Current Research and Issues

Was Cahokia a State?

Cahokia was the largest community to develop in the pre-Columbian Americas north of Mexico, but scholars are not sure if it was a complex chiefdom or a simple state. What factors suggest a state? Factors suggesting that it was a state include its size—the core community covered over 13 square kilometers and included more than 100 earthen mounds. The largest of these mounds was the largest human-made construction in the Americas north of Mexico until the Empire State Building was completed in 1931. The population of Cahokia was at least 10,000 people and may have been more like 40,000. There were also elites—one buried on a blanket decorated with over 20,000 shell beads and surrounded by over 100 other individuals who appear to have been sacrificed at the time of the elite individual’s death. Cahokia also engaged in long-distance trade that stretched from the Gulf of Mexico to the Great Lakes, and from the Appalachians to the Black Hills. There were a number of smaller communities in the Cahokia region, and some scholars have suggested a three-level settlement hierarchy was present. Three-level hierarchies are often taken to indicate the presences of states.

So why do most scholars not think Cahokia was a state? Largely because the evidence is lacking on a number of points. There is no evidence of leaders able to control the population by force. There was no standing army, no obvious administrative bureaucracy, and no obvious administrative control over the economy. While there were obvious elites who controlled access to prestige goods (and for whom human sacrifices may have been made upon their deaths), it is not clear that these elites had political power over the entire society or controlled an all-encompassing bureaucracy. The settlement hierarchy, too, may have been informal rather than administrative, and trade may have been carried out by individuals without any government regulation. In short, most scholars think that while Cahokia was clearly a complex social and economic entity, it was not a true state.

Regardless of whether Cahokia was actually a state or not, Cahokia

An embossed copper plate depicting an elite like those who lived at Cahokia demonstrates the difficulty of interpreting political and economic organization from the archaeological record.


In South America, a group of distinct state societies may have emerged as early as 2500 B.C. in the Supe and Pativilca valleys north of Lima, Peru. The valley contains a group of large cities that seem to have been interdependent—cities on the coast supplied inland cities with fish, whereas inland cities served as political and economic centers. The cities contain plaza areas and large pyramids, which are thought to be temple structures. After 200 B.C. the major river valleys leading from the Andes to the sea witnessed the development of a complex agricultural system dependent on irrigation. The separate, but similar, states participated in a widespread system of religious symbols and beliefs called Chavin. The various states included the well-known Moche state, creators of some of the most remarkable effigy ceramics ever known, and the Nazca state, the people of which constructed a huge landscape of intaglios (inscribed images and lines) on the hard ground of highland deserts. By A.D. 700, these regional states were integrated into a large, militaristic empire called Wari (or Huari).

In North America, a huge settlement, with over 100 earthen mounds (one of them, Monk’s Mound, is the largest pre-Columbian structure north of Mexico) and covering an area of more than 5 square miles (13 square kilometers), developed near present-day St. Louis late in the 1st millennium A.D. The site is called Cahokia, and it was certainly the center of a large and powerful chiefdom. Whether it had achieved a state level of organization is controversial. There is evidence for religious and craft specialists and there is clear social stratification, but whether or not the leaders of Cahokian society were able to govern by force is still unclear.
Theories About the Origin of the State

We have seen that states developed in many parts of the world. Why did they evolve when and where they did? We consider those that archaeologists have discussed frequently.\textsuperscript{102}

Irrigation

Irrigation seems to have been important in many of the areas in which early state societies developed. Irrigation made the land habitable or productive in parts of Mesoamerica, southern Iraq, the Nile Valley, China, and South America. It has been suggested that the labor and management needed for the upkeep of an irrigation system led to the formation of a political elite, the overseers of the system, who eventually became the governors of the society.\textsuperscript{103} Proponents of this view believe that both the city and civilization were outgrowths of the administrative requirements of an irrigation system.

Critics note that this theory does not seem to apply to all areas where cities and states may have emerged independently. For example, in southern Iraq, the irrigation systems serving the early cities were generally small and probably did not require extensive labor and management. Large-scale irrigation works were not constructed until after cities had been fully established.\textsuperscript{104} Thus, irrigation could not have been the main stimulus for the development of cities and states in Sumer. Even in China, for which the irrigation theory was first formulated, there is no evidence of large-scale irrigation as early as Shang times.\textsuperscript{105}

Although large-scale irrigation may not always have preceded the emergence of the first cities and states, even small-scale irrigation systems could have resulted in unequal access to productive land and so may have contributed to the development of a stratified society.\textsuperscript{106} In addition, irrigation systems may have given rise to border and other disputes between adjacent groups, thereby prompting people to concentrate in cities for defense and stimulating the development of military and political controls.\textsuperscript{107} Finally, as Robert Adams and Elman Service both suggested, the main significance of irrigation, either large or small scale, may have been its intensification of production, a development that in turn may have indirectly stimulated craft specialization, trade, and administrative bureaucracy.\textsuperscript{108}

Population Growth, Circumscription, and War

Robert Carneiro has suggested that states may emerge because of population growth in an area that is physically or socially limited. Competition and warfare in such a situation may lead to the subordination of defeated groups, who are obliged to pay tribute and to submit to the control of a more powerful group.\textsuperscript{109} Carneiro illustrated his theory by describing how states may have emerged on the northern coast of Peru.

After the people of that area first settled into an agricultural village life, population grew at a slow, steady rate. Initially, new villages were formed as population grew. But in the narrow coastal valleys—blocked by high mountains, fronted by the sea, and surrounded by desert—this splitting-off process could not continue indefinitely. The result, according to Carneiro, was increasing land shortage and warfare between villages as they competed for land. Because the high mountains, the sea, and the desert blocked any escape for losers, the defeated villagers had no choice but to submit to political domination. In this way, chiefdoms may have become kingdoms as the most powerful villages grew to control entire valleys. As chiefs’ power expanded over several valleys, states and empires may have been born.

Marvin Harris suggested a somewhat different form of circumscription. He argued that the first states with their coercive authority could emerge only in areas that supported intensive grain agriculture (and the possibility of high food production) and were surrounded by areas that could not support intensive grain agriculture. So people in such areas might put up with the coercive authority of a state because they would suffer a sharp drop in living standards if they moved away.\textsuperscript{110}

Carneiro suggested that his theory applies to many areas besides the northern coast of Peru, including southern Iraq and the Indus and Nile valleys. Although there were no geographic barriers in areas such as northern China or the Mayan lowlands on the Yucatán Peninsula, the development of states in those areas may have been the result of social
circumscription. Carneiro’s theory seems to be supported for southern Iraq, where there is archaeological evidence of population growth, circumscription, and warfare.\textsuperscript{111} There is also evidence of population growth before the emergence of the state in the Teotihuacán Valley.\textsuperscript{112}

But population growth does not necessarily mean population pressure. For example, the populations in the Teotihuacán and Oaxaca valleys apparently did increase prior to state development, but there is no evidence that they had even begun to approach the limits of their resources. More people could have lived in both places.\textsuperscript{113} Nor is population growth definitely associated with state formation in all areas where early states arose. For example, according to Wright and Johnson, there was population growth long before states emerged in southwestern Iran, but the population apparently declined just before the states emerged.\textsuperscript{114}

In addition, Carneiro’s circumscription theory leaves an important logical question unanswered: Why would the victors in war let the defeated populations remain and pay tribute? If the victors wanted the land so much in the first place, why wouldn’t they try to exterminate the defeated and occupy the land themselves, which has happened many times in history?

**Local and Long-Distance Trade**

It has been suggested that trade was a factor in the emergence of the earliest states.\textsuperscript{115} Wright and Johnson theorized that the organizational requirements of producing items for export, redistributing the items imported, and defending trading parties would foster state formation.\textsuperscript{116} Does the archaeological evidence support such a theory?

In southern Iraq and the Mayan lowlands, long-distance trade routes may indeed have stimulated bureaucratic growth. In the lowlands of southern Iraq, as we have seen, people needed wood and stone for building, and they traded with highland people for those items. In the Mayan lowlands, the development of civilization seems to have been preceded by long-distance trade. Farmers in the lowland regions traded with faraway places to obtain salt, obsidian for cutting blades, and hard stone for grinding tools.\textsuperscript{117} In southwestern Iran, long-distance trade did not become very important until after Susa became the center of a state society, but short-distance trade may have played the same kind of role in the formation of states.

Kwang-chih Chang put forward a similar theory for the origin of states in China. He suggested that Neolithic societies in the Yellow River valley developed a long-distance trade network, which he called an *interaction sphere*, by about 4000 B.C. Trade spread cultural elements among the societies in the interaction sphere, so that they came to share some common elements. Over time, these societies came to depend on each other both as trade partners and as cultural partners, and around 2000 B.C., they unified into a single political unit under the Shang dynasty.\textsuperscript{118} Thus, Chang sees political unification in China as an outgrowth of a pre-existing system of trade and cultural interaction.

**The Various Theories: An Evaluation**

Why do states form? As of now, no one theory seems to fit all the known situations. The reason may be that different conditions in different places may have favored the emergence of centralized government. After all, the state, by definition, implies an ability to organize large populations for a collective purpose. In some areas, this purpose may have been the need to organize trade with local or far-off regions. In other cases, the state may have emerged as a way to control defeated populations in circumscribed areas. In still other instances, a combination of factors may have fostered the development of the state type of political system.\textsuperscript{119}

**The Consequences of State Formation**

We have considered several areas where states arose, as well as a number of theories to explain the origin of states. But what were the consequences for the people living in those societies? The consequences seem to have been dramatic.
One of the ways states change the lifestyles of people is by allowing for larger and denser populations.\textsuperscript{120} The presence of agriculture itself gives populations the potential to grow, and the development of a state only furthers that potential. Why? Because a state is able to build infrastructure—irrigation systems, roadways, markets—that allows both the production and distribution of agricultural products to become more efficient. States are able to coordinate information as well, and they can use that information to manage agricultural production cycles and to anticipate or manage droughts, blights, or other natural disasters. States are also able to control access to land (through laws and a military) and thus can both maintain farmers on the land and prevent others (from either within or outside of the state) from removing the farmers or interfering with their ability to produce food.

With increased efficiency of agricultural production and distribution, states also allow many (if not most) people in the society to be relieved of food production. These people are freed to become craftspeople, merchants, and artists, as well as bureaucrats, soldiers, and political leaders. People may also live apart from agricultural fields, and thus cities with dense populations can arise. Cities can also arise in locations that are not suited to agriculture but that perhaps are suited to trade (such as the cities on rivers in southern Mesopotamia) or defense (such as on top of a mountain, as in the case of Monte Albán). Art, music, and literature often flourish in such contexts, and these too are often consequences of the rise of states. Organized religion also often develops after states appear. Thus, all the hallmarks we associate with civilization can be seen as resulting from the evolution of states.\textsuperscript{121}

The development of states can have many negative impacts as well. When states develop, people become governed by force and are no longer able to say “no” to their leaders. Police and military forces can become instruments of oppression and terror.\textsuperscript{122} On a less obvious level, the class stratification of states creates differences in access to resources and an underclass of poor, uneducated, and frequently unhealthy people. Health issues are exacerbated by the concentration of people in cities, an environment in which epidemic diseases can flourish.\textsuperscript{123} Without direct access to food supplies, people in cities also face the threat of malnutrition or outright starvation if food production and distribution systems fail.\textsuperscript{124}

All states appear to be expansionistic, and the emergence of state warfare and conquest seems one of the most striking negative impacts of the evolution of states. In fact, more human suffering can probably be linked to state expansion than to any other single factor. Why do states expand? One basic reason may be that they are able to. States have standing armies ready to fight or be sent to conquer enemies. Another reason for state expansion might be related to the threat of famine and disease, which is more likely with intensive agriculture.\textsuperscript{125} A third answer to the question of why states tend to expand might be that belligerence is simply part of the nature of states. States often arise through military means, and it may be vital to the continuation of some states that military power be continually demonstrated.\textsuperscript{126} Regardless of the causes, war and conquest are the consequences of state formation. Often, too, defeat in war is the fate of states.
The Decline and Collapse of States

When you look over the list of ancient states we have discussed in this chapter, you will notice one element common to them all: Each eventually collapsed; none maintained its power and influence into historic times. Why? It is an important question because, if collapse is the ultimate fate of many if not all states, then we can anticipate that our own state is likely to collapse eventually. Perhaps knowing something about how and why other states have fallen can prevent (or at least hold off) the fall of our own.

One suggested explanation for the decline and collapse of states is environmental degradation. If states originally arose where the environment was conducive to intensive agriculture and harvests big enough to support social stratification, political officials, and a state type of political system, then perhaps environmental degradation—declining soil productivity, persistent drought, and the like—contributed to the collapse of ancient states. Archaeologist Harvey Weiss has suggested that persistent drought helped to bring about the fall of the ancient Akkadian empire, in the Near East. By 2300 B.C., the Akkadians had established an empire stretching over 800 miles (1,300 kilometers) from the Persian Gulf in what is now Iraq to the headwaters of the Euphrates River in what is now Turkey. But a century later, the empire collapsed. Weiss thinks that a long-term drought brought the empire down, as well as other civilizations around at that time too. Many archaeologists doubted there was such a widespread drought, but new evidence indicates that the worst dry spell of the past 10,000 years began just as the Akkadians’ northern stronghold was being abandoned. The evidence of the drought, windblown dust in sediment retrieved from the bottom of the Persian Gulf, indicates that the dry spell lasted 300 years. Other geophysical evidence suggests that the drought was worldwide.

Environmental degradation may also have contributed to the collapse of Mayan civilization. Lake sediments show that the region the Maya inhabited experienced an extended period of drought lasting between roughly A.D. 800 and A.D. 1000. The Maya,
who depended on rainfall agriculture for subsistence, may not have been able to produce enough food in areas around temple complexes during this long period of drought to feed the resident populations. People would have been forced to move into less populated areas to survive, and the temple complexes would have slowly been abandoned.\(^{130}\)

The behavior of humans may sometimes be responsible for environmental degradation. Consider the collapse of Cahokia, a city of at least 15,000 people that thrived for a while in the area where the Missouri and Mississippi rivers converge. In the 12th century A.D., Cahokia had large public plazas, a city wall constructed from some 20,000 logs, and massive mounds. But within 300 years, only the mounds were left. Silt from flooding covered former croplands and settled areas. Geographer Bill Woods thinks that overuse of woodlands for fuel, construction, and defense led to deforestation, flooding, and persistent crop failure. The result was the abandonment of Cahokia.\(^{131}\)

Many other ideas have been put forward to explain collapse, ranging from catastrophes to almost mystical factors such as “social decadence,” but, as with theories for the origin of states, no single explanation seems to fit all or even most of the situations. Although it is still not clear what specific conditions led to the emergence, or collapse, of the state in each of the early centers of civilization, the question of why states form and decline is a lively focus of research today. More satisfactory answers may come out of ongoing and future investigations.

### Summary and Review

#### Preagricultural Developments

**8.1** Explain the relationship between broad-spectrum collecting, sedentarism, and population growth in terms of preagricultural developments.

- In the period immediately before plants and animals were domesticated, there seems to have been a shift in many areas of the world to less dependence on big game hunting and greater dependence on what is called broad-spectrum collecting.
- The broad spectrum of available resources frequently included aquatic resources such as fish and shellfish and a variety of wild plants, deer, and other game.
- Climatic changes may have been partly responsible for the change to broad-spectrum collecting.
- In Europe, the Near East, Africa, and Peru, the switch to broad-spectrum collecting seems to be associated with more permanent communities. But in areas of Mesoamerica, domestication of plants and animals may have preceded permanent settlements.

**What were some of the preagricultural developments in the Near East and Mesoamerica that might have led to agriculture?**

#### The Domestication of Plants and Animals

**8.2** Discuss the domestication of plants and animals in the Near East, Mesoamerica, and elsewhere in the world.

- Domestication refers to changes in plants and animals that make them more useful to humans. Often, without human assistance, domesticated plants and animals cannot reproduce. Neolithic cultures reflect the presence of domestication.
- The earliest evidence of domestication comes from the Near East at about 8000 B.C.
- In the New World, early areas of cultivation and domestication include the highlands of Mesoamerica (about 7000), the Central Andes around Peru (about the same time, but perhaps even earlier), and the Eastern Woodlands of North America (about 2000).
- There were also probably independent centers of domestication in other areas of the Old World—China, Southeast Asia (what is now Malaysia, Thailand, Cambodia, and Vietnam), New Guinea, and Africa—sometime around or after 6000 B.C.

**What of plants and animals were domesticated in the Near East, Mesoamerica, and South America?**
Why Did Food Production Develop?

8.3 Evaluate theories for why food production developed.

- Theories about why food production originated remain controversial, but most archaeologists think that conditions must have pushed people to switch from collecting to procuring food, rather than food production being a voluntary choice.
- One possible cause of food production may have been population growth in regions of bountiful wild resources, pushing people to move to marginal areas where they tried to reproduce their former abundance.
- Another cause of food production may have been global population growth, filling most of the world's habitable regions and forcing people to use a broader spectrum of wild resources and to domesticate plants and animals.
- Perhaps a third cause of food production was hotter and drier summers and colder winters, favoring sedentarism near seasonal stands of wild grain; resulting population growth may have forced people to plant crops and raise animals to support themselves.
- But climate change or population pressure apparently did not lead to domestication in Mesoamerica; humans in that area seem to have actively turned to domestication to obtain more of the most desired or useful plant species.

Evaluate the strengths and weaknesses of two theories for the origins of agriculture.

Consequences of the Rise of Food Production

8.4 Critically analyze the consequences of food production.

- Regardless of why food production originated, it seems to have had important consequences for human life.
- Plant and animal domestication led to substantial increases in population.
- A greater reliance on agriculture led to an increase in sedentarism in many areas.
- Populations that relied heavily on agriculture were less healthy compared with earlier foraging populations.

- In more permanent villages, houses and furnishings became more elaborate, people began to make textiles and to paint pottery, long-distance trade seemed to increase, and political assemblies formed.

Archaeological Inferences About Civilization

8.5 Explain how archaeologists infer that a particular people in the past had social classes, cities, or a centralized government.

- Archaeologists rather than historians have studied the most ancient civilizations because those civilizations evolved before the advent of writing.
- Archaeologists generally assume that burial finds reflecting inequality in death reflect inequality in life, at least in status and perhaps also in wealth and power. When archaeologists find other substantial differences, as in house size and furnishings, they can confirm that the society had different socioeconomic classes of people.
- Archaeologists do not always agree on how a state should be defined, but most seem to agree that hierarchal and centralized decision making that affects a substantial population is the key criterion.
- Most states have cities with public buildings, fulltime craft and religious specialists, an official art style, and a hierarchical social structure topped by an elite class from which the leaders are drawn.
- Most states maintain power with a monopoly on the use of force. The state uses force or the threat of force to tax its population and to draft people for work or war.

Cities and States in Southern Iraq

8.6 Describe the emergence of cities and states in southern Iraq.

- Early state societies arose in what is now southern Iraq and southwestern Iran.
- Burial sites from the formative era reflect differences in status. Villages specialized in the production of
particular goods. Temples may have been centers of political and religious authority for several communities. Chiefdoms, each having authority over several villages, may have developed.

- The state of Sumer in southern Iraq was unified under a single government just after 3000 B.C. It had writing, large urban centers, imposing temples, codified laws, a standing army, wide trade networks, a complex irrigation system, and a high degree of craft specialization.

How was Sumer after 3000 B.C. different from earlier societies in southern Iraq?

Cities and States in Mesoamerica

- In the formative period, small, autonomous farming villages shifted from the hilly slopes to the floor of the Teotihuacán Valley, probably in association with the use of irrigation. Small “elite” centers emerged, each having a raised platform that supported temples and residences.

- The city and state of Teotihuacán developed somewhat later in the Valley of Mexico and likely influenced much of Mesoamerica. Teotihuacán-style pottery and architectural elements are spread extensively, and graves include significant amounts of foreign goods. Streets and buildings were laid out in a grid pattern that involved much planning.

- The earliest city-state in Mesoamerica developed in the Valley of Oaxaca, with a capital at Monte Albán. It may have originally been founded in the late formative period as a neutral place where different political units in the valley could coordinate activities affecting the whole valley.

- Mayan state societies were densely populated and dependent on intensive agriculture. Their societies may have been more urban and complex than previously thought.

What were the first cities and states like in Asia, Africa, South America, and North America?

Cities and States in Other Areas

- City and states arose early on the African, Asian, South American, and North American continents.

- In Africa, the Nile Valley in Egypt with a capital at Memphis supported a population that lived in self-sufficient villages; later states built the pyramids. The Axum state in Ethiopia was a center of trade with multistory stone residences. Sub-Saharan Africa comprised a succession of city-states.

- In Asia, the Harappan civilization in the Indus Valley of India controlled enormous territory with major cities built on similar patterns that included municipal water and sewage systems. The Shang dynasty in China was a stratified and specialized state society with religious, economic, and administrative unification and a distinctive art style.

- In South America, state societies near present-day Lima, Peru, had independent cities, plazas, large pyramids, and those in the Andes had complex agricultural systems with irrigation, a widespread system of religious symbols and beliefs, and art.

- In North America, Cahokia, near present-day St. Louis, was a huge settlement with a powerful chiefdom, religious and craft specialists, and social stratification.

Theories About the Origin of the State

- The irrigation theory suggests that the administrative needs of maintaining extensive irrigation systems may have been the impetus for state formation.

- The circumscription theory suggests that states emerge when competition and warfare in circumscribed areas lead to the subordination of defeated groups, which are obliged to submit to the control of the most powerful group.
Theories involving trade suggest that the organizational requirements of producing exportable items, redistributing imported items, and defending trading parties would foster state formation.

At this point, no one theory is able to explain the formation of every state. Perhaps different organizational requirements in different areas all favored centralized government.

Epidemic disease and periodic famine affect the population, often resulting from dense populations and issues with food production.

Summarize the major theories about the origin of the state and give examples of each.

The Consequences of State Formation

- Populations grow and become concentrated in cities.
- More efficient agriculture allows many people to be removed from food production. As a result, art, music, literature, and organized religion can develop and flourish.
- Militaristic expansion and conquest occurs, and leaders wield power over their own populations. An underclass of poor and often unhealthy people emerges.

The Decline and Collapse of States

- All ancient states collapsed eventually. As with theories for the origin of states, no single explanation seems to fit all or even most of the situations. Research into this question may have implications for prolonging the lives of our modern state systems.
- Four possible reasons may partially explain the collapse of a state: (1) environmental degradation; (2) human behavior that may increase the incidence of disease; (3) overextension that may deplete resources; (4) internal conflict that results from leaders’ mismanagement or exploitation.

Think on it

1. What factors might cause people to work harder to get food?
2. Do the various theories of the rise of food production explain why domestication occurred in many areas of the world within a few thousand years?
3. Like the emergence of food production, the earliest cities and states developed within a few thousand years of each other. What might be the reasons?
4. Can you imagine a future world without states? What conditions might lead to that "state" of the world?