.D. onward. However, excavations over the past 30 years have revealed a far more complex situation, with states developing indigenously. At the same time, trade across the Sahara seems to have been earlier and more widespread than was previously thought. In the Inland Niger Delta of Mali, urban sites like Jenné-jeno began to develop late in the 1st millennium B.C., with a complex network of prosperous towns throughout the region by the 2nd or 3rd centuries A.D. As in the Indus Valley, there is little evidence for status differences or political centralization in these urban centers; it may be that they were governed in a relatively egalitarian fashion, perhaps by councils of ethnic groups representing different occupational specializations.

Outline

I. The Horn of Africa is part of a vast environmental zone called the Sahel, stretching over a distance of almost 8,000 kilometers from the Atlantic coast to the southern Arabian Peninsula, encompassing regions south of the Sahara and the Arabian Desert.

- **A.** In the western part of this environmental zone, there is archaeological evidence for important regional trade and exchange systems from very early times.
- **B.** Historians traditionally thought that trans-Saharan contacts from North Africa became important after about the 8th century A.D., but archaeology has revealed that urbanism and states developed indigenously, and trade across the Sahara seems to have begun earlier and been more widespread than previously thought.

II. We have to interpret cultural history in this part of Africa in the context of a desiccating Sahara from the 4th millennium B.C. onward.

- **A.** It seems as if agriculture, pastoralism, and substantial settlements first developed in the southwestern Sahara.
- **B.** As the southern Sahara dried up, people living there were forced to migrate south into areas where cereal agriculture was becoming more feasible, and they probably interacted with indigenous populations in these areas.
- **C.** This progressive mixing of peoples was probably the origin of the complex ethnic milieu in the Inland Niger Delta.

III. By the 8th century B.C., farming communities appear in the archaeological record, and a complex network of prosperous towns like Jenné-jeno existed throughout the region by the 2nd or 3rd centuries A.D.

- **A.** Trade was important from the beginning; the excavators at Jenné-jeno discovered that iron ore, stone, and copper were imported from substantial distances.
- **B.** By the late 1st millennium A.D., Jenné-jeno was an important urban center.
- **C.** There is no real evidence for great differences in material wealth or social standing within the Jenné-jeno community. No palaces or administrative center has been found on the site, and those burials that have been located display few differences in the material interred with the corpse.
- **D.** It is possible that the town was governed in a relatively heterarchical fashion, perhaps by councils of ethnic groups representing different occupational specializations.

IV. It is not clear whether all of these towns were organized according to the political template in use at Jenné-jeno, and in fact there may have been considerable variation in political systems around the Inland Niger Delta during the 1st millennium A.D.

V. In some ways, developments around the Inland Niger Delta resembled those in Southeast Asia. In both areas, there exists controversy about the role of better known external states, but more recent research has revealed the important indigenous element in cultural change.

Suggested Reading:

Bedaux and Rowlands. “The Future of Mali’s Past.”

McIntosh, R., *The Peoples of the Middle Niger*.

McIntosh, S. K., “Floodplains and the Development of Complex Society.”

Questions to Consider:

1. What economic and political circumstances made the ancient Sahel one of the richest areas in Africa, and what factors contributed to its later impoverishment?
2. Why is the archaeological site of Jenné-jeno significant?

Lecture Thirty-Five
Lake Chad Basin—Settlement and Complexity

Scope: In parts of Africa, paths toward statehood are not always well understood, often because less research has been done in this area. In the southern Lake Chad Basin of Central Africa, Gajiganna culture villages first appear in the 2nd millennium B.C.; unusually, their inhabitants appear to have been pastoralists initially. By the mid-1st millennium B.C., some of the descendants of these Gajiganna settlers were living in large villages surrounded by ditches, and possibly walls. Researchers are now engaged in investigating the social and political characteristics of these communities, which seem to have proliferated and diversified during the 1st millennium A.D. Over the succeeding centuries, complicated interactions developed between small local states, chiefdoms, and even less centralized societies on the one hand and large, expansionist, territorial states on the other.

Outline

I. In many areas of the world, paths toward statehood are not always well understood, often because less research has been done in such areas. This is certainly the case in the Lake Chad Basin of Central Africa.

- **A.** The Lake Chad Basin was much affected by environmental changes around the Sahara over the past 10,000 years.
- **B.** Between 10,000 and 7,000 years ago, Lake Chad expanded vastly, becoming an inland sea called Mega-Chad, with connections to the network of rivers and lakes that existed through the Sahara at this time.

II. As in the Inland Niger Delta, the gradual desiccation of the southern Sahara in the mid-Holocene pushed Saharan peoples further to the south and made environments around the shrinking Mega-Chad more hospitable for occupation.

III. The full extent of sites like Zilum, in present-day Nigeria, have only been revealed through the use of magnetometry survey.

A. Africanist archaeologists do not have the resources to do large-scale excavations on large sites like Zilum. Instead, a surface magnetometry survey allows us to build up a map of buried features on a site.

B. The magnetometry survey at Zilum revealed that hundreds of buried pit features are scattered across the site.

C. Perhaps more important, Zilum was surrounded by a ditch almost a kilometer long, revealed by excavation to be three meters deep in some areas. Other sites of the same period have similar ditch features.

IV. Village-sized communities seem to have proliferated south of Lake Chad during the 1st millennium A.D., and some of them were certainly walled. There seems to be no evidence of the political centralization or occupational specialization to call these and other communities urban.

V. As in the Inland Niger Delta, the early 2nd millennium A.D. saw the progressive expansion of predatory, militaristic states into the Lake Chad Basin. Preeminent among them was Kanem-Bornu.

A. Over the succeeding centuries, complicated interactions developed between small local states, chiefdoms, and even less centralized societies on the one hand and large, expansionist, territorial states on the other.

B. This led to increased settlement in the Mandara Mountains and the construction of a somewhat mysterious set of stone monuments, known as the DGB sites.

Suggested Reading:

David, *Performance and Agency*.

MacEachern, "State Formation and Enslavement in the Southern Lake Chad Basin."

Magnavita, "Zilum."

Questions to Consider:

1. What role do remote sensing techniques play at sites like Zilum and elsewhere?
2. What is the significance of the horse skeletons found at the Aissa Dugjé site in Cameroon?

Lecture Thirty-Six
Great Zimbabwe and Its Successors

Scope: Great Zimbabwe astonished the first Europeans who saw it in the mid-19th century, with its extraordinary walls and enclosures. Blinded by racist assumptions, they could not believe that it had been built by Africans and concocted fanciful stories about the Queen of Sheba and wandering Phoenicians, which have persisted until far too recently. Great Zimbabwe is an entirely indigenous site developed out of earlier Iron Age occupations by cattle-herding farmers of the mid-1st millennium A.D. A gradual process of population growth and status differentiation by Leopard's Kopje communities culminated in the first construction at Great Zimbabwe in the 12th century A.D. Great Zimbabwe seems to have been the capital of a substantial territorial state a century later. Smaller stone analogues to Great Zimbabwe, probably the communities of subsidiary leaders, are found across the Zimbabwe Plateau.

Outline

I. Great Zimbabwe, on the Zimbabwe Plateau of southeastern Africa, astonished the first Europeans who saw it in the middle of the 19th century. They could not believe that the site had been built by Africans and concocted origin stories that involved the Queen of Sheba or wandering Phoenicians.

II. What were the actual origins of Great Zimbabwe?

- **A.** The farmers who settled on the Zimbabwe Plateau cultivated sorghum and millet and kept cattle, sheep, and goats.
- **B.** In this region, there is convincing evidence for the beginning of gold mining and the expansion of regional trading networks at about A.D. 1000, with the appearance of glass trade beads.

III. The beginnings of elite control can be seen at sites like Toutswemogala. Hilltop dwellings, stone walls, and valuable possessions like gold, copper, and imported glass beads set members of the Mapungubwe elite off from common people.

- **A.** At its height, the population of Great Zimbabwe was probably 15,000–18,000 people, consisting of an elite group and a larger population of commoners. This was a true urban center of the period, the first in southern Africa.
- **B.** Great Zimbabwe elites monopolized access to gold, copper, and items brought in from the Indian Ocean coast.
- **C.** We know little about the composition or ideology of this elite; debates have tended to center on the extent to which we can understand government at Great Zimbabwe.

IV. Great Zimbabwe was the capital of a substantial territorial state, with trading relations extending to the Indian Ocean coast of Mozambique and into the African interior.

- **A.** The Great Zimbabwe site was abandoned by the early 16th century A.D., and the territorial coherence of the state it controlled was lost.
- **B.** A number of factors may have contributed to its decline, especially environmental degradation at Great Zimbabwe itself.

V. Great Zimbabwe was succeeded by a number of smaller states, including the Mutapa state and Torwa/Khami.

- **A.** As in other areas of Africa, state formation at Great Zimbabwe seems to have been associated with a number of economic and cultural changes, often involving agricultural intensification, population growth, and the establishment of both regional and intercontinental trading links.
- **B.** In these circumstances, well-positioned individuals, families, and lineages could tap in to new forms of wealth, vastly increasing their influence and power.

Suggested Reading:

Huffman, *Snakes and Crocodiles*.

Pikirayi, *The Zimbabwe Culture*.

Pwiti and Ndoro, "The Legacy of Colonialism."

Questions to Consider:

1. In what way is cattle a "democratic" form of wealth compared to, for example, gold or trade goods?
2. How have ethnographic data been used to interpret the archaeological remains at Great Zimbabwe?

Lecture Thirty-Seven
Sedentism and Agriculture in Mesoamerica

Scope: After the last Ice Age, foraging communities in Mesoamerica gradually adopted a variety of different plant and animal domesticates, the first perhaps being gourds and squash. Corn does not seem to have been domesticated until perhaps the 5th millennium B.C., with full-scale maize agriculture appearing only in the following millennium. Over long periods, raising corn and other domesticates seems to have been integrated into a mobile, foraging lifestyle. This probably explains why sedentary communities appeared comparatively late in the Mesoamerican archaeological record, by the early 2nd millennium B.C. In some parts of this area, ritual structures were built in farming villages, providing an ideological basis for communal action. As yet, however, there is little evidence for status differences in Mesoamerican communities during this period. These farming villages traded extensively with one another, drawing much of lowland Mesoamerica into networks of economic and social interaction.

Outline

I. In many ways, the themes of social hierarchy, urbanism, and state formation found in Mesoamerica and South America resemble those in the Old World.

II. Domesticated plants appeared in the Americas at about the same time as in the Old World, but their context and usage was quite different.

- **A.** In the Americas, gourds were domesticated by about 10,000–8000 B.C.
- **B.** These very early gourds were used as containers, not as food crops. Such containers would be a valuable addition to a mobile hunter-gatherer lifestyle, but they would not transform foragers into farmers.
- **C.** The great cereal crop of the New World is corn, which appears to have evolved via a genetic transformation from a wild grass called teosinte.

III. We have indirect evidence for early domesticated corn in two different areas of the New World.

- **A.** Corn pollen has been found on the coast of the Gulf of Mexico and has been dated to about 5000 B.C. It seems likely that this comes from an early form of domesticated corn.
- **B.** The remains of corn starch granules have been found in cooking pots from coastal Ecuador, dating to about 4150 B.C.

IV. The earliest direct evidence of domesticated corn comes from Guilá Naquitz in Oaxaca, in southern Mexico, where tiny cobs have been dated to about 3450 B.C.; full-scale corn agriculture appeared only in the 3rd millennium B.C.

V. Remember that few large animals were domesticated in the New World—none larger than dogs in Mesoamerica, and llamas and alpacas in South America.

- **A.** This has economic and cultural consequences: Protein from domesticated stock would have been much rarer in the Americas, and the use of traction animals was unknown.
- **B.** A fully sedentary lifestyle may have awaited two innovations: the breeding of more productive forms of corn after 2000 B.C. and the widespread adoption of domesticated beans and squash, providing an excellent dietary complement to corn.

VI. Throughout most of the 2nd millennium B.C., there was little evidence for status differences in Mesoamerican communities. However, at San José Mogote in Oaxaca, significant changes occurred after 1300 B.C.

- **A.** An elite group is increasingly easy to distinguish in the community. They lived in larger, more complex structures, were buried with elaborate grave goods, practiced ritual skull deformation, and built temples on pyramidal platforms.
- **B.** Similar processes seem to have been going on 350 kilometers to the northwest at Tlatilco, Tlapacoya, and related villages in the valley of Mexico from about 1400 B.C. onward.

Suggested Reading:

Flannery, *The Early Mesoamerican Village*.

Marcus and Flannery, "The Coevolution of Ritual and Society."

Smith, *The Emergence of Agriculture*.

Questions to Consider:

1. How does plant domestication seem to have taken place in the New World in comparison to the processes that we have seen at work in the Old World?
2. What social changes were taking place at San José Mogote after 1300 B.C.?

Lecture Thirty-Eight
The Olmec of Lowland Mexico

Scope: Social and cultural complexity appeared early in various parts of Mesoamerica, but nowhere more spectacularly than in the Olmec culture in the tropical forests along the Gulf Coast of Mexico between 1300 and 300 B.C. The colossal stone heads found at large ceremonial centers are among the most famous and most recognizable of Mesoamerican artifacts, while the arrangements of platforms, pyramids, and plazas make extraordinarily impressive monuments. These sites are not, however, specifically urban centers; the hinterland around San Lorenzo and La Venta probably supported populations of 10,000–20,000 people. Olmec artwork indicates that political rule was vested in individuals with privileged access to the supernatural world—sometimes called shaman-kings. One of the most debated issues in Olmec archaeology involves their influence on later Mesoamerican civilizations.

Outline

I. Evidence of social and cultural complexity occurs in different parts of Mesoamerica by the late 2nd millennium B.C. The most spectacular manifestation of these processes is found in Olmec culture, at sites dating to between 1300 and 300 B.C.

II. There was little archaeological work done in the Olmec heartland through most of the mid- to late 20th century. Many Olmec artifacts found during this period came from other parts of Mesoamerica.

III. A widespread, shared culture of elite display existed in Mesoamerica during the late 2nd and 1st millennia B.C. from at least the valley of Mexico in the north to Oaxaca and on to Guatemala in the southeast.

- **A.** It articulated commercial and political relations between those communities, as well as representing power, authority, and connections to exotic and distant places to commoners.
- **B.** There was a complex network of trade and exchange relations between communities.

IV. The colossal stone heads found at Olmec ceremonial centers are among the most famous of Mesoamerican artifacts, while the arrangements of platforms, pyramids, and plazas make these sites extremely impressive monuments.

- **A.** This monumental architecture is of earth. However, the scale of these structures would imply the labor of thousands of people for substantial periods of time.
- **B.** The monumental stone artwork involves the colossal heads, 17 of which are known at this point; carved stelae and other sculptures; and massive offerings found at La Venta.
- **C.** These latter are meticulous deposits of carefully worked serpentine blocks found under the mounds and plazas in the central ceremonial area of the site.

V. These Olmec sites were not specifically urban centers; little evidence for residential areas has been found at San Lorenzo, La Venta, or Laguna de los Cerros.

VI. Many archaeologists see the Olmec as having built the first territorial states in Mesoamerica. Other researchers see little evidence for elaborate state systems and would call Olmec political systems chiefdoms.

Suggested Reading:

Diehl, *The Olmecs*.

Pool, *Olmec Archaeology and Early Mesoamerica*.

Wilk, "Miss Universe, the Olmec and the Valley of Oaxaca."

Questions to Consider:

1. Was Olmec a Mesoamerican mother culture or not?
2. What are Olmec colossal heads and massive offerings, and what do they tell us about governance in the Olmec world?

Lecture Thirty-Nine
Teotihuacán—The First American City

Scope: Urbanism developed in the valley of Mexico throughout the middle of the 1st millennium B.C., first at sites like Cuicuilco, which may have contained as many as 5,000 people and dominated nearby settlements. The ultimate expression of early urbanism in highland Mexico was the great site of Teotihuacán, located northeast of present-day Mexico City and occupied between 200 B.C. and A.D. 750. At its height, between A.D. 150 and 400, Teotihuacán housed more than 150,000 people in its standardized apartment compounds, making it one of the very largest cities in the world at the time, while its ceremonial center still astonishes with its great pyramids and plazas. There was no competitor to Teotihuacán in highland Mexico, and so we must imagine it as the center of a large territorial state—one that collapsed in the 8th century A.D. for reasons that are still unclear.

Outline

I. Developments toward urbanism began in the valley of Mexico at sites like Cuicuilco between about 900 B.C. and A.D. 100 and continued through the middle of the 1st millennium B.C.

II. The ultimate expression of early urbanism in highland Mexico was this great site of Teotihuacán, located northeast of Mexico City and occupied between 200 B.C. and A.D. 750.

- **A.** The ceremonial center of Teotihuacán seems to have been planned as more or less one ritual unit, with its Avenue of the Dead and the great Pyramids of the Sun and Moon flanking it, as well as other temples and pyramids.
- **B.** There is some evidence for irrigation systems in the area around the city, but the extent to which agricultural intensification may have contributed to the rise of Teotihuacán is unknown.
- **C.** Trade seems to have been an important factor in the rise of Teotihuacán; it has sometimes been thought of as a commercial empire, with its culture spread mostly by traders.

III. Around A.D. 600, Teotihuacán entered an extended period of population decline, decrease in external trade, and eventual collapse. Archaeologists still debate the reason for this collapse.

IV. What kind of a political unit was Teotihuacán?

- **A.** Interpretation is rendered more challenging by the lack of writing at Teotihuacán, although writing was well known in contemporary Mayan communities. Indeed, Maya descriptions are one of our main sources of information on Teotihuacán.
- **B.** The Teotihuacán state seems to have controlled the valley of Mexico, with no obvious rivals from approximately A.D. 100–600. Beyond this core area, it administered enclaves in strategically important areas.
- **C.** Teotihuacán is a good example of a highly centralized, territorial state. It seems to have exerted substantial political and commercial influence in both highland and lowland Mesoamerica.

Suggested Reading:

Cowgill, "An Update on Teotihuacan."

Headrick, *The Teotihuacan Trinity*.

Sugiyama, *Human Sacrifice, Militarism, and Rulership.*

Questions to Consider:

1. What social and economic characteristics were associated with the apartment blocks found at Teotihuacán?
2. What does the layout of the ceremonial center at Teotihuacán tell us about Mesoamerican civilization in the 1st millennium A.D.?

Lecture Forty
Beginnings of States in Lowland Mesoamerica

Scope: To some degree, state formation in highland and lowland Mesoamerica paralleled Egypt and Mesopotamia, respectively: the territorial state at Teotihuacán versus the more diverse political arrangements around the Maya cities. As in the highlands, the origins of Maya civilization lay in early sedentary communities at sites like Cuello in Belize and Nakbé in Guatemala. The pace of platform and pyramid construction at these and other sites accelerated through the 1st millennium B.C. until a few urban centers, such as El Mirador and Kaminaljuyú, probably housed 20,000–30,000 people each by the end of the millennium.

Outline

I. The development of states and civilization among Maya populations in Mesoamerica provides a fascinating counterpoint to contemporary Teotihuacán.

II. The period between 1200 and 600 B.C. was one of relatively slow colonization of the Maya lowlands by pioneering farmers, but the pace of cultural change in the area accelerated by the middle of the 1st millennium B.C.

- **A.** The population expanded in the region, increasing the number and size of settlements.
- **B.** There is more evidence for trade in the region.
- **C.** It is almost certain that ceremonial activity had been going on in earlier times, but after about 600 B.C., it is more visibly represented in architecture and in artifacts.

III. At the Guatemalan site of Nakbé, substantial earth and stone platforms were built between 800 and 600 B.C., with pyramids appearing shortly thereafter.

- **A.** Buildings seem to have been placed on top of these platforms, but they were made of wood and other organic materials and have disappeared.

B. Later, these buildings were made of stone. Where these are preserved, they seem to have had multiple functions: habitations for members of community elites and sites for ceremonial activities.

IV. Perhaps the most extraordinary manifestation of these cultural and political processes was not at Nakbé but at El Mirador, only 13 kilometers away.

A. A ceremonial causeway called a *sacbe* connected El Mirador and Nakbé. A number of other *sacbe* radiate out from El Mirador, probably connecting the site to other Maya centers.

B. The El Mirador site covers a total area of approximately 16 square kilometers, and the remains of over 200 structures have been found on the site.

C. The largest structures on the site are gigantic earth and stone platforms, on each of which sat a series of three pyramids.

D. In total, this complex is larger than the Pyramid of the Sun at Teotihuacán, and it was probably completed a century earlier.

V. The iconography of the site links El Mirador and related sites of the period with later and better known Maya political systems.

A. It seems reasonable to think of El Mirador as an early Maya site, and the center of a significant state. However, we have difficulty accounting for the social and political transformation of this region at about 500 B.C.

B. This transformation is not likely to have been peaceful: There seems to be a movement of communities into more defensible locations, as well as mass burials.

C. Urban sites seem to have developed during this period within a web of political and economic relations, cooperating with one another while competing at other times.

VI. El Mirador collapsed in the 3rd century A.D. This opened the way for the dominance of the great Maya city-states of the later 1st millennium A.D.

Suggested Reading:

Coe, *The Maya*.

Hansen and Guenter, "Early Social Complexity and Kingship in the Mirador Basin."

McKillop, *The Ancient Maya*.

Questions to Consider:

1. How does the site of El Mirador affect our understanding of the development of Maya civilization?
2. What are *sacbe*, and what was their ritual and political significance?

Lecture Forty-One
The Great Maya City-States

Scope: Maya urbanism and political complexity reached their peak between A.D. 250 and 900. During this period, this part of Mesoamerica was home to hundreds of urban settlements of different sizes and thousands of Maya communities. Cities like Tikal had populations of 50,000–60,000, grouped around a central core of pyramids, temples, and palaces housing ruling elites, with hundreds of thousands more people living in their immediate vicinities. These urban centers were supported by complex and diverse agricultural systems, suitable to life in tropical forests and to a lack of large domesticated animals; these farming systems incorporated terraced and raised-field systems, fallow agriculture, and irrigation and water control in some areas.

Outline

I. The spread of Maya urbanism and political complexity reached its peak between A.D. 250 and 900. During this period, this part of Mesoamerica was home to dozens of urban settlements of different sizes and thousands of Maya communities.

II. Through most of the 20th century, it was believed that the Maya practiced agriculture that supported relatively low population densities and that small Maya populations would perhaps reduce the need for warfare.

- **A.** Maya centers were thus conceived of as ritual and ceremonial locations occupied only by small groups of elites and custodians.
- **B.** It is now known that Maya farming systems were sophisticated and supported large urban areas.
- **C.** A recognition that Maya populations were much larger than earlier believed, combined with developing understandings of Maya artwork and writings, led to the realization that political competition and warfare between Maya centers was common and frequently very destructive.

III. The Maya center of Tikal was situated in north Guatemala, about 60 kilometers south of El Mirador.

A. Tikal's residential areas were not planned, although the ceremonial center was, laid out in a series of architectural complexes that encompassed pyramids, plazas, temples, ball courts, palaces, and other buildings.

B. Archaeologists can identify a period of great influence of the Teotihuacán dynasty on Tikal, indicating that Teotihuacán was far from being a peaceful commercial empire as is sometimes claimed.

C. The Teotihuacán dynasty seems to have led Tikal into a period of prosperity during the 4th and 5th centuries A.D.

D. In the 9th century A.D., Tikal suffered a substantial decline in power. The last stele written on the site is dated to A.D. 869; by that time ceremonial construction and writing had ceased, and the population had decreased dramatically.

IV. Palenque, with a history spanning approximately A.D. 431–800, may serve as an illustration of the diversity within an overall Mayan civilization.

A. Palenque does not display a number of traditional Maya traits: It has few stelae, there is no great plaza, and elite tombs are not found in pyramids.

B. Palenque's rulers seem to have made unusual efforts to immortalize themselves even by Mayan standards. Equally unusual was the fact that one of these rulers was a woman.

C. The last named ruler of Palenque is referred to in an inscription dated to A.D. 799. After that, the city largely fades from history.

Suggested Reading:

Marken, *Palenque*.

Sabloff, *Tikal*.

Schele and Freidel, *A Forest of Kings.*

Questions to Consider:

1. How did our archaeological understanding of the ancient Maya change once it was realized that they did not depend entirely on slash-and-burn agriculture?
2. In what ways do the cities of Palenque and Tikal differ from one another?

Lecture Forty-Two
Epigraphy—Changing Views of the Maya

Scope: For much of the early 20th century, archaeologists and epigraphers viewed Maya civilization as a peaceful, nonurban culture dominated by priest-kings who were obsessed with calendars and astronomy. Since the 1970s, progress in translating Maya texts has revealed a sequence of wars, alliances, dynastic struggles, and competitions for ritual and political primacy between Maya city-states that were just as complex as any in European history. They reveal that Maya cities ruled by lords were the fundamental political unit within the Maya cultural sphere.

Outline

I. At Tikal, the earliest stele dates to A.D. 292. After this time, epigraphers can identify individuals and even dynasties, as well as the particular years in which events happened.

II. For much of the early 20th century, archaeologists and epigraphers viewed Maya civilization as a peaceful, nonurban culture dominated by priest-kings.

- **A.** In large part, this was because the Maya number and calendar systems were the first elements understood.
- **B.** Since the 1970s, further progress in deciphering Maya texts has revealed a sequence of wars, alliances, dynastic struggles, and competitions for ritual and political primacy between Maya city-states.

III. It seems likely that writing developed at an Olmec source between 400 B.C. and A.D. 200 and spread into different areas of Mesoamerica, where different scripts developed.

IV. Maya writings reveal that Maya urban centers were the fundamental political unit within the Maya cultural sphere and were almost perpetually in conflict. By the middle of the 1st millennium A.D., it appears that certain cities were able to dominate their neighbors and rule large territories.

V. What was life like outside Maya urban centers? Archaeologists have suggested that day-to-day relations were organized on heterarchy principles rather than intensely stratified, hierarchical social relations.

Suggested Reading:

Coe and Van Stone, *Reading the Maya Glyphs*.

Houston, "Writing in Early Mesoamerica."

Pohl, Pope, and von Nagy, "Olmec Origins of Mesoamerican Writing."

Questions to Consider:

1. Who was Spear-Thrower Owl, and why is he important for our understanding of political relations in ancient Mesoamerica?
2. Should we understand Maya political units as territorial or city-states, or is that dichotomy too simplistic for this region?

Lecture Forty-Three
Was There a Maya Collapse?

Scope: During the 8th century A.D., a progressive abandonment of Maya urban centers began that led to the end of the classic Maya city-states. Archaeologists have produced many possible explanations for the collapse of the Maya political system; most can be described as either ecological or social explanations. It is also quite possible that a combination of factors led to the end of Maya urbanism. It is equally clear that this did not lead to the end of the Maya. Maya ceremonial and elite architecture was still being produced and used in northern centers like Chichen Itzá and Uxmal until the coming of the Spanish in the 16th century, but these were not urban centers on the classic Maya scale.

Outline

I. In the 8th century A.D., an abandonment of Maya urban centers began. In the Maya heartland, this led to the disappearance of Maya regional and city-states by about A.D. 900.

- **A.** Maya texts tell us relatively little about the end of states and urbanism in the Maya heartland.
- **B.** In the 8th century A.D., the habit of writing stopped in the Maya heartland. As a result, regional differences developed in the script and the legibility and comprehensibility of texts was reduced.

II. Elite literacy broke down all over the Maya heartland, which implies a breakdown of the social and ideological bases of the political system.

- **A.** In some cases, ambitious and grammatically correct texts were produced near the end of the 8th century A.D. and writing ceased abruptly thereafter.
- **B.** In centers like Seibal and Calakmul, there was a gradual deterioration of writing through the 8th and 9th centuries.
- **C.** In the northern Yucatan Peninsula, the production of written signs continued until the arrival of the Spanish.

III. The ending of Maya writing was part of a larger process of cultural change. Between the 8th and 10th centuries A.D., there was a progressive abandonment of both urban centers and small communities in the Maya heartland.

- **A.** At Tikal, the decline seems to have been gradual, with the population decreasing over the course of a century.
- **B.** In other Maya centers, the end seems to have been more violent. At Dos Pilas, there was escalating warfare with neighboring Maya centers, culminating in the defeat of its rulers and the abandonment of the site in A.D. 761.
- **C.** Even smaller centers were emptied at the same time. There was a decrease of perhaps 90 percent in the population of the Maya lowlands, but this did not lead to the end of the Maya.

IV. Archaeologists have generated a number of possible explanations for the collapse of the Maya cultural system: Most can be described as either ecological or social explanations.

- **A.** Some archaeologists believe that warfare, or commoner revolt against elite labor demands, played a dominant role.
- **B.** Some of the Maya cities seem to have been destroyed violently. However, such warfare seems to have been endemic among competing Maya polities, and we do not know if it increased in absolute terms by the 8th century.
- **C.** Other researchers think that increases in population and the progressive overexploitation of the tropical forest ecosystems supporting Maya farming, possibly combined with serious drought, made urban life insupportable. Archaeologists do not have good models for how societies cope with environmental changes that affect agricultural productivity.
- **D.** It is also quite possible that a combination of different factors—warfare, environmental degradation, drought, and a purblind ignorance on the part of elites, perhaps—led to the end of a rich and sophisticated Maya sociopolitical system.

Suggested Reading:

Aimers, "What Maya Collapse?"

Culbert, "The Collapse of Classic Maya Civilization."

Houston, Baines, and Cooper, "Last Writing."

Questions to Consider:

1. Through what stages did Maya writing fall out of use, and how long did that process take?
2. What roles may population increase and environmental overexploitation have played in the Maya Collapse?

Lecture Forty-Four
Adaptations in Pacific South America

Scope: Along the Pacific coast of South America, agriculture and political developments occurred in contexts of great environmental difference. At sites like La Paloma in Peru, sedentary groups depended on fish and other marine resources for their main food supplies between the 6th and 3rd millennia B.C. For these and similar coastal populations in Chile, the first domesticated plants that appeared before 3000 B.C. were not only food plants like maize but also cotton—useful in making fishing nets. Central to these adaptations in certain areas were exchanges of maritime and agricultural products up and down the river valleys that flow from the Andes to the Pacific.

Outline

I. The Pacific coast and Andean region of South America is best known as home to the Inka Empire. However, this area had also seen astonishingly precocious political developments thousands of years before that, only recently recognized by archaeologists.

II. Agricultural and political developments occurred in contexts of great environmental difference, from the teeming fisheries just off the coast to the heights of the Andes. This seems to have generated economic adaptations and political responses not seen in other parts of the world.

- **A.** At sites along the north coast of Chile, by 7500 B.C. people were exploiting the potentials of coastal resources.
- **B.** In many different parts of the world, the productivity and reliability of such littoral zones encouraged foraging populations to settle in more permanent communities, even before the development of agriculture.
- **C.** By about 6000 B.C., people on or near this coast were living in at least semipermanent settlements.
- **D.** The economy of the site was centered on fishing and shellfish gathering, supplemented by the harvesting of a variety of wild plants, with domesticated squash and beans added to the diet before 4000 B.C.

E. There is no evidence for any marked differences in social status or wealth in this small-scale society.

III. Between about 4000 and 3000 B.C., this economic strategy continued to develop on and near the Pacific coast, from southern Ecuador to northern Chile.

A. The primary economic development over this period was the domestication of plants at many sites. Coastal populations either planted or encouraged the growth of a wide variety of indigenous crops.

B. Arguably the most important agricultural crop for these coastal communities was cotton, which transformed societies through its use in fishing nets, baskets, and similar fiber objects.

C. One major question during this period is the role of corn. Corn was probably available to coastal populations in Ecuador in the 5th millennium B.C. and gradually spread further south.

IV. The highlands and planos of the Andes offered different challenges and different resources to settlers than did coastal areas.

A. At Guitarrero Cave in northern Peru, domesticated beans are dated to somewhere between 8500 and 5500 B.C., among the earliest in the New World.

B. The earliest domesticated potatoes come from sites around Ayacucho and date to about 3800 B.C.

C. The only large animals to be domesticated in the New World were also tamed in the Andean highlands. These were the native camelids, including llamas and alpacas, probably domesticated in the 3rd millennium B.C.

V. One of the most contentious questions in South American archaeology involves the role of maritime resources in the origins of civilization.

A. In the mid-1970s, Michael Moseley advanced his maritime foundations hypothesis: The earliest developments toward civilization in this part of South America were sustained primarily by exploitation of anchovies.

B. Archaeologists are conditioned to look to agriculture as the basis for state formation and civilization. Could it be true that progress toward the state was based on anchovies?

C. In this area, archaeological and bioanthropological data suggest that corn was not a major component of the diet during this early period.

D. It could also be the case that the staple agricultural crop in the region was not corn but rather potatoes and related tubers from the highlands.

Suggested Reading:

Moseley, *The Incas and Their Ancestors*.

———, "Maritime Foundations and Multilinear Evolution."

Silverman and Isbell, *Handbook of South American Archaeology*.

Questions to Consider:

1. How do we understand the vertical nature of resource availability and exploitation along the Pacific coast of South America?
2. What was the role of maritime resources in the development of social systems in this region?

Lecture Forty-Five
Pyramids and Precocity in Coastal Peru

Scope: At Caral and many neighboring sites away from the coast, the people built an extraordinary array of stone mounds, pyramids, plazas, and residential areas, beginning at about 3000 B.C. and continuing over the next 1,200 years. Some of the residences at these sites seem to have been occupied by richer or higher-status families, but there is a great deal of debate about the political status of the Caral-Supe sites. Although the sites are quite densely packed in the valleys leading to the Pacific coast, there is no evidence of conflict or warfare between them. Different archaeologists suggest that they were individual chiefdoms, a unified state, or possibly a focus of ritual and political power without significant political hierarchy. Further research will be required to provide a more detailed history of the social and political characteristics of the Caral-Supe sites.

Outline

I. In the late 3rd and early 2nd millennia B.C., sites like Kotosh and La Galgada in the Andean highlands displayed common elements of ceremonial architecture, including fire pits, temples, and pyramids. Some of these sites may have been purely ritual centers.

- **A.** There are sufficient parallels between events at these sites to speak of a common tradition along the Pacific coast of Peru.
- **B.** This period, between 2500 and 1500 B.C., also seems to have been one of substantial population growth.

II. One of the coastal sites, Aspero, was significant in the formulation of Moseley's maritime foundations hypothesis.

- **A.** Aspero sits close to the point where the Supe River Valley runs into the Pacific. The site was first occupied before 3000 B.C. by people who built six large platform mounds there. Shellfish and fish seem to have been the mainstays of the Aspero diet.

B. Archaeologists have known since the late 1940s that there were large sites, some containing massive platform mounds, circular plazas, and large residential areas, along the Supe River. However, it was assumed that these dated to around 2000 B.C. as there was no pottery on these sites.

C. However, radiocarbon dating about 10 years ago indicated that construction at Caral, the largest and most complex of these sites, started at about 2700 B.C. and continued until 2000 B.C.

III. Caral's monumental architecture is stunning.

A. There are six large platform mounds, as well as two sunken plazas, a variety of other large structures and mounds, and at least two residential areas.

B. The cores of these platform mounds are made of net bags of rock and rubble, and they were faced with stone and plaster. This method would be well-adapted to progressive contribution to construction by families in the area.

C. Irrigation agriculture made use of water from the Supe River in the semiarid foothills of the Andes. There is no trace of corn or potatoes at Caral or other Norte Chico sites; instead, irrigation was used to grow cotton, beans, squash, and the indigenous tubers and fruits that had been grown in the area for millennia.

D. In addition, people consumed large amounts of fish and shellfish; virtually no other animal foods were eaten there.

E. Coastal populations may have traded maritime products for either raw cotton or the finished nets and line essential to their fishing economy.

IV. There are at least eight major sites similar to Caral, although generally smaller, in the Supe River Valley, and over 30 in the Norte Chico area as a whole.

V. What can we say today about sociopolitical systems at Caral, Aspero, and related sites?

A. Some researchers look at the architecture and the communal labor that would be necessary to build them and think of Caral as the capital of a Supe River Valley kingdom or state.

B. Other archaeologists point to ethnographic examples of massive communal activities produced by prestate populations.

C. Still other researchers point to the fact that no direct evidence for status distinctions exists. They conceive of these sites as the result of ceremonial activities among a number of neighboring communities.

Suggested Reading:

Haas and Creamer, "Crucible of Andean Civilization."

Solís, "America's First City?"

Solís, Haas, and Creamer, "Dating Caral."

Questions to Consider:

1. How did radiocarbon dating lead to a reappraisal of the significance of Caral and other Supe River Valley sites in Peru?
2. What seems to have been the economic relationship between river valley sites like Caral and coastal sites like Aspero?

Lecture Forty-Six
Andean Civilization—Chavín to Chimú

Scope: After Caral-Supe, there was a steady development of social hierarchy and political centralization both along the Pacific coast of South America and in the Andean foothills and highlands. Central to this process was the elaboration of ideological and ceremonial systems that provided a rationale for social hierarchies. These systems were vividly displayed at ceremonial centers like Chavín de Huántar in the middle of the 1st millennium B.C. Over the succeeding centuries, up until A.D. 1000, a succession of states controlled different areas along the coast and in the highlands in progressive sequences of expansion and collapse. While these states depended on increasingly intensive terrace and irrigation farming systems, they did not develop urban centers on a Mesoamerican scale: Chan Chan, the largest of these centers, probably housed about 25,000 people.

Outline

I. The Norte Chico sites provide fascinating insights into cultural processes in coastal Peru during the 3rd millennium B.C. However, developments in political and cultural systems seem to continue during later times as well.

II. The Cerro Sechin/Sechin Alto site complex provides a good illustration of the complexity of the ceremonial centers.

- **A.** Sechin Alto is an extremely large site with a series of plazas and ceremonial structures extending from a gigantic main mound.
- **B.** Cerro Sechin yielded a remarkable series of stone carvings that show that violence—and probably warfare—was part of its culture.

III. The late 2nd and 1st millennia B.C. was a period of great economic and cultural change along the Pacific coast of Peru.

- **A.** Throughout this period, ceramics and irrigation agriculture became more common in coastal areas. Cotton continued to be cultivated, as did corn, but it is unclear how important it was until the 1st millennium A.D.

B. One of the most important developments of this period was the extension and elaboration of religious traditions in the Peruvian highlands, not just along the coast.

C. Very significant in this regard was the site of Chavín de Huántar on the western slopes of the Andes, occupied between about 1000 and 200 B.C.

D. The oldest temple at Chavín de Huántar, dating to the early 1st millennium B.C., is full of offerings. At its center is a tall stone monolith carved with the figure of a deity known in later times as the Smiling God.

IV. One important element in the regional spread of culture seems to have been the development of road systems through what is now coastal and highland Peru. These early roads probably had largely ceremonial and ritual uses.

V. Cultural traditions along the central Pacific coast and the highlands of South America diversified in the 1st millennium A.D.

A. Most famous is the Moche culture, dated A.D. 100–800, which is most recognizable for its detailed and realistic pottery.

B. Moche shows a great deal of evidence for social differentiation and centralization of political power and wealth.

VI. The first substantial evidence for territorial states and urbanism in this part of South America dates to the period after A.D. 300.

A. After A.D. 300, the Tiwanaku site expanded to become the largest center in South America to that time.

B. The rise of Tiwanaku seems in great part to have been based on agricultural developments.

C. Similar processes seem to have taken place further to the north, with the appearance of the Wari culture between about A.D. 600 and 1100.

D. The last of these states, the Chimú state, with its capital at Chan Chan, controlled a large territory in coastal northern Peru between A.D. 1100 and 1400.

Suggested Reading:

Burger, *Chavin and the Origins of Andean Civilization*.

Hastorf, *Agriculture and the Onset of Political Inequality before the Inka.*

Moore, *Cultural Landscapes in the Ancient Andes.*

Questions to Consider:

1. What was the Chavín style, and what was its extent in South America in the 1st millennium B.C.?
2. What economic innovations are associated with the rise of the Tiwanaku state?

Lecture Forty-Seven
The Florescence of the Inka Empire

Scope: The culmination of state development in South America was the rise of the Inka Empire in the 15th century A.D. As the name implies, to a greater degree than any earlier state in the region, the Inka state grew by conquest, the incorporation of conquered lands into its territory, and large-scale transfers of defeated populations from one part of the empire to another. The population of the capital, Cuzco, was probably about 100,000 in the early 16th century, making this by far the largest urban settlement in South America up to that time. The Inka developed a efficient infrastructure for governing their far-flung territories, including a complex bureaucracy and the famous Inka road system, and they did this without ever developing writing, using instead a record-keeping system based on knotted string, or *quipu*. The state ultimately fell to the Spaniards in A.D. 1532.

Outline

I. The culmination of state development in Pacific South America was the rise of the Inka Empire in the 15th century A.D.

- **A.** The Inka state originated in the 12th century A.D. in the area around Cuzco, in southern Peru northwest of Lake Titicaca.
- **B.** The original Inka polity seems to have been a small state organized around the population center at Cuzco.
- **C.** At its height, the Inka Empire controlled a state from southern Colombia in the north to southern Chile and western Argentina in the south, and from the Pacific toward the forests of the Amazon.
- **D.** The Inka Empire grew by conquest, the incorporation of conquered lands, and large-scale transfers of defeated populations from one part of the empire to another.

II. A number of factors may help explain the Inka expansion.

- **A.** It occurred when potentially competitive states like Chimú were entering periods of decline.
- **B.** The state originated in a region with high agricultural potential that could support large populations under intensive farming techniques.
- **C.** The system of labor-based taxation known as *mit'a* allowed the mobilization of effort for agriculture and communal building activities.
- **D.** The Inka emphasized the divinity of the ruler and promulgated the national cult of Viracocha, the sun god, but at the same time incorporated ritual centers in conquered territories into their own ritual system.

III. The population of the capital, Cuzco, was probably about 100,000 in the early 16th century, making this by far the largest urban settlement in South America up to that time.

IV. Macchu Picchu, built on the heights of the Andes, is the most famous Inka site, but it is not characteristic of Inka population centers. It was probably only occupied for about a century after construction began in A.D. 1460, and its permanent population was probably quite small.

V. The Inka developed an efficient infrastructure for governing their territories, including a complex bureaucracy and the famous Inka road system.

- **A.** These roads linked different parts of the empire, and in theory their use was limited to military forces, government officials, and goods and people being moved on the orders of the state.
- **B.** Administration involved significant standardization across the empire, with sumptuary laws and elaborate systems of social identification that were used as the basis of a census and tax-collection system.
- **C.** The Inka did all of this without ever developing writing. Instead, they used a record-keeping system based on knotted string, or *quipu*.

VI. In Bruce Trigger's dichotomy of city-states and territorial states, the Inka state is an example of the latter.

- **A.** The Inka state had an elaborate bureaucratic hierarchy; other than Cuzco, urban centers were relatively unimportant.
- **B.** It covered a large area and incorporated a number of different ethnic and cultural groups. It also had a long cultural and ideological tradition of state formation and governance to draw on.
- **C.** Territorial states are prone to breakup, and we do not know how long the Inka expansion could have been kept up given the instability provided by the system of royal succession.
- **D.** The Inka state fell to the Spaniards in A.D. 1532—a time when many areas of the globe were feeling the effects of European expansion. It thus becomes difficult to examine state-formation processes without reference to that expansion.

Suggested Reading:

D'Altroy, *The Incas*.

Silverman, *Andean Archaeology*.

Wernke, "The Politics of Community and Inka Statecraft in the Colca Valley, Peru."

Questions to Consider:

1. How did the pattern of royal inheritance help drive expansionism in the Inka Empire?
2. What are *quipu*, and how do they expand our definitions of ancient record-keeping systems?

Lecture Forty-Eight
Ancient States—Unity and Diversity?

Scope: Although there are significant parallels in the ways in which states developed in many areas, there seem to be exceptions to almost any generalization we could make. Ancient states developed in arid environments and in tropical forests; they were ruled hierarchically by despots and heterarchically by councils of citizens; they may or may not have built great cities or had temples and palaces at the center of their community; they developed writing systems or they were illiterate. An archaeological account of the origins of states must take note of common factors—a complex agricultural system, expanding population, the importance of ceremony and ideology, some elements of bureaucracy—while still recognizing the distinctiveness of regional culture histories. In this way, the study of ancient states and civilizations resembles any other archaeological research, and this complexity is one of the many things that makes archaeology such a fascinating pursuit.

Outline

I. We have surveyed world history, seeking to understand the origins and development of states and civilizations in different parts of the world.

II. One of the most important elements in any such study will be a comparative outlook.

- **A.** We cannot assemble a complete account of ancient states and civilizations if we do not understand how they developed through time in different environmental, cultural, and historical circumstances.
- **B.** Although there are parallels in the ways in which states and civilizations developed in many areas, there seem to be exceptions to almost every generalization we could make.
- **C.** No rigid theory will fully explain the development of states and civilizations.

III. We can identify a number of themes that appear to be important to the origins and development of many ancient civilizations.

- **A.** The economic basis of those civilizations is obviously very important, and their appearance and development involves the prior existence of an efficient and productive agricultural system.
- **B.** The further growth of states frequently involves further intensification of these farming systems, and in general this involves significant increases in population, which often takes the form of urbanism.
- **C.** Trade with surrounding regions is usually vital. In some cases, this involved trade and exchange for staples, but just as important was trade in various luxury goods.
- **D.** Regional cultural traditions are especially associated with elite groups and with trade and exchange in exotic luxury goods.
- **E.** One vital element in state formation is ideology, which works to naturalize the state, making it and its rulers central elements in the divine order.

IV. This complex relationship between commonality and diversity is the primary theme for any serious study of ancient states and civilizations.

- **A.** We cannot help being astonished at the diverse ways in which ancient peoples created states and civilizations and the ingenuity and effort invested in supporting those states.
- **B.** At the same time, archaeologists look for common patterns in the development of ancient states, seeking to understand the complex relations between environments, economies, technologies, religious and political systems, and the outcomes of human endeavor.

Suggested Reading:

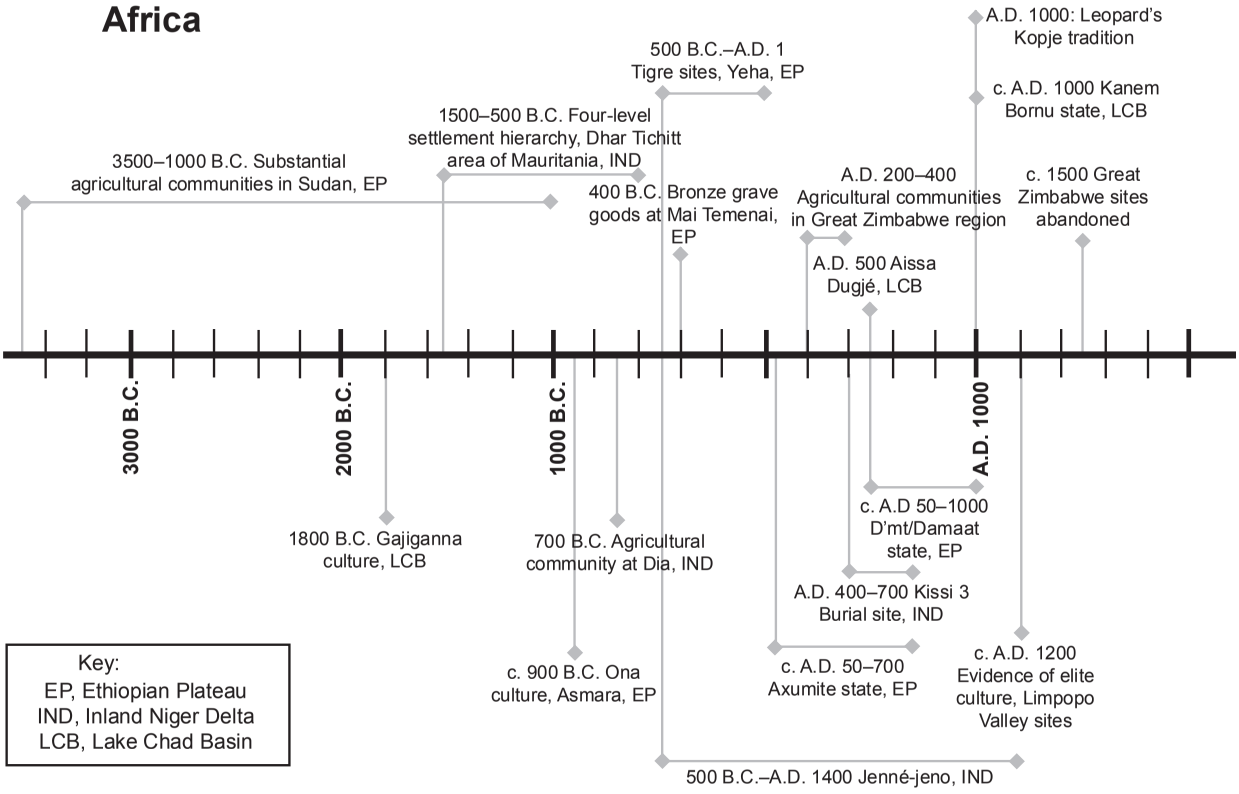
Haas, *From Leaders to Rulers*.

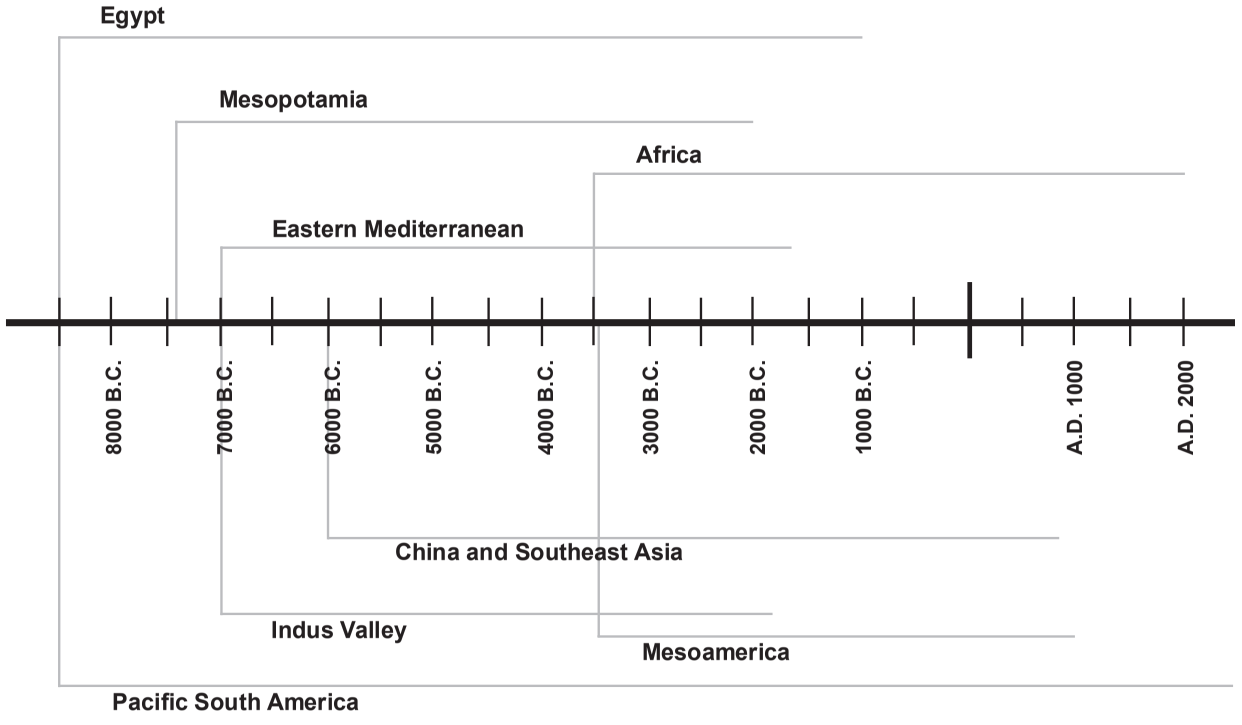
Earle, *How Chiefs Come to Power*.

Pauketat, *Chiefdoms and Other Archaeological Delusions*.

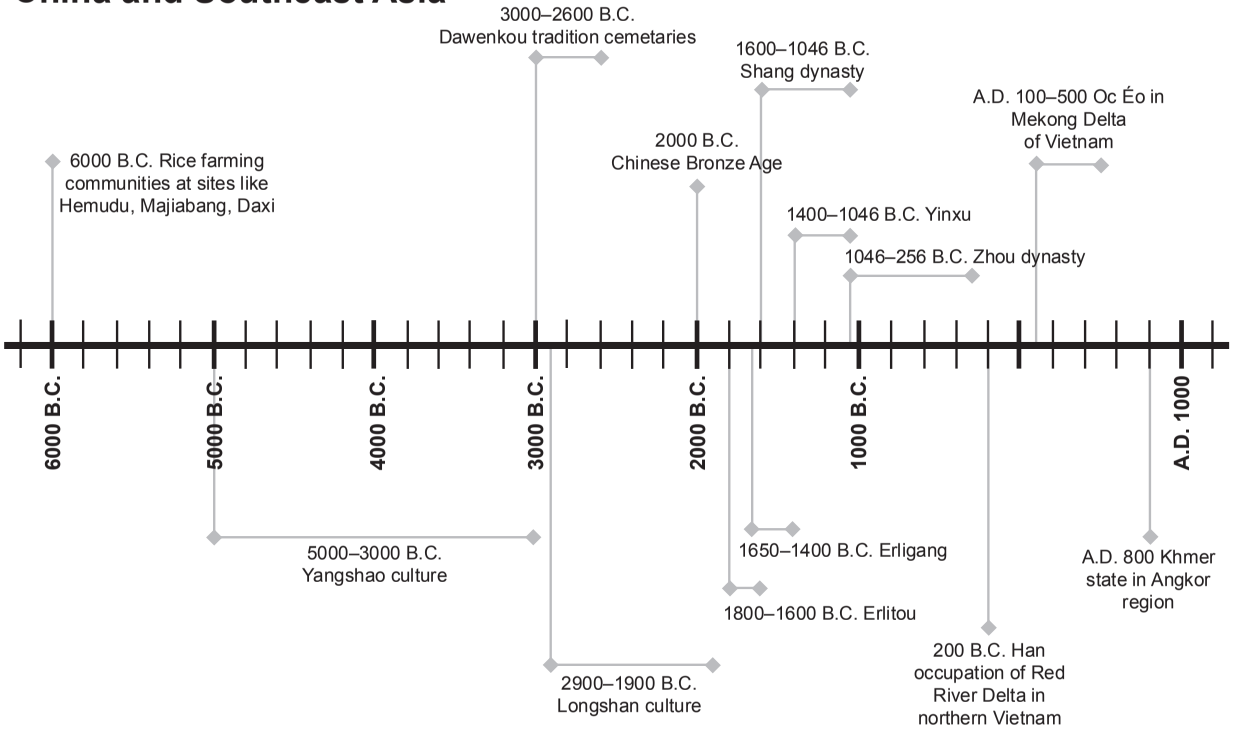
Questions to Consider:

1. What factors do we have to take into account when we seek to understand the variability that existed among ancient states?
2. What roles do ideology, art, and architecture play in the rise of ancient states and civilizations?

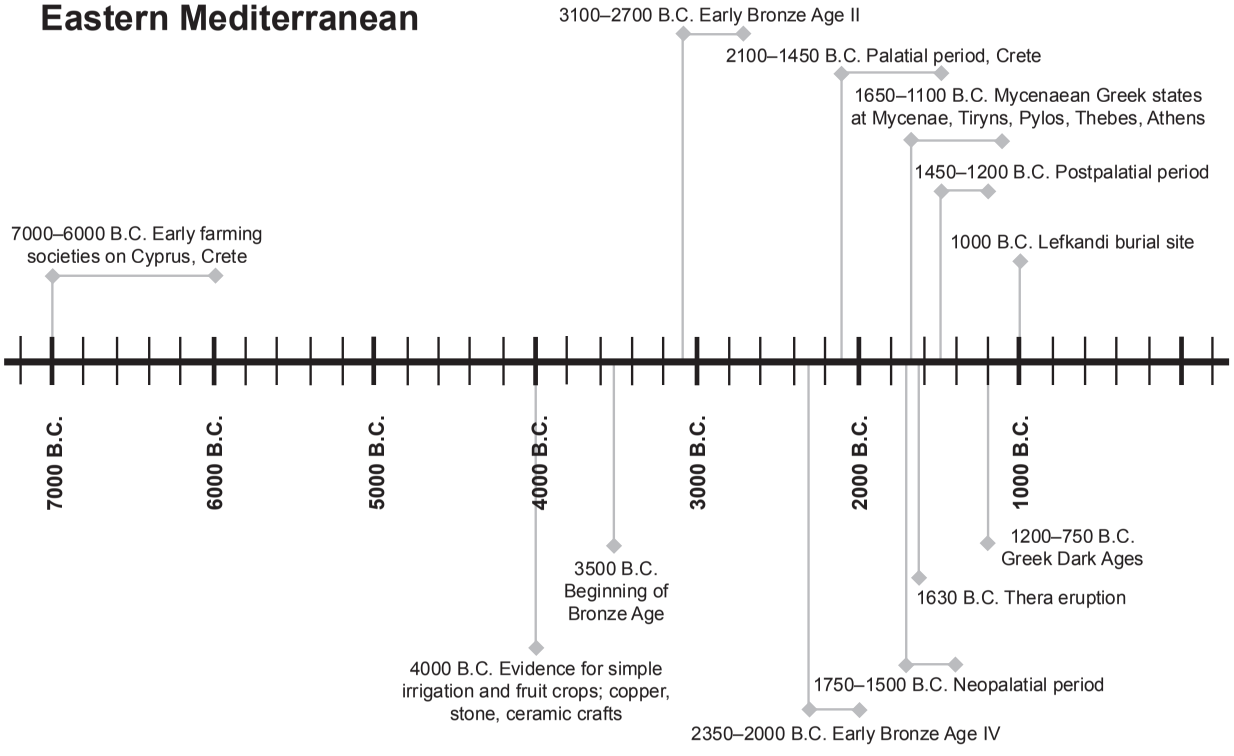

Africa
A.D. 1000: Leopard's Kopje tradition
500 B.C.–A.D. 1 Tigre sites, Yeha, EP
c. A.D. 1000 Kanem Bornu state, LCB
1500–500 B.C. Four-level settlement hierarchy, Dhar Tichitt area of Mauritania, IND
3500–1000 B.C. Substantial agricultural communities in Sudan, EP
400 B.C. Bronze grave goods at Mai Temenai, EP
A.D. 200–400 Agricultural communities in Great Zimbabwe region
c. 1500 Great Zimbabwe sites abandoned
A.D. 500 Aissa Dugjé, LCB
3000 B.C.
2000 B.C.
1000 B.C.
A.D. 1000
c. A.D 50–1000 D'mt/Damaat state, EP
1800 B.C. Gajiganna culture, LCB
700 B.C. Agricultural community at Dia, IND
A.D. 400–700 Kissi 3 Burial site, IND
c. 900 B.C. Ona culture, Asmara, EP
c. A.D. 50–700 Axumite state, EP
c. A.D. 1200 Evidence of elite culture, Limpopo Valley sites
500 B.C.–A.D. 1400 Jenné-jeno, IND
Key:
EP, Ethiopian Plateau
IND, Inland Niger Delta
LCB, Lake Chad Basin

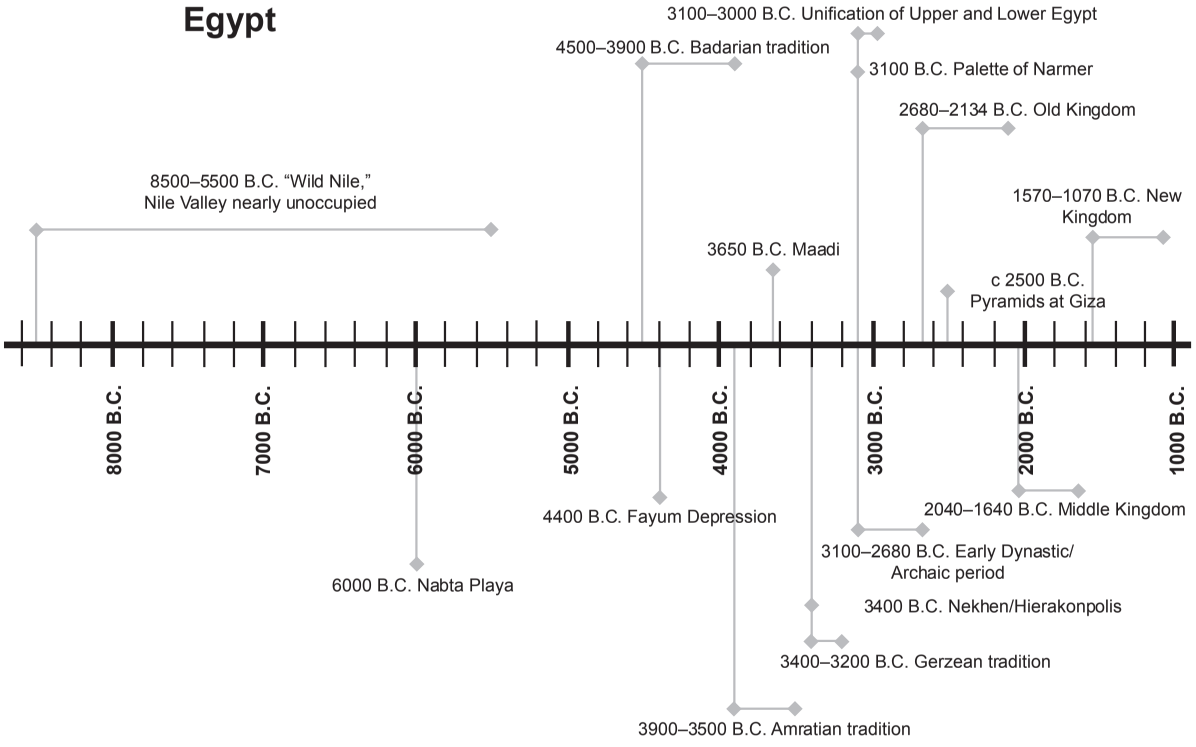

Egypt
Mesopotamia
Africa
Eastern Mediterranean
8000 B.C.
7000 B.C.
6000 B.C.
5000 B.C.
4000 B.C.
3000 B.C.
2000 B.C.
1000 B.C.
A.D. 1000
A.D. 2000
China and Southeast Asia
Indus Valley
Mesoamerica
Pacific South America

China and Southeast Asia

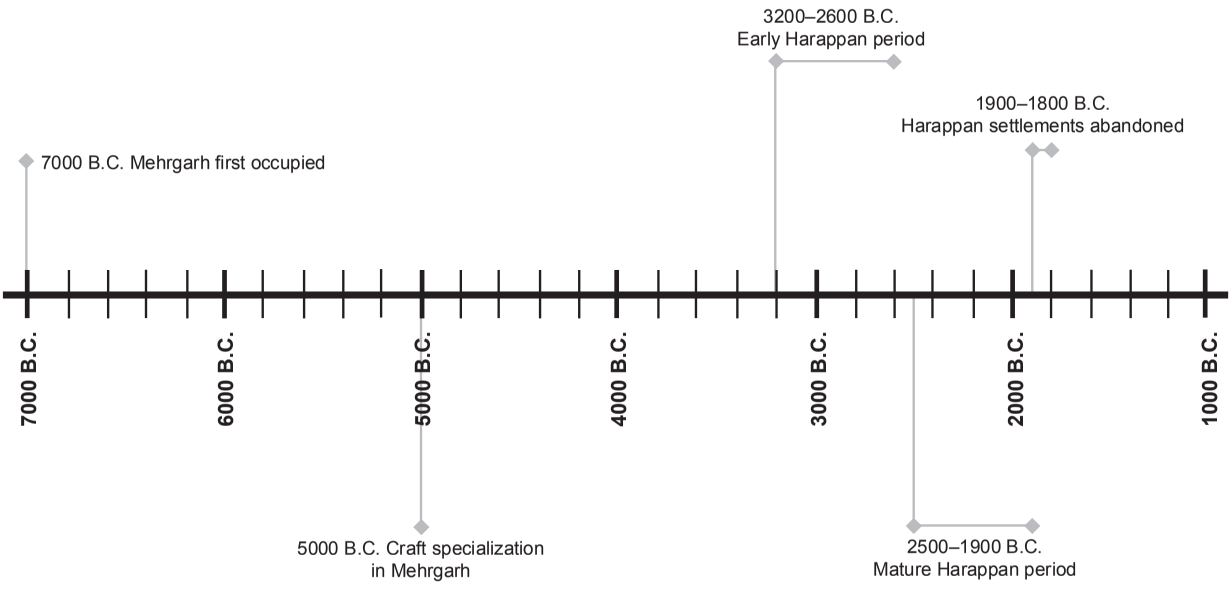


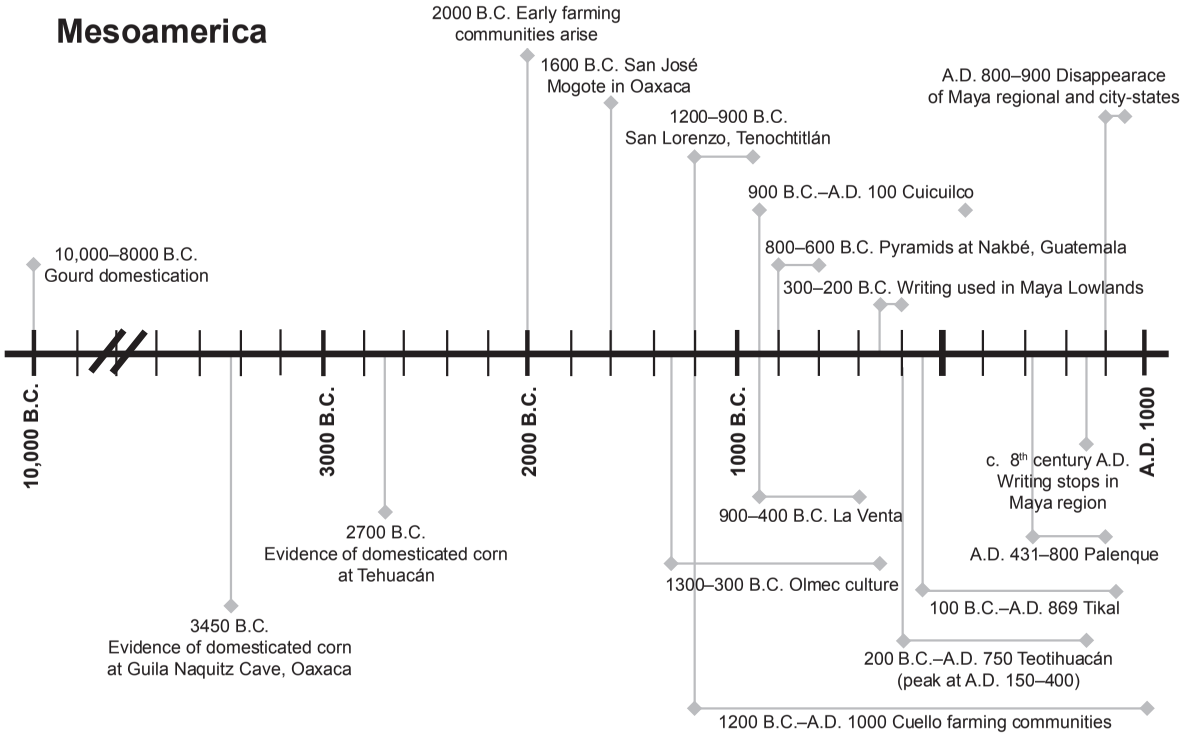
Eastern Mediterranean

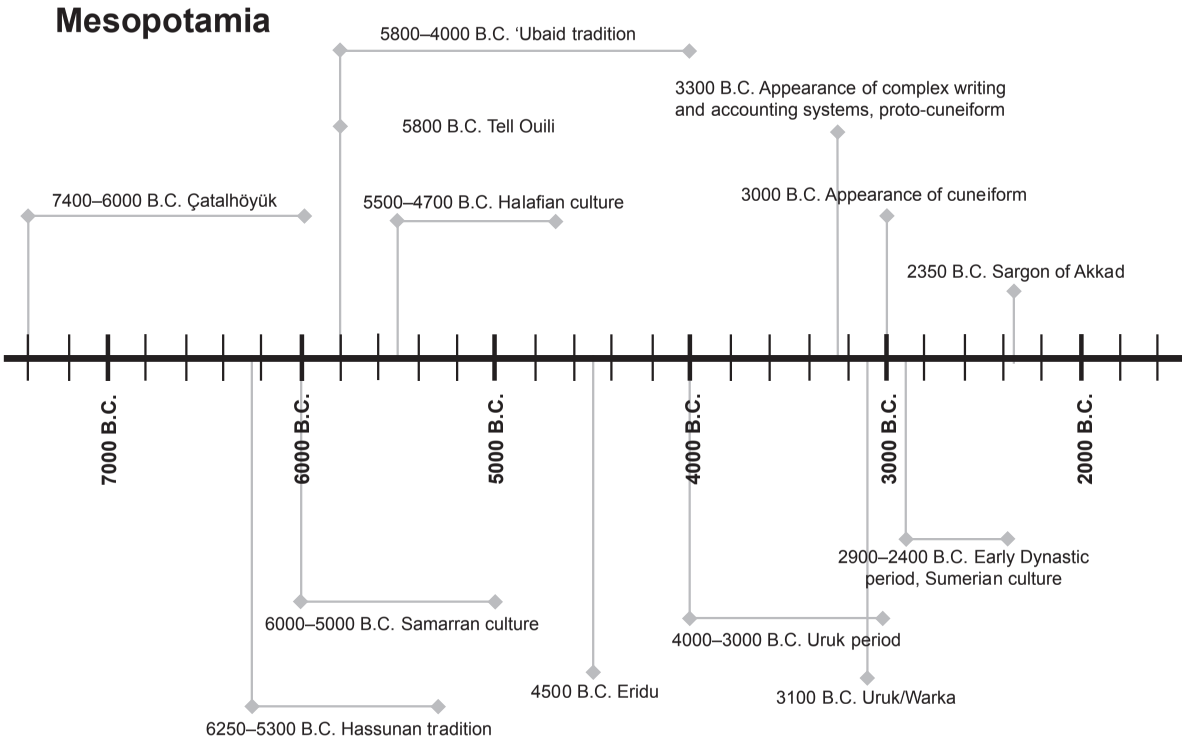


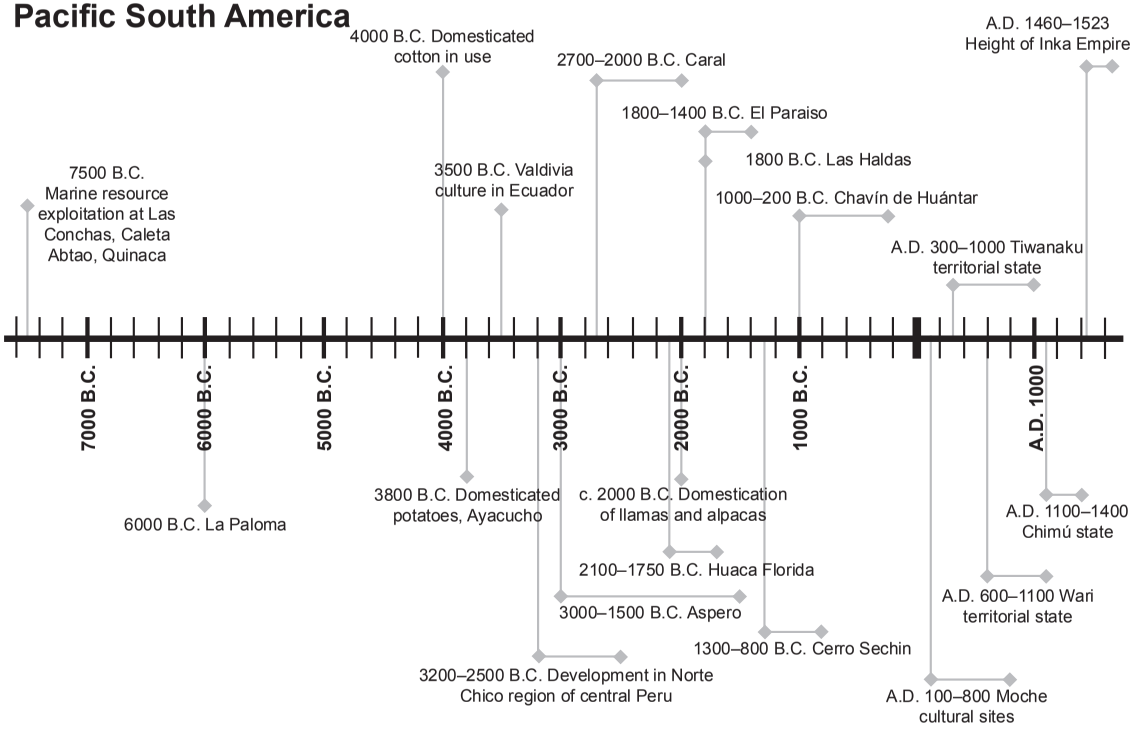

Egypt
3100–3000 B.C. Unification of Upper and Lower Egypt
4500–3900 B.C. Badarian tradition
3100 B.C. Palette of Narmer
2680–2134 B.C. Old Kingdom
8500–5500 B.C. “Wild Nile,”
Nile Valley nearly unoccupied
1570–1070 B.C. New
Kingdom
3650 B.C. Maadi
c 2500 B.C.
Pyramids at Giza
8000 B.C.
7000 B.C.
6000 B.C.
5000 B.C.
4000 B.C.
3000 B.C.
2000 B.C.
1000 B.C.
4400 B.C. Fayum Depression
2040–1640 B.C. Middle Kingdom
3100–2680 B.C. Early Dynastic/
Archaic period
6000 B.C. Nabta Playa
3400 B.C. Nekhen/Hierakonpolis
3400–3200 B.C. Gerzean tradition
3900–3500 B.C. Amratian tradition

Indus Valley




Mesoamerica
2000 B.C. Early farming communities arise
1600 B.C. San José Mogote in Oaxaca
1200–900 B.C. San Lorenzo, Tenochtitlán
A.D. 800–900 Disappearace of Maya regional and city-states
900 B.C.–A.D. 100 Cuicuilco
800–600 B.C. Pyramids at Nakbé, Guatemala
10,000–8000 B.C. Gourd domestication
300–200 B.C. Writing used in Maya Lowlands
10,000 B.C.
3000 B.C.
2000 B.C.
1000 B.C.
A.D. 1000
c. 8th century A.D. Writing stops in Maya region
900–400 B.C. La Venta
2700 B.C. Evidence of domesticated corn at Tehuacán
A.D. 431–800 Palenque
1300–300 B.C. Olmec culture
100 B.C.–A.D. 869 Tikal
3450 B.C. Evidence of domesticated corn at Guila Naquitz Cave, Oaxaca
200 B.C.–A.D. 750 Teotihuacán (peak at A.D. 150–400)
1200 B.C.–A.D. 1000 Cuello farming communities


Mesopotamia
5800–4000 B.C. ‘Ubaid tradition
5800 B.C. Tell Ouili
7400–6000 B.C. Çatalhöyük
5500–4700 B.C. Halafian culture
3300 B.C. Appearance of complex writing and accounting systems, proto-cuneiform
3000 B.C. Appearance of cuneiform
2350 B.C. Sargon of Akkad
7000 B.C.
6000 B.C.
5000 B.C.
4000 B.C.
3000 B.C.
2000 B.C.
2900–2400 B.C. Early Dynastic period, Sumerian culture
6000–5000 B.C. Samarran culture
4000–3000 B.C. Uruk period
4500 B.C. Eridu
3100 B.C. Uruk/Warka
6250–5300 B.C. Hassunan tradition


Pacific South America
4000 B.C. Domesticated cotton in use
2700–2000 B.C. Caral
A.D. 1460–1523 Height of Inka Empire
1800–1400 B.C. El Paraiso
1800 B.C. Las Haldas
7500 B.C. Marine resource exploitation at Las Conchas, Caleta Abtao, Quinaca
3500 B.C. Valdivia culture in Ecuador
1000–200 B.C. Chavín de Huántar
A.D. 300–1000 Tiwanaku territorial state
7000 B.C.
6000 B.C.
5000 B.C.
4000 B.C.
3000 B.C.
2000 B.C.
1000 B.C.
A.D. 1000
3800 B.C. Domesticated potatoes, Ayacucho
c. 2000 B.C. Domestication of llamas and alpacas
6000 B.C. La Paloma
A.D. 1100–1400 Chimú state
2100–1750 B.C. Huaca Florida
A.D. 600–1100 Wari territorial state
3000–1500 B.C. Aspero
1300–800 B.C. Cerro Sechin
3200–2500 B.C. Development in Norte Chico region of central Peru
A.D. 100–800 Moche cultural sites

Glossary

Amorites: One of the well-known pastoralist groups living in what is now Syria; they existed on the edges of Mesopotamian city-states, and in many cases they seem to have been integrated into Mesopotamian communities.

Amratian: A farming community in Upper Egypt distinguished by increasing sophistication of stone tool production, different ceramic styles, and progressively larger settlements through time that may have been walled.

Aspero: One of the coastal sites in the Norte Chico area of central Peru, north of Lima. The site was first occupied before 3000 B.C. and was significant in the formulation of Michael Moseley's maritime foundations hypothesis.

Axumite kingdom: A northern Ethiopian kingdom founded early in the 1st century A.D. and peaking in the 3rd and 4th centuries A.D. During this period, first the ruler and then the wider populace converted to Christianity. The Axumites ruled most of the Ethiopian Plateau until the 7th or 8th century A.D.

border zone: An area of a few to tens of kilometers across that in some regions is more important than the exact location of the border; communities there can take advantage of their position between the two neighboring countries.

Bronze Age: A European cultural period that began in the eastern Mediterranean around end of the 3rd millennium B.C., wherein greater scales of political centralization and social hierarchy were developed; this was accompanied by a continuing increase in the intensity and reach of regional trading systems.

bullae: Hollow, clay spheres from the middle Uruk period that stored clay tokens used for inventory and trade. The bullae served to conceal the tokens from outside examination and prevent covert tampering. Bullae were increasingly marked with seal impressions as the period progressed, providing evidence of ownership and/or involvement in economic transaction inventoried within.

Caral: The largest and most complex coastal site on the Norte Chico area of central Peru; it was settled around 2700 B.C. and inhabited until 2000 B.C. There are at least eight major sites similar to Caral in the Supe River Valley, although they are generally smaller, and over 30 in the Norte Chico area as a whole. An extraordinary array of mounds, pyramids, plazas, and residential areas, were built in the area between about 3000 and 1800 B.C.

Cascajal Block: A 26-pound carved stone block found near San Lorenzo, Mexico, and dating to about 900 B.C.; it is a recent, and controversial, candidate for the earliest writing in the New World. It is carved with a sequence of 28 different signs, with an inscription length of 62 characters.

Çatalhöyük: A Neolithic site in Anatolia, Turkey, dated to 7400–6000 B.C. It is remarkable for its large population and for the relatively well-preserved nature of remains on the site.

Chan Chan: Capital of the Chimú state, which controlled a large territory in coastal northern Peru between A.D. 1100 and 1400; it was the largest South American urban center of the time, probably housing about 25,000 people, who were supported via intensive terrace and irrigation farming systems.

Chavín de Huántar: A substantial Peruvian settlement occupied between about 1000 and 200 B.C.; the fundamental architectural unit at the site was the U-shaped ceremonial complex. The oldest temple at Chavín de Huántar, dating to the early 1st millennium B.C., is full of offerings, and at its center is a tall stone monolith carved with the figure of a deity known in later times as the Smiling God.

chiefdoms: Also known as intermediate societies; smaller-scale societies with weakly developed mechanisms of political power and coercion; some degree of social ranking; and hereditary chiefs, who usually have fairly limited power. They are mostly agricultural societies.

Chinese writing: A logographic (word-symbol) writing system fully developed by the Shang dynasty period (1600–1046 B.C.); Shang writings are found either as monographs on bronze vessels or as texts concerned with divination, inscribed on ox scapulae or turtle shells.

city-states: Small territories, usually with high population densities, often amenable to control over by less-elaborate bureaucracies. They are often associated with the development of intensive agricultural systems and a high proportion of specialist producers. Economic relations between neighboring centers encouraged public markets and widespread trading systems, and so the economic systems of city-states tend to be efficient and responsive to change.

civilization: Cultural, political, and ideological systems that are shared between different states in a region.

corn: The great cereal crop of the New World, which appears to have evolved via a genetic transformation that may or may not be associated with human use from a wild grass called teosinte. The earliest direct evidence of domesticated corn comes from Guila Naquitz in Oaxaca, in southern Mexico, where tiny cobs have been dated to about 3450 B.C.; full-scale corn agriculture appeared only in the 3rd millennium B.C., with quite slow population growth thereafter.

Cretan hieroglyphics: A script known from the archaeological sites on Crete. Cretan hieroglyphs, like the symbols on the Cretan Phaistos Disc, have never been deciphered, and their cultural associations, use, and language remain a mystery.

Cuicuilco: A site where developments toward urbanism began in the valley of Mexico between about 900 B.C. and A.D. 100. A volcanic eruption in about 50 B.C. seems to have led to the long-term decline of Cuicuilco—and possibly allowed its rival, the neighboring community of Teotihuacán, to increase in power.

cuneiform: A script developed in Mesopotamia over 5,000 years ago that was adopted by speakers of a variety of Near Eastern languages; it was written on clay tablets, which ensured that a great variety of different texts have been preserved for archaeological interpretation.

ding: A bronze vessel from early to mid-2nd millennium B.C. China that was one of the important classes of findings from Erlitou; the presence of these vessels at Erlitou suggests that practices of the elite were already part of their culture along the Huang He.

down-the-line trade: A process whereby goods are passed via middlemen from one community to the next, sometimes over long distances.

Dynastic period: In Egyptian history, the period of remarkable continuity in the forms and ideologies of state rule between 3100 and 332 B.C.

Early Dynastic Egypt (a.k.a. **Archaic Egypt**): The period that lasted from roughly 3100 B.C. to approximately 2680 B.C., the beginning of the Old Kingdom. In this period the center of the Egyptian states moved to a new capital at Memphis, on the border of Upper and Lower Egypt. After this period, Egyptian history is traditionally divided into the Old, Middle, and New Kingdoms, which are further divided into dynasties.

Early Dynastic Mesopotamia: A period particularly associated with the civilization of the people known as the Sumerians, it begans around 2900 B.C. and lasted until about 2400 B.C. Evidence of central rule in city-states during this period is abundant.

Early Harappan period: A period of general cultural continuity and population growth in the Indus Valley dating from about 3200 to 2600 B.C.; almost 500 settlement sites are dated to this period, including the first larger settlements in the region. These larger sites stood at the apex of regional settlement hierarchies, each surrounded by smaller villages and hamlets. Political organization during this period remains hard to discern.

ecotone: A transitional area between two ecological zones, often very attractive to species that can exploit the resources of both zones without moving very far.

Egyptian Predynastic period: The period when states first appeared in the Nile Valley; it corresponds roughly to the late ‘Ubaid and Uruk periods in Mesopotamia.

El Mirador: The most extraordinary manifestation of Guatemalan cultural and political processes. Located 13 kilometers away from Nakbé, it probably housed 20,000–30,000 people by the end of the 1st millennium B.C.—far more than any of its contemporaries. A *sacbe* connected El Mirador to Nakbé and other Maya centers; the iconography of the site links El Mirador and related sites of the period with later and better-known Maya political systems. El Mirador collapsed in the 3rd century A.D.

Erligang: A Chinese site near modern Zhengzhou occupied between about 1650–1400 B.C.; it best represents the initial stage of Shang culture. It included an immense walled area that seems to have housed members of the elite and a constellation of commoner habitation sites around the walled area.

Erlitou: The first true urban center known in China, probably housing more than 20,000 people between about 1800 and 1600 B.C. Palaces were built on platforms on the site, and there is evidence of specialized workshops; extremely rich burials also date from this period.

frontier zones: Areas that often showed significant resistance to state development; they were also zones of exploitation and served as laboratories in which new political and social forms developed.

Gajiganna: A community that first appears southwest of Lake Chad, in what is now northern Nigeria, at about 1800 B.C.; they were initially pastoralists who also harvested wild grains. By the middle of the 1st millennium B.C., some of their descendants were living in large villages like Zilum.

gourds: An ornimental fruit domesticated between 10,000 and 8000 B.C. in the Americas; early gourds were used as containers for the mobile hunter-gatherer lifestyle.

Great Zimbabwe: The first true urban center of southern Africa, whose roots reach as far back as the early 1st millennium, settled by farmers who cultivated sorghum and millet and kept cattle, sheep, and goats. In A.D. 500–900, control over cattle herds probably developed as a central form of wealth in these communities; at about A.D. 1000, there is convincing evidence for an expansion of regional trading networks. The site was abandoned by the early 16th century A.D.

Greek Dark Ages: A period beginning in the 13th and 12th centuries B.C. and lasting until approximately 750 B.C., when communities on the Greek mainland and on Crete experienced extensive disruption and the cultural unity of Mycenaean civilization seems to have fallen apart.

Halafian: A culture overlapping and succeeding the Hassunan culture in northern Mesopotamia from about 5500 to 4700 B.C. The Halafian offers no evidence for large villages or much wealth differentiation, and its agricultural system is rain-fed; one primary difference from the Hassunan is its widespread pottery tradition.

Harappan: A civilization that originated in local agricultural settlements along the western edge of the Indus Valley and just below the highlands leading up to the Afghanistan Plateau. It is divided into Early and Mature phases.

Harappan written signs: Writing came into common use in the Mature Harappan period, beginning around 2500 B.C. Examples tend to appear on seals and to include few characters, making decipherment difficult; many experts think the language is most likely related to the modern Dravidian languages.

Hassunan: A tradition of farming communities in northern Mesopotamia in the period 6250–5300 B.C. Characterized by small villages and local trading systems, Hassunan sites show no evidence of any real social differentiation within villages.

hieroglyphics: A script developed in Egypt over 5,000 years ago at almost the same time as cuneiform. The use of papyrus as a writing surface to record hieroglyphics means that far fewer and more limited texts are known from ancient Egypt than from its contemporaries.

Holocene rainfall: About 12,000 years ago, rainfall levels increased dramatically over most of Africa, significantly above modern levels. This had two effects on the region: First, it caused a series of exceptionally high and quite destructive Nile floods, with periods of higher flooding thereafter. Second, it made the lands east and west of the Nile less desertlike and thus more attractive to human occupation.

Horn of Africa: Part of a vast environmental zone stretching from the Atlantic coast of Africa to the southern Arabian Peninsula, encompassing regions south of the Sahara and the Arabian Desert.

hyperurbanism: A process of rural areas around Mesopotamian city-states depopulating as farmers moved into the urban centers for protection during warfare and for full participation in civic life.

ideology: The forms of religious and cultural justifications and explanations for civilizations—a vital element in state formation.

Indian Punjab: A region of South Asia home to a number of vibrant and related cultural traditions that changed dramatically when farmers begin moving in around 2600 B.C.

Inka Empire: Originating in the 12th century A.D. in the area around Cuzco in southern Peru, northwest of Lake Titicaca, this empire rose in the 15th century A.D. due to the culmination of state development in Pacific South America. At its height, the Inka Empire controlled a state running from southern Colombia in the north to southern Chile and western Argentina in the south and from the Pacific toward the forests of the Amazon. The empire grew through conquest, incorporating conquered lands and transfering defeated populations from one part of the empire to another.

Jemdet Nasr period: An intervening century between the Uruk period that ends about 3000 B.C. and the Early Dynastic period that begins around 2900 B.C. It is named after a site in southern Iraq.

Jenné-jeno: An important urban center, part of a complex network of prosperous towns existing throughout the inland Niger Delta of Mali by the 2nd or 3rd centuries A.D. There is no real evidence for great differences in material wealth or social standing within this community.

jue: A bronze vessel from early to mid-2nd millennium B.C. China that was one of the important classes of findings from Erlitou; the presence of these vessels at Erlitou suggests that practices of the elite were already part of their culture along the Huang He.

Kanem-Bornu: A preeminent predatory-militaristic state, which developed in toward the end of the 1st millennium A.D. along the northeastern shores of Lake Chad; likely to have expanded at least in part through control of trans-Saharan trade routes that run from Lake Chad through the Sahara and north to Tripoli. By the early second millennium A.D., it dominated the plains east and south of Lake Chad.

k'uhul ajaw: The lords who ruled Maya cities, the fundamental political unit within the Maya cultural sphere.

Lake Chad: A freshwater lake in west central Africa that expanded vastly between 10,000 and 7,000 years ago, becoming an inland sea called Mega-Chad, connecting to the network of rivers and lakes that existed throughout the Sahara at this time.

late Chalcolithic period (a.k.a. **Copper Age**): The period between 4000–3500 B.C. when craft production, especially of copper artifacts, stone sculpture, and prestige ceramics, expanded considerably. Copper is relatively easy to smelt and form, but because of its softness, it tends to be used for prestige and ceremonial items, not utilitarian tools.

Lerna: An early Bronze Age community on the Greek mainland; its House of Tiles was a large central building of unclear function like those found in other early Bronze Age communities, although its presence indicates the existence of some central political authority.

Levant: The region that is now Israel, Palestine, Jordan, Lebanon, and Syria. Exposed to statehood habits from Mesopotamia and the Nile Valley in the 3rd millennium B.C., the region also seems to have acted at times as a frontier zone. Through the Bronze Age, the region was subject to intense interactions, both peaceful and violent, with neighboring and more powerful states the region—especially Egypt.

Linear A: A writing system that uses the same symbols as a very archaic form of Greek written on Crete and the Greek mainland during later Mycenaean times and called Linear B; however, if the sounds associated with particular symbols in Linear B are applied to Linear A texts, the resulting sound patterns do not seem to be closely related to any known language.

Linear B: A form of archaic Greek used on the Mycenaean mainland and by the mainland Minoan elites who destroyed and rebuilt Crete's palaces in the middle of the 2nd millennium B.C.

Longshan: A Chinese culture that succeeded Yangshao villages between 2900 and 1900 B.C. It shares some cultural characteristics with earlier traditions in the same area: Rice seemed to increasingly supplement millet as an important cereal crop, and wheat and cattle were introduced into local economies.

Longshan cultural sphere: An elite tradition of ceremony, spectacle, feasting, and burial first developed in Longshan communities and then adopted by elite populations in different parts of China.

Maadi: A large farming settlement in Lower Egypt dated to approximately 3650 B.C. There is evidence for trade beyond the Nile Valley at the site; related sites, like Buto in the northern Nile Delta, were occupied until the end of the Predynastic period.

magnetometry survey: A technique that reveals the disturbances that buried archaeological features—pits, ditches, hearths, and so on—generate in the Earth's magnetic field.

mandala: A Hindu-Buddhist religious term describing the spheres of political and ritual influence thought to have existed between different centers and their rulers in Southeast Asia.

maritime foundations hypothesis: Developed by Michael Moseley in the mid-1970s, this hypothesis suggests that the earliest developments toward civilization in the Pacific coast of South America, between about 3000–1800 B.C., were sustained primarily by exploitation of maritime resources, including shellfish but especially anchovy fisheries. Agricultural production would have been of lesser importance.

Mature Harappan period: The phase of Harappan culture that lasted from about 2500 to 1900 B.C. Its sites are related to Early Harappan sites in terms of material culture, but many innovations occurred, and, most importantly, urbanism developed in entirely new forms in the Mature phase, vastly exceeding anything that came before. Well over 1,000 Mature Harappan sites in total are known from survey and excavation in India and Pakistan.

Maya: A South American community that reached its peak between A.D. 250 and 900 in urbanism and political complexity; its farming systems were sophisticated and supported large urban areas. The evidence for larger populations than earlier believed and developing understanding of Maya artwork and writings indicate that political competition and warfare between Maya centers was common and frequently very destructive.

Meluhha: A name for a place that Mesopotamian scribes were writing about around the middle of the 3rd millennium B.C. It probably refers to a rich and powerful Harappan city.

Mehrgarh: An agricultural settlement in what is now Pakistan, along the western edge of the Indus Valley and just below the highlands leading up to the Afghanistan Plateau, where the Harappan civilization has its origin; it was occupied between about 7000 and 2500 B.C. By the 6th millennium B.C., Mehrgarh's farming system was based on Near Eastern domesticates, but it prospered over the centuries as a waypoint in an extensive trading network that linked the Indus Valley to Afghanistan, Tajikistan, and the Arabian Sea.

Minoan: A community that began on Crete during the late 3rd millenium B.C. Because it was at the center of a vibrant maritime trading system and the agricultural potential of its fertile plains, it developed a remarkable political and cultural life.

Minoan palaces: Structures found on the island of Crete. Constructed from the late 3rd millenium onward, they were characterized by open courtyards surrounded by wings of rooms on three or four sides; they had multiple uses, including elite living quarters; administrative centers; banquet halls; shrines; and areas for communal gatherings, work, and storage.

mit'a: A system of labor-based taxation, developed by the Chimu but perfected by the Inka, that allowed the mobilization of effort for agriculture and communal building activities. The system tied populations to the state for a significant period of each year, as they were fed and supported by the state while engaged in state labor.

Moche: An Andean community that flourished between A.D. 100 and 800 that is most recognizable through their highly detailed and realistic pottery, which shows a great deal of evidence for social differentiation and centralization of political power and wealth.

Muqadimmah: Completed in the mid-14th century by Ibn Khaldun, this was the first systematic application of the scientific method to social relations. It dealt with the rise and fall of political dynasties in North Africa.

Mycenaean: A community that began on the Greek mainland in the middle of the 2nd millennium B.C. Mycenaean culture looks different from that of the Minoans in a number of respects, although it is arguable that the same dynamic of population growth and elite competition was at work in both areas during the Bronze Age. In the late 2nd millennium B.C., Mycenaean sites suffered extensive destruction, and the cultural unity of Mycenaean civilization seemed to fall apart over a period of about a century.

myths of the archaic state: According to Norman Yoffee, they include the following: The earliest states were all basically the same kind of thing; ancient states were totalitarian regimes; the earliest states enclosed large regions and were territorially integrated; typologies can be used to analyze states on a ladder of progressiveness; these ancient types can be correlated with modern societies; and structural changes in political and economic systems were the only engines for the evolution of early states.

Nakbé: The Guatemalan site where substantial earth and stone platforms were built between 800 and 600 B.C., with pyramids appearing shortly thereafter. Buildings seem to have been placed on top of these platforms, but the buildings were made of wood and other organic materials and have disappeared. Stelae fragments from Nakbé provide a striking illustration of developing concepts of elite rule in the Maya lowlands.

Neopalatial period: Period after about 1750 B.C. when Minoan palaces, possibly destroyed by an earthquake, were rebuilt. Around 1500 B.C., Crete seemed to enter into a period of political and social upheaval, which marks the end of this period.

Nile River: A long, relatively straight river of northeast Africa, flanked by barren and inhospitable desert, in many ways like a long oasis. The river itself and its seasonal floods were a central part of Egyptian culture before the building of the Aswan High Dam. Summer rains on the Ethiopian Plateau caused the flooding, beginning in June or July and ending in October or November. Crops would be planted as soon as the floods receded and were harvested some months later.

Nile Valley: A region of northeast Africa divided into two sections: Upper Egypt to the south, closer to the headwaters of the river, where the river is narrow and deeply incised; and Lower Egypt to the north, where the valley is wider and easier to irrigate. Lower Egypt includes the Nile Delta: a large, triangular area dissected by many small streams where the Nile flows into the Mediterranean.

nomes: Egyptian provinces where an administration system was imposed, probably based on the territories of the Predynastic chiefdoms along the Nile; governance would in some cases devolve back to the nome level at times when central political authority broke down.

Olmec: The most spectacular example of the evidence of social and cultural complexity that occurred in different parts of ancient Mesoamerica. Among the first recognized artifacts discovered were the stone heads found at a number of sites in Veracruz state, Mexico.

Ona: A community that existed around Asmara, the capital of Eritrea, with large, permanent villages and stone architecture by the early 1st millennium B.C. Their architecture and other material remains mark them as largely indigenous to the area; they were farmers and pastoralists, cultivating a mix of indigenous Ethiopian and foreign cereal crops.

oracle bones: Flat fragments of cattle scapulae and turtle shells with a very early form of Chinese writing inscribed on them. Questions about future events were scratched onto the surface of the bone or shell, which was then heated over a fire. The cracks resulting from this heating were then interpreted as responses.

Palatial period: The period of Minoan palace building on Crete, from about 2100 to 1450 B.C.

Palenque: A Mayan city in what is now Chiapas, Mexico, Palenque was a smaller urban center than Tikal and did not seem to have much peripheral settlement around the ceremonial center. It does not display a number of traditional Maya traits and seems to have been more a ceremonial city, perhaps even a necropolis for its great leaders.

Palette of Narmer (a.k.a. **Narmer Palette**): A flat, intricately carved stone found in Nekhen/Hierakonpolis. The palette displays the archaic Egyptian king Narmer on both sides, on one side wearing the crown of Upper Egypt, on the other Lower Egypt, on both destroying his enemies.

Pastoralism: An economic form that involves some degree of dependence on domesticated animals for subsistence. Pastoralists frequently appear as savage raiders in the histories of settled peoples, but this may be a question of marginality since pastoralists operate on the peripheries of settled land.

Phaistos Disc: A Bronze Age clay disk discovered in the Minoan palace site of Phaistos on Crete. The symbols on its surface are presumed to be an ancient script, but they have never been deciphered, and their cultural associations, use, and language remain a mystery.

pharaoh: The ruler of unified Egypt who was linked with the ideology of rule to the social and spiritual health of the Nile Valley and its inhabitants. The pharaoh was seen as having a supernatural identity, which maintained the balance of social and supernatural forces that ordered the world. During the 3rd millennium B.C., the pharaoh was the personification on Earth of the hawk god Horus, and ultimately of the sun god Re. After his death, it was believed that the pharaoh would take his or her place in the divine pantheon, watching over Egypt, and the vital identification would pass to his successor.

Postpalatial period: The time between about 1450 and 1200 B.C. on Crete that probably involved a significant increase in Mycenaean influence from mainland Greece; this period saw a centralized administration at Knossos extending over much of Crete, but many of the economic roles of the palace were retained.

pre-Axumite: A period when dated to between about 500 B.C. and A.D. 1 when complex settlements like Yeha appeared in Tigre, in what is now northeastern Ethiopia.

proto-cuneiform: An early form of writing from the ancient Near East from which complex recording systems were developed; it appeared at approximately 3300 B.C. The symbols were largely pictographic and were made with a wooden stylus. These new forms of recording were used for a variety of things, but especially for resource control via different forms of public and private ownership; thus they did not record a language per se but primarily inventories and numbers.

proto-Elamite: A script related to proto-cuneiform that appears slightly later in southwestern Iran.

pyramids: Conceived in Egyptian royal ritual as a divine mountain, from which the pharaoh could ascend into heaven after death, these structures date to the middle of the 3rd millennium B.C. Archaeologists have also suggested that the pyramids were designed to knit together the multitude of Egyptian communities in a single communal effort for the glorification of the ruler and the state; they are a striking symbol of redistribution and governance.

quipu: A knotted string that the Inka used instead of writing for their record-keeping system. A ***quipu*** consists of a tied-together collection of fibres, with knots of different types positioned at different points. It appears that ***quipu*** were primarily a numerical system used for keeping accounts, taxation, and calendrical purposes.

Regionalization Phase: The period between 3800–3200 B.C. from which more than 250 Harappan sites are known; farming populations moved across the Indus Valley itself to what is now the India-Pakistan border.

sacbe: A ceremonial causeway that represented cosmological and political relations between different Maya states; one connected El Mirador and Nakbé. A number of other *sacbe* radiate out from El Mirador, probably connecting the site to other Maya centers.

Sahel: An Environmental zone including the Horn of Africa that stretches over a distance of almost 8,000 kilometers.

Samarran: A tradition that paralleled the Hassunan and Halafian between about 6000 and 5000 B.C.; it may be at least in part descended from the Hassunan culture. Elaborate Samarran pottery is found over a wide area; one crucial difference between Samarran and the traditions to the north is that in central Mesopotamia, Samarran communities used irrigation agriculture.

Shang dynasty: Chinese dynasty that flourished from about 1600 to 1046 B.C.

state: In political terms, an area with a centralized governmental system; a monopoly over the legitimate use of force internally and externally; the existence of bureaucratic forms of control; and usually some kind of redistributive system.

stelae: Slab monuments erected to commemorate events such as the dedication of a temple, the death of a ruler, and so on.

Sumerian: A civilization particularly associated with the Early Dynastic period where a culture of city-states succeeded the Uruk in Mesopotamia; there were about 12 major cities in the region during this period, with 20–30 smaller centers.

tell: A kind of archaeological site found in areas where mud-brick or adobe architecture was in use. It is an artificial mound, sometimes extremely large, made up of the remains of mud-brick houses that were built, occupied, and abandoned over periods of centuries, mixed in with domestic debris and garbage.

Teotihuacán: A site northeast of present-day Mexico City that was occupied between 200 B.C. and A.D. 750, it became the ultimate expression of early urbanism in highland Mexico. At its height (A.D. 150–400), there was a significant degree of depopulation in the immediate vicinity of the great city, which may have been a way of keeping common people more directly under the control of elites.

territorial state: A state that controls a larger area, usually through elaborate bureaucratic hierarchies. Its urban centers are not so important because they are not the foci of settlement and authority. They are more dependent on bureaucratic systems of control, and so local populations exist less disturbed by the center. They are subject to breakup, at which point political control reverts to more local levels. Its economic system is less efficient than that of a city-state, but because it is larger in absolute terms, it can control greater quantities of resources and use them on, for example, larger building projects.

Thera eruption (a.k.a. **Santorini eruption**): Dated to just before 1600 B.C., this volcanic event contributed a great deal to our archaeological knowledge of Minoan civilization, as it preserved the town of Akrotiri under meters of volcanic debris. The primary effect of the eruption was a violent tsunami that would have damaged Cretan coastal sites and shipping.

Thomas Levy's model: A model that states that collapse of the settlement and political system in the Levant at about 3500 B.C. came about because of climatic change and the subsequent breakdown of complex and intensive sociocultural systems associated with the breakdown of long-distance exchange and trading systems and with warfare.

Tikal: A Mayan city that was situated in north Guatemala; its ceremonial center was laid out in a series of architectural complexes that encompassed pyramids, plazas, temples, ball courts, palaces, and other buildings. The Teotihuacán dynasty seems to have led Tikal into a period of prosperity in the late 4th and 5th centuries A.D., although the fortunes of the city fluctuated through time; in the 9th century A.D., Tikal suffered a substantial decline in power.

Tiwanaku: After A.D. 300, this urban center became the largest in South America up to that time. The rise of Tiwanaku seems in great part to have been based on agricultural developments. Its people shared many elements of ritual and ideology with Wari, and their expansions can be seen at least in part as impelled by a proselytizing religious system.

type-state: The site that a particular ancient culture is named after. It is often the first site of that culture to have been found, and it will be important in the original definition of that culture's characteristics.

'Ubaid: The earliest culture known on the alluvium of southern Mesopotamia, which dates to about 5800–4000 B.C.; settlement patterns display a classic two-level settlement system, with large villages of 1,000 or more people surrounded by smaller hamlets.

'Ubaid 0: Levels in excavations at the Tell Ouilli site, near Larsa in southern Iraq, that link developments on the alluvium of southern Mesopotamia with those further to the north.

unilinear evolutionary model: Influenced to some degree by the success of theories of biological evolution in the mid-19th century, this model posited a single evolutionary trajectory for all human societies, everywhere and always. By the early 20th century, it was becoming obvious that these unilinear models did not accurately reflect the cultural diversity of societies across the globe.

urbanism: The shift of a population from rural to city life, often a result of the appearance of early states as the mechanisms that allow people to coordinate their economic efforts become more elaborate.

Uruk period: The period succeeding ‘Ubaid in Mesopotamia; named after the largest site of the time, it dates from about 4000 to 3000 B.C. Long-distance trade was one of the most striking characteristics of this period.

V. Gordon Childe’s models: Models for the origins of states and civilizations based on a band-tribe-chiefdom-state succession. Archaeologists have criticized these models because they may not account for the details of state formation everywhere in the world. They are more useful as a heuristic that aids in discussing general trends in state formation.

vertical integration: The ways in which human communities can make use of resources from different environmental zones, separated not so much by great distances but rather by altitude.

villas (a.k.a. **mansions**): In Minoan urban areas and the countryside during the Neopalatial period, large buildings that were not palaces; they usually shared the fundamental layout of the palaces but were smaller.

wang: An early Chinese ruler, considered the intermediary between heaven and earth, who ensured the stability of the realm through sacrifices to the gods and ancestors, his own initiatives, and even the right kind of court music.

Wari: A community whose influence extended over a large area of coastal and highland Peru between about A.D. 600 and1100; the urban center at the site of Wari itself was at least as large as Tiwanaku.

Xia dynasty: Correlating to the late Longshan period of Chinese history, this semilegendary period is referred to by later Chinese historical documents.

Yangshao: A culture of farming communities that grew millet in and around the valley of the Huang He River in northern China, it flourished between approximately 5000 and 3000 B.C.

Yinxu: The best known of the Shang capitals, this city was occupied between about 1400 and 1046 B.C. and is the site of the modern city of Anyang. Excavations at Anyang in the 1920s provided the first proof that the Shang dynasty existed. Yinxu generally resembled Erligang, with more elaborate palaces and temples on pounded-earth platforms and the same kinds of commoner households, workshops, and cemeteries surrounding the central area. One of the most important finds at this site was a burial complex including 1,222 small graves and 13 large royal burials.

Yoffee's rule: "If you can argue about whether a society is a state or isn't, then it isn't."

Zhou dynasty: In the middle of the 11th century B.C. in ancient China, the last ruler of Shang dynasty was defeated in battle by the king of Zhou, a neighboring state—beginning the Zhou dynasty. It would last, in theory at least, until 256 B.C. This was a feudal period, with segmentary systems of authority and a ruler who was first among a set of noble equals; society was highly stratified, with great social distance between commoners and nobility.

Zilum: A site where descendants of early Gajiganna settlers were living by the middle of the 1st millennium B.C. There are hundreds of buried pit features scattered across the site, which probably correspond to grain storage or garbage pits, and the site is surrounded by a ditch almost a kilometer long.

zones of empire: A tributary zone loosely integrated with a state's administration and from which resources flowed to a state center; they frequently included an inner zone immediately around the capital and under its day-to-day state control, along with an outer predatory zone, where the writ of the state was exercised only by force—through military expeditions or, perhaps, slave raids.

Biographical Notes

Childe, V. Gordon (1892–1957): Australian-born British historian, linguist, and archaeologist; an important synthesizer and theoretician on the development of urbanism and origins of states and civilizations. He is known for his deployment of Marxist concepts about the integration of economic, cultural, and ideological systems.

Darwin, Charles (1809–1882): English natural philosopher who influenced 19th-century theorists with his theory of natural selection. Along with Herbert Spencer's views of cultural progress, these theorists erected complex models of global, unilinear cultural evolution; these models held that all societies could be placed at different stages along a single evolutionary trajectory and that each of these stages involved a particular combination of technological, economic, social, and political characteristics.

Evans, Arthur (1851–1941): British archaeologist whose work between 1900 and 1903 at Knossos attracted researchers' attention to the most striking archaeological features of Minoan civilization: its palaces.

Higham, Charles (b. 1939): Archaeology Professor at the University of Otago in New Zealand. As an archaeologist working in Southeast Asia, he theorizes highly stratified chiefdoms appearing in different parts of this region during the last half of the 1st millennium B.C. Higham relates these developments to an increase in agricultural productivity deriving from the introduction of plowing, as well as the support of nonfarming nobles and retainers and the investment of agricultural products into activities that increase prestige.

Hodder, Ian (b. 1948): Archaeology Professor at Stanford University; he began his career doing quantitative archaeology in Britain in the 1970s and then did ethnoarchaeological work with African populations. Hodder became one of the world's foremost archaeological theorists in the 1980s and is now director of the Çatalhöyük Archaeological Project, which involves research at the extraordinary early farming community of Çatalhöyük in Turkey.

Ibn Khaldun (1332–1406): Arab historian who completed the *Muqadimmah*, the first systematic application of the scientific method to social relations, in the mid-14th century. It dealt with the rise and fall of political dynasties in North Africa and the relationships of people within and beyond the borders of states.

Levy, Thomas (b. 20th century): Anthropology Professor at the University of California, San Diego. Through his work in the southern Levant, he has developed a model to explain the growing populations in the late 5th millennium B.C. and makes a good case that some factors are visible in the archaeological record. According to this model, the collapse of the settlement and political system at about 3500 B.C. came about because of climatic change and subsequent breakdowns of complex and intensive sociocultural systems.

McIntosh, Rod (b. 1951): Anthropology Professor Emeritus at Rice University. Along with his wife, Susan Keech McIntosh, he excavated Jenné-jeno in the Inland Niger Delta of Mali, which revolutionized our understanding of the development of complex societies and urbanism in West Africa. The McIntoshes demonstrated that these societies developed indigenously, before significant contact with Islamic societies in North Africa in the late 1st millennium A.D.

McIntosh, Susan Keech (b. 1951): Anthropology Professor at Rice University. Along with her husband Rod McIntosh, she excavated Jenné-jeno in the Inland Niger Delta of Mali, which revolutionized our understanding of the development of complex societies and urbanism in West Africa. The McIntoshes demonstrated that these societies developed indigenously, before significant contact with Islamic societies in North Africa in the late 1st millennium A.D.

Morgan, Lewis Henry (1818–1881): American ethnologist who refined the evolutionary theory developed by Edward Tylor, which had three successive stages, each in turn divided into three different substages with different technological, economic, social, political, and religious characteristics assigned to each division: savagery, barbarism, and civilization.

Moseley, Michael E. (b. 1941): Anthropology Professor at the University of Florida; in the mid-1970s, Moseley advanced his maritime foundations hypothesis, which states that between about 3000 and 1800 B.C., the earliest developments toward civilization in the Pacific coast region of South America were sustained primarily by exploitation of maritime resources, including shellfish but especially the fantastically rich anchovy fisheries just off the Pacific coast.

Possehl, Gregory (b. 20th century): Anthropology Professor Emeritus at the University of Pennsylvania. A long-time researcher on Indus Valley sites in Pakistan, Possehl developed interesting ideas about the workings of Indus Valley societies 4,500 years ago, including the possible origins of those societies in an ideological revolution at that time.

Schmandt-Besserat, Denise (b. 1933): Professor Emerita of Art and Middle Eastern Studies at the University of Texas at Austin. Schmandt-Besserat is a notable archeologist who believes Mesopotamian writing developed over a long period from earlier record-keeping systems.

Spencer, Herbert (1820–1903): English philosopher who influenced 19th-century theorists with his views of cultural progress. His theories, along with Charles Darwin's theory of natural selection, were used to develop complex models of global, unilinear cultural evolution; these models held that all societies could be placed at different stages along a single evolutionary trajectory, and that each of these stages involved a particular combination of technological, economic, social, and political characteristics.

Trigger, Bruce (1937–2006): Canadian archaeologist and protean scholar who wrote the primary text on the development of archaeological theory. Trigger is known for comparative work on the origins and developments of states in different parts of the world; he has identified important contrasts between city-states and territorial states, with patterned differences in the way that these kinds of political units controlled space.

Tylor, Edward (1832–1917): English anthropologist who developed the evolutionary theory refined by Lewis Henry Morgan, which had three successive stages, each of those in turn divided into three different substages with different technological, economic, social, political, and religious characteristics assigned to each division: savagery, barbarism, and civilization.

Yoffee, Norman (b. 20th century): Anthropology and Near Eastern Studies Professor at the University of Michigan; as an archaeologist, he works in Mesopotamia and is one of the leading critics of earlier evolutionary models of political development. He proposed Yoffee's rule: "If you can argue about whether a society is a state or isn't, then it isn't." Yoffe also advanced a set of myths of the archaic state.

Bibliography

Abdi, K. "The Early Development of Pastoralism in the Central Zagros Mountains." *Journal of World Prehistory* 17, no. 4 (December 2003): 395–448.

Adams, Barbara, and Krzysztof Cialowicz. *Protodynastic Egypt*. Oxford: Shire Egyptology, 1997.

Adams, Ellen. "Power Relations in Minoan Palatial Towns: An Analysis of Neopalatial Knossos and Malia." *Journal of Mediterranean Archaeology* 17, no. 2 (2004): 191–222.

Aimers, James. "What Maya Collapse?: Terminal Classic Variation in the Maya Lowlands." *Journal of Archaeological Research* 15, no. 4 (2007): 329–77.

Algaze, Guillermo. "Expansionary Dynamics of Some Early Pristine States." *American Anthropologist* 95, no. 2 (1993): 304–33.

———. "The Uruk Expansion: Cross-Cultural Exchange in Early Mesopotamian Civilization." *Current Anthropology* 30, no. 5 (1998): 571–608.

Allard, Francis. "Stirrings at the Periphery: History, Archaeology, and the Study of Dian." *International Journal of Historical Archaeology* 2, no. 4 (1998): 321–42.

Balter, Michael. *The Goddess and the Bull. Çatalhöyük: An Archaeological Journey to the Dawn of Civilization*. Walnut Creek, CA: Left Coast, 2006.

Bard, Kathryn. *An Introduction to the Archaeology of Ancient Egypt*. New York: Wiley-Blackwell, 2007.

Bard, Kathryn A. "Toward an Interpretation of the Role of Ideology in the Evolution of Complex Society in Egypt." *Journal of Anthropological Archaeology* 11, no. 1 (1992): 1–24.

Bedaux, R. M. A., and Michael Rowlands. "The Future of Mali's Past." *Antiquity* 75, no. 290 (2001): 872–76.

Blake, Emma, and Bernard Knapp, eds. *The Archaeology of Mediterranean Prehistory*. London: Wiley-Blackwell, 2005.

Boltz, William. *The Origin and Early Development of the Chinese Writing System*. New Haven, CT: American Oriental Society, 1994.

Branigan, K, ed. *Urbanism in the Aegean Bronze Age*. Sheffield, UK: Sheffield Academic, 2001.

Broodbank, Cyprian. *An Island Archaeology of the Early Cyclades*. Cambridge: Cambridge University Press, 2000.

Burger, Richard. *Chavin and the Origins of Andean Civilization*. London: Thames & Hudson, 1992.

Cadogan, Gerald. *Palaces of Minoan Crete*. London: Methuen, 1991.

Campbell, Stuart. "The Halaf Period in Iraq: Old Sites and New." *Biblical Archaeologis*t 55 (1992): 182–87.

Castleden, Rodney. *Mycenaeans*. New York: Routledge, 2005.

Chang, Kwang-Chih. *Shang Civilization*. New Haven, CT: Yale University Press, 1980.

———. *Art, Myth and Ritual: The Path to Political Authority in Ancient China*. Cambridge, MA: Harvard University Press, 1988.

Childe, V. G. "The Urban Revolution." In *The Rise and Fall of Civilizations*, edited by C. C. Lamberg-Karlofsky and J. Sabloff, 6–14. Menlo Park, CA: Benjamin/Cummings, 1974.

Coe, Michael. *The Maya*. London: Thames & Hudson, 2005.

Coe, Michael, and Mark Van Stone. *Reading the Maya Glyphs*. London: Thames & Hudson, 2005.

Cohen, Ronald and Elman R. Service. *Origins of the State: The Anthropology of Political Evolution*. Philadelphia: Institute for the Study of Human Issues, 1978.

Cork, Edward. "Peaceful Harappans? Reviewing the Evidence for the Absence of Warfare in the Indus Civilisation of North-West India and Pakistan (c. 2500–1900 BC)." *Antiquity* 79 (2005): 411–25.

Cowgill, George. "An Update on Teotihuacan." *Antiquity* 82 (2008): 962–75.

Crawford, Harriet. *Sumer and the Sumerians*. Cambridge: Cambridge University Press, 2004.

Cribb, Roger. *Nomads in Archaeology*. Cambridge: Cambridge University Press, 2004.

Culbert, Patrick. "The Collapse of Classic Maya Civilization." In *The Collapse of Ancient States and Civilizations*, edited by N. Yoffee and G. Cowgill, 69–101. Tucson: University of Arizona Press, 1988.

D'Altroy, Terence. *The Incas*. New York: Wiley, 2003.

David, Nicholas, and Sterner, Judy. “Wonderful Society: The Burgess Shale Creatures, Mandara. Polities and the Nature of Prehistory.” In *Beyond Chiefdoms: Pathways to Complexity in Africa*, edited by S. K. McIntosh, 96–109. Cambridge: Cambridge University Press, 1999.

David, Nicholas. *Performance and Agency: The DGB Sites of Northern Cameroon*. Oxford: British Archaeological Reports, 2008.

Dickinson, Oliver. *The Aegean Bronze Age*. Cambridge: Cambridge University Press, 1994.

Diehl, Richard. *The Olmecs: America's First Civilization*. London: Thames & Hudson, 2005.

Earle, Timothy. *How Chiefs Come to Power: The Political Economy in Prehistory*. Palo Alto, CA: Stanford University Press, 1997.

Fabian, Johannes. *Time and the Other: How Anthropology Makes Its Object*. New York: Columbia University Press, 1983.

Fagan, Brian. *People of the Earth: An Introduction to World Prehistory*. 12th ed. New York: Prentice-Hall, 2006.

Fagan, Brian, Kenneth Garrett, and Zahi Hawass. *Egypt of the Pharaohs*. Washington DC: National Geographic, 2001.

Feinman, Gary, and Joyce Marcus, eds. *Archaic States*. Santa Fe, NM: School of American Research, 1998.

Finkelberg, Margalit. *Greeks and Pre-Greeks: Aegean Prehistory and Greek Heroic Tradition*. Cambridge: Cambridge University Press, 2009.

Finneran, Niall. *The Archaeology of Ethiopia*. London: Routledge, 2007.

Flad, Rowan. “Divination and Power: A Multiregional View of the Development of Oracle Bone Divination in Early China.” *Current Anthropology* 49, no. 3 (2008): 403–37.

Flannery, Kent, ed. *The Early Mesoamerican Village*. New York: Academic, 1976.

Forsyth, Phyllis Young. *Thera in the Bronze Age*. New York: Lang, 1997.

Frangipane, Marcella. “Different Types of Egalitarian Societies and the Development of Inequality in Early Mesopotamia.” *World Archaeology* 39, no. 2 (2007): 151–76.

Frankfort, Henri. *The Birth of Civilization in the Near East*. New York: Doubleday, 1956.

Glassner, Jean-Jacques. *The Invention of Cuneiform*. Baltimore, MD: Johns Hopkins University Press, 2003.

Golden, Jonathan, Thomas Levy, and Andreas Hauptmann. "Recent Discoveries Concerning Chalcolithic Metallurgy at Shiqmim, Israel." *Journal of Archaeological Science* 28 (2001): 951–63.

Green, Stanton, and Stephen Perlman. *The Archaeology of Frontiers and Boundaries*. New York: Academic, 1985.

Haas, Jonathan. *From Leaders to Rulers*. New York: Springer, 2001.

Haas, Jonathan, and Winifred Creamer. "Crucible of Andean Civilization: The Peruvian Coast from 3000 to 1800 B.C." *Current Anthropology* 47, no. 5 (2006):745–75.

Hamilakis, Yannis. *Labyrinth Revisited: Rethinking 'Minoan' Archaeology*. Oxford: Oxbow, 2002.

Hansen, Richard D. and Stanley Guenter. "Early Social Complexity and Kingship in the Mirador Basin." In *Lords of Creation: The Origins of Sacred Maya Kingship*, edited by Virginia M. Fields and Dorie Reents-Budet, 60–1. Los Angeles: Scala, 2005.

Hassan, Fekri A. "The Predynastic of Egypt." *Journal of World Prehistory* 2, no. 2 (1998): 135–85.

Hastorf, Christine. *Agriculture and the Onset of Political Inequality before the Inka*. Cambridge: Cambridge University Press, 1993.

Headrick, Annabeth. *The Teotihuacan Trinity: The Sociopolitical Structure of an Ancient Mesoamerican City*. Austin: University of Texas Press, 2007.

Higham, Charles. *The Civilization of Angkor*. Berkeley: University of California Press, 2004.

Hodder, Ian. *The Leopard's Tale: Revealing the Mysteries of Çatalhöyük*. London: Thames & Hudson, 2006.

Hodder, Ian, and Scott Hutson. *Reading the Past: Current Approaches to Interpretation in Archaeology*. Cambridge: Cambridge University Press, 2004.

Houston, Stephen. "Writing in Early Mesoamerica." In *The First Writing: Script Invention as History and Process*, edited by Stephen D. Houston, 274–309. Cambridge: Cambridge University Press, 2004.

Houston, Stephen, John Baines, and Jerrold Cooper. “Last Writing: Script Obsolescence in Egypt, Mesopotamia, and Mesoamerica.” *Comparative Studies in Society and History* 45, no. 3 (2003):430–79.

Huffman, Thomas. *Snakes and Crocodiles: Power and Symbolism in Ancient Zimbabwe*. Johannesburg: Witwatersrand University Press, 1996.

Jarrige, Jean-François, and Richard H. Meadow. “The Antecedents of Civilization in the Indus Valley.” *Scientific American* 243, no. 2 (1980): 122–33.

Joffe, Alexander H., J. P. Dessel, and Rachel S. Hallote. “The ‘Gilat Woman:’ Female Iconography, Chalcolithic Cult, and the End of Southern Levantine Prehistory.” *Near Eastern Archaeology* 64, nos. 1/2 (2001): 9–23.

Johnson, Matthew. *Archaeological Theory*. New York: Wiley-Blackwell, 1999.

Keightley, David. *The Ancestral Landscape: Time, Space, and Community in Late Shang China (ca. 1200–1045 BC)*. Berkeley: University of California Press, 2000.

Keightley, David. *Sources of Shang History: The Oracle-Bone Inscriptions of Bronze Age China*. Berkeley: University of California Press, 1985.

Kenoyer, Jonathan. *Ancient Cities of the Indus Valley Civilization*. Oxford: Oxford University Press, 1998.

———. “Wealth and Socioeconomic Hierarchies in the Indus Valley Tradition.” In *Order, Legitimacy and Wealth in Ancient States*, edited by Mary Van Buren, 88–109. Cambridge: Cambridge University Press, 2000.

Kopytoff, Igor. “The Internal African Frontier: The Making of African Political Culture.” In *The African Frontier: The Reproduction of Traditional African Societies*, edited by I. Kopytoff, 3–84. Bloomington, IN: Indiana University Press, 1987.

Levy, Thomas, ed. *The Archaeology of Society in the Holy Land*. London: Leicester University Press, 1998.

Lewis, Mark. *Sanctioned Violence in Early China*. Albany, NY: SUNY Press, 1989.

Lewis-Williams, David. “Constructing a Cosmos: Architecture, Power, and Domestication at Catalhoyuk.” *Journal of Social Archaeology* 4, no. 1 (2004): 28–59.

Lightfoot, Kent, and Antoinette Martinez. “Frontiers and Boundaries in Archaeological Perspective.” *Annual Review of Anthropology* 24 (1995): 471–92.

Liu, Li. *The Chinese Neolithic*. Cambridge: Cambridge University Press, 2007.

Liu, Li, and Hong Xu. “Rethinking Erlitou: Legend, History and Chinese Archaeology.” *Antiquity* 81, no. 314 (2007): 886–901.

MacEachern, Scott. “At Aissa Dugjé, Cameroon.” http://archaeology.about.com/od/hourinthelife/qt/maceachern.htm. About.com: Archaeology.

———. “State formation and enslavement in the southern Lake Chad Basin.” In *West Africa during the Atlantic Slave Trade: Archaeological Perspectives*, edited by C. DeCorse, 130–51. London: Leicester University Press, 2001.

———. “Beyond the Belly of the House: Space and Power in the Mandara Mountains.” *Journal of Social Archaeology* 2, no. 2 (2002): 197–219.

———. “Selling the Iron for Their Shackles: Wandala-Montagnard Interactions in Northern Cameroon.” *Journal of African History* 34, no. 2 (1993): 247–70.

Magnavita, Carlos. “Zilum: A Mid-First Millennium BC Fortified Settlement Near Lake Chad.” *Journal of African Archaeology* 4, no. 1 (2006): 153–69.

Marcus, Joyce, and Kent V. Flannery. “The Coevolution of Ritual and Society: New 14C Dates from Ancient Mexico.” *Proceedings of the National Academy of Sciences* 101, no. 52 (2004): 18257–62.

Marken, Damien, ed. *Palenque: Recent Investigations at the Classic Maya Center*. Lanham, MD: AltaMira, 2007.

McIntosh, Roderick. *The Peoples of the Middle Niger: The Island of Gold*. Oxford: Blackwell, 1998.

McIntosh, Susan Keech. “Floodplains and the Development of Complex Society: Comparative Perspectives from the West African Semi-Arid Tropics.” *Archeological Papers of the American Anthropological Association* 9, no. 1 (1999): 151–65.

McKillop, Heather. *The Ancient Maya: New Perspectives*. New York: Norton, 2006.

Moore, Jerry. *Cultural Landscapes in the Ancient Andes: Archaeologies of Place*. Gainesville, FL: University Press of Florida, 2005.

Moseley, Michael. “Maritime Foundations and Multilinear Evolution: Retrospect and Prospect.” *Andean Past* 3 (1992): 5–42.

———. *The Incas and Their Ancestors: The Archaeology of Peru*. London: Thames & Hudson, 2001.

Oates, Joan. “The Background and Development of Early Farming Communities in Mesopotamia and the Zagros.” *Proceedings of the Prehistoric Society* 39 (1973): 147–81.

———. “Early Writing in Sumer: A Review.” *Cambridge Archaeological Journal* 3, no. 1 (1993): 149–53.

O’Conner, David. *Abydos: Egypt’s First Pharaohs and the Cult of Osiris*. London: Thames & Hudson, 2009.

O’Reilly, Dougald. *Early Civilizations of Southeast Asia*. Walnut Creek, CA: AltaMira, 2007.

Orme, Byrony. “Archaeology and Ethnography.” In *Explanation of Culture Change: Models in Prehistory*, edited by C. Renfrew, 481–92. Pittsburgh: University of Pittsburgh Press, 1973.

Osborne, Robin. *Greece in the Making, 1200–479 BC*. London: Routledge, 1996.

Parpola, Asko. “The Indus Script: A Challenging Puzzle.” *World Archaeology* 17 (1986): 399–419.

Pauketat, Timothy. *Chiefdoms and Other Archaeological Delusions*. Lanham MD: AltaMira, 2007.

Phillipson, David. *Ancient Ethiopia. Aksum: Its Antecedents and Successors*. London: British Museum, 1995.

Pikirayi, Innocent. *The Zimbabwe Culture: Origins and Decline of Southern Zambezian States*. Walnut Creek, CA: AltaMira, 2000.

Pohl, Mary, Kevin Pope, and Christopher von Nagy. “Olmec Origins of Mesoamerican Writing.” *Science* 298 (2002): 1984–8.

Pollock, Susan. *Ancient Mesopotamia*. Cambridge: Cambridge University Press, 1999.

Pool, Christopher. *Olmec Archaeology and Early Mesoamerica*. Cambridge: Cambridge University Press, 2007.

Possehl, Gregory. “Sociocultural Complexity without the State: The Indus Civilization.” In *Archaic States*, edited by G. Feinman and J. Marcus, 260–91. Santa Fe, NM: School of American Research Press, 1998.

———. *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, CA: AltaMira, 2002.

Pwiti, Gilbert, and Webber Ndoro. "The Legacy of Colonialism: Perceptions of the Cultural Heritage in Southern Africa, with Special Reference to Zimbabwe." *African Archaeological Review* 16, no. 3 (1999): 143–53.

Renfrew, Colin, and Paul Bahn. *Archaeology: Theories, Methods and Practise.* London: Thames & Hudson, 2008.

Rothman, Mitchell. *Uruk Mesopotamia and Its Neighbors*. Santa Fe, NM: School of American Research Press, 2001.

Sabloff, Jeremy, ed. *Tikal: Dynasties, Foreigners & Affairs of State: Advancing Maya Archaeology*. Santa Fe, NM: School of American Research Press, 2003.

Savage, S. H. "Some Recent Trends in the Archaeology of Predynastic Egypt." *Journal of Archaeological Research* 9, no. 2 (2001: 101-55.

Scarre, Christopher, and Brian Fagan. *Ancient Civilizations.* 3rd ed. New York: Prentice-Hall, 2007.

Schele, Linda, and David Freidel. *A Forest of Kings: The Untold Story of the Ancient Maya*. New York: Morrow, 1990.

Schmandt-Besserat, Denise. *How Writing Came About*. Austin: University of Texas Press, 1997.

Silverman, Helaine. *Andean Archaeology*. London: Blackwell, 2004.

Silverman, Helaine, and William Isbell, eds. *Handbook of South American Archaeology*. New York: Springer, 2008.

Smith, Bruce, ed. *The Emergence of Agriculture*. New York: Scientific American Library, 1998.

Snodgrass, Anthony M. *The Dark Age of Greece: An Archaeological Survey of the Eleventh to the Eighth Centuries BC*. New York: Routledge, 2000.

Solís, Ruth Shady. "America's First City? The Case of Late Archaic Caral." In *Andean Archaeology* III: North and South, edited by William Harris Isbell and Helaine Silverman, 28–66. New York: Springer, 2006.

Solís, Ruth Shady, Jonathan Haas, and Winifred Creamer. "Dating Caral, a Preceramic Site in the Supe Valley on the Central Coast of Peru." *Science* 292 (2001): 723–27.

Stahl, Ann, ed. *African Archaeology: A Critical Introduction*. London: Blackwell, 2005.

Stark, Miriam, ed. *Archaeology of Asia*. New York: Wiley-Blackwell, 2005.

Stein, Gil J. "The Political Economy of Mesopotamian Colonial Encounters." In *The Archaeology of Colonial Encounters*, 143–72. Sante Fe, NM: School of American Research Press, 2005.

Stein, Gil, and Rana Ozbal. "A Tale of Two Oikumenai: Variation in the Expansionary Dynamics of 'Ubaid and Uruk Mesopotamia". In *Settlement and Society: Ecology, Urbanism, Trade and Technology in Mesopotamia and Beyond*, edited by Elizabeth C. Stone, 356–70. Los Angeles: Cotsen Institute of Archaeology, 2006.

Sugiyama, S. *Human Sacrifice, Militarism, and Rulership: The Symbolism of the Feathered Serpent Pyramid at Teotihuacan, Mexico*. Cambridge: Cambridge University Press, 2005.

Trigger, Bruce. *Early Civilizations: Ancient Egypt in Context*. American Cairo: University in Cairo Press, 1993.

———. "Shang Political Organization: A Comparative Approach." *Journal of East Asian Archaeology* 1 (1999): 43–62.

———. *Understanding Early Civilizations: A Comparative Study*. Cambridge: Cambridge University Press, 2003.

Van De Mieroop, Marc. *A History of the Ancient Near East ca. 3000–323 BC*. London: Blackwell, 2007.

Weber, Steven, and William Belcher. *Indus Ethnobiology: New Perspectives from the FIeld*. Lanham, MD: Lexington Books, 2003.

Wengrove, David. "Rethinking 'Cattle Cults' in Early Egypt: Towards a Prehistoric Perspective on the Narmer Palette." *Cambridge Archaeological Journal* 11, no. 1 (2001): 91–104.

Wenke, Robert. "Explaining the Evolution of Cultural Complexity: A Review" *Advances in Archaeological Method and Theory* 4 (1981): 79–125.

Wenke, Robert J. *The Ancient Egyptian State: The Origins of Egyptian Culture (c. 8000–2000 BC)*. New York: Cambridge University Press, 2009.

Wernke, Steven. "The Politics of Community and Inka Statecraft in the Colca Valley, Peru." *Latin American Antiquity* 17, no. 2 (2006): 177–208.

Wetterstrom, Wilma. "Foraging and Farming in Egypt: The Transition from Hunting and Gathering to Horticulture in the Nile Valley." In *The Archaeology of Africa. Food, Metals and Towns*, edited by *Thurstan* Shaw, Paul Sinclair, Bassey Andah, and Alex Okpoko, 165–226. New York: Routledge, 1993.

Wilk, Richard. “Miss Universe, the Olmec and the Valley of Oaxaca.” *Journal of Social Archaeology* 4, no. 1 (2004): 81–99.

Wilkinson, Toby. *Genesis of the Pharaohs*. London: Thames & Hudson, 2003.

Wright, Rita. *The Ancient Indus: Urbanism, Economy, and Society*. Cambridge: Cambridge University Press, 2009.

Yoffee, N. “Too Many Chiefs? (Or, Safe Texts for the 90s).” In *Archaeological Theory: Who Sets the Agenda?* edited by N. Yoffee and A. Sherratt, 60–78. Cambridge: Cambridge University Press, 1993.

———. *Myths of the Archaic State: Evolution of the Earliest Cities, States and Civilizations*. Cambridge: Cambridge University Press, 2005.

Zagarell, Allen. “Pastoralism and the Early State in Greater Mesopotamia.” In *Archaeological Thought in America*, edited by C. C. Lamberg-Karlovsky, 280–301. Cambridge: Cambridge University Press, 1989.