1.2: The Paleo-Indian Era Through the Agricultural Revolution

This earliest period, from the time that humans entered the Americas until about 8,000 BCE, is known as the Paleo-Indian period. During this time, humans spread throughout the Western hemisphere, supporting themselves with similar subsistence patterns and technologies. PaleoIndians, including the Clovis culture, were nomadic hunter/gatherers. They moved as frequently as once or twice a week, hunting the big game of the Paleolithic: the megafauna. As previously noted, well-known animals such as the mammoth and mastodon were included among the megafauna. Other North American megafauna included less well-known animals, such as the short-faced bear, and giant versions of animals such as sloth, moose, and beaver. Paleo-Indian technology included knapped, or chipped, stone tools such as scrapers, knives, and projectile points, such as the Clovis point. Throughout the Paleo-Indian era, the spear was the most common weapon. At first, humans used spears as thrusting weapons, which of course required very close range between the hunter and game, a dangerous prospect at best. Sometime during the Paleo-Indian era, humans developed new kinds of technology, including a lighter throwing spear and an implement to propel this spear much farther: the atlatl. The atlatl, or spear thrower, was one of the most important items in the late Paleo-Indian tool kit. It was a long, thin piece of wood with a notch at the end. This notch was designed to receive the end of a spear. The atlatl acted as an extension of the throwing arm, enabling the spear thrower to greatly increase the speed and range of the cast.

Paleo-Indians probably lived in groups that anthropologists call “bands,” small groups of related individuals, typically no bigger than 100-150 people. This set-up allowed a simple leadership structure, probably with one individual at the head of the group, to be an effective means of control. It also allowed for easy mobility. In terms of possessions, hunter/gatherers such as Paleo-Indians lived with only easily transportable and reproducible possessions. One of the greatest problems of living in such a small group, however, was finding a suitable mate. Anthropologists theorize that regional Paleo-Indian groups came together yearly in the summer months to celebrate religious rituals, exchange news, and trade women to ensure genetic diversity amongst their groups.
Everything that we know about humans in the Americas from these early eras comes from the archaeological record. Perhaps the most famous PaleoIndian site is the Blackwater Draw site near Clovis, New Mexico. Blackwater Draw is the archaeological site where the large, leaf-shaped Clovis points were first identified. As many Clovis period sites were excavated in the midtwentieth century, Clovis points came to be one of the defining artifacts for the Paleo-Indian era in North America, and anthropologists came to regard the Clovis culture as the first firmly established proof of human presence in the Americas. The “Clovis First” hypothesis held sway throughout much of the rest of the century, calling archaeological evidence that dated older than about 10,000 BCE unreliable. However, as more and more sites have produced reliable older dates and the coastal migration theory became more widely accepted, the Clovis First movement has lost favor.

One of the sites that first seriously challenged the Clovis First idea was the Monte Verde site in Chile, which consistently produced well-documented dates at and around 14,800-13,800 BP (12,800-11,800 BCE). Archaeological remains at this site include the evidence of wood and hide shelters, claylined fire pits, and dozens of plant materials used in the Paleo-Indian diet, a use supported by the appearance of coprolites, or fossilized human feces. Perhaps the most fascinating artifact from the Monte Verde site is a child’s footprint, preserved in the soft clay surrounding a fire pit.

The Vero Man site, located outside of Vero Beach, Florida, is one of the few sites where human bones have been found alongside megafauna bones, including bison, mastodon, giant sloth, dire wolf, llama, and camel. More gracile, modern animals such as deer remains were also unearthed at the Vero Man site. The site dates roughly around 12,000-14,000 BP. In 2009, a bone with a carving of a mammoth on it was found; testing dates the bone to sometime between 13,000-20,000 BP. This artifact probably represents the oldest artwork ever found in the Americas.

1.3.1: The Archaic and Woodland Periods

From 8,000-7,000 BCE, the Earth’s climate began to warm, and the North American environment changed. Paleo-Indians adapted to the world around them, learning to rely more and more on a diet rich in plant materials, and hunting smaller game such as bison as the megafauna began to die out. In this way, they began to more closely resemble...
typical hunter/gatherers, whose diet relies up to 90 percent on gathered food rather than on meat. Over the next 6,000-7,000 years, native cultures developed and diversified during the Archaic and the Woodland periods, 8,000-1,000 BCE and 1,000 BCE -1,000 CE respectively. During this era, the peoples of the Americas also began to domesticate plants, leading to one of the most important transformations in human history: the development of agriculture, known as the agricultural revolution.

In the Americas, the agricultural revolution began in Mesoamerica, the area between Central Mexico and Honduras. The process of domestication began some 10,000 years ago in Oaxaca, Mexico, when people began to tend squash plants in order to use the squash as containers. Eventually, more tender forms of squash became a food source. Following the domestication of beans at around 6,000 BP, Mesoamerican peoples began to become more sedentary. Finally, maize (or corn) was domesticated sometime around 5500 BP. Corn as we know it today originated as a wild grass called teosinte. Over thousands of years, the tiny teosinte seed pod, measuring about 4 cm long, was transformed though cultivation into much larger, nutritionally rich ears of corn. The domestication of maize completed the Mesoamerican triad, the three staple crops of the Americas. Native American agriculturalists all over the hemisphere grew corn, beans, and squash as the principal foods of their diet until many years after European contact. This combination proved ideally suited in several ways; first, the three foods grew well together. The corn grew tall and provided a “pole” for the beans to vine around and grow up, and the large squash leaves provided shade that retained moisture and inhibited the growth of weeds. Corn strips great quantities of nitrogen from the soil as it grows; beans are “nitrogen fixers” which put nitrogen back into the soil. From a dietary standpoint, the Mesoamerican triad provides an ideal diet, as long as the corn is processed in an alkaline solution. In Mesoamerica, this process involved soaking the corn kernels in a mixture of lime (calcium hydroxide, not the fruit) and ash. Processing the corn in this way unlocks certain proteins from the corn’s endosperm, which allows the human body to digest it.
Agricultural knowledge and techniques spread from the region of Mesoamerica throughout the temperate parts of the Western hemisphere in a process called diffusion. Although corn and beans probably came from Mesoamerica, the eastern portions of North America might also have been an independent center of plant domestication; cultigens important to the regional diet, such as marshelder, chenopod, squash, and sunflower, appear to have been domesticated first in this region.

One of the most famous Archaic period sites is the Windover site near Titusville, Florida. Windover was a burial site, dated 6,000-5,000 BCE. Individuals were wrapped in a textile and interred in the mucky bottom of a pond. The bog-like conditions of the pond helped to preserve the skeletons and grave goods, artifacts buried with the deceased, such as atlatls and projectile points. Of the 168 individuals excavated at Windover, 90 had preserved brain matter: the oldest preserved human brains. Several of the brains recovered at Windover have been DNA sequenced.

The Head-Smashed-In buffalo jump site in Alberta, Canada first came into use at about 5,700 years ago. Archaic humans used it as a kill site, driving herds of buffalo and bison off of a 35 foot cliff, seriously injuring or killing the game. The bodies would then be drug to a nearby campsite and processed. The site remained in use for thousands of years, into the historic period, when Blackfoot, dressed as coyote and wolves, would drive buffalo along established “drive lanes” to the cliff. Excavations at Head-SmashedIn have unearthed a deposit of skeletons, primarily of buffalo and bison, measuring more than 10 meters (33 feet) deep.

The Poverty Point site in Louisiana (1650-700 BCE) is an important bridge between the Archaic and Woodland periods because it was one of the earliest sites to develop technologies and characteristics that came to define the Woodland period, including the development of pottery and manmade earthworks. Poverty Point has yielded some of the earliest known pottery in North America. Poverty Point is also important because it offers evidence of complex, far-reaching trade networks. Artifacts at the site, including shell, copper, and stone such as red jasper, came from all over the southeastern region. These materials would then be worked into finished, value-added objects and traded out again. Finally, Poverty Point is one of the first sites to exhibit evidence of monumental earthworks and a complex residential settlement, features that would come to define later peoples in the Southeast.

1.3.2: Early Agriculturalists in the Southeast and Southwest: The Mississippian and the Anasazi

The Southeastern portion of North America was an early agricultural center of development. This development fostered the growth of a large, long-lasting, and influential culture known as the Mississippian (ca. 500- 1400 CE). This culture originated in the Mississippi River Valley and spread out to encompass an area which spread all the way to the lower Great Lakes region to the north, the Carolinas to the east, and northern Florida to the south. This culture emerged from the late Woodland Period as agriculturalists that practiced large-scale, corn-based agriculture. The excess agricultural product allowed them to support a dense population with a large group of specialized artisans.
Politically, Mississippian peoples were organized as a chiefdom, a hierarchy of chiefs that pledged allegiance to the leader of the most important group. Within the chiefdom existed a high level of social stratification, with a noble class at the top. Socially, the Mississippian peoples appear to have practiced matrilineal descent patterns. In matrilineal descent, familial relations focus on the mother’s family, with property, status, and clan affiliation being conferred through the female line. A person’s most important relations were his mother’s parents and siblings. The father’s relations were relatively unimportant. Boys looked to their mother’s brother as an important male figure rather than to their father, and uncles passed political power and possessions to their nephews and maternal relatives rather than to their sons. This system’s main advantage is that descent and clan affiliation was beyond a doubt; a child’s paternity can be uncertain, but a clan can be sure of a child’s maternity. Matrilineality is relatively common among indigenous peoples of North America, and came to be commonplace among Southeastern peoples.

The religion of the Mississippian peoples is known as the Southeastern Ceremonial Complex. Important religious symbols for the culture included a snake (sometimes depicted as a horned serpent), a cross in circle motif, and Birdman, a warrior/falcon hybrid. These symbols were closely related to not only cosmology, but also the elite and warriors, giving the religion a socio-political aspect that reinforced the social status and authority of the elite—including the high chieftain, his lesser chiefs, and the priests of the cult. These symbols, along with a host of others, appeared multitudinously on a variety of artifacts such as cups and shell gorgets, a type of pendant. Archaeological evidence strongly indicates that only the elite were able to possess these objects, which may have been sacred and therefore viewed as powerful. Additionally, evidence suggests an exchange network of these sacred objects existed among the elite of the Mississippian peoples, fostering not only political alliances, but also trade. Objects inscribed with symbols associated with the Southeastern Ceremonial Complex may have been produced by only a handful of artists; excavation of sites in Missouri and Oklahoma have turned up artifacts so similar that some archaeologists believe the same artist produced them. These sacred objects were buried as grave goods with their owners, indicating the status and power they carried into the afterlife.
One key feature of the Mississippian culture was that they were mound builders. They produced thousands of earthworks used in a variety of manners. Some earthworks were burial mounds for the elite. The chief, his family, and perhaps other members of the elite lived atop some of the mounds. Finally, some of the largest mounds appear to have been centers of worship. The largest and most important towns of the chiefdoms contained the greatest number of mounds.

Some of these chiefdoms produced large and complex settlements that rivaled and surpassed contemporary European cities. The largest and most important of these was Cahokia (ca 600-1400 CE) in southwestern Illinois, located just across the Mississippi River from St. Louis, Missouri. Cahokia was a walled complex made up of 120 mounds that housed perhaps as many as 30,000 people, making it a very large city for its day. Community plazas were located throughout the complex. A woodhenge was built for astrological observations; poles in the henge were marked to indicate the sun’s rising point on the solstices and equinoxes. Cahokia’s mounds took tremendous effort to build; laborers moved about 55 million cubic feet of earth in construction. The largest of the mounds, today called Monk’s Mound, is approximately ten stories high and covers an area of 13.8 acres at the base. The top of the mound, the focal point of the city, housed a huge structure that may either have been a temple or the residence of the paramount chief of the Cahokia chiefdom.

Cahokia came to power in part because of its location near the confluence of the Mississippi, Illinois, and Missouri Rivers. This confluence allowed the chiefdom to control much of the regional trade, giving them access to a great variety of trade items from many regions. Cahokia participated in trade networks stretching as far as the Great Lakes to the north and the Gulf Coast to the south. Cahokia began to decline around 1300 CE and slowly dwindled in size and importance. Scholars have speculated that overhunting, deforestation, and the rise of the Moundville center in Alabama contributed to Cahokia’s demise.

1.3.3: The Anasazi

Like the Mississippians, peoples of the southwestern region were also generally agriculturalists, supporting themselves by growing the Mesoamerican triad. One of the earliest Southwest groups was the Anasazi, who emerged in the Four Corners area of the modern United States (Colorado, Utah, Arizona, and New Mexico) around 700-1300 CE. They are also known as Ancient Puebloans because they are ancestors of the modern Pueblo peoples. The Anasazi grew and stored corn, a practice leading them to build large, complex, and beautiful towns.

These towns were carefully planned communities that provided for the changing needs of the society over time. Anasazi towns, such as the Pueblo Bonito site, were often organized around large, open plazas allowing for community gatherings. Structures were large and multi-storied apartmentlike buildings that housed many people and provided a lot of room for storing their yearly harvest. The Ancient Puebloans later built similar structures high on canyon walls or atop mesas and became “cliff dwellers” to protect the population from nomadic raiding groups. Houses were often accessible only by ladder or rope so their inhabitants could easily cut off access.

Another important structure found at all Ancient Puebloan sites is the kiva, the ceremonial center of the village. Kivas, often circular in shape, were dug into the earth and entered from the roof via a ladder. At the center of the kiva lay a small hole in the floor called a sipapu. Modern Pueblo peoples hold that the sipapu symbolizes the navel of the Earth, the place where the ancestors first emerged. Much of what we know about Anasazi religion derives from modern Pueblo...
peoples, such as the Hopi and Zuni.

In modern Pueblo societies, kivas are associated with the kachina belief system. Kachinas are spirit beings, representations of the life force within all parts of the universe. They may represent a specific place or some aspect of nature: the sun, squash, and animals such as eagle or mountain lion. They may also represent an ancestor (or many ancestors), a historical event, or an idea, such as maidenhood. Kachinas are not worshipped, per se, but are spiritual forces that can use their power to benefit the population. The kachina cult was widespread in the Southwest. Religious ceremonies focused on venerating the kachina. Members of religious societies dressed as some of the more than 400 different kachina, enacting the spiritual being for ritual purposes. Some of the ceremonies took place inside the kiva, some outside in the plaza. Kivas were also put to secular use as gathering places for the community’s men and probably houses for visitors to the community, such as traders.

Trade with outlying areas and other peoples through trade networks was central to the Anasazi economy. A large system of roads stretching some 180 miles into the countryside linked the Ancient Puebloan towns and connected the culture to the larger regional economy. Artifacts found at sites like Pueblo Bonito show that the Anasazi possessed many luxury items not found in their native southwest, including macaw feathers and obsidian from Mexico and marine shell from the Gulf Coast. Analysis of wood from the structures also attests to the economic importance of the road, as much of the timber originated at areas quite a distance from the Anasazis.

However, some modern Pueblo peoples, as well as some archaeologists, suggest that the roads also had religious significance for the Ancient Puebloans, as many roads seem to lead to areas of religious significance, such as lakes, mountains, and streams. Some of the major roads, like the Great North Road, were oriented along a north/south axis. This fact, combined with the north/south orientation of many of the kiva and religious structures, suggests a pattern of astrological observances. The Modern Pueblo also speak of the North Road as being the way to the sipapu, the place where the ancestors originated.

No clear reason suggests why the Ancient Puebloan cultures ended. Over the period from around 1150-1300 CE, the Ancient Puebloans underwent several changes and ultimately abandoned many of their towns. A variety of factors probably contributed to this abandonment. The period was one of dramatic climatic change for North America, the most prominent being the 300 year long Great Drought. During this period, the Anasazi appear to become more insular, engaging in less trade and practicing more intensive agriculture, aided by new irrigation techniques. Archaeological evidence indicates that new peoples were moving into the area, comprising an additional pressure. Finally, religious turmoil seems to have occurred amongst the Ancient Puebloans during this period, as many of the kiva and ceremonial structures at several sites evidence deliberately set fires and boarded up windows and doors. By 1300 CE, many of the towns and villages had been abandoned. While early historians held that the Anasazi “vanished,” modern Pueblo peoples asserted that the Anasazi in fact migrated further south and joined groups that became the modern Pueblo cultures such as the Hopi and Zuni. Archaeological evidence has verified this account.

1.3.4: Before You Move On

Key Concepts

The earliest period, from the time that humans entered the Americas until about 8,000 BCE, is known as the Paleo-
Indian period. During this time, humans spread throughout the Western hemisphere, supporting themselves as nomadic hunter/gatherers. Native cultures developed and diversified during the Archaic (8,000-1,000 BCE) and the Woodland periods (1,000 BCE -1,000 CE). During this era, the peoples of the Americas also began to domesticate plants, leading to one of the most important events in human history: the development of agriculture, known as the agricultural revolution. Mesoamerica became one of the sites of early plant domestication: corn, beans, and squash, known as the Mesoamerican Triad, became the basis of many agriculturalists’ diets.

The future Southeastern United States was another early site. Important domesticates from the region included marshelder, chenopod, squash, and sunflower. This development fostered the growth of a large, long-lasting, and influential culture, the Mississippian chiefdom (ca. 500-1400 CE), one of the most important in the region. The Mississippians produced thousands of earthworks used in a variety of manners, some as burial mounds, others as Mississippian religious centers, known as the Southeastern Ceremonial Complex.

Many of the peoples of the American Southwest were also agriculturalists. One of the earliest Southwestern groups was the Anasazi, who emerged in the Four Corners area of the modern United States (Colorado, Utah, Arizona, and New Mexico) around 700-1300 CE. The Anasazi produced large and multi-storied apartment-like buildings that housed many people and provided ample harvest storage space. Another important structure found at all Ancient Puebloan sites was the kiva, the ceremonial center.

Test Yourself

Exercise 1

1. The Paleo-Indian era is most strongly associated with what type of artifact?

   a. Ceramic pottery
   b. The atlatl
   c. Clovis point
   d. Basketry

   **Answer**

   c

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Exercise 2

2. The Mississippian culture is known for ____

   a. the kiva as the center of religious worship.
   b. moundbuilding.
   c. a tradition in whaling.
Exercise \(\PageIndex{3}\))

3. The region of the present-day Southeastern United States was likely one of the world’s independent centers for plant domestication.

a. True

b. False

Answer  

Exercise \(\PageIndex{4}\))

The _____ are ancestors of today’s modern Pueblo peoples, and their cultures share much in common.

a. Mississippians

b. Clovis peoples

c. Vero Man peoples

d. Anasazi

Answer  

Answer d