

Cahokia: Capital of the Mississippi Valley

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Located near the confluence of three major rivers, the site of Cahokia Mounds (Fig.1) is situated in the center of a major trade network operating throughout the North American continent. At its height in the early 2nd Millennium, Cahokia boasted a population larger than London and an even larger sphere of influence. Despite the site's current state, with an interstate and a highway running through the grounds and erosion eating at Monk's Mound, Cahokia was once a seat of power in the Pre-Columbian



Figure 1: Artist's Rendition of Cahokia Mounds

landscape. The city's power and wealth are visible throughout the site and is especially legible in Cahokia's earthworks and built environment. Using metaphorical design and architectural archetypes seen throughout the world, Cahokia Mounds establishes its status as a capital of pre-Columbian North America.

In order to understand the designed landscape and architecture, one must know of the culture and history of the people who designed and constructed. The name Cahokia comes from the Illinois Confederacy tribe of the same name who controlled the region when French explorers arrived in the early 18th Century¹. The city of Cahokia was built for the people of the Mississippian Culture around the year 800 BCE. These peoples lived throughout the eastern United States, from the modern-day state of Georgia to the northern states of Minnesota and Wisconsin. These peoples are known for their large earthworks, seen not only in the city of Cahokia, but also at Poverty Point in Louisiana, Serpent's Mound in Ohio, and the Grand Village in Mississippi².

¹ White, A.J., Samuel E. Munoz, Sissel Schroeder, and Lora R. Stevens. "After Cahokia: Indigenous Repopulation and Depopulation of the Horseshoe Lake Watershed AD 1400–1900." *American Antiquity*, n.d., 1–16. doi:10.1017/aaq.2019.103.

² Upton, Dell. *American Architecture: A Thematic History*. New York: Oxford University Press, 2020.

With the Mississippian culture dispersing throughout the region in the 1500s, due in part to European contact, warfare and population movement, not much is known about the culture itself. However, one discovery in Cahokia shows a unique facet of Mississippian culture: copper metallurgy. Unlike most civilizations in pre-Columbian North Americans, the Mississippian's exploited the precious metal of copper to create masks, jewelry, and religious icons³.



Figure 2: Greater Braden Style Copper

Located near Mound 34 on the Cahokia site, three tree stumps were found that would have held anvils for working copper pieces. Found pieces of copper-works were designed in a style known as the Greater Braden Style (Fig. 2) and can be found in other sites spread throughout the Mississippian sphere and as far as the modern state of Georgia⁴. This indicates an advanced trade network throughout the North American continent prior to the Columbian Exchange.

Another important cultural aspect of Cahokia is its mounds. These mounds act as burial sites for the residents and show another important distinction in the culture of Mississippian Cahokia: social class. This expression of hierarchy can be seen at the burial at Mound 72, where a 40-year-old man was buried with cache of jewelry. Also buried with the man were several sacrificed men and women with notable health issues⁵. These disparities between the buried group shows both the hierarchical differences in Mississippian society, as well as the common use of sacrifice at Cahokia.

³ Kelly, John E., Lucretia S. Kelly, James Brown. February 2009. *Summary of 2008 Field Excavations to Locate the Copper Workshop in the Mound 34 Area*. Cahokia Mounds Historical Society.
https://web.archive.org/web/20120515063851/http://cahokiamounds.org/explore/mound34_report2008.pdf.

⁴ Kelly, 2009.

⁵ Ambrose, Stanley H., Jane Buikstra, and Harold W. Krueger. 2003. "Status and Gender Differences in Diet at Mound 72, Cahokia, Revealed by Isotopic Analysis of Bone". *Journal of Anthropological Archaeology* 22 (3): 217-226.
doi:10.1016/s0278-4165(03)00036-9.

These facets of Mississippian life at Cahokia give evidence of the presence of a governing state. According to Patricia O'Brien of Kansas State University, four facets of culture indict the presence of a "state":

1. a monopoly of the threat of the use of legitimate force
2. the presence of political-economic class
3. the presence of a hierarchical bureaucracy
4. the presence of hierarchical decision-making⁶

All four of these indicators exist in the burial at Mound 72 and throughout the Cahokia site. The amount of 250 sacrificial bodies found at Mound 72 alone indicate the common use of sacrifice, which could indicate its use as a control mechanism over another class of people. O'Brien cites Shang China as an example of sacrifice as a control mechanism. Hierarchy and social class are indicated by the elaborate burials of elite men and women, such as the man at Mound 72 and other elite burials around the site⁷.

Hierarchical bureaucracy can also be indicated in the planning of Cahokia's city and surrounding settlements. Cahokia has a three-level hierarchy in its planning, and this rank is indicated by the number of mounds that exist. In the first rank is Cahokia proper, where Monks Mound, Mound 72 (elite burial), and Mound 34 (featuring the copper works) are located, as well as numerous other landmarks. Cahokia proper also has over 100 mounds, and archaeological remains indicate the highest trafficked settlement⁸. The second ranked settlement is what's known as the "Metro" area, located in modern day East Saint Louis and is entirely buried by the city. This area has a little under half the number of mounds, with the count at 45 mounds. The

⁶ O'Brien, Patricia J. 1990. "Cahokia: The Political Capital of the "Ramey" State?". *North American Archaeologist* 10 (4): 275-292. doi:10.2190/rdk3-qffn-mpj9-wtek.

⁷ O'Brien, 1990.

⁸ O'Brien, 1990.

third is known as the “Saint Louis” area, located in Saint Louis proper and the surrounding municipalities, also buried under the modern city, with only roughly a third of the mounds at 27 totals. The tiers keep going down throughout the area, going as far as a fifth tier, such as the one-mound sites of Lohman or McDonough Lake⁹. Cahokia’s sprawl indicates something apparent in modern cities: sprawl. Considering the projected population of Cahokia at its height in the 12th Century, with the estimate at around 40,000 people¹⁰, sprawl would occur with the areas being more urban or rural depending on proximity to Cahokia’s center.

With such a large population, sprawl, and organization, it begs the question of why it exists in the first place, as large cities in pre-Columbian North America are rarer than they are in Central or South America. As said before, the Mississippian culture was spread across the eastern part of the continent. A key aspect of the site of Cahokia (as well as modern day Saint Louis) is the confluence occurrences on the Mississippi River with two major rivers: the Illinois River, which flows from Lake Michigan near modern day Chicago, and the Missouri River, which begins far to the northwest in modern day Montana. This gives the Cahokian city a distant reach not only into the Mississippian heartland, but also through the plains and the foothills of the Rocky Mountains, as well as to distant parts of Canada via the Great Lakes. This would explain how the Greater Braden Style copper pieces have been found all over the North American continent¹¹, and could make the argument that Cahokia was an economic and political center.

⁹ O’Brien, 1990.

¹⁰ Benson, Larry V., Timothy R. Pauketat, and Edward R. Cook. 2009. "Cahokia's Boom and Bust in The Context of Climate Change". *American Antiquity* 74 (3): 467-483. doi:10.1017/s000273160004871x.

¹¹ Kelly, John E., Lucretia S. Kelly, James Brown. February 2009. *Summary of 2008 Field Excavations to Locate the Copper Workshop in the Mound 34 Area*. Cahokia Mounds Historical Society.
https://web.archive.org/web/20120515063851/http://cahokiamounds.org/explore/mound34_report2008.pdf.

Using landscape design, urban design, and archetypes, Cahokia shows its status as a political-economic center through its built environment. As mentioned before, Cahokia has three, distinctive zones. However, visual analysis can only occur effectively in the primary zone, Cahokia proper, due to the burial or destruction of landmarks at the second and third tier zones. Considering the amount of traffic and the scale of the earthworks compared to the outlying areas, much can still be learned from archaeological remains and by analyzing the locations of important landmarks.

Looking at the landmarks map, the layout of plaza's implies an axial plan style, with the largest mound, Monk's Mound, as the central point flanked by four plazas on each side. Monk's Mound and the grand plaza to the south are bordered with a wooden wall, creating an enclosed central node, with a main axial road running east to west (Fig. 3)¹². The axial road would work much in the same way as the *decumanus maximus* would work in a Roman kit city, connecting the many of the city's main functions on an east/west axis. For example, in the

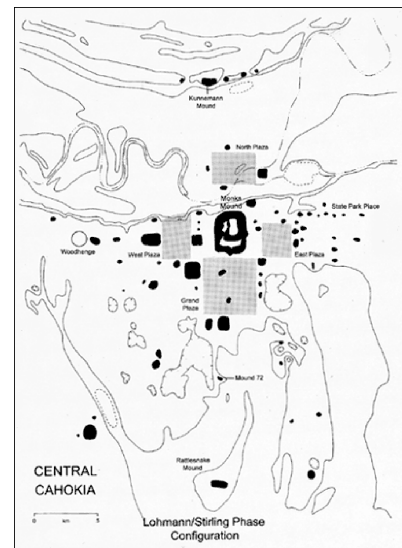


Figure 3: Central Cahokia Site

Timgad city site in Algeria, the public forum and marketplaces sit right on the main axial road¹³. Another example of axial urban planning would be another major Pre-Columbian urban center in modern day Mexico, Teotihuacan. It's Avenue of the Dead, which is the north/south axial connection of numerous stone pyramids. In the case of Cahokia, the main east/west axial road

¹² Chappell, Sally A. Kitt. *Cahokia: Mirror of the Cosmos*. Chicago, IL: University of Chicago Press, 2004.

¹³ UNESCO Centre. "Timgad". *Whc.Unesco.Org*, 2020, <https://whc.unesco.org/en/list/194>.

connects Monk's Mound and the Grand Plaza to the east and west plazas, numerous homes, as well as the site of a Woodhenge.

The Woodhenge shows the advanced celestial knowledge of the Pre-Columbian world, and specifically the Mississippian people. Consisting of one central mast, surrounded by 48 poles in a 410-foot diameter, this instrument would've been used to identify the solstices of winter and summer. What a visitor would see today is a reconstruction, however, archaeologist and anthropologists have constructed the Woodhenge system based on site excavations, native trees, and used tools and practices identical to what would've been used¹⁴. The reconstruction methods used provides an authentic example of what would have been there.

Furthermore, analysis of the urban layout and mounds shows the placement of several mounds and other important city functions along where solstice and equinox solar movements occur (Fig. 4). For example, Mounds 58 and 48 are aligned to the Winter Solstice Sunset, while Mounds 18 and 3 are aligned to the Summer Solstice Sunrise, while Mounds 18 and 3 are aligned to the Summer Solstice. The previously mentioned main axial road is perfectly aligned to the Equinox sunset and sunrise (Fig. 4)¹⁵.

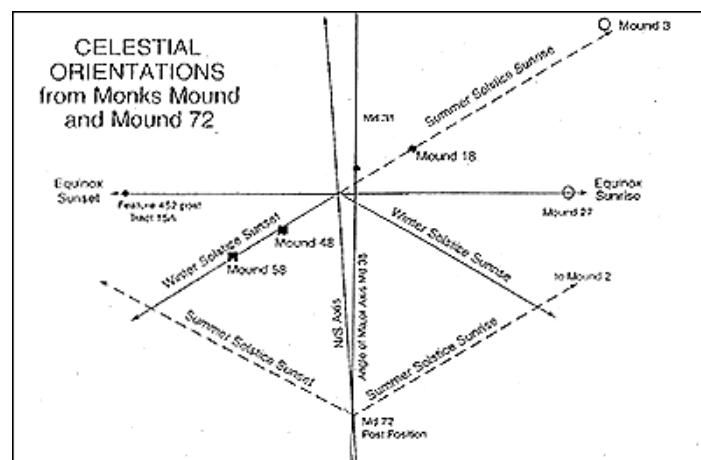


Figure 4: Celestial Orientations

¹⁴ Bryden-Wasoba, Megan E., and William R. Iseminger. "The American Woodhenge." *Central States Archaeological Journal*, vol. 63, no. 4, 2016, pp. 189–193. *JSTOR*, www.jstor.org/stable/44715259. Accessed 3 May 2020.

¹⁵ Chappell, Sally A. Kitt. *Cahokia: Mirror of the Cosmos*. Chicago, IL: University of Chicago Press, 2004.

Once again looking at the classical Mesoamerican city of Teotihuacan, the city is oriented on a north/south axis. However, where Cahokia used their orientation as a sort of calendar through solar solstices and equinoxes, Teotihuacan would use it to mark star movements, such as Sirius and the Pleiades (called *Ytianquiztle*, or “rattle of rattlesnakes” by the Teotihuacáanos)¹⁶. Looking at both Cahokia and Teotihuacan, celestial orientations and the cosmos played a vital role in the Teotihuacán and Mississippian cultures and their city planning in the Pre-Columbian Americas.

Cahokia’s mounds are the only original remaining super structures from the city, and the tallest mound, Monk’s Mound, is still a site to behold. The largest platform mound in North America, the mound rises to 98.8 feet and occupies more than 14 acres of land¹⁷. Monk’s Mound contains four terraces at different elevations:

Terrace 1: Southernmost terrace, approximately 39 feet tall. Connects to the
Grand Plaza and axial main road by stairs.

Terrace 2: Remains of a slope failure from the 1200-1300s CE

Terrace 3: Highest Terrace on the northeast corner of Monk’s Mound. Connects
to Terrace 1 by stair¹⁸.

Terrace 4: Northernmost terrace, sits approximately 3 feet above Terrace 1.

Out of these four terraces, Terraces 1 and 3 are thought to have previously featured constructed buildings¹⁹.

¹⁶ Dow, James W. “Astronomical Orientations at Teotihuacan, A Case Study in Astro-Archaeology.” *American Antiquity*, vol. 32, no. 3, 1967, pp. 326–334. *JSTOR*, www.jstor.org/stable/2694661. Accessed 3 May 2020.

¹⁷ Schilling, Timothy. "Building Monks Mound, Cahokia, Illinois, A.D. 800–1400." *Journal of Field Archaeology* 37, no. 4 (2012): 302-13. Accessed February 6, 2020. www.jstor.org/stable/24408530.

¹⁸ Schilling, 2012.

¹⁹ Schilling, 2012.

Given the fact that Monk's Mound is the largest platform mound in North America, has stood since the 11th Century, and is incredibly advanced for time period and the tools used, it begs the question, what is the significance of mounds in Mississippian Culture? Accord to James Vernon Knight, mounds were important symbols that “*possess symbolic associations with autochthony, the underworld, birth, fertility, [and] death...*”²⁰. In short, the Mississippian platform mound acted in a similar way that the Ziggurat of Ur or the Pyramids of Giza function: to connect the overworld, middle world, and underworld; a tangible connection to the heavens and to create an axis mundi in their celestially aligned city.



Figure 5: Monk's Mound

Visiting the site of Cahokia mounds in the modern day still creates the same experience the Mississippian people would've experienced (Fig. 5). While on a flat plan rise the majestic mounds, almost as if a heavenly being extruded the forms by pinching and pulling the ground. Susan Chappell describes the landscape and architectural experience using one word: mass²¹. As Chappell puts it,

*“Mass, which gives scale and proportion to experience, also provides the dimension of height at Cahokia. Climbing a gradual slope tunes up the body... the senses become more acute. A visitor not only experiences Cahokia through sight and a physical reaction”*²².

²⁰ Knight, Vernon James. “Symbolism of Mississippian Mounds.” *Powhatan's Mantle: Indians in the Colonial Southeast, Revised and Expanded Edition*, edited by Gregory A. Waselkov et al., University of Nebraska Press, LINCOLN; LONDON, 2006, pp. 421–434. *JSTOR*, www.jstor.org/stable/j.ctt1djmhnk.19. Accessed 4 May 2020.

²¹ Chappell, Sally A. Kitt. "Cahokia: The Symbolic Language of Landscape Architecture." *Landscape Architecture* 93, no. 5 (2003): 28-34. Accessed February 6, 2020. www.jstor.org/stable/44675344.

²² Chappell, 2003.

With evidence of celestial alignment and orientation, as well as the mounds heavenly scale, Cahokia represents what the Mississippian people would've imagined their ideal existence to be, same as the Islamic empires constructed pleasure gardens. One could imagine the celebrations that would occur in the plazas and the majesty of rulers or priests as they ascend Monk's Mound. This capital of Pre-Columbian North America displays its majesty and power not just through its copperworks and grand burials, but through its landscape design and earthworks.

Figures

Figure No. 1: Artist's Rendition of Cahokia from Above

Source: <https://press.uchicago.edu/Misc/Chicago/101363.html>

Figure No. 2: Examples of Greater Braden Style Cooper Plates

Source: www.chromesun.com

Figure No. 3: Central Cahokia Site, Lohmann/Stirling Phase Configuration

Source: <https://press.uchicago.edu/Misc/Chicago/101363.html>

Figure No. 4: Celestial Orientations

Source: <https://press.uchicago.edu/Misc/Chicago/101363.html>

Figure No. 5: Monk's Mound

Source: Personal visit, January 1, 2020

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