

Hopewell Archeology

Directions: Using the evidence provided to your group through artifacts, photos (this is where you found the artifacts, and the handouts), write down claims and questions about what you have found.

Claims: (based on the evidence)

Questions:

Reflection Questions:

1. What is difficult about making claims with the evidence that you have been provided with?
2. What other evidence would you want? Could you get it?

According to page 288 in Strayer:

Who are the **Hopewell**?

When was the high point of their culture?

What are their major achievements?

Southwestern Desert Cultures

Bolliet →

Around 300 B.C.E. in what is today Arizona, contacts with Mesoamerica led to the introduction of agriculture based on irrigation. Because irrigation allowed the planting of two maize crops per year, the population grew and settled village life soon appeared. Of all the southwestern cultures, the Hohokam of the Salt and Gila River Valleys show the strongest Mesoamerican influence. Hohokam sites have platform mounds and ball courts similar to those of Mesoamerica. Hohokam pottery, clay figurines, cast copper bells, and turquoise mosaics also reflect this influence. By 1000 C.E. the Hohokam had constructed an elaborate irrigation system. Hohokam agricultural and ceramic technology then spread over to neighboring peoples, but it was the Anasazi to the north who left the most vivid legacy of these desert cultures.

Archaeologists use **Anasazi**, a Navajo word meaning "ancient ones," to identify a number of dispersed, though similar, desert cultures located in what is now the Four Corners region of Arizona, New Mexico, Colorado, and Utah (see Map 7.4). In the centuries before 700 C.E. the Anasazi developed an economy based on maize, beans, and squash. As irrigation and other technologies increased their productivity, they formed larger villages and evolved a much more complex cultural life centered on underground buildings called kivas. They produced pottery decorated with geometric patterns, learned to weave cotton cloth, and, after 900 C.E., began to construct large multistory residential and ritual centers.

One of the largest Anasazi communities was located in Chaco Canyon in what is now northwestern New Mexico. There were twelve towns in the canyon and surrounding mesas, suggesting a regional population of 15,000. Pueblo Bonito (founded in 919 C.E.) had more than 650 rooms arranged in a four-story block of residences and storage rooms; it also had thirty-eight kivas, including a great kiva more than 65 feet (19 meters) in diameter. Hunting, trade, and the need to maintain irrigation works often drew men away from the village. Women shared in agricultural tasks, were specialists in many crafts, and were responsible for food preparation and childcare. At Chaco Canyon the high-quality construction, the size and number of kivas, and the system of roads linking the canyon to outlying towns all suggest that Pueblo Bonito and its nearest neighbors exerted political and cultural dominance over a large region.

As had been the case with the Olmec center of San Lorenzo and Chavín de Huántar in Peru nearly a thousand years earlier, Pueblo Bonito's ascendancy depended on its identity as a sacred site and on the elaboration of an intense cycle of religious rituals that attracted pilgrims from distant locations.

Early archaeologists suggested that the Chaco Canyon culture originated as a colonial appendage of Mesoamerica, but the archaeological record provides little evidence for this theory. Merchants from Chaco did provide Toltec-period peoples of northern Mexico with turquoise in exchange for shell jewelry, copper bells, macaws, and trumpets, but these exchanges occurred late in Chaco's development. More importantly, the signature elements of Mesoamerican influence, such as pyramid-shaped mounds and ball courts, are missing at Chaco.

The abandonment of the major sites in Chaco Canyon in the twelfth century most likely resulted from a long drought that undermined the culture's fragile agricultural economy. Nevertheless, the Anasazi continued in the Four Corners region for more than a century after the abandonment of Chaco Canyon, with major centers at Mesa Verde in present-day Colorado and at Canyon de Chelly and Kiet Siel in Arizona. The construction of these settlements in large natural caves high above valley floors suggests increased levels of warfare, probably provoked by population pressure on the region's limited arable land.

Stearns

Perhaps the most famous southwestern regional tradition is that of the **Anasazi** (Navajo for "the ancient ones"), who lived in the Four Corners region of New Mexico, Arizona, Colorado, and Utah. Settled in the region from about 200 B.C.E., they began to live in large, multistory adobe and stone dwellings by 700 C.E. Apparently, pressure from hostile neighbors caused them to build these dwellings in protected canyons or in cliffs, where access is difficult.

Kivas are also found in another type of Anasazi settlement. The ruins of about 125 towns in New Mexico's Chaco Canyon and the surrounding areas are remarkable for their planning and the care of their stone and

adobe construction. Many of these towns were connected by an extensive system of what seem to be roads or ritual lines, which linked the city to celestial or natural phenomena. The Anasazi produced excellent pottery without the potter's wheel, and they had trading contacts with Mesoamerica, where the turquoise of their region was traded for items such as parrots, valued for their feathers.

A long period of drought in the late 13th century seems to explain the decline of the Anasazi and other southwestern peoples. Perhaps their technology in managing water resources was unable to keep pace with a drought that lasted for hundreds of years. The Anasazi decline, followed by pressure from nomads such as the Navajo and Apache, eventually led to the abandonment of the towns, but many scholars believe that the traditions of the Anasazi have continued in the culture of the modern Hopi and other Pueblo Indians of the American Southwest.

Cahokia

Basics (who, where, when)

context (what's the history of this place? Which places/people exist around it?)

Political (government, policies and laws, rebellion, legitimacy, hegemony, diplomacy)

Religious/Belief System (beliefs/assumptions, role of core ideas and thinkers in society/government)

Innovations (technologies, inventions, literature, and art)

Military (military structure and size, role of warfare, role of military in society, emphasis on military and expansion)

Economic (production of goods and agriculture, trade, currency, markets, jobs, business, industry)

Social (structure of the social classes, gender roles, views on race and citizenship)

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Directions: As you read, keep track of the discussion questions and take notes on the topic headings listed on this page. Keep track of page numbers so you can prepare for the discussion. *Source:* Mann, Charles C. "Made in America." in 1491: New Revelations of the Americas Before Columbus. Vintage Books; USA, 2005. Complete the reading even if you cannot finish all the questions.

Cahokia Reading Guide

1. Crops that Cahokia grew and had access to:
2. Animals that Cahokia raised or hunted:
3. What is the environment of the "American Bottom"?
4. Describe the mounds and the technology behind them.
5. What was the role of maize in the development of Cahokia?
6. How did the rivers change their course? What was the effect on Cahokia?

7. How did the floods destroy Cahokia and cause its downfall?
8. What is the social structure like in Cahokia? How did the elite respond to the problems of the floods?
9. What finally causes the fall of Cahokia?

Discussion Questions:

1. Explain how the regions are highly specialized region? (e.g. has jobs, specialties, complex structures.)
2. To what extent does geography determine the development and downfall of a civilization? (think social, political, and economic)
3. What is the function of politics and religion in maintaining legitimacy, unity and hegemony?
4. How does your region compare and contrast with the rest of the world at this time? (1000-1250)
 - a. Japan
 - b. Mongols
 - c. Europe
 - d. Song Dynasty
 - e. Ghana
 - f. Islamic World

*Tignor,
Woods Together,
Woods Apart.*

THE CAHOKIANS IN NORTH AMERICA Cities took shape at the hubs of trading networks all across North America. The largest was Cahokia, along the Mississippi River near modern-day East St. Louis. A city of about 15,000, it approximated the size of London at the time. Farmers and hunters settled in the region around 600 CE, attracted by its rich soil, its woodlands for fuel and game, and its access to the trading artery of the Mississippi. Eventually, fields of maize and other crops fanned out toward the horizon. The hoe replaced the trusty digging stick, and satellite towns erected granaries to hold the increased yields.

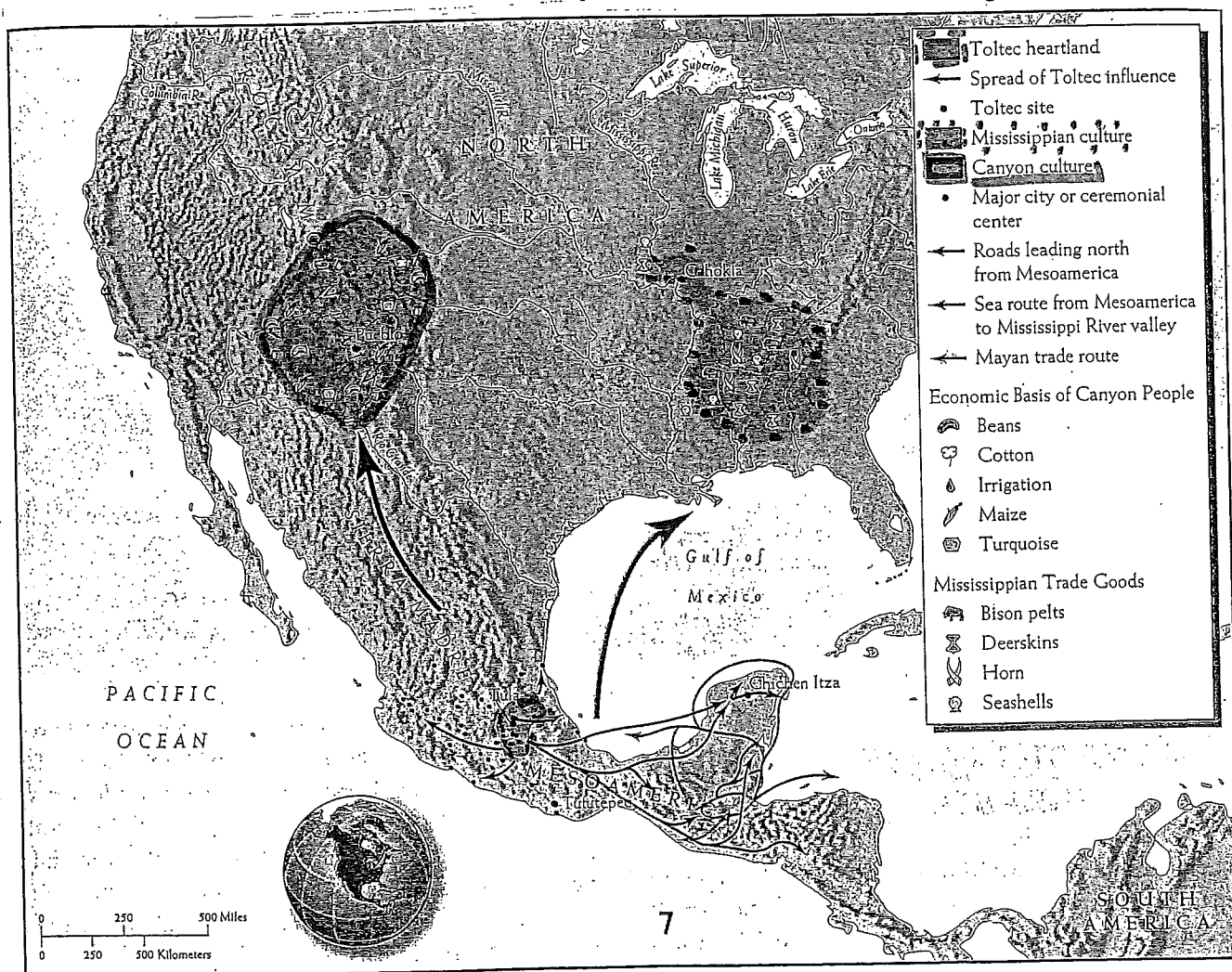
Now Cahokia became a commercial center for regional and long-distance trade. The hinterlands produced staples for Cahokia's urban consumers, and in return its crafts rode inland on the backs

of porters and to distant markets in canoes. The city's woven fabrics and ceramics were especially desirable. In exchange, traders brought mica from the Appalachian Mountains, seashells and sharks' teeth from the Gulf of Mexico, and copper from the upper Great Lakes. Cahokia became more than an importer and

exporter: it was the exchange hub for an entire regional network trading in salt, tools, pottery, woven stuffs, jewelry, and ceremonial goods.

Dominating Cahokia's urban landscape were enormous mounds (hence their nickname, "mound people"). These earthen monuments reveal a sophisticated design and careful maintenance: their builders applied layers of sand and clay to prevent the foundations from drying and cracking. It was from these artificial hills that the people paid homage to spiritual forces. Building this kind of infrastructure without draft animals, hydraulic tools, or even wheels was labor-intensive, so the Cahokians recruited neighboring people to help. A palisade around the city protected the metropolis from marauders.

Ultimately the city outgrew its environment, and its success bred its downfall. As woodlands fell to the axe and arable soil lost nutrients, timber and food became scarce. Because the city lacked a means to ship bulky items over long distances—in contrast to the sturdy dhows of the Arabian Sea and the bulky junks of the China Sea—its river canoes could carry only limited cargoes. Cahokia's commercial networks met their limits. When the creeks that fed its water system could not keep up with demand, engineers changed their course, but to no avail. By 1350 the city was practically empty. Nevertheless, Cahokia was a remarkable center of exchange while it lasted. It represented the growing networks of trade and migration, and the ability of North Americans to organize vibrant commercial societies.



TEN THOUSAND MOUNDS

Anyone who traveled up the Mississippi in 1100 A.D. would have seen it looming in the distance: a four-level earthen mound bigger than the Great Pyramid of Giza. Around it like echoes were as many as 120 smaller mounds, some topped by tall wooden palisades, which were in turn ringed by a network of irrigation and transportation canals; carefully located fields of maize; and hundreds of red-and-white-plastered wood homes with high-peaked, deeply thatched roofs like those on traditional Japanese farms. Located near the confluence of the Missouri, Illinois, and Mississippi Rivers, the Indian city of Cahokia was a busy port. Canoes fitted like hummingbirds across its waterfront traders bringing copper and mother-of-pearl from faraway places; hunting parties bringing such rare treats as buffalo and elk; emissaries and soldiers in long vessels bristling with weaponry; workers ferrying wood from upstream for the ever hungry cookfires; the ubiquitous fishers with their nets and clubs. Covering five square miles and housing at least fifteen thousand people, Cahokia was the biggest concentration of people north of the Rio Grande until the eighteenth century.

Away from the riverside, Cahokia was hardly less busy and imposing. Its focal point was the great mound—Monks Mound, it is now called, named after a group of monks who lived nearby in the eighteenth and nineteenth centuries. Around its sides rushed a flow of men, their body paint and tattoos obscured by dust from the hardened, brick-like mud that lay underneath the entire city. Some built new mounds or maintained the old; others hauled wood for fuel and houses or carried water in leather pouches or weeded the maize fields

Nobody knows what these people called themselves or which language they spoke. They were not "Cahokians"—that name, itself a linguistic garble, comes from an unrelated group that migrated to the area almost a thousand years later. Archaeologists are unlikely to find a better name, though.

To Jackie
Thanks for teaching
our children!

1491

*New Revelations of the Americas
Before Columbus*



CHARLES C. MANN

Charles C. Mann



VINTAGE BOOKS

THE RISE AND FALL OF THE AMERICAN BOTTOM

Cahokia was one big piece in the mosaic of chiefdoms that covered the lower half of the Mississippi and the Southeast at the end of the first millennium A.D. Known collectively as "Mississippian" cultures, these societies arose several centuries after the decline of the Hopewell culture, and probably were its distant descendants. At any one time a few larger polities dominated the dozens or scores of small chiefdoms. Cahokia, biggest of all, was preeminent from about 950 to about 1250 A.D. It was an anomaly: the greatest city north of the Río Grande, it was also the only city north of the Río Grande. Five times or more bigger than any other Mississippian chiefdom, Cahokia's population of at least fifteen thousand made it comparable in size to London, but on a landmass without Paris, Córdoba, or Rome.

Cahokia sat on the eastern side of the American Bottom. Most of the area has clayey soil that is hard to till and prone to floods. Cahokia was located next to the largest stretch of good farmland in the entire American Bottom. At its far edge, a forest of oak and hickory topped a line of bluffs. The area was little settled until as late as 600 A.D., when people trickled in and formed small villages, groups of a few hundred who planted gardens and boated up and down the Mississippi to other villages. As the millennium approached, the American Bottom had a resident population of several thousand. Then, without much apparent warning, there was, according to the archaeologist Timothy R. Pauketat of the University of Illinois at Urbana-Champaign, what has been called a "Big Bang"—a few decades of tumultuous change.

Cahokia's mounds emerged from the Big Bang, along with the East St. Louis mound complex a mile away (the second biggest, after Cahokia, though now mostly destroyed) and the St. Louis mounds just across the Mississippi (the fourth biggest). Monks Mound was the first and most grandiose of the construction projects. Its core is a slab of clay about 900 feet long, 650 feet wide, and more than 20 feet tall. From an engineering standpoint, clay should never be selected as the bearing material for a big earthen monument. Clay readily absorbs water, expanding as it does. The American Bottom clay, known as smectite clay, is especially prone to swelling: its volume can increase by a factor of eight. Drying, it shrinks back to its original dimensions. Over time the heaving will destroy whatever is built on top of it. The Cahokians' solution to this problem was discovered mainly by Woods, the University of Kansas archaeologist and geographer, who has spent two decades excavating Monks Mound.

To minimize instability, he told me, the Cahokians kept the slab at a constant moisture level: wet but not too wet. Moistening the clay was easy—capillary action will draw up water from the floodplain,

which has a high water table. The trick is to stop evaporation from drying out the top. In an impressive display of engineering savvy, the Cahokians encapsulated the slab, sealing it off from the air by wrapping it in thin, alternating layers of sand and clay. The sand acts as a shield for the slab. Water rises through the clay to meet it, but cannot proceed further because the sand is too loose for further capillary action. Nor can the water evaporate; the clay layers atop the sand press down and prevent air from coming in. In addition, the sand lets rainfall drain away from the mound, preventing it from swelling too much. The final result covered almost fifteen acres and was the largest earthen structure in the Western Hemisphere; though built out of unsuitable material in a floodplain, it has stood for a thousand years.

Because the slab had to stay moist, it must have been built and covered quickly, a task requiring a big workforce. Evidence suggests

that people moved from miles around to the American Bottom to be part of the project. If the ideas of Pauketat, the University of Illinois archaeologist, are correct, the immigrants probably came to regret their decision to move. To his way of thinking, the Big Bang occurred after a single ambitious person seized power, perhaps in a coup. Although his reign may have begun idealistically, Cahokia quickly became an autocracy: *in an Ozymandias extension of his ego*, the supreme leader set in motion the construction projects. Loy- alists forced immigrants to join the labor squads, maintaining control with the occasional massacre. Burials show the growing power of the elite: in a small mound half a mile south of Monks Mound, archaeologists in the late 1960s uncovered six high-status people interred with shell beads, copper ornaments, mica artworks—and the sacrificed bodies of more than a hundred retainers. Among them were fifty young women who had been buried alive.

Woods disagrees with what he calls the "proto-Stalinist work camp" scenario. Nobody was *forced* to erect Monks Mound, he says. Despite the intermittent displays of coercion, he says, Cahokians put it up "because they wanted to." They "were proud to be part of these symbols of community identity." Monks Mound and its fellows were, in part, a shout-out to the world—Look at us! We're doing something different! It was also the construction of a landscape of sacred power, built in an atmosphere of ecstatic religious celebration. The American Bottom, in this scenario, was the site of one of the world's most spectacular tent revivals. Equally important, Woods says, the mound city was in large part an outgrowth of the community's previous adoption of maize.

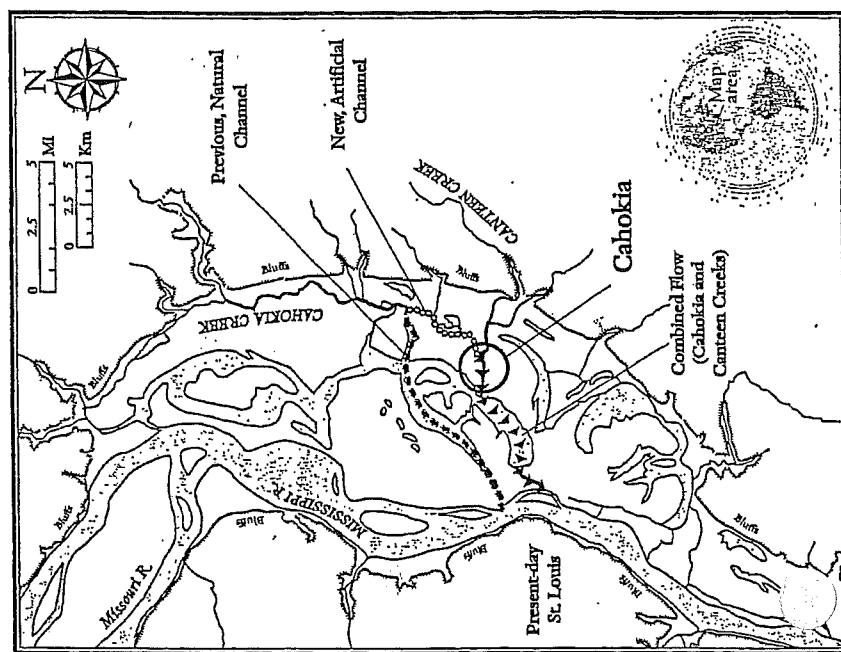
Before Cahokia's rise, people were slowly hunting the local deer and bison populations to extinction. The crops in the Eastern Agricultural Complex could not readily make up the difference. Among other problems, most had small seeds—imagine trying to feed a family on sesame seeds, and you have some idea of what it would have been like to subsist on maygrass. Maize had been available since the first century B.C. (It would have arrived sooner, but Indians had to breed landraces that could tolerate the cooler weather, shorter growing seasons, and longer summer days of the north.) The Hopewell, however, almost ignored it. Somewhere around 800 A.D. their hungry successors took another look at the crop and liked what they saw. The

American Bottom, with its plenitude of easily cleared, maize-suitable land, was one of the best places to grow it for a considerable distance. The newcomers needed to store their harvests for the winter, a task most efficiently accomplished with a communal granary. The granary needed to be supervised—an invitation to develop centralized power. Growth happened fast and may well have been hurried along by a charismatic leader, Woods said, but something like Cahokia probably would have happened anyway.

Maize also played a role in the city's disintegration. Cahokia repulsed the first time Indians north of the Río Grande had tried to feed and shelter fifteen thousand people in one place, and they made beginner's mistakes. To obtain fuel and construction material and to grow food, they cleared trees and vegetation from the bluffs to the east and planted every inch of arable land. Because the city's numbers kept increasing, the forest could not return. Instead people kept moving further out to get timber, which then had to be carried considerable distances. Having no beasts of burden, the Cahokians themselves had to do all the carrying. Meanwhile, Woods told me, the city began stripping its water supply, a "somewhat wimpy" tributary called Canteen Creek. To solve both of these problems at once, the Cahokians apparently changed its course, which had consequences that they cannot have anticipated.

Nowadays Cahokia Creek, which flows from the north, and Canteen Creek, which flows from the east, join together at a point about a quarter mile northeast of Monks Mound. On its way to the Mississippi, the combined river then wanders, quite conveniently, within two hundred yards of the central plaza. Originally, though, the smaller Canteen Creek alone occupied that channel. Cahokia Creek drained into a lake to the northwest, then went straight to the Mississippi, bypassing Cahokia altogether. Sometime between 1100 and 1200 A.D., according to Woods's as-yet unpublished research, Cahokia Creek split in two. One fork continued as before, but the second, larger fork dumped into Canteen Creek. The combined river provided much more water to the city—it was about seventy feet wide. And it also let woodcutters upstream send logs almost to Monks Mound. A natural inference, to Woods's way of thinking, is that the city, in a major public works project, "intentionally diverted" Cahokia Creek.

In summer, heavy rains lash the Mississippi Valley. With the tree cover stripped from the uplands, rainfall would have sluiced faster and heavier into the creeks, increasing the chance of floods and mudslides. Because the now-combined Cahokia and Canteen Creeks carried much more water than had Canteen Creek alone, washouts would have spread more widely across the American Bottom than would have been the case if the rivers had been left alone. Beginning in about 1200 A.D., according to Woods, Cahokia's maize fields repeatedly flooded, destroying the harvests.



THE AMERICAN BOTTOM, 1300 A.D.

There is little indication that the Cahokia floods killed anyone, or even led to widespread hunger. Nonetheless, the string of woes provoked a crisis of legitimacy. Unable to muster the commanding vitality of their predecessors, the priestly leadership responded ineffectively, even counterproductively. Even as the flooding increased, it directed the construction of a massive, two-mile-long palisade around the central monuments, complete with bastions, shielded entryways, and (maybe) a catwalk up top. The wall was built in such a brain-frenzied hurry that it cut right through some commoners' houses.

Cahokia being the biggest city around, it seems unlikely that the palisade was needed to deter enemy attack (in the event, none materialized). Instead it was probably created to separate elite from hoi polloi, with the goal of emphasizing the priestly rulers' separate, superior, socially critical connection to the divine. At the same time the palisade was also intended to welcome the citizenry—anyone could freely pass through its dozen or so wide gates. Constructed at enormous cost, this porous architectural folly consumed twenty thousand trees.

More consequential, the elite revamped Monks Mound. By extending a low platform from one side, they created a stage for priests to perform ceremonies in full view of the public. According to Woods's acoustic simulations, every word should have been audible below, lifting the veil of secrecy. It was the Cahokian equivalent of the Reformation, except that the Church imposed it on itself. At the same time, the nobles hedged their bets. Cahokia's rulers tried to bolster their position by building even bigger houses and flaunting even more luxury goods like fancy pottery and jewelry made from exotic semiprecious stones.

It did no good. A catastrophic earthquake razed Cahokia in the beginning of the thirteenth century, knocking down the entire western side of Monks Mound. In 1811 and 1812 the largest earthquakes in U.S. history abruptly lifted or lowered much of the central Mississippi Valley by as much as twelve feet. The Cahokia earthquake, caused by the same fault, was of similar magnitude. It must have splintered many of the city's wood-and-plaster buildings; fallen torches and scattered cooking fires would have ignited the debris, burning down most surviving structures. Water from the rivers, shaken by the quake, would have sloshed onto the land in a mini-tsunami.

Already reeling from the floods, Cahokia never recovered from the earthquake. Its rulers rebuilt Monks Mound, but the poorly engineered patch promptly sagged. Meanwhile the social unrest turned violent; many houses went up in flames. "There was a civil war," Woods said. "Fighting in the streets. The whole polity turned in on itself and tore itself apart."

For all their energy, Cahokia's rulers made a terrible mistake: they did not attempt to fix the problem directly. True, the task would not have been easy. Trees cannot be replaced with a snap of the fingers. Nor could Cahokia Creek readily be reinstalled in its original location. "Once the water starts flowing in the new channel," Woods said, "it is almost impossible to put it back in the old as the new channel rapidly downcuts and establishes itself."

Given Cahokia's engineering expertise, though, solutions were within reach: terracing hillsides, diking rivers, even moving Cahokia. Like all too many dictators, Cahokia's rulers focused on maintaining their hold over the people, paying little attention to external reality. By 1350 A.D. the city was almost empty. Never again would such a large Indian community exist north of Mexico.

Directions: Prepare for a graded discussion on the following questions. This is a discussion graded on SPARC, transitioning and answering the question. You will then have a quiz on Japan, Cahokia and the Anasazi.

Topics:

- Japan
- Anasazi
- Cahokia

Sub-topics: (only for question #4)

- Mongols
- Europe
- Islamic World
- Ghana

Sources:

- Strayer, Ways of the World. Anasazi (pages 286-288) or Cahokia (pages 288-289))
- Mann, Chales, 1491.
- ABC-CLIO
- *OPTIONAL*: Diamond, Jared. Collapse

Discussion Questions

1. Explain how the region you studied is a highly specialized region? (e.g. has jobs, specialties, complex structures.)
2. To what extent does geography determine the development of the civilization? (think social, political, and economic)
3. What is the function of politics and religion in maintaining legitimacy, unity and hegemony?
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