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Tools of the Trade: An Ethnohistoric and Archaeological
Investigation of Late Fort Ancient Bifacial Endscrapers

By
Kevin A. Rolph

A Thesis Submitted in Fulfillment of the
Requirements of Independent Study
In Archaeology at
The College of Wooster

Archaeology 451

Dr. Olivia Navarro- Farr

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Abstract

The arrival of Europeans to the New World forever changed the social and economic landscapes of Native Peoples who occupied the continents. Colonial institutions profited off the land and those who occupied it. One institution that exemplified this was the Fur Trade. Throughout the North and Northeast colonies, European nations acquired furs from a variety of mammals to meet the trans-Atlantic demand. To maximize profits in the New World many European colonizers turned to Native peoples to aid in their economic endeavors. Native Americans employed trade routes and knowledge of the land to their advantage in the new economic landscape.

In this IS, I illustrate the role that the Late Fort Ancient people played during the Fur Trade by investigating, the context bifacial endscrapers which appear to spike in usage during the period of (1450-1750 A.D). I evaluate ethnohistoric evidence to determine whether the Late Fort Ancient peoples may have been engaged in hide production work as a response to increasing European demand.

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I would first like to my father Tim D. Rolph for creating and supporting my passion for archaeology.

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Land Acknowledgement

“The name “Ohio” is an Iroquoian word derived from the Iroquois/Mohawk language. It came from the Seneca name for the Ohio River, Ohiyo, which means “great river” or “beautiful river.” What is now known as the state of Ohio has been populated by diverse indigenous communities for centuries, including the Wyandotte, Mingo, Shawnee, Delaware, Lenape, Miami, Huron, Ojibwe, Potawatomi, Odawa, and many more. These population movements, both willing and unwilling, resulted from complex social processes which unfolded for over 10,000 years. Throughout that time, native peoples, including Algonquian and Iroquoian speakers, built dynamic communities, cosmologies, economies, and innovated long-term sustainable approaches to caring for this land. The erasure of their narratives and experiences from our sense of the collective history of this land has resulted in grossly misguided perceptions about indigeneity in the Americas. These narratives must be restored and recognized as being as central to our story as those of European settler colonizers have been.”

Drafted collaboratively by members of the College of Wooster working group on Indigeneity:

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Chapter I

Problem Statement

The arrival of Europeans to the New World forever changed the social and economic landscapes of Native Peoples who occupied the continents. Colonial institutions profited off the land and those who occupied it. One institution that exemplified this was the Fur Trade. Throughout the North and Northeast colonies, European nations acquired furs from a variety of mammals to meet the trans-Atlantic demand. To maximize profits in the New World many European colonizers turned to Native peoples to aid in their economic endeavors. Native Americans employed trade routes and knowledge of the land to their advantage in the new economic landscape.

In this independent study, I illustrate the role that the Late Prehistoric/Early Historic peoples of the Ohio River Valley (OHR) played during the Fur Trade by first investigating the context for two hide-processing tools, endscrapers and beamers. Both of these tools appear to spike in usage during the period of 1450-1750 AD. This marks the Madisonville horizon phase of the Fort Ancient site/region/culture area. It also fits within the period of initial European contact. My goal is to determine whether the Native peoples in direct contact with Europeans may have been engaged in hide production work as a response to increasing European demand and whether a case can be made to explain the sudden increase in the tool use as seen in OHR sites (Fort Ancient). I evaluate this question by employing middle range analogues based on ethnohistoric, experimental, and ethnoarchaeological data to address two related questions. First, whether there is documented evidence of tools analogous to endscrapers like those in the OHR in

territories adjacent to the OHR. Second, if such evidence exists, is there a suggestion that the quantity of tools mirrors those as seen at OHR sites.

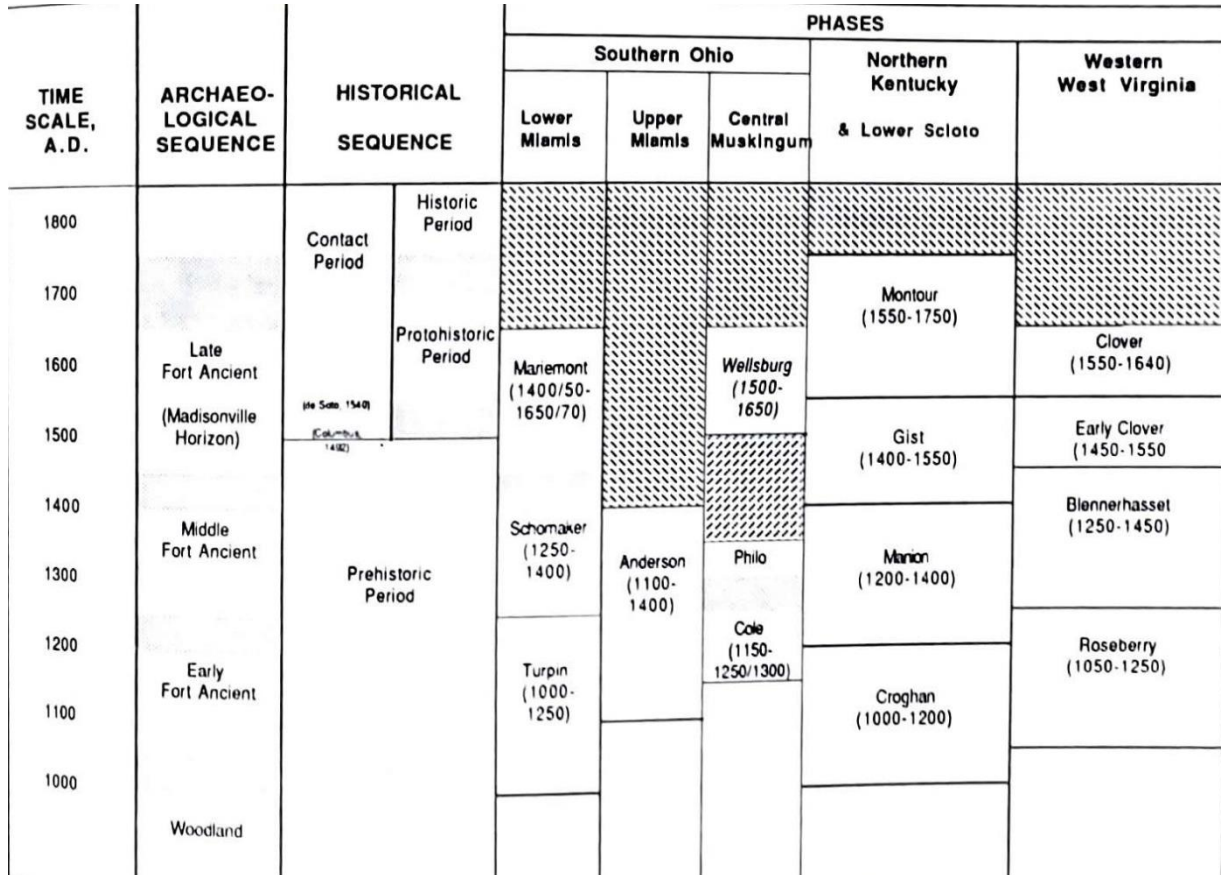


Figure 1.1 (Chronology of the Fort Ancient (Drooker and Cowan 2001))

Ohio History

The Paleo-Indian period (12,000 ~ 8,000 BC) saw the first human occupation of Ohio. It was a time when the vast majority of the state was largely covered by glaciers and megafauna such as woolly mammoths and mastodon inhabited the hills and valleys. The notable sites during this period in Ohio are Paleo Crossing, Flint Ridge and Sheriden Cave (Lepper). Another site of importance in the Midwest is the Meadowcroft rock shelter in western PA. This site is associated with the Clovis culture (Lepper 2005).

Clovis culture is the oldest known culture to make Ohio their home. However, to claim that the Clovis was the first culture in Ohio or the Americas would be, at best, a stretch. There exists a number of pre-Clovis sites across both North and South America. The Clovis culture is known from the distinctive tool industry that employed a fluted projectile point. The term derives from the town in New Mexico where the style of tools was first discovered. Clovis people subsisted on hunting game and gathering wild plants. Although they were not the first people to populate the Americas there is little debate that they were an extremely well adapted and widespread culture throughout the Americas.

The Archaic Period (8,000-550 BC) is divided into three sub-phases, Early (8,000-6,000 BC), Middle (6,000-3,000 BC) and Late (3,000-550 BC). The Early Archaic saw the disappearance of megafauna from the North American continent due to increased global temperature (Prufer et al. 1999).

This major shift in resources during the Early Archaic caused an increase in the diversity of subsistence practices for the peoples across the region. In Ohio, this shift resulted in a more diverse tool kit that included stone nut crackers, grinding stones and the atlatl. Stone nut crackers and grinding stones became common during this time suggesting that the people of the Archaic period migrated throughout the region more than their Paleo-Indian ancestors. Traces of the atlatl begin to appear during the Early archaic (Philips and Brown 1993). Although, it is theorized that the atlatl was most likely part of Paleo-Indian life however, there is no archaeological evidence to support that claim as of yet (Lepper: 60). There have been no Early Archaic (10,000-2,500 BC) burials uncovered in Ohio although, the Jerger site in Southwestern Indiana has produced early archaic burials that have similarities to the Paleoindian mortuary

practices (Lepper 2005). Important Archaic sites in Ohio include DuPont Village Maple Creek Rais Rockshelter and Eppley Rockshelter (Lepper 2005).

The Middle Archaic (6,000-3,000 BC) saw the Midwest become warmer and dryer. These conditions lead to further diversification of tools and a widening of known edible plants. Notably hickory and acorn nuts became a staple food. Projectile points became smaller than those found in the Paleoindian and early archaic. The Middle Archaic saw a decline in population as many groups sought new food resources in more bountiful areas (Lepper 2005).

Settlements patterns during this time suggested that sites were occupied for several seasons as base camps. From these camps groups would venture out in search of game or nuts and berries. Elders would have played a large role in during the Middle Archaic passing on knowledge of alternate food sources when environmental pressures created stress on staple foods (Philips and Brown 1983).

Temperatures began to cool during the Late Archaic and the modern climate of the region was established. This cooling led to an explosion of food diversity across Ohio that, in turn, led to a population increase. The Archaic period saw the expansion of shamanic beliefs and practices by beginning to include red ochre in burials specifically in western Ohio (Prufer et al. 1993).

The Early Woodland period (850-50 BC) introduced complex burial traditions. The Adena were a mound building culture that was located throughout the Ohio River Valley and its tributaries (Webb and Baby 1957). Much is known about the ritual life of the Adena. However, there is a lack of understanding about the daily life of these people mainly due to the temporary nature of many materials within the archaeological record (Clay 1998). The Early Woodland period saw the introduction of agriculture in Ohio through the expansion of the eastern

agriculture complex (EAC). The EAC is comprised of squash, sunflower, maygrass and swampweed. This dependence on domesticated plants forced the people of the Early Woodland period to become more sedentary. The archaeological record with larger complex houses and the increased use of pottery establish this agricultural dependence. Notable Early Woodland period sites include Adena site, Boudiont #4 Jeffers Mound, Fairmount Mound and Colerain Works (Lepper 2005).

The Middle Woodland period (150 BC- 450 AD) saw the expansion of the Hopewell culture. The Hopewell culture subsisted very similarly to the Adena culture and occupied similar regions. One aspect of the Hopewell culture was the extensive trade network that stretched from the Atlantic to the Rocky Mountains. The Hopewell use the raw materials they obtained through trade to construct a wonderful array of artifacts such as effigy pipes and hand facades made from mica. This time period saw the further specialization of tools and an increased variety in ceramic production (Lepper 1995). Important sites during this time are Hopewell, Fort Ancient, Octagon, Great Circle and Mound City Group (Lepper 2005).

The Middle Woodland period was preceded by the Late Woodland period (450- 850 AD). The Late Woodland period saw an abandonment of much of what defined the Middle Woodland period. It is during this time that the Hopewell way of life ended and larger more permanent settlements began to spread across the landscape (Shortt et al. 1993).

Late Prehistoric period (850-1550 AD)(Lepper 2005). The Late Prehistoric period saw a resurgence of mound construction. Effigy mounds were constructed throughout the Ohio River Valley. The largest of these effigy mounds is Serpent Mound, located in Adams County (Lepper 1998) . The Fort Ancient were the cultural descendants of the Hopewell and continued many of their practices, including mound building and similar agriculture. Corn was the main crop grown

by the Fort Ancient; they grew it to an even greater extent than the Hopewell. This in turn led to an increase in the population of the Fort Ancient people. The Fort Ancient Culture began to decline during the second half of the 17th century.

The Historic period began in 1650 AD and continues to the present. It is used by historians and archaeologists to mark the point of contact between the indigenous tribes of the area and European explorers and settlers. Nicolas Sanson (Griffin 1966) is credited for creating the first map of the region, with illustrations showing various rivers in northern Ohio (Griffin 1966). The period marked a turning point for native peoples in Ohio as they were driven out by the Iroquois during the Beaver Wars (Lepper 2005). From then on Ohio became a place of transition for Native American tribes along the eastern seaboard who moved west due to pressure from European colonizers (Lepper 2005).

Chronology and Taxonomy

The Taxonomy of Ohio and the Midwest was constructed at a time when archaeologists of the United States had begun to create their own regional taxonomy. For the Midwest, W.C. Mckern was the one who would define regional taxonomy.

Mckern like many others in the field of archaeology at the time, was concerned that there was no nomenclature on how archaeologists could interpret the material that they were excavating. Mckern worked primarily in Wisconsin on the Effigy Mound Culture. He noticed similarities between the Wisconsin effigy culture and other mound building cultures throughout the Midwest. Mckern's comparative observation led him to establish the taxonomy of the Midwest in 1943, in his paper *Regarding Midwestern Archaeological Taxonomy*.

In the paper, McKern creates four arbitrary divisions of culture that he defines as focus, aspect, phase and pattern (McKern 1943:313). Focus refers to a trait that is common in some

instances but fails to bridge all instances such as political or traditional. An aspect is similar to a focus. However, groups of people have closer cultural ties with the only division being in tribal names. A phase implies a cultural area and a pattern represented in the ethnological culture (McKern 1943: 315). This is significant as it establishes the basic cultural divisions of the Midwest that we still use today.

The regional chronology for the Fort Ancient is as follows: Early Fort Ancient from 1000 to 1200 AD, the Middle Fort Ancient from 1200 to 1400 AD, and the Madisonville horizon from 1400 to 1750 AD (Brose 2001:87). The phases of the Fort Ancient are separated by region: Southern Ohio, Northern Kentucky, and Western West Virginia. Within Southern Ohio, the phases can be split further into the Lower Miami, the Upper Miami and the Central Muskingum (Brose 2001: 85).

The Fort Ancient

Before looking in-depth into the chronology and classification of the Fort Ancient, it is important to define their cultural traits. Defining Fort Ancient is a difficult task: the early chronology shows that there was much regional variation to the point that different river valley groups could potentially have had different forms of home construction and pottery (Brose 2001). The Early Fort Ancient focused on maize horticulture, interregional interactions (Brose 2001). The Late Fort Ancient saw changes in several of these characteristics, including more extensive interactions outside of the ORV as well as a decrease in widespread settlements in favor of larger centralized villages (Brose 2001). The Late Fort Ancient also saw an increase in corn cultivation to support larger settlements. Despite the emphasis on cultivation of corn, the Fort Ancient peoples continued to hunt as part of their way of life (Brose 2001). One of the main staples of the Fort

Ancient culture was its use of corded pottery. The classification of pottery is broken down into four foci: Baum, Feurt, Anderson and Madisonville (Griffin 1966).

The Baum focus derives its name from the Baum site in Ross County, Ohio, and is viewed as an anomaly within the Fort Ancient culture (Griffin 1966) in that the mound construction is similar to early groups such as the Hopewell or Adena, but the artifacts associated with the site lack their cultural markers. Hopewellian is a term that is often applied to the Baum focus, in that it is the only one of the foci where cremation is practiced (Griffin 1966). Other Baum features include turkey head rattles and crescent shaped shell gorgets (Griffin 1966).

The Feurt site is located on the Scioto River in Scioto County, Ohio. The burial tradition at the Feurt site is an aspect that sets the focus apart. The burials were found in three large mounds within the village site with small grave goods (Griffin 1966). Bundle burials were common in the Feurt (Griffin 1966). Effigy pipes in the shape of humans or zoomorphic figures are a diagnostic trait of this focus along with rectangular stemless pipes (Griffin 1966).

The Anderson site is located on the Little Miami River and is named after C. C Anderson, who owned the site (Griffin 1966). The Anderson focus is marked by shell gorgets with a cross and wide-based triangular point that can be linked to ex-regional influences (Griffin 1996:). Some have suggested that the Anderson Focus is an example of Mississippian interaction (Griffin 1966).

The Madisonville site is located on the Little Miami River, in the suburb of Mariemount, in Hamilton County, Ohio (Griffin 1966). The Madisonville focus is the largest of the foci and also has the greatest number of traits. Many of the traits that are only found in Madisonville sites can also be found in Middle Mississippian sites (Griffin 1966). Artifacts such as shelled spoons with notched edges, and Busycon pendants can all be attributed to Madisonville and Mississippian sites (Griffin 1966). For a map of Fort Ancient sites seen Figure 2.

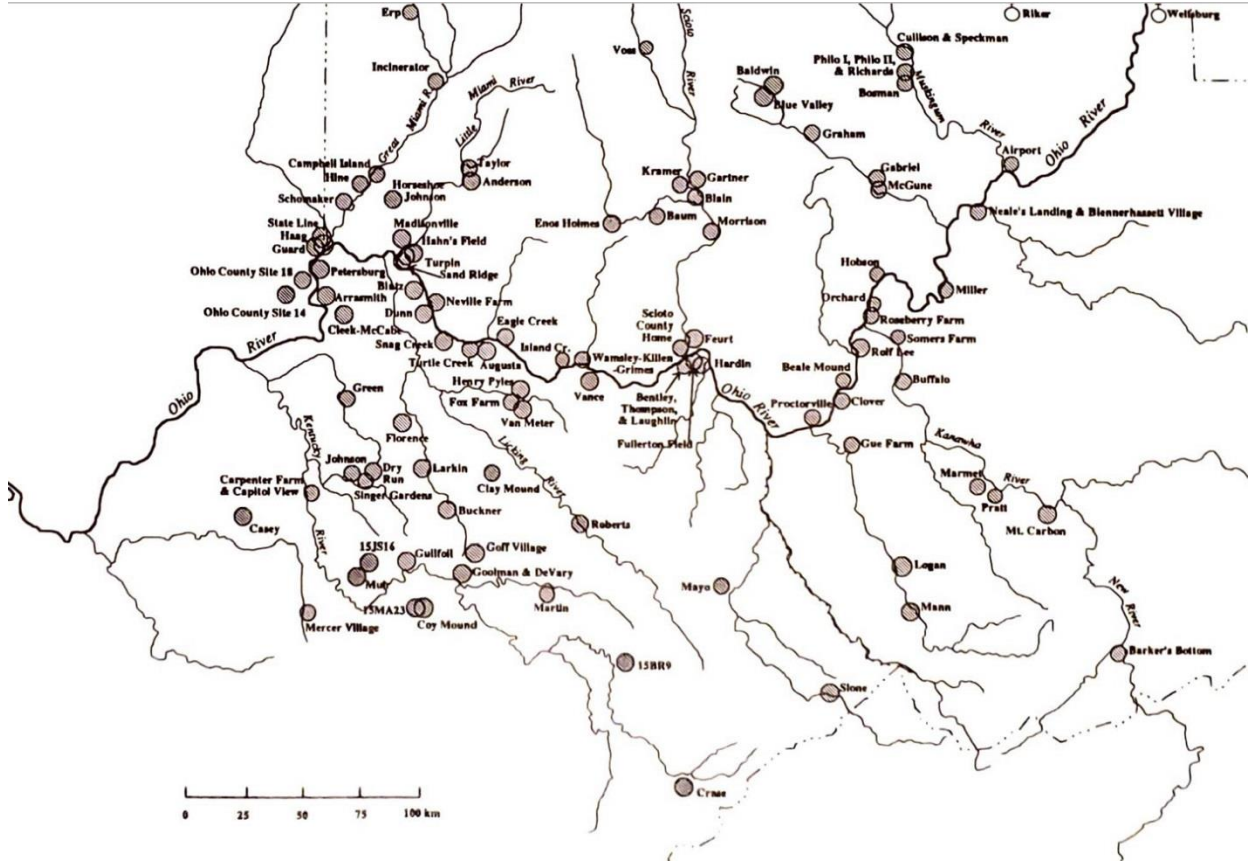


Figure 1.2: Map of Fort Ancient sites (Drooker 1997)

It is known that the Fort Ancient had some contact with the Middle Mississippian tribes mostly along the southwest extent of the Fort Ancient territory, but what less visible is to what extent these interactions occurred (Griffin 1966). Currently archeologists are reinvestigating the theory that migrations occurred from the Middle Mississippian with an emphasis on individual migrations (Cook 2016).

The Early Fort Ancient is the most elusive period to study in comparison to the middle and late (Cook 2008). Settlement structure of Early Fort Ancient sites are generally comprised of five to seven small houses that are loosely clustered (Cook 2008). There are few Early Fort Ancient sites that are currently known.

Middle Fort Ancient saw great diversity within Fort Ancient ceramic production. (Drooker and Cowan 2001). Settlements became less scattered and more organized (Cook 2008). Villages were typically circular, and houses became larger (Drooker and Cowan 2001). During this time the Middle Fort Ancient began to interact with the Mississippians to their west. The nature of this interaction is still a topic debated by scholars (Pollack et al. 2002)

The Late Fort Ancient sites tend to concentrate around the Ohio River (Cook 2008). This period also saw the general trend of consolidation of artifact styles such as ceramics (Cook 2008). In Drooker's book *The View From Madisonville* the Late Fort Ancient is divided further by scholars on the basis of European artifacts that are present (Drooker 1997). The early Late Fort Ancient (1400-1450/1550 AD) and late Late Fort Ancient (1550- 1650/1750 AD). The late Late Fort Ancient would demarcate the Fort Ancient's movement from pre-history to proto history (Drooker 1997).

European Artifacts at Madisonville

The Madisonville site in southern Ohio is one of the largest Fort Ancient sites known so far. The site was primarily occupied during the Late Fort Ancient. One unique aspect of the Madisonville site is the number and variety of European Artifacts found. European copper, iron, glass and brass are present (Drooker 1996). Several of the artifacts were modified in some fashion, while others were not (Drooker 1996).

Clarksdale Bells are brass bells that are typically associated with the De Soto expedition. Although De Soto never made it to Ohio, Madisonville is the farthest north that Clarksdale bells are found (Drooker 1996).

Kettle parts are also prevalent within the European artifact assemblage at Madisonville. Basque traders brought a kettle that was very distinct. The kettle was large, constructed from pure copper, and was reinforced by iron bands (Drooker 1996). Iron lugs served as the attachment point for the handle. These kettles were brought to the new world by the Basque from 1580-1600 (Drooker 1996). The Basque traded these kettles along the St. Lawrence river (Drooker 1996). Madisonville has no complete Basque kettle but does have parts of the kettle including eight iron bands, three iron lugs, and a few cooper rims (Drooker 1996).

History of Ohio Archaeology

Archaeology in Ohio has been focused on the study of pre-history since its conception. The fascination with mounds that covered the landscape before white settlers led to both preservation and destruction of many significant archaeological sites. For the purpose of this study I will look specifically at three periods of archaeology in Ohio. First at the early efforts of archeology, then at the institutional endeavors, next at a period of retrenchment (Kardulias 1989).

The early efforts (1788-1875) at archeology in the region is marked by white settlers entering the Ohio territory (Kardulias 1989). It was also a time of great mystery for the European settlers who recently migrated to the region. Questions such as ‘What culture constructed these mounds and earthworks? Who where they? Where did the go?’ perplexed the great minds of the time. One prevalent theory was that there was once a great civilization who constructed the earthen mounds and were then killed by savages (the people who actually had built them).

Much of the early archaeological efforts focused on preservation of these earthworks to try to untangle the mystery. The first recorded efforts of preservation came from Marietta Ohio, where in 1788 land was set aside to protect the local earthworks there. Another example comes

from the efforts of Rev. Stephen Peet who now famously proclaimed the great serpent Mound was the Garden of Eden and tried to preserve its likeness (Kardulias 1989). Despite these early victories in the preservation of the prehistory of Ohio, it was forever scarred by the plow of “progress.”

Many of Ohio’s earthen mounds have been destroyed due to the region’s agricultural roots. Many settlers from the late 1700 to arguably the end of reconstruction came to Ohio to carve out a living by establishing a farm or homestead (Kardulias 1989). The western style of farming greatly favors flat land of which Ohio has no shortage of. Except for the features on the landscape that were created by humans.

Seeing the destruction of the Ohio Earthworks, some saw it necessary to preserve them any way they could. Ephraim George Squire and Dr. Edwin H. Davis wanted to do just that. Together they drew the nation’s eye to Ohio with their 1852 book *Monuments of the Mississippi Valley* (Kardulias 1989). The third addition recorded over 200 mounds in Ohio and was Smithsonian Institution’s first in the *Contribution to Knowledge* series (Kardulias 1989).

By the Early 1800s people began to take a greater interest in the study of Ohio Archaeology. Organizations such as the Historical Society of Ohio and the Historical and Philosophical Society of Ohio were established (Kardulias 1989). Along with state organizations local groups also emerged. The Western Reserve Historical Society was one of the more prominent in the study of prehistory. These organizations paved the path for the next phase in Ohio Archaeology Institutional Development.

Institutional Devolvment (1875-1930) began on August 5th 1875 with the foundation of the State Archaeological Association of Ohio (SAAO) (Kardulias 1989). The mission of the SAAO as stated by one of its founders General Roeliff Brinkerhoff is as follows “an organization

through which interested individuals could combine their efforts in solving the problem of aboriginal origins” (Kardulias 1989).

By the 1880s the SAAO had become inactive and a new organization took its place. The Ohio State Archaeological and Historical Society (OSAHS) was founded in the winter of 1885 (Kardulias 1989). Its mission encompassed more than the SAAO in that it included the creation of books and manuscripts as well as the curation of pre-historical artifacts (Kardulias 1989).

Another reason for its founding was that a number of archaeological surveys and excavations had already been conducted in Ohio (Kardulias 1989). Thus, the best collection of Ohio cultural material was held outside of Ohio in both private and public collections (Kardulias 1989). The Peabody Museum curated by F.W. Putnam possessed the largest collections of Ohio antiquities. To remedy this one of the first acts of the SAAO was to create an exhibit area at the Ohio State University campus. It opened in October of 1885 (Kardulias 1989).

OSAHS first curator of archaeology was W.K. Moorehead. From 1895 to 1897, he participated in unrestricted archaeological surveying and excavation in southern Ohio (Kardulias 1989). In 1896, he excavated 32 mounds. After 1897, Moorehead was succeeded by William C. Mills who held the position of until 1928 (Kardulias 1989).

During this time the Ohio State Museums collection grew exponentially. From its founding it had around 5,000 artifacts (Kardulias 1989). By 1905 it stored over 50,000 artifacts and close to 150,000 by 1911 (Kardulias 1989). It is important to note that not all artifacts were from excavations. Some were donations and did not come from Ohio (Kardulias 1989).

By the end of the 1920s, OSAHS had accomplished its goals set by founders. They had conducted many excavations from a number of sites and published many of them in the

Archaeologic Atlas in 1914 (Kardulias 1989). OSHAS had managed to set the standard for how state archaeology was to be conducted in the first half of the 20th century (Kardulias 1989).

The period of Retrenchment 1930-1945 archaeology was impacted greatly by the Great Depression. Funding was tight and OSHAS no longer could facilitate excavations. During this time, the examination and cataloging of cultural materials that were previously excavated became the focus of Ohio archaeology (Kardulias 1989).

By the mid-1930s, the federal government began an increasingly more important role in Ohio archaeology and the preservation of important archeological sites through the National Parks Service (Kardulias 1989). In 1933, the federal government again increased its role in archaeology with the Civil Works Administration and other organizations such as the Tennessee Valley Authority who hired archaeologists to aid in the construction of the country's new infrastructure (Kardulias 1989).

Fur Trade Intro

The fur trade was born out of envy. European nations had watched as Spain became the world superpower due to the wealth that their new colonial ventures had brought them (Martin 1978). Wanting to cash in on some new world markets, some entrepreneurial French fishermen traveled across the Atlantic Ocean in search of "untouched" fisheries. Knowing that Spain occupied the southern portion of the Americas, the fishermen elected to go north. There they encountered not only the fish they sought but a variety of different groups such as the Micmac that had grown accustomed to life on the coastal forests (Martin 1978).

The Micmac began to exchange fur with the French fishermen. These early interactions are seen physically by the odd collection of maritime tools that are found at Micmac sites (Martin 1978). The discovery that the North American continent could be used to for pelt

extraction came at an opportune time for Europe. Wild animal populations in Europe had been in decline for hundreds of years and furs prices had gone through the roof (Richards and McNeil 2014).

Trading in Furs was relatively easy for entrepreneurs to get into. Like most business it helps if you already had the capital. However, compared to other colonial startups it required little in initial investment. Although Europeans profited the most off the fur trade Native Americans were the main labor force. The Micmac and other Algonquin groups in the North East traded heavily with Europeans. As time progressed, the Fur Trade became more of an institution for the French and other European nations (Richards and McNeil 2014). At the same time the goods traded in exchange for furs also began to change. As stated previously, the initial interactions of the Fur Trade are marked by European maritime odds and ends. Later interactions dealt in narcotics, mainly tobacco and alcohol (Richards and McNeil 2014).

Tobacco had been cultivated for thousands of years on the American continent. There was a great deal of diversity in tobacco variety. There was a tobacco variety that could be cultivated in virtually every ecological region in the Americas. Although the Algonquin people of the North East had their own variety, they greatly preferred the sweeter tobacco from the Potages colony of Brazil. This was to the dismay of the Hudson Bay Company, who put great effort in to convince the Micmac that the Chesapeake tobacco was superior (Richards and McNeil 2014). The Brazilian tobacco was sweeter in large part to the Portages additives of molasses and spices (Richards and McNeil 2014). While also having a spiritual component, tobacco could be used to stave off hunger and fatigue while working (Richards and McNeil 2014).

Alcohol unlike tobacco was new to the Americas. Wine and brandy were traded extensively to Algonquin speaking people in the North East (Richards and McNeil 2014). Alcohol related deaths became common place among Algonquin people. Alcoholism and disease became facets of ever day life. Immune systems of Algonquins was weakened by the presences of alcohol and smallpox's begin to ravage their population (Richards and McNeil 2014). Alcohol also made Algonquin depended on European trade in that it was only through Europe that they could procure alcohol (Richards and McNeil 2014).

For the Native Americans of the region hunting was a religious endeavor (Martin 1978). There existed among Native hunters a graded reverence for the 'wilderness' and the game that occupied it (Martin 1978). Whatever animal happened to be the goal of the hunt knew it was going to be killed for the benefit of the hunter and would surrender itself. The inability to get game would at first be shrugged off by stating that the game simply did not want to get caught yet (Martin 1978). However, as the days turned into weeks the problem stopped being the game and started becoming the hunter. In order to increase the odds for hunters often participated in divination rituals (Martin 1978). These rituals involve burring bones of previously hunted game. The cracks and color of the bones are then interpreted by and elder who was able to see where the best hunting grounds would be (Martin 1978).

In the North East, the Fur Trade was focused on animal furs for fashion and prestige. Pelts such as beaver, mink and foxes were primary targets. Bears and racoon were also hunted, however, they lacked the prestige that the other pelts brought (Richards and McNeil 2014). The South East lacked an abundance of beaver and prestige pelts. This did not mean that they were not active within the fur trade. The woodlands of the South East possessed the one of the largest

white tail deer populations in the world (Richards and McNeil 2014). Unlike the furbearers of the North, whitetail deer could not be caught in traps. It had to be hunted.

Whitetail deer in Europe had only survived due to strict hunting laws imposed by the Medieval Feudal system (Richards and McNeil 2014). Deer was not considered chic by any standers in Europe. However, it was coveted for its versatility. It could be used to make anything from boots to book bindings (Richards and McNeil 2014). Poaching on lands private reserves and preserves lead to a decline in European deer populations. The value of land also leads to further decline. as land became more valuable in Europe many private hunting reserves were sold or became farmland (Richards and McNeil 2014).

Ohio and the Fur Trade

The Fur Trade came to Ohio first through the waters of trade and later through the fires of war. The Iroquoians of northern Ontario began trading with the Assistehronon Confederation (The Fire Nation) who controlled a large section of lake Michigan's coast as well as a large section the Lake Erie cost line in present-day north-west Ohio. The Iroquoians maintained a good relationship with the Fire Nation through trade. The Fire Nation would receive European goods such as glass beads and metal rings in exchange for the furs of various animals such as beaver and fox that they would produce (Lepper: 2005).

The northwest portion of Ohio was of great value to the Fire Nation. This region of Ohio was known as the Great Black swamp (Lepper: 2005). In antiquity it was roughly the size of Connecticut and followed the Maumee river and its tributaries (Lepper: 2005). The swamp provided the Fire Nation with the one of the best beaver hunting grounds south of Ontario (Lepper: 2005).

Knowing of the riches of the Black Swamp the Iroquoians attacked the Fire Nation. After several years of war, the Fire Nation was defeated and pushed west to Wisconsin (Lepper: 2005). It was there that the Fire Nation had its first contact with Europeans. In Wisconsin, they became known as the Kickapoo (Lepper 2005).

The Creek

The Creek occupied some of the best hunting grounds for white tail deer in the Americas (Richards and McNeil 2014). They resided in large portions of what is today the American south and had contact with British colonizers (Richards and McNeil 2014). British colonial outposts such as Jamestown Virginia and Charlton South Carolina became centers for exporting deer hides. Between 1699 to 1714 Charleston exported 600 deer pelts a year (Richards and McNeil 2014).

The Creek were also considered to be the best deer hunters. They had adapted quickly to the opportunity of the deer fur trade however, they faced a logistical dilemma, how to get the maximum number of deer skins to market in a given year (Richards and McNeil 2014).

The nuclear family was to foundational social unit for the Creek (Richards and McNeil 2014). During fall and winter the nuclear family would migrate to hunting camps. A hunter would go out from the camp for days on end tracking deer (Richards and McNeil 2014). A Creek hunter would have been equipped with a musket that was obtained through French and English traders. A hunter could travel between 25 to 30 miles in search of game. A good year would result in Creek hunters bringing in 200,000- 300,000 deer skins with less than half sold to the Europeans (Richards and McNeil 2014). By the Late 18th century the deer skin trade had collapse for numerous factors including trade embargos enacted in response to the American

Revolutionary war and a declining deer population (Pavao-Zuckerman 2007). The collapse forced the Creek to find a new way to survive.

The collapse of the deer skin trade was gradual. The Creek for years leading up to it had begun to incorporate European domestic animals into their substance practices. European and U.S programs to ‘civilize’ tribes furthered Creek dependency on domesticated animals (Pavao-Zuckerman 2007).

Oneota

The Oneota lived in the upper plains of Wisconsin, Iowa, Minnesota, Indiana, and Illinois. They consisted of a fusion of Woodland and Mississippian. Some have referred to the Oneota as the Upper Mississippian however, this is not entirely true as the Oneota never fully embrace the Mississippian way of life. They did embrace the cultivation of maize until they began their bison procurement (Theler and Boszhardt 2003).

Salt Licks and Bison in the ORV

Salt Licks or mineral licks are naturally formed features that can be found across the American continent. Licks are created in a process of natural deposition and concentration of minerals into clays and soils. These salt licks can be used to combat mineral deficiencies in the diets of many animals. Salt licks are relatively small and well known to both humans and predators (Ayotee, Parker and Gillingham 2008).

There are a number of salt licks that naturally occur within the ORV. These salt licks were have existed for thousands of years. Humans have known the location of these salt licks since the last ice age 11,000- 11,000 years ago where they were used to hunt megafauna such as

the mastodon (Tankersley 1991). One of the more well-known salt licks in the ORV is Big Bone Lick BBL.

BBL is significant for its large collection of megafauna remains. The famous explorer William Clark is also associated with the site. In 1807 he and his brother excavated BBL for three weeks during which several species were collected, including bison (Hedeon 2008).

Although bison are associated in American culture with the Great Plains of the central United States, during antiquity, bison moved into ORV (Shay 1978). Bison began to move into the ORV starting sometime before 1600 AD (Tankersley 1985). The many tributaries of the Ohio River allowed for an easy passage into the wooded areas east of the Mississippi River. These wooded areas began to shrink into grasslands due to the drop in temperature from the little ice age. Salt licks are present throughout these tributaries and would have provided suitable hunting grounds as the salt licks would have been known to indigenous groups such as the Fort Ancient for thousands of years (Tankersley 1985)

Food Utility Index

Food utility index are used in anthropological and more recently archaeological research. The index is created through the analysis of the modern butchery with the weights of meat and marrow taken from the carcass of a modern kill. The cuts are then ranked according to nutritional value. The weight of meats and marrow allow for a comparison to be created with modern and zooarchaeological remains. By examining zooarchaeological remains, archaeologists are able to determine the cuts of meat that were removed and brought back to camp (O'Brien et al. 2014).

Endscrapers

Endscrapers are artifacts made from chert. They would have been used primarily for the processing of hides although it they are also thought to have been used in woodworking and manipulation of other materials such as bone to produce a variety of tools (Railey 1992). Endscrapers are typically thickest towards the working end (Railey 1992). Within the Fort Ancient context endscrapers are divided into two categories unifacial and bifacial (See figure 3) (Railey 1992).

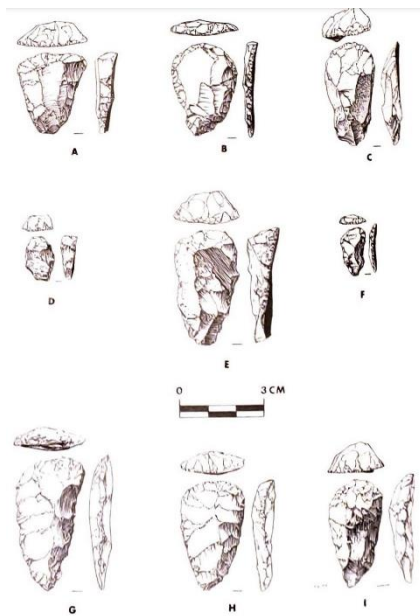


Figure 1.3: A- F Unifacial Endscrapers G-I Bifacial Endscrapers (Railey 1992)

Unifacial endscrapers are constructed from thick flacks (Railey 1992). They range in constitution from expertly crafted to more improvisational. The endscrapers that are hastily made express intensive modification on only the working end and no other part (Railey 1992).

Bifacial or teardrop endscrapers possess bifacial flaking and are generally triangle or teardrop shaped (Railey 1992). The working ends are not as sharply beveled as unifacial endscrapers (Railey 1992). Bifacial endscrapers also express a standardization in shape that is

not seen in unifacial endscrapers and a greater attention to detail and workmanship (Railey 1992). Bifacial endscrapers can be placed temporally in the Fort Ancient Context and are only found in during the Late Fort Ancient post 1400 (Railey 1992).

Conclusion

This chapter outlined the thesis of the paper while also setting the historical stage for topics that will be covered in latter chapters. The historical understanding of the region is of great importance moving forward as much of the data that is within this independent study has been shaped by those who occupied and continue to occupy what was once the land belonging to the Late Fort Ancient. The next chapter will establish the theoretical framework for this independent study.

Chapter II

Theory

What follows is a description of the theoretical lenses that I will be use throughout the project to frame my argument. I focus on analogy, which I discuss at some length, as it will be one of the largest components of this project in tandem with agency and cognitive archaeology. Although there is no perfect, singular theory, there are some that are better suited to certain projects. The advantages and disadvantages of using each concept are described below.

Analogy

Wylie (1985) states that modern archaeological mistrust of analogy lays in its early abuse in the 16th century. The discipline of anthropology was birthed from colonial ambitions to examine those who Europeans had recently subjugated. Early anthropologists sought to draw a comparison between the “Savages” that they had encountered in the Americas and Africa with the prehistoric people of Europe (Wylie 1985). Sollas, (1924) one such scholar at the time, found great fascination with the hunter/gather societies in around the world. Sollas used the ideals of Tylolean evolutionism that describes societal evolution as “progress” along a singular and inevitable route ending with Western civilization (Wylie 1985). The initial criticism of the Sollas-style analogy was the danger of over assumption to a point where the analogy was useless because the analogy relied on the archaeologist’s personal understanding of the contemporary world. This made Sollas’ analogy inherently ethnocentric (Wylie 1985).

With the ideal of analogy tainted by evolutionary thinking, archaeology at the turn of the 20th century began to separate itself from speculative theories such as analogy. Kluckhohn spoke out against this growing trend by stating that it was impossible for archaeology to remove itself

from speculative theories and that if the discipline continued to move in this direction it would become little more than an excuse to measure objects in the dirt (Wylie 1985).

Ascher and Clark would both independently build on Kluckhohn's ideas. Clark concept of new analogy removes the universal assumptions of cultural evolution. Instead Clark believed that through an analogy-based framework, archaeologists can understand culture change on a case by case basis rather than a singular evolutionary track (Clark 1953). For Clark, analogy is only useful if the cultures being compared have similar subsistence patterns or environments. However, Clark recognizes that cultures can create different paths to adapt to different internal and external forces (Clark 1953). Ascher's goal was to recreate analogy in a way that could forgo the blunders of early scholarship and by "placing analogy on a firmer foundation" (1961:233). He would do this first through addressing the main criticisms that are associated with the ideals within evolutionary-based analogies (Ascher 1961).

Lewis Binford outlines how analogy is to be conducted in archaeology, with the hopes that it will lead to greater consideration in future studies. Analogy as defined by Binford is the process of finding similarities while acknowledging differences. Binford believes that there are three main components that create a "successful argument in analogy" (1967:1). First, "if the initial resemblance is such that the inferred property would account for the resemblance, then the conclusion is more likely to be true" (1967:2). What Binford is saying is that if two tools from different areas are similar, then it can be assumed that they were used for similar purposes. The analogy is strengthened by what Binford defines as positive analogy. Positive analogy examines the "important" aspects of tools. Important is defined by Binford as aspects of knowledge that are obtained through prior knowledge, such as use ware analysis (Binford 1967). Binford's second criteria states that "The more comprehensive the positive analogy and the less

comprehensive the inferred properties the more likely the conclusion is true” (1967:2). That is not to say that the analogy can be proven true or false. However, a strong analogy can be made if what is being inferred can be limited in scope to some degree. The example of strong analogy given by Binford in his 1967 article that examines smug pits through ethnohistorical and archaeological means. In his examination he comes to the conclusion that smug pits were used for the processing of hides (Binford 1967). Binford’s third recommendation for the construction of a strong argument with analogy is to avoid over assumption (Binford 1967).

Criticisms of analogy have changed little over time. Gould, a prominent anti-analogy scholar still proclaims that analogy is built on selective traits, blurs the past and present and is categorical in nature (Wylie 1985). Wylie believes that critics like Gould have yet to offer a reliable alternative to analogy (Wylie 1985). Analogy is a powerful tool; when used incorrectly no knowledge is gained. For Wylie, proper use of analogy stems from an understanding of its past misuse and that there are logical times when analogy can be applied. One myth that should be avoided is that of the “perfect analogy”. A perfect analogy would only consider a culture’s similarity, and, in doing so, would be misappropriation of an analogy (Wylie 1985). Proper analogy should examine the similarities and differences of the cultures being studied. Wylie states that the natural aspect of the analogy can be assumed when supporting the similarities, this can be called formal analogy (Wylie 1985). A point for point comparison with the three aspects of analogy can be applied logically to further a scholarly argument (Wylie 1985). The understanding of the how analogy has been used is crucial to this research this project is undertaking on the late Fort Ancients participation in the Fur Trade.

Wylie’s chapter describes two forms of analogy, formal and relational. Formal analogy is devoid of any historical connection. A formal analogy relays the similarities between two

cultural groups that are in no way descended from one another. The similarities would be based on substance and the environment that the cultures are constructed around. Relational analogy is based on cultural affiliation. A relational analogy is constructed with the understanding that a contemporary culture and historic culture have a connection historical speaking. Relational analogy does acknowledge that practices can and do change overtime.

Agency

Agency in archaeology stems from post-processual approaches. Its foundations stem from many different thinkers, not all of whom were archaeologists. Dornan address these roots by examining the ideologies of Pierre Bourdieu (Bourdieu 1977), Anthony Giddens (Giddens 1979), Michael Shanks and Christopher Tilley (Shanks and Tilley 1987), Ian Hodder (Hodder 2000), James Bell (Bell 1992) and Arthur Joyce (Joyce 2000). Agency theory can trace its ideological backbone to the French philosopher Pierre Bourdieu and English sociologist Anthony Giddens (Dornan 2002).

Bourdieu believed that culture was the construction of the individual. This idea of the individual shaping culture stemmed from his philosophical works on Practice theory that sought to destroy the material/symbol that had been popular understandings of human action for many social scientists including Marx and Weber (Bourdieu 1977). Bourdieu's vision for how individuals acted centered around his concept of "habitus". Habitus can be defined as the unconscious action taken by individuals in response to an agent's interest. The unconscious action of habitus can both support an individual's social structure or shape it (Bourdieu 1977).

Giddens differs from Bourdieu in that he ascribes to the notion that actions taken by individuals are not an unconscious act that is inherent within a structure (Dornan 2002).

Giddens' view of action allows for individuals to have a more direct impact on social structures through innovation (Giddens 1979). To further this influence, Giddens puts human actions on a goal oriented "skillful enactment of tacit knowledge" (Dornan 2002:308). Although Giddens believes in more intellectual freedom of individuals, he also recognizes that humans are not entirely free (Giddens 1979). In Giddens' world, humans are aware of the structures that surround them; the materials that individuals create are both a reflection and a manipulation of these structures (Giddens 1979).

Shanks and Tilley follow in Giddens ideological footsteps in that they believe that individuals are not unconscious in their actions. They further Giddens' notions by describing individuals as competent actors within social systems (Dornan 2002). However, Shanks and Tilley recognize that the actions of the competent actors result in unintended consequences that can have a large impact of social structures and individual lives (Shanks and Tilley 1987). The ideal that Shanks and Tilley present is defined as collective agency. They attempt to illustrate its use in the field by examining beer bottles in both the UK and Sweden. In their field test, Shanks and Tilley conclude that beer bottles and beer advertisements in the UK and Sweden endeavor to construct a different societal meaning for alcohol consumption for the working class in both countries (Shanks and Tilley 1987). Some scholars, including Dornan and (Jonson 2000) argue that although Shanks and Tilley have come from a place of reason, their module of agency relies too heavily on the archaeologist understanding of the present (Dornan 2002). Therefore, it would be impossible to examine the archeological record with the same amount of detail that shanks and Tilley present in their argument (Dornan 2002).

Hodder views agency through a different lens. Instead of focusing on collective agency and groups of individuals like Shanks and Tilley, Hodder focuses on the "Lived Lives" of

individuals (Hodder 2000). To Hodder, by focusing on the collective, the archaeologist creates an ahistorical view of the past. To remedy this intellectual gap Hodder believes that agency should seek to view individuals as actively and intelligently trying to improve their surroundings for their benefit (Hodder 2000). In Hodder's study he examines the burial of the "Ice Man" of Catalhoyuk. Through his examination Hodder attempts to uncover the large-scale social processes on a smaller individual level. This micro individual view contains some drawbacks. One being its reliance on leaders and outliers as being the driving force for social change (Dornan 2002). This means that the larger population is often not considered. This reliance can lead to archaeologists neglecting large portions of the archaeological record (Dornan 2002).

Bell uses agency theory to explain collective action and communal social institutions as the legacy of rational actors' decisions and actions. Bell defines this view as "methodological individualism" (Bell 1992). Bell, like Shanks and Tilley, recognizes that actions are met with unintended consequences. Social structures, in Bell's argument, are direct results of individual decisions and actions (Dornan 2002). A limitation on Bell's form of agency is the problem of motive. Motives of individuals are difficult to acquire within the archaeological record. Bell suggests that agency can only be applicable where motives are widely shared among a group of individuals or cultures. Bell believes that agency should be further limited to the study of individuals in the area of prehistory though some universal assumptions concerning individual rationality (Bell 1992).

Arthur Joyce brings psychology to agency theory by setting his theoretical framework in Giddens' camp of competent individuals as opposed to Bourdieu's unconscious decisions (Joyce 2000). For Joyce, agency is a tool that archaeologists can employ to infer about the past. Joyce

focuses on interactions within social structures. The example that Joyce illustrates is the social interaction between elite and non-elite individuals at the site of Monte Alban (Joyce 2000). Joyce demonstrates that the dynamics between elites and non-elites at Monte Alban involved large amounts of “social negotiation” (Joyce 2000). To accomplish this Joyce uses the previously discussed agency theory of actions with unintended consequences. However, Joyce does differ in that he assumes that decisions should be viewed in respect to the place that they are being made, thus creating a local meaning for decisions (Dornan 2002). Agency theory informs this project by viewing the Fort Ancient as rational actors. This allows for the project to theorize that the Fort Ancient people would have been able to view an economic opportunity such as the fur trade and be able to adapt to insure that they are able to take advantage of the new opportunity to their benefit.

Technology and Agency

Agency theory can be a powerful tool assigning greater meaning and context to a culture’s technology. Technology should be viewed as more than a tool that makes life easier for individuals. Cultures created technology that was suited to their specific living conditions. The construction of any technology will undoubtedly mirror world views and become a social action (Dobres and Hoffman 1994).

Understanding of technology derives from micro scale research (Dobres and Hoffman 1994). This entails in-depth analysis of a tool’s ‘life’ from its creation, to daily use, to repair, to the tool being broken and discarded or repurposed (Dobres and Hoffman 1994). It is also crucial to recognize that the production of tools is both meaningful and practical. Tools are constantly changing to adapted to new problems that people encounter, this actively changing tendency is the process in which new tools and traditions are created (Dobres and Hoffman 1994). The subject

of examining tools with analogy provides understanding of the daily microscale processes as opposed to focusing on how or what the tool was used for (Dobres and Hoffman 1994). This requires the context of a specific artifact in order to be applicable. The distribution at a site, repair of tool, discard location and social interaction should all be considered when examining technology (Dobres and Hoffman 1994).

The variation of tools can be viewed in the context of day to day activity. Rational actors are navigating their landscape with numerous different technologies. This daily interaction can lead to individuals to experiment with different means of tool production, resource acquisition or the construction of domiciles (Dobres and Hoffman 1994).

Conclusion

In terms of theory, I will view the Fort Ancient culture as individuals who are rational in their actions and constantly seeking ways to improve their lives. To bolster this claim, I use formal analogy to examine how Fort Ancient peoples change with the economic opportunity presented by the fur trade. This will be done through an analysis of other Indigenous groups in adjacent regions that were in contact with Europeans during the fur trade to look for any similarities in the types of hide processing tools used and the amount of hide processing tools present at a site. I argue that the creation of new tools is a social act that is born out of skilled individuals who sought to find solution to a problem that may be unobtainable from the archaeological record. However, that problem can and should be considered by archaeologists.

Chapter III

Methods

In this chapter I will define and detail the numerous methodologies that were used in this independent study. The Methods can be separated into three main categories Ethnographic, ethnohistoric and archaeological. By using these methods...

Archaeological

The archaeological evidence that I use for this independent thesis were excavated by a number of institutions from numerous different sites in and around the ORV. In this section I will break down, site by site, the different archaeological methods used. In some cases, most notably the Fort Ancient site of Madisonville, the chronology of excavations will also be crucial to understanding the how the data was gathered.

Madisonville

The Madisonville site is the largest Late Fort Ancient settlement that is currently known. The site has an extensive excavation history that begins in the early 1880s. The first excavations conducted at the site were done by an amateur historical group named the Madisonville literary and scientific society (MLSS). The MLSS conducted excavations in June of 1880. There is little evidence as to how the excavations were conducted. Of the four sets of field notes, no two are similar (Drooker 1997).

Following the MLSS excavations, the Harvard Peabody Museum under the direction of Fredric Putnam began its 30 year on and off relationship with the site. The first excavations by Putnam began in 1882. There is little documentation of this excavation and how it was

conducted. However, during the following excavations starting later in 1897, the Peabody Museum returned. This excavation like the ones to follow in 1907, 1908, and finally 1911, would produce some of the best documentation of Madisonville for almost a century. Regular field notes were taken, the site and units were placed on grids. The majority of the burials that were “exhumed” were photographed. Unfortunately, the screening of soil occurred very sparsely and when it was conducted the mesh was too large to recover artifacts that could be seen. Furthermore, during these excavations the artifact province was only recorded when in association with a burial. Lastly animal bones and pottery shards were completely discarded (Drooker 1997).

Following the 1911 excavation no professional work was conducted. In Drooker’s book *The View from Madisonville* she notes that throughout the 20th century that countless amateur excavations were conducted until the 1980s. During this period extensive looting occurred at the site, with an immensely sad number of artifacts being lost to private collections (Drooker 1997).

During the 1980s a number of small excavations were conducted that mostly aimed to obtain the first stratigraphic data from middens at the site as well as obtaining carbon samples for dating. These small excavations used more modern techniques allowing the site to become well surveyed and the provinces of artifacts well recorded.

Driving Range

The excavations at Driving Range were conducted during the winter of 1993. The excavations were conducted due to a sewer line being constructed near the site. Initially the plans for the sewer line did not plan for any disturbance at the site however, it was deemed unavoidable. Therefore, excavations began (Purtill 1999).

A backhoe was used to create six trenches measuring 5m x 25m, with one large unit measuring 20m x 54m. The backhoe was removed the plow zone, stratigraphy was recorded for each level on each unit. Apart from this information, no other text on how the excavations were conducted were published (Purtill 1999).

Big Bone Lick

There have been numerous excavations at BBL. However most focused on the presence of megafauna during the last ice age. Considering this, the excavations used in this independent study was conducted in 2008 by Cincinnati museum center. The excavations focused on a later prehistoric bison kill site in BBL. The kill site was in a stream. Because of this, a small dam was constructed, and a water pump was used to drain water from that area of the site. Due to the hardness of the surface, towels were unable to remove any material. Rock hammers were used instead. After the bones were exposed, they were mapped with archaeological and archaeological markers and then removed (Genheimer 2013)

Augusta Site

The Augusta site was uncovered around the town of Augusta's founding in 1796 with settlers reporting a large number of burials during the construction of the town. Throughout the 18th 19th and early 20th century the town produced a number of metal artifacts. All excavations during this time were not overseen or recorded by any archaeologist, university or historical group. Rather the artifacts and human remains uncovered were sometimes recorded by individuals who had undertaken a construction project. An example of this practice can be found in 1924, when a man by the name of Curtis reported four human burials with a wide array of

grave goods (shell beads and bone awls are all that are listed) had been unearthed to the erection of a Ford automobile garage (Pollack and Henderson 1992).

Professional archaeological excavations began in 1950 with the University of Kentucky investigation of the site. Two archaeologists were called when a local resident unearthed five separate burials in the construction of his basement. The two archaeologists Snow and Woodbury arrived and exhumed the skeletons and grave goods. During the 1950s and 1960s the trend of local residents unearthing cultural material and sometimes reporting it would continue (Pollack and Henderson 1992).

Starting in the 1970s a number of archaeological surveys were conducted by various institutions within Kentucky (Kentucky Historical Commission and Northern Kentucky University). During the NKU survey of 1979, archaeologists were unable to find any archaeological remains. When construction of a sewage treat plant began cultural material was uncovered (Pollack and Henderson 1992).

In 1984 archaeological excavations were conducted at Augusta. Obtaining premising for the excavation was not a simple task. It is noted within the write up of the 1984 excavation that the presence of professional archaeologists was off putting for the locals. This is was in part due to the numerous 'armature' collections that many locals take pride in. However, permission was eventually obtained. The excavation consisted of three 1x2 unites in close proximity to the town center. The three units were scattered along the town's river front. Unit 1 was placed in the back yard of John Jackson. Unit two was 280m east of Unit one in the back yard of the Augusta Historical museum. Unit three was located in a tobacco field 50m west of unit one. Unit three was placed where in 1810 110 human remains had been uncovered. The stratigraphy was

recorded at each unit. The stratigraphy was divided into zones depending on the cultural affiliation (Pollack and Henderson 1992).

Thomson

Unlike the previous sites listed the Thomson site has no historically recorded archaeological investigations. There could, however, exist a surface collection. In 1848 the landowner of the site invited a professional archaeologist to survey the site, during which pottery sherds were found. Although it is unclear if the description of the sites is referring to the Thomson site due to its close proximity to the Fort Ancient site Laughin (Turnbow and Jobe 1992).

The first officially recorded investigation began in 1984. After an extensive survey to determine the sites extent. It was decided that the four unites of 2x2 would be placed in the areas where the most surface material was collected. The four unites were excavated in similar fashion to the Augusta site with the stratigraphy being recorded at each unite. The unites were placed in close proximity. The stratigraphy was divided into zones based on cultural affiliation (Turnbow and Jobe 1992).

Both the Augusta site and the Thomson site were excavated around the same time. In both investigations plow zones were removed. The zone ranged from 20-30 cm below the surface. All material from this zone was screened through a 12.5 mm hardware mesh. Following the plow zone each level was excavated in intervals of 5cm with. Flotation samples of six liters at each unit were collected from the northeast corner at 10cm levels. Along with stratigraphy maps being crated from wall profiles photographs were taken upon each closure of the unit (Turnbow and Jobe 1992).

Ethnohistorical

The ethnohistorical data was collected from several collections of monographs and articles that contained the collections of various ethnohistorical accounts of Indigenous peoples' participation in fur production. The Muscogee were chosen due to the large amount of ethnohistoric accounts. I initially believed that within those accounts there would have been a mention of an analogous tool to the Late Fort Ancient bifacial endscraper. However, the further I examined the ethnohistorical accounts, the more I began to examine the ethnohistoric accounts relating to Muscogee settlement patterns. The ethnohistoric accounts found in the monographs feature letters and diary entries of contact with the Muscogee from the European colonizer perspective (Braund 1993).

Conclusion

With the methodology for data collection established it is important to keep remember that the archaeological data was obtained well before the passing of NAGPRA (Native American Graves Protection and Repatriation Act). It is also noteworthy that many of the sites mentioned have been heavily disturbed or destroyed by agriculture and industry. The next chapter will now present the data

Chapter IV Data

In this chapter I detail the data that I have gathered from a variety of sources including ethnohistoric accounts and archaeological data from sites both in and out of the ORV. I will first examine the archaeological data which include both changing settlement pattern data and endscraper frequencies. These data pertain to the Fort Ancient culture area which, again, spans the ORV. The settlement data are chronologically limited to Middle (~ AD 900-1400) to Late (~AD 1400-1700) Fort Ancient. The endscraper data, however, are limited to Late Fort Ancient period and include material pertaining to the Fort Ancient sites of Madisonville, Fox Farm, and Driving Range Augusta as well as a bison kill site at Big Bone Lick within the ORV. The presence of bison is significant as they could otherwise be considered anomalous in terms of the ORV environment as a woodland rather than a prairie grassland which is the typical habitat of these grazers.

I then review and describe the ethnohistoric evidence of settlement patterns among the Muscogee Creek, which I chose for comparative purposes due to their similarity in subsistence pattern and environment. The ethnohistoric data that exists on the Muscogee is from accounts of early settlers of the southeast region of the U.S. For clarification moving forward, I will define ethnohistoric as an account of how peoples lived in the past written by people who witnessed how a group lived, recognizing that the recorder most likely has no experiences in the study of human cultures or behaviors. Among the Muscogee there exists no such tool that resembles a bifacial or unifacial endscrapers (Figure 4.1). However, while endscrapers were not present in the south, they were extremely prominent in the northwest Algonquian tribes of the American Great Plains. There exists ethnohistoric evidence of both unifacial and bifacial endscrapers being

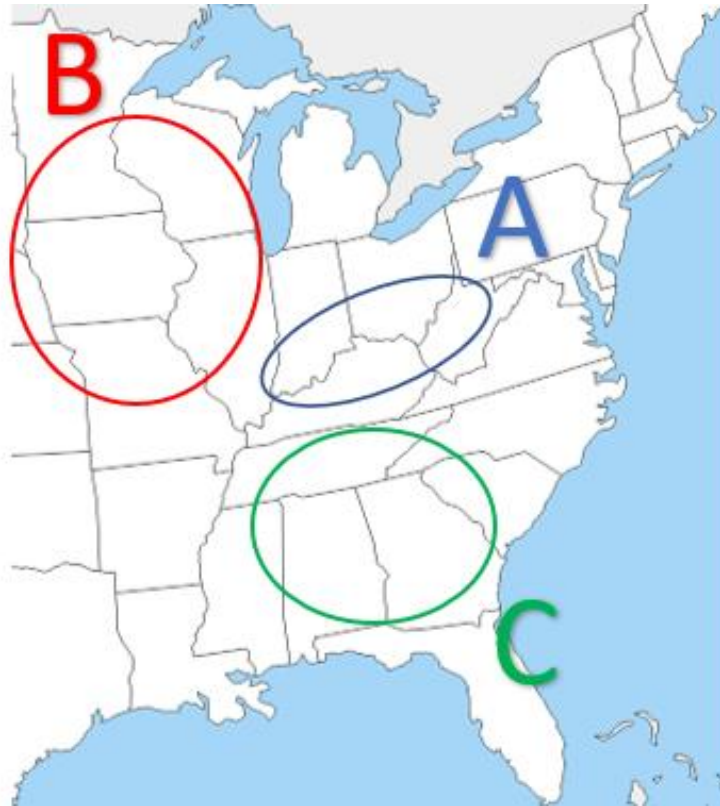
used for the processing of bison hides (Boszhardt and McCarthy 1999). Because of this, the sites from tribes like the Oneota or other Great Plains tribes have been selected as well as ethnohistoric evidence that they used these endscrapers to process bison hides. Finally, to create a link between the Fort Ancient and the fur trade through the use of endscrapers, I discuss the presence of European goods traded into these sites as way to acknowledging interaction between Fort Ancient peoples and the European traders and that the Fort Ancient peoples maintained



these networks. See map 4.1, which illustrates the three areas of interest in this chapter.

(Figurar 4.2 Fort Ancient Bifacial Endsrapper From Railey 1992) Endscrapers such as these are typical of the Late Fort Ancient.

A blue A and circle represent the Fort Ancient cultural area, the red B and circle represent the Oneota culture area and the green C and circle represent the Muscogee cultural area.



(Map 4.1 Cultural Areas within Chapter IV)

This Chapter is composed of multiple tables and figures. The tables consist of endscrapers that are found in a Fort Ancient context as well as European manufactured goods. The figures consist of maps concerning the number of sites within and outside of the Fort Ancient aspect. The figures also depict artifacts such as endscrapers and kettles as well as maps with the distribution of said artifacts. For reference, I have included a typical middle Fort Ancient village plan see (Figure 4.1)

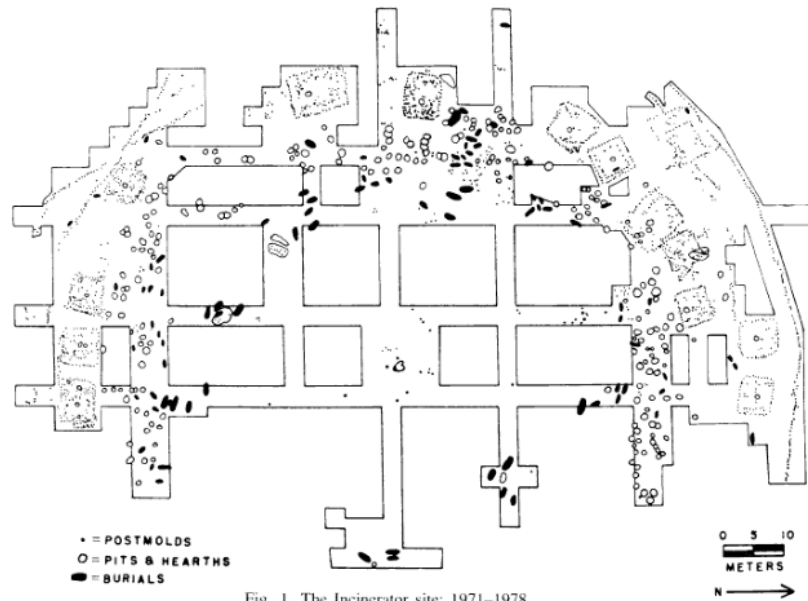
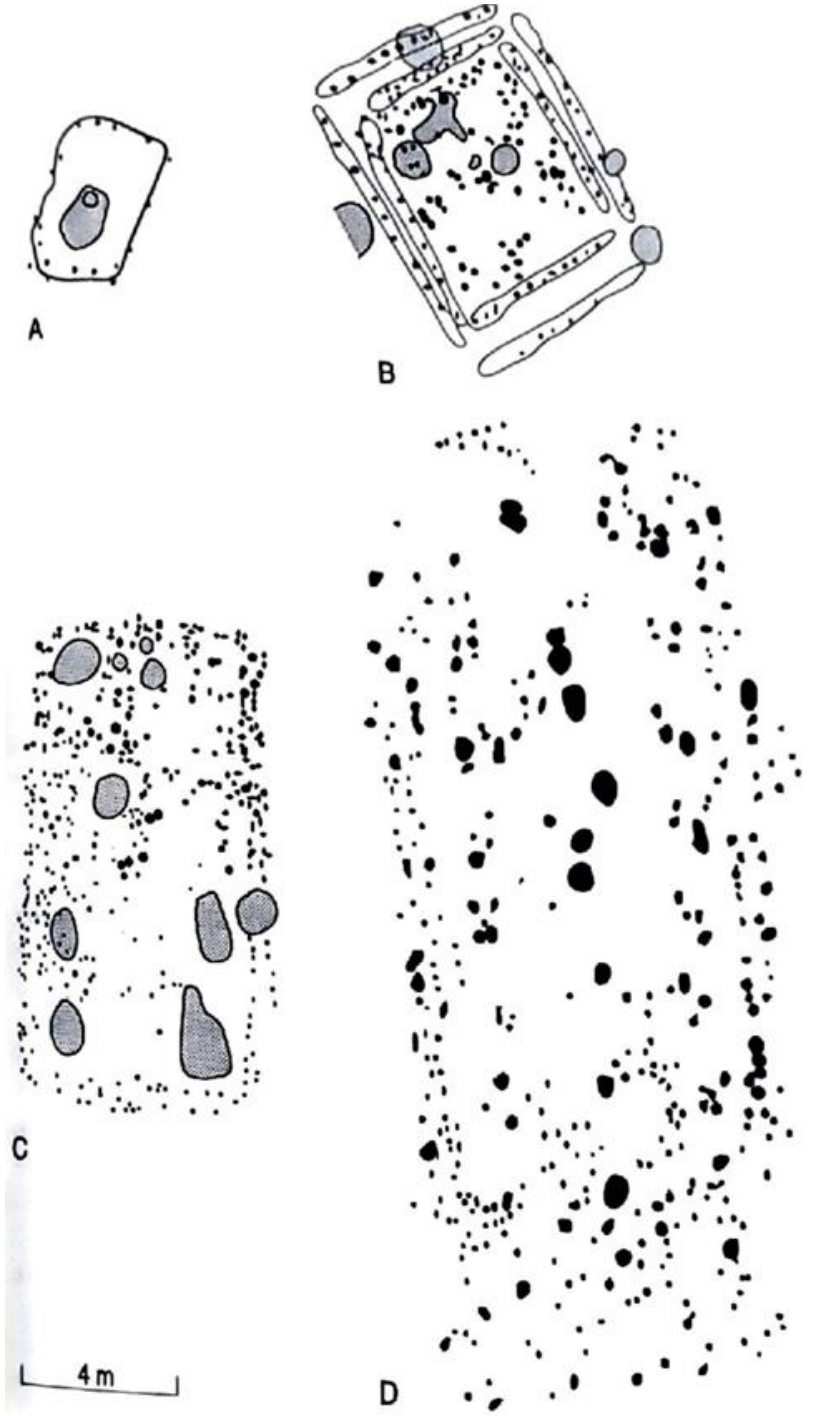


Fig. 1. The Incinerator site: 1971-1978.

(Figure 4.1 From Robertson 1984) This is a map of the incinerator site, also known as Sunwatch village. The site is a typical middle Fort Ancient site with a planned village with all houses in a circular arrangement around a central plaza. Within the plaza there would have stood a large pole that it is theorized to have been used to track season change for the planting of maize (Robertson 1984).

Figure 4.3 (pictured below) depicts the house size change from early Fort Ancient (A) to Late Fort Ancient (C and D) with the middle Fort Ancient being (B) respectfully. During the Late Fort Ancient, houses become larger and appear to be less organized, however there is considerably less data on Late Fort Ancient housing size due to the destruction of the stratigraphy and Late Fort Ancient material and post molds resulting from antiquarianism as well as settler colonialist farmers. Drooker, during her excavations of Madisonville, avoided attempting to discern the settlement of the village altogether instead focusing on the graveyard and the grave goods associated with it (1997). From what scholars have discerned with the presence of hunting camps during the Late Fort Ancient are similar to the practices of the Muscogee in that they have a Summer/Winter occupation cycle with the winter months likely to

have been spent in hunting camps and the Summer months being spent in villages with extended kin (Drooker and Cowan 2001).



(Figure 4.3 From Drooker and Cowan 2001)

Ethnohistoric Data on the Fur Trade

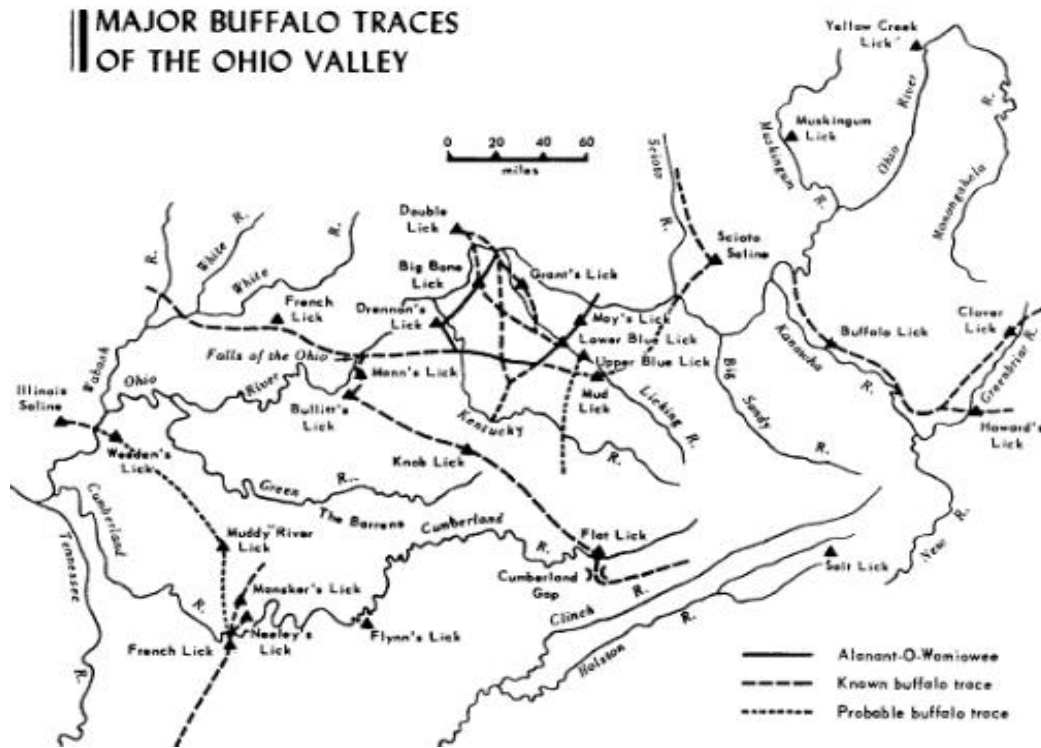
The change in house size and plan from Middle to Late Fort Ancient appear similar to the Muscogee Creek who operated in the Fur Trade From 1685-1815, the presence of hunting camps within the Late Fort Ancient further this analogy (Braund 1993). During this period, there is ethnohistoric evidence of seasonal migration to accommodate their reliance on hunting. During the winter months typically from October to February, each nuclear family would separate from the village during this time to establish a hunting camp. The main source of ethnohistoric records of this style of occupation come from early European (mainly British) settlers in the American south. A Georgian settler named George Friedrich Von Rech described the temporary hunting camps that were established in the following way, “When they camp during traveling or on a hunt, they peel a pine tree and make a hut of bark or else skins and a few poles” (Braund 66-671993).

Archaeological Data on the presence of Bison

Beginning some time before 1650 AD. Bison had made a return to the ORV and surrounding areas. The Bison were spread out disproportionately across the landscape (Tankersley 1992). What attracted bison east is speculated to have been newly formed grass patches within the forests of the Midwest. Adding to this, areas of south east Ohio and north east Kentucky also had the added benefit of possessing numerous salt licks (See Figure 4.3). Salt licks are springs that contain high amounts of salt that attract a wide array of mammals, including bison.

A salt lick can be found in large streams. Bison would follow the streams to the salt licks. These paths are predicable and are known as bison traces (See Figure 4.4). These traces would

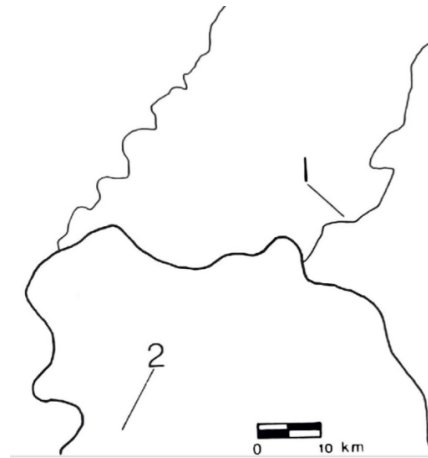
have been known for thousands of years before the return of bison to the ORV. Salt licks had been used in the past to hunt the megafauna of the last ice age and were also used more recently for the hunting of deer and elk before the arrival of bison (Jackle 1968).



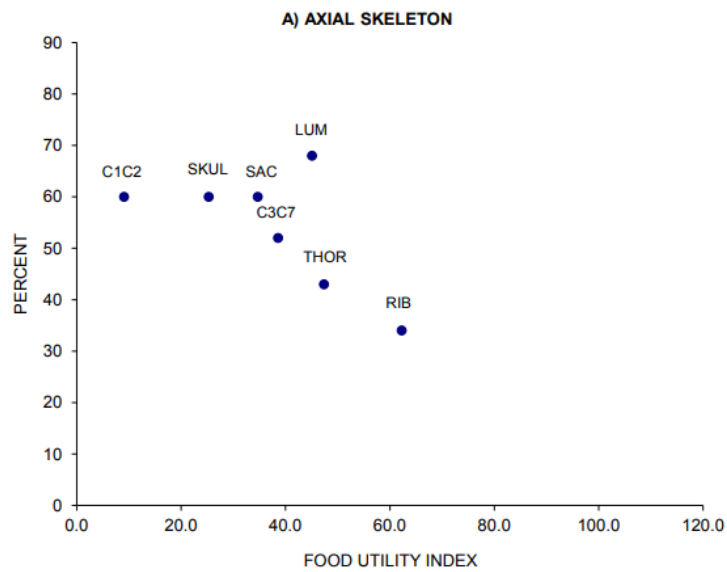
(Figure 4.4 Map of buffalo traces and salt licks from Jackle 1968)

One of these salt licks was is Big Bone Lick (BBL). BBL has a long history of use as a kill site stretching back to the Clovis culture. As bison moved to the ORV, BBL became a kill site as well as a temporary hunting camp for the Fort Ancient people. BBL has been theorized to have a connection with the Fort Ancient Site of Madisonville (Tankersley 1992) (See Figure 4.4). During the most recent investigations at BBL conducted by the Cincinnati Museum Center, a bison kill was discovered that carbon dated to 1400 to 1650 AD (Genheimer 2013). During their investigation they investigated the potential food benefits from the Bison using a Food

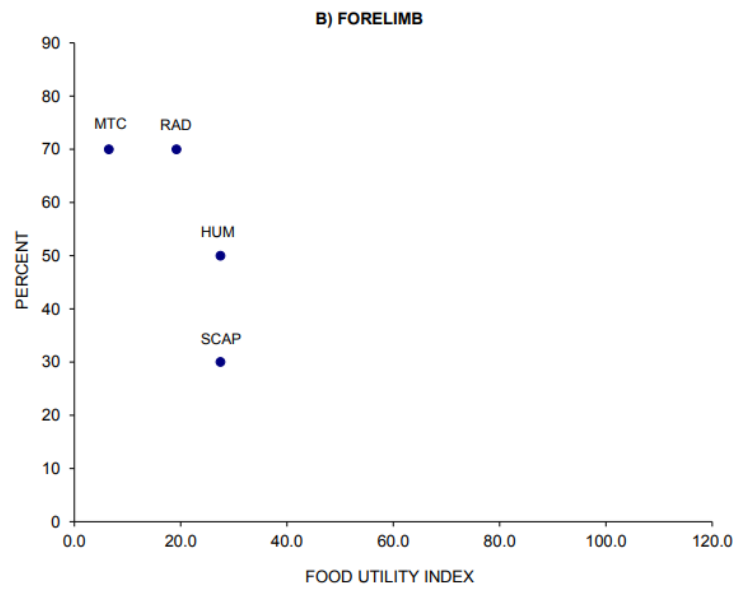
Utility index. It was determined that high value cuts of meat were likely removed from the bone and brought to a different location (See Figure 4.5-4.8) (Genhimer 2013). The buffalo trace that extends from the north of BBL was known by the Shawnee as the Alonata-O-Wamiowee (Jackle 1968).



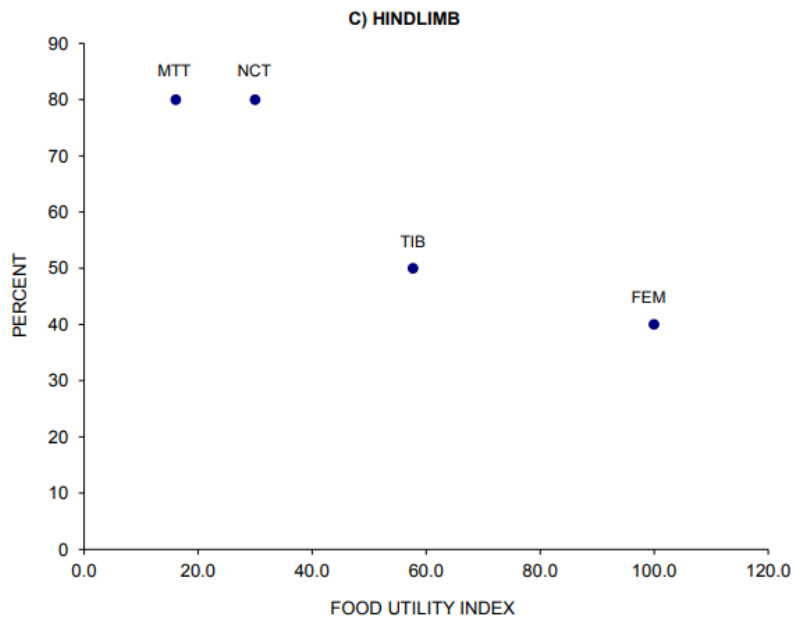
(Figure 4.5 Map of Madisonville 1 and Big Bone Lick 2. The larger of the line closer to 2 is the Ohio River. The line with no number is the Great Miami River and the line with the 1 is the Little Miami River From Tankersley 1992)



(Figure 4.6 Food Utility Index of bison kill at BBL Axial Skeleton From Geheimer 2013)



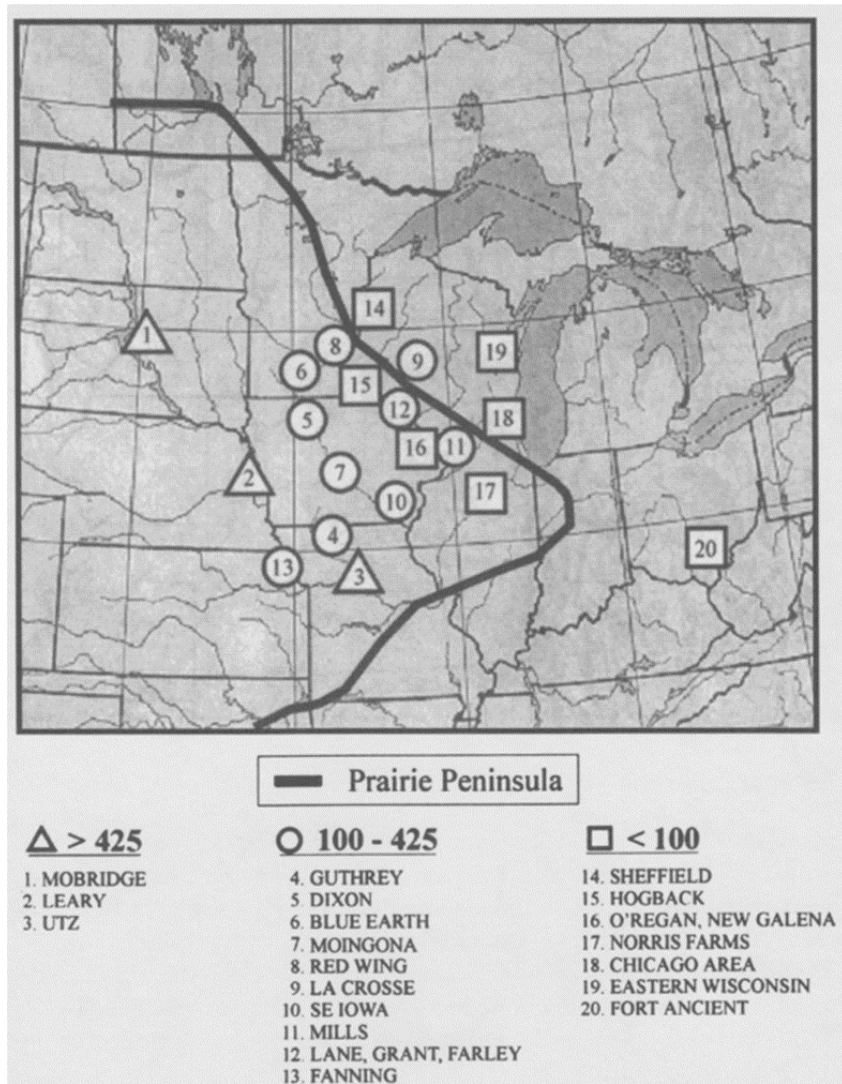
(Figure 4.7 Food Utility index of forelimb from bison kill at BBL from Genhiemer 2013)



(Figure 4.8 food utility index for hindlimb of bison kill from BBL from Genhimer 2013)

Table 4.1 Endscrapers at Fort Ancient sites and excavation year

	Number of Endscrapers	Excavation Year
Madisonville		1895-1911
Unifacial	n=56	
Bifacial	n=217	
Augusta		1984
Unifacial	n=3	
Bifacial	n=3	
Thomson		1984
Unifacial	n=0	
Bifacial	n=9	
driving range		1993
Unifacial	n=0	
Bifacial	n=6	



(Figure 4.9 map of cultures with bifacial endscrapers including a line that divided prairie region from the forest region from Boszhardt and McCarthy 1999)

Table 4.2 Bifacial Endscrapers from East to West among Planes tribes.

<i>Locality</i>	<i>Site</i>	<i>Scraper-Point Index</i>	<i>Reference</i>
South Dakota (Mobridge)	34Ww3	231	Wedel 1955
	34Ww10	589	
	34Ca6	428	
Nebraska	Leary	447	Hill and Wedel 1936
Kansas	Fanning	331	W. Wedel 1959
Missouri	Dowell	59	Henning 1970
	Guthrey	128	
	Utz	921	
Northwest Iowa	Dixon	187	Harvey 1979
Southwest Minnesota	21Fa45	167	Gibbon 1983
	21Fa83	400	
	21Fa79	100	
	21Fa72	333	
	21Fa68	400	
	21Fa74	200	
	21Fa81	250	
	21Fa76	150	
	21Fa69	250	
	21Fa75	67	
	21Fa1	106	
	21Fa2	129	
	21Fa64	300	
Central Iowa	Christenson	90	Benn 1984 Moffat et al. 1990
	Wildcat Creek	318	
	Dawson	200	
	Norman Dille	227	
North-central Iowa	Milford	1	Tiffany and Anderson 1993
Southeast Iowa	Kingston	251	Straffin 1971 Tiffany 1988
	McKinney	135	
Northeast Iowa/ Southeast Minnesota	Lane	137	M. Wedel 1959 McKusick 1973 M. Wedel 1959 Gallagher 1991 M. Wedel 1959 Wilford and Brink 1974 M. Wedel 1959
	Grant	250	
	Elephant	400	
	Farley	240	
	O'Regan	59	
	Hogback	41	
	New Galena	29	
Red Wing	Silvernale	117	Gibbon 1979
	Bryan	156	
	Bartron	216	
	Armstrong	245	
St. Croix River	Sheffield	34	Gibbon 1983
La Crosse	Olson	249	Gallagher et al. 1982
	Tremaine	304	Goatley 1995
	Midway	428	MVAC
	Sand Lake	405	MVAC
	Pammel Creek	404	Rodell 1989
	Gundersen	212	Boszhardt 1993

Table 4.2 Continued.

<i>Locality</i>	<i>Site</i>	<i>Scraper-Point Index</i>	<i>Reference</i>
	Filler	181	O’Gorman 1994
	Valley View	91	Withrow 1983
	State Road Coulee	50	Anderson et al. 1995
Northwest Illinois	Mills	132	Emerson 1991
Central Illinois	Norris Farms 36	20	Santure and Esarey 1990
Eastern Wisconsin	Walker Hooper	15	Gibbon 1969
	Carcajou Point	25	Hall 1962
	Aztalan	4	Barrett 1933
	Pipe	54	Overstreet 1981
	Mero	35	Mason 1966
	Old Spring	0	Overstreet 1989
Northeastern Illinois/ Northwestern Indiana	Greismer	26	Faulkner 1972
	Hoxie Farm	24	Brown and O’Brien 1990
	Anker	74	Bluhm and Liss 1961
	Oak Forest	76	Brown and O’Brien 1990
	Huber	51	

The Fort Ancient sites are the furthest east that bifacial endscrapers are found (See Figure 4.5). Table 4.2 provides a breakdown of bifacial endscrapers found to the west of the Fort Ancient among the Oneota peoples (See table 4.2). Table 2 shows the number of endscrapers found within four Fort Ancient Sites that are situated in the ORV (See Table 4.1).

Table 4.3 (below) includes a list of sites that have similar brass artifacts (Figures 4.10 and 4.11) that were found at Madisonville during Drooker’s excavations (See Table 4.3). What follows the table is a series of maps (See Figures 4.11-4.15) that show the data from Table 4.3. Figure 4.3 shows the locations where iron branded copper kettles produced by the Basque were uncovered at various sites (See Figures 4.9 and 4.11).

Table 4.3 list of sites containing copper objects (Drooker 1997)

		Serpent Shapes	Coils, Rings	Spirals	References
Lu/O 86	AL	x	x		Webb 1939
Seven Mile Ia.	AL		x		Jolly 1969, 1973
near N. Little Rock	AR	(x)			M. Wedel 1959
Mt. Royal	FL	(x)			Moore 1894, 1920
Anker	IL	(x)	x		Bluhm and Liss 1961; Herold et al. 1990
Carter Mound	IL	*			Ctr. for Amer. Arch., K. Farnsworth, pers. comm. 1995
Hoxie Farm	IL	(x)			Butkus 1973; Herold et al. 1990:88-7; Dausman 1990
New Lenox	IL		x		Lurie 1994
Palos	IL		x		Munson and Munson 1969a, 1969b
Zimmerman	IL	*			M. Brown 1975
Fifield	IN	(x)*			Faulkner 1972; Herold et al. 1990
Murphy	IN		x		Moorehead 1906; M. Wedel 1959
Blood Run	IA	x	x		Harvey 1979
Burke	IA		x		M. Wedel 1959
Dixon Village	IA	(x)			Harvey 1979
Hogback	IA		x		M. Wedel 1959
Lane	IA	x			M. Wedel 1959
New Galena	IA	x			M. Wedel 1959
O'Regan	IA	(x)	x**		M. Wedel 1959
Woolstrom	IA		x		M. Wedel 1959
northeastern Iowa	IA	x			Iowa Historical Soc., #E.O. 1250
Fanning	KS		x		W. Wedel 1959
Augusta	KY	(x)			Henderson et al. 1986
Hardin	KY		x		Hanson 1966
Slack Farm	KY		x		C. Munson, pers. comm. 1991
Dumaw Creek	MI	(x)			Quimby 1966a
Summer Island	MI	*			Brose 1970
Cooper	MN		x		Birk and Johnson 1992
Hogback	MN		x		M. Wedel 1959
Utz	MO		x**		Bray 1978
Adams	NY		x	x	Wray et al. 1987
Bach	NY			x	Bradley and Childs 1991
Cameron	NY			x	Bradley and Childs 1991
Chase	NY			x	Bradley and Childs 1991
Culbertson	NY		x	x	Wray et al. 1987
Diablo	NY			x	Bradley and Childs 1991
Englands Woods	NY			x	Bradley and Childs 1991
Genoa Fort	NY			x	Bradley and Childs 1991
Pompey Center	NY			x	Bradley and Childs 1991
Ripley	NY			x	Bradley and Childs 1991
Smith-Pageric	NY			x	Bradley and Childs 1991
Spragg	NY			x	Bradley and Childs 1991
Tram	NY			x	Wray et al. 1991
Beale Mound	OH			x	Wm. Wertz, pers. comm. 1993
Indian Hills	OH		x		Stothers 1994
Madisonville	OH	x	x	x	Hooton and Willoughby 1920
Brantford area	ON	*			Fox 1991:6
Dwyer	ON			x	Bradley and Childs 1991
Fonger	ON			x	Fitzgerald 1990
Graham-Rogers	ON		x		Fitzgerald 1990
Green Lake	ON		x	x	Fitzgerald 1990
Grimsby	ON			x	Bradley and Childs 1991
Hood	ON		x		Fitzgerald 1990
Kleinburg	ON		x		Fitzgerald 1990
Sault Ste. Marie area	ON	*			Fox 1991:6
Snider	ON		x		Fitzgerald 1990
Warminster	ON		x	x	Fitzgerald 1990
Foley Farm	PA			x	Bradley and Childs 1991
Ingraham/Spragg	PA			x	Johnson 1994
Overpeck	PA			x	Bradley and Childs 1991
Schultz	PA			x	Bradley and Childs 1991

Table 4.3 Continued (Dooker 1997)

		Serpent Shapes	Coils, Rings	Spirals	References
Shenks Ferry	PA			x	Bradley and Childs 1991
U.Susquehanna sites	PA			x	Bradley and Childs 1991
WashingtonBoro	PA			x	Bradley and Childs 1991
46HM73	WV			x	Bradley and Childs 1991
Buffalo	WV	(x)*			Hanson 1975
Herriott Farm	WV			x	Bradley and Childs 1991
La Poe	WV			x	Johnson 1994
Pancake Island	WV			x	Brashler 1987; Johnson 1994
State Road Coulee	WI		x		Boszhardt 1989
Valley View	WI		x		Boszhardt 1989



Figure 4.9 Image of iron-banded copper kettle (From Fitzgerald, Turgeron, Whitehead and Bradley 1993) The majority of the Kettle was constructed from copper the band that can be seen underneath the rim of the kettle was crafted out of iron with two iron bolts holding it in place (Fitzgerald, Turgeron, Whitehead and Bradley 1993).



Figure 4.10 Basque kettle distributions a distinction to note is that no intact iron banded kettles are present in the Fort Ancient context (from Drooker 1997)

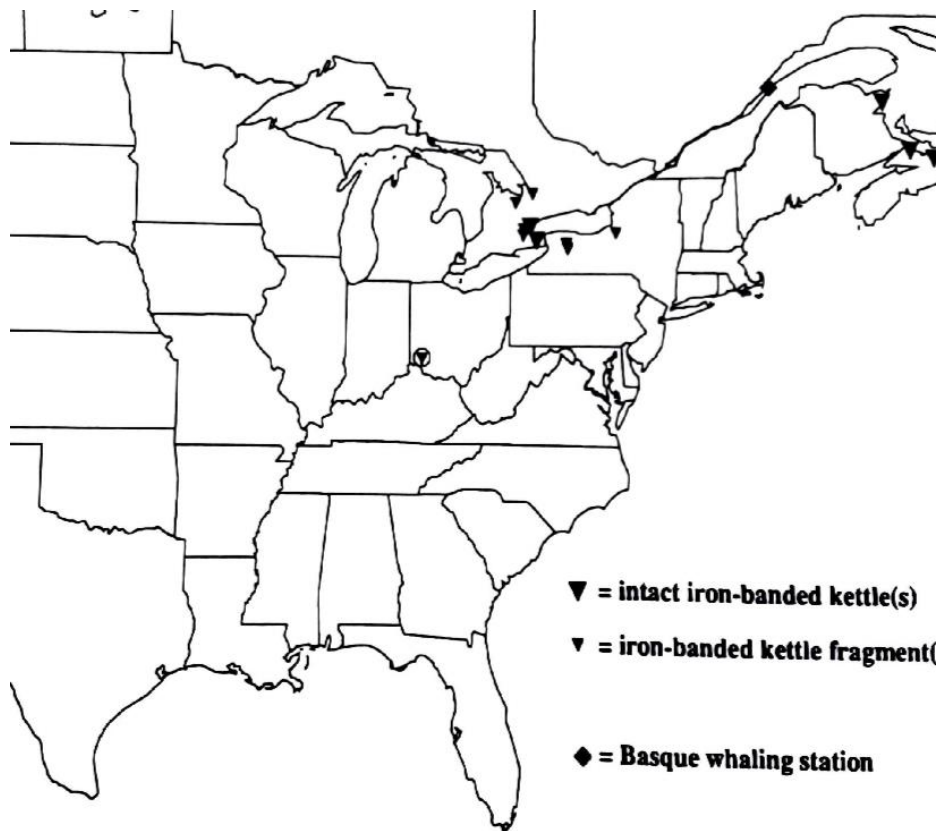


Figure 4.11 Image of Clarksdale bells found at Madisonville From Drooker 1996



Figure 4.12 brass Clarksdale Bell distribution from Drooker 1997

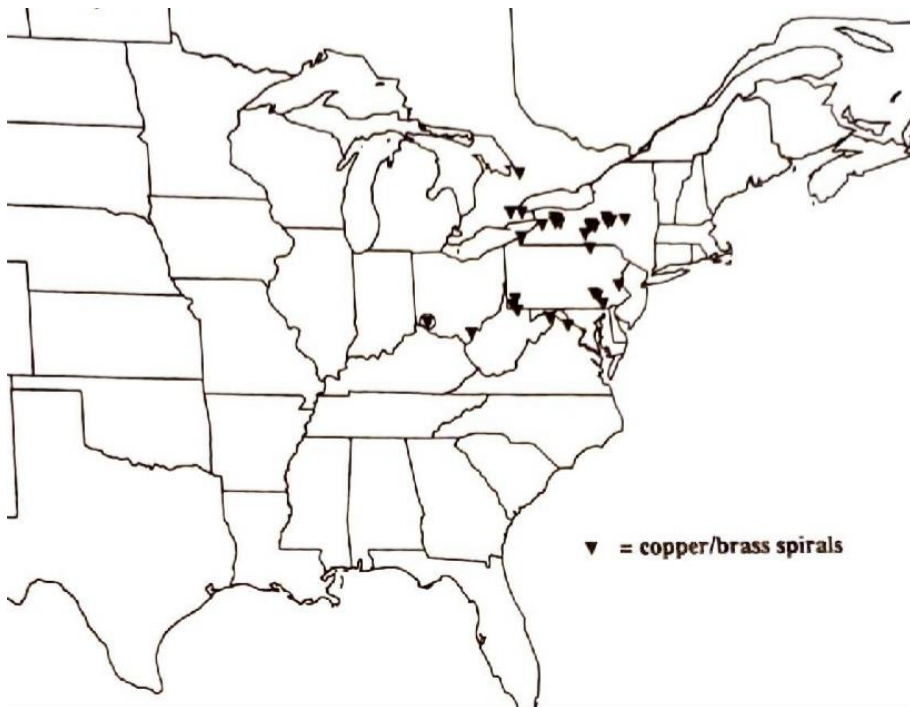


Figure 4.13 Copper Spirals distribution From Drooker 1997

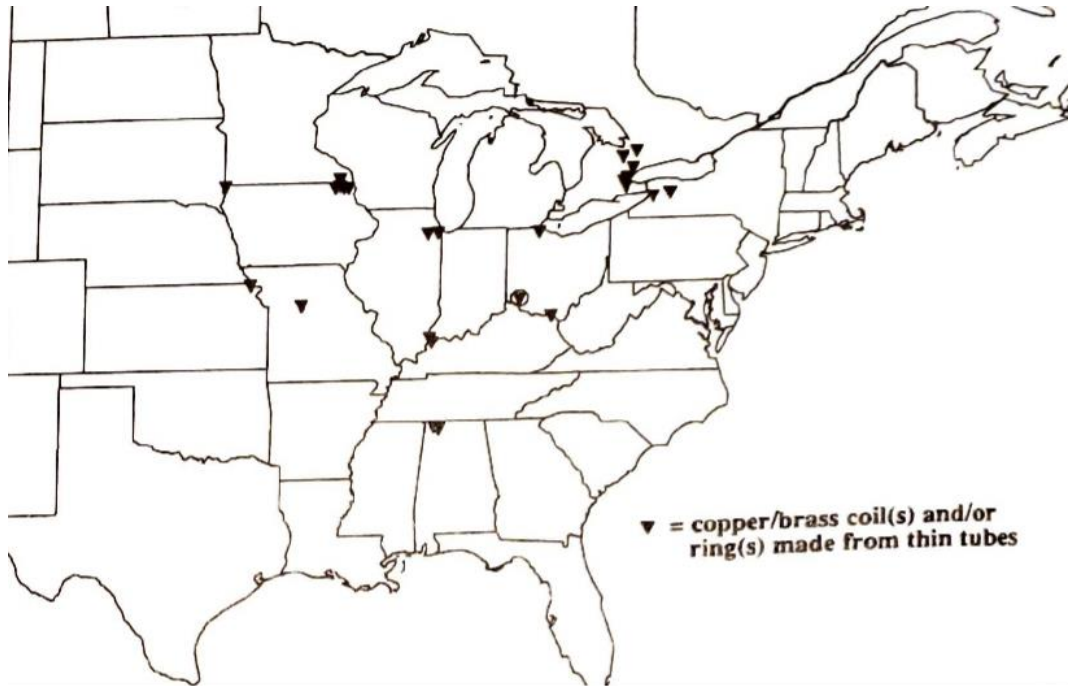


Figure 4.14 Copper Coil distribution from Drooker 1997

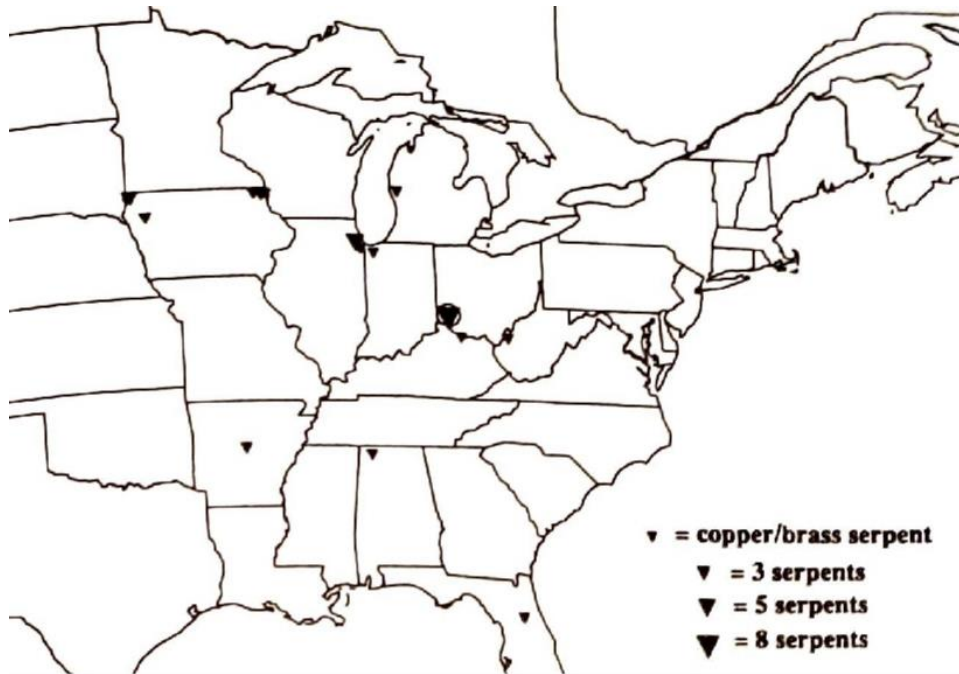


Figure 4.15 copper serpent distribution from Drooker 1997

Conclusion

With the data presented in this chapter, I will synthesize and interpret their significance in view of my hypothesis that the Late Fort Ancient culture was participating in the fur trade indirectly through various groups that had contact with Europeans.

Chapter V Analysis

Introduction

In this research project I am attempting to illuminate the role that late prehistoric people (Late Fort Ancient) played in the early European Fur Trade. I believe if I used the idea of “rational actors” (see chapter II) that the Late Fort Ancient would see an economic opportunity in the European Fur Trade (Bell 1992). In order to accomplish this, I examined the creation and wide adoption of the bifacial endscrapers among the late Fort Ancient 1400-1750 AD. My goal was to build an analogy using the Late Fort Ancient endscraper data in tandem with ethnohistoric data from an Indigenous community known to have participated historically with the European Fur Trade. The community I decided to research were the Muscogee, who have a documented participation in the European fur trade. Through that comparative investigation, I was hoping to find direct ethnohistoric evidence in the form of a stone tool directly analogous to the Fort Ancient bifacial endscrapers used by members of the Muscogee. In finding an analogous tool I had hoped to construct a formal analogy (an analogy between two groups that share no historical link as described by Wylie in chapter II between the Late Fort Ancient and the Muscogee (Wylie 1985).

In this chapter, I analyze the data discussed in the previous chapter. In so doing, my goal has been to evaluate whether a link exists connecting the Late Fort Ancient peoples with the European Fur Trade that demonstrates they were actively and tangentially involved in that economic activity. I discuss the three sets of data that were illustrated in chapter IV each in turn, beginning with settlement structure.

Settlement Structure

Due to my previous research on the Fort Ancient culture, I had knowledge that Fort Ancient settlement changed throughout time. Although academic research of Late Fort Ancient

settlement is limited due to site destruction by agriculture, research demonstrates that Early Fort Ancient settlements were comprised of small villages that appear to have been in some form of loose organization. However, Early Fort Ancient sites are difficult to document due to poor preservation within the archaeological record (Drooker and Cowan 2001). The Middle Fort Ancient settlement structure is well documented archaeologically due to the research conducted at well-preserved sites such as Sunwatch (Cook 2008). Settlements during the Middle Fort Ancient were arranged around a circular plaza (see Figure 4.1) with rings of houses constructed around this central plaza. The cultivation of maize was a crucial aspect of life during the Middle Fort Ancient. The Late Fort Ancient settlement patterns such as Early Fort Ancient are not as well preserved as Middle Fort Ancient. With that being said, the consensus from academics such as Penelope Drooker and Wesley Cowan is that settlement organization that was maintained during Middle Fort Ancient was abandoned by the Late Fort Ancient, this is seen in the archaeological record as Late Fort Ancient settlements have no central plaza (Drooker and Cowan 2001). It is also during the Late Fort Ancient that seasonality (seasonal movement in and out of a given area) became more prevalent with the establishment of hunting camps away from village centers.

House size within the Fort Ancient is also discussed in chapter IV. Throughout the Fort Ancient's residency in the ORV, the size of the houses continued to increase from the Early through to Late period (see Figure 1.1). The Late Fort Ancient peoples created the largest houses when compared to the Early and Middle phase Fort Ancient housing. These larger houses were able to house an extended family or kinship group, whereas the Early and Middle Fort Ancient were only large enough to house a nuclear family. Again, I had known about housing size and settlement structure of the Fort Ancient due to previous research and was it was not my intention

at the beginning of this research project to discuss them. However, this changed when I began to do research on the ethnohistoric data on the Muscogee participation within the Fur Trade.

I had chosen the Muscogee to research due to their historic participation in the southern European Fur Trade. As stated in chapter I, the southern portion of the European Fur Trade was devoted to the production of utilitarian furs, mostly deer. This stands in contrast with the northern European Fur Trade that was devoted exclusively to the production of luxury furs like beaver and mink. I had hopes that within the ethnohistoric accounts of the Muscogee there would be reference to the types of tools that the Muscogee used to produce deer hides and that these tool types would be directly comparable with those endscrapers during the Late Fort Ancient, thus providing the bridge connecting the data at Fort Ancient with evidence for significance of their use through the analogical framework. Recognizing that the Late Fort Ancient and the Muscogee were in no way historically connected the analogy would have revolved around the use of the stone tool similar to the types of analogy that scholars such as Lewis Binford created in the past in regards to smug pits. Within the ethnohistoric descriptions, I hoped to find a description of a tool that would have been analogous to the Late Fort Ancient bifacial endscrapers that spiked/surged in numbers at this time. However, during my research I found no such account. Instead, I was able to locate ethnohistoric accounts of how the Muscogee organized themselves socially to accommodate their intensive deer hunting. Before examining the ethnohistoric data and its parallels with the Fort Ancient data, I will emphasize the factors involved in the production of deer hides.

Deer, being large mammals, are difficult to trap, unlike the smaller animals that were hunted in Canada and in Northern parts of the US. This means that the acquisition and production of deer hide requires a considerable amount of labor. Another factor to consider is

that deer hunting was somewhat of a new experience for the European colonizer, as hunting in Europe was primarily an elite affair.

The Muscogee having the knowledge of the how to conduct a deer hunt while also possessing an unparalleled amount of information on the best hunting grounds in the South East where historically one of the best producers of deer hide during the European fur trade (Braun 1993). The Muscogee participation in the southern European Fur Trade was voluntary. They provided European (largely British) colonizers with furs in exchange for European goods. The opportunity that the European Fur Trade presented soon made deer hide production the staple of the Muscogee economy.

The ethnohistoric accounts of the Muscogee describe a seasonal migration of extended kinship groups from their villages during summer months to hunting camps during the winter. The accounts also describe that the production of deer hide was a gendered endeavor with the hunting being conducted by the males of a family and the production of the hide being done by the women.

These ethnohistoric accounts of Muscogee seasonality made me re-consider settlement structure and house size within the Fort Ancient. The size of Late Fort Ancient houses being large enough to accommodate extended families and kinship groups and the reorganization of Late Fort Ancient villages with the introduction of Hunting camps could be interpreted as the Late Fort Ancient shifting their focus from intensive agriculture of maize to increased reliance on the acquisition of animals structured in a similar style to the Muscogee of the south east, with kinship-based families temporarily migrating out of a village during the winter months to a hunting camp. During the winter months the kinship group would have focused on the acquisition of animal products, including meat and hides.

Although this revelation was somewhat provocative, the ethnohistoric accounts of Muscogee provided no explicit discussion of tools analogous to those the Late Fort Ancient bifacial endscrapers. This lack of evidence to connect bifacial endscrapers to the southern fur trade and the production of deer hide prompted me to expand the scope of where to look for a tool analogous to a bifacial endscrapper. This led me to examine any culture that also engaged in the creation of bifacial endscrapers. I then was introduced to the Oneota and their production of bison hides.

Bison and Bifacial Endscrapers

Having found no tool that resembled a bifacial endscrapper among the Muscogee data, I began to look to any other group that was possessed a tool that was similar. The search brought my attention away from the north and southeast to the western Oneota of the upper great plains. The reports listed a stone tool that they described as a ‘teardrop endscrapper’. This tool the teardrop endscrapper was almost an exact replica to the bifacial endscrapers found in a Fort Ancient context. The Oneota had no connection to European Fur Trade whatsoever and I was still at a loss as to why they possessed a tool that what similar to the bifacial endscrapper.

My question then became why did the Oneota possess a tool similar to the Fort Ancient bifacial endscrapper and why did the Fort Ancient possess the easternmost extent of its distribution. The answer to the first question was that the Oneota participated in hunting bison. The teardrop endscrapper was used by the Oneota exclusively for the production of bison hides. This can be seen in the distribution of the bifacial ‘teardrop’ endscrapers (see Figure 4.9). With the exclusion of the Fort Ancient, bifacial endscrapers occurred to the west of the “prairie line” where the forests of the east end and the great plains begin. This is where the bison lived until their near extinction during the gilded age; if the Oneota used bifacial endscrapers solely to

produce bison hides, then the problem became that to my knowledge bison did not live within the ORV.

With the knowledge that the Oneota used bifacial endscrapers for the procurement of bison hides I was fairly perplexed as the range of wild bison does not extend to the ORV today. However, starting before 1600, AD bison did begin to inhabit the ORV (Tankerly 1992). It was also this period before 1600 AD that bifacial endscrapers begin to appear in a Fort Ancient context. Bison entered the ORV using what are known as bison traces. Bison traces are streams that bison would have used almost as a highway. With bison being an extremely large mammal, the heavy forests of the ORV would have presented a challenge in terms of navigation. The traces are accompanied by salt licks which are mineral deposits that attract a variety of animals as they replace many minerals that are necessary for survival. During the last ice age, the bison traces would have been used to hunt megafauna (Tankerly 1992). Following the last ice age (115,000 – 11,700 years ago) bison traces would have been of high value as the salt licks provided premier hunting locations (Tankerly 1992). These locations would have been well known to the Fort Ancient well before the introduction of bison to the ORV.

Based on these evaluations of the data, I infer that the Late Fort Ancient were rational actors then the creation and adoption of the bifacial endscrapper was in a response to the arrival of bison to the ORV during the Late Fort Ancient period. This would explain why Late Fort Ancient have the only example of bifacial endscrapers east of the prairie line. Having found a culture group with analogous tools to the Late Fort Ancient bifacial endscrapper, and having data that states that bifacial endscrapers were used wholly for the production of bison hides, I began to examine Fort Ancient trade in an attempt to uncover a connection to the European Fur Trade.

Trade

The Late Fort Ancient site of Madisonville has been extensively researched in regards to Late Fort Ancient imports and exports (Drooker 1997). Madisonville is also considered to be the most important late Fort Ancient site. It was because of this that I decided that a focus on Madisonville as the best way to illustrate the exchange networks that the Fort Ancient participated in.

The imports to the Fort Ancient have very little to do with the Oneota and the north west. Rather, what is seen is a greater focus to the north and south east. Copper from Europeans would have been an item that was used in the manufacturing of many goods including brass spindles that were traded with the Fort Ancient from the east. Basque kettles parts also show that the Late Fort Ancient had access to Native peoples who had contact with European colonizers. What the Late Fort ancient were trading to the east is not visible in the archaeological record. Another overarching issue is the fact that there was no demand for bison hides by the Europeans at this time. The demand would come much later during the mid to late 1800s far past the existence of the Fort Ancient (Richards and McNeill 2014).

Due to the lack of archaeological remains of Fort Ancient interaction to the east it could be possible that the Late Fort Ancient were trading an object/objects that is/was difficult to preserve archaeologically within the region. There is also the fact that during the Late Fort Ancient there was no demand for bison by Europeans because they would have been a foreign animal. That being said, bison fur would have still maintained a value among native peoples. We can then infer that the Late Fort Ancient were not using bifacial endscrapers to produce bison hides for Europeans, instead they would have been produced to meet a need within other surrounding native communities. Thus, bison was the economic opportunity that was recognized by the Late Fort Ancient not the European Fur Trade.

The European Fur trade began in the 1500s when French fishermen attempted to increase their personal profits. Fur Trading on the American continent began long before the arrival of Europeans. The Late Fort Ancient peoples would have used long-existing trade routes and connections to trade bison hides, which would have been a new resource. Bison for the Late Fort Ancient would have represented a new way to engage in trade with other Indigenous groups across the North American continent.

Conclusion

The settlement structure of the Late Fort Ancient suggests that hunting became increasingly more prevalent during the Late Fort Ancient than during the Early or Middle Fort Ancient. Bifacial endscrapers are similar to the 'teardrop endscrapers' of the Oneonta. It can therefore be implied/understood that the Late Fort Ancient used bifacial endscrapers in the same fashion as the Oneonta, for the processing of bison. Bison hides would have been traded in an economy separate to that demanded by European interests.

The data that I have collected and now explained shows that the Late Fort Ancient did participate in the Fur Trade. However, they did not participate in the *European* Fur Trade. The Fur Trade that they did participate in had initiated thousands of years before the arrival of Europeans to the American continent. I had initially begun this project with the intent of creating a bridge between the Late Fort Ancient and the *European* Fur Trade. I believed that this connection would have given a greater agency to the Fort Ancient as being adaptable to a new economic interest. However, in my attempt to create this bridge I did not acknowledge that the trading of furs had existed on the American continent thousands of years before Europeans arrived. I now understand that although I had a well-intentioned initial hypothesis, it was Euro-centric. I believe that my findings shed light on a little discussed aspect of American history.

That indigenous groups adapted and maintained long held connections and traditions after European contact.

Chapter VI

Conclusion

This chapter will summarize my findings and give my thoughts on what research should be conducted in relation to bifacial endscrapers within the Late Fort Ancient. When I began this investigation, I hoped to create a connection between the Late Fort Ancient and the European Fur Trade. I believed that the economic opportunity that was presented in the European Fur Trade would not have been overlooked by the Late Fort Ancient who I viewed as rational. The actions that the Late Fort Ancient took by the Late Fort Ancient had intended consequences that were known by the Late Fort Ancient. There were also of course unintended consequences to their actions.

The bifacial endscraper, a tool that only exists within the Late Fort Ancient I believed, was the result of the Late Fort Ancients recognizing what could be gained in the European Fur Trade. Although the Late Fort Ancient had no direct contact with European colonizers, they most definitely traded with Native communities who did this can be seen by the presence of Basque kettles found at the important Late Fort Ancient site of Madisonville. If bifacial endscrapers did represent an increase of fur production for European demand I had to find a Native community that did participate in the European Fur Trade. That is when I began to research the ethnohistoric accounts of the Muscogee.

While researching the Muscogee I was attempting to find a tool that was analogous to the Late Fort Ancient bifacial endscraper. I found no such tool; however, I did find descriptions of Muscogee settlement patterns. These settlement patterns mirrored those of the Late Fort Ancient. I would later use this information to re-orient my hypothesis, but I first had to find a tool that was analogous to the Late Fort Ancient bifacial endscraper.

I found a tool similar to a Late Fort Ancient bifacial endscraper to the west of European contact. The Oneota who occupied the prairies just beyond the woodlands of the east produced a “teardrop” endscraper that is close to identical to Late Fort Ancient bifacial endscrapers. These teardrop endscrapers were used specifically for the production of bison hides.

Although no bison naturally lived in the ORV during the Late Fort Ancient, populations of bison began to move east using long existing buffalo traces (rivers and streams) to enter the forested areas. The many salt licks within the ORV and its tributaries would have attracted bison. Salt licks and buffalo traces had been used as hunting grounds for Native groups for thousands of years there is no doubt that the Late Fort Ancient used them as well and took note of the newly migrated bison.

Having learned of bison inhabiting the ORV and that bifacial “teardrop” endscrapers were used by the Oneota exclusively for the production of bison hide I then inferred that bifacial endscrapers in within the Late Fort Ancient were also used exclusively for the production of bison hides. However, the question still remained: who were the hides for? There existed during the Late Fort Ancient no European demand for bison hides. Bison hides then were only utilized by native communities. Initially I thought that by creating a connection between the Late Fort Ancient and a global colonial economy would give some form of agency. My end results far exceed my initial ambition. The Late Fort Ancient did not participate in the European Fur Trade. They did, however, participate in the North American Fur Trade that lasted for thousands of years before 1492.

In terms of further research, I would first suggest a comparative microwear analysis of bifacial endscrapers within a late fort Ancient context like the once done by Jack Schultz and Peter Siegel (Schultz 1992) (Siegel 1984). This work could further test the hypothesis that

bifacial endscrapers within the Late Fort Ancient were used for processing of bison hides. Furthermore, it could be of interest to investigate why bifacial endscrapers are preferred to produce bison hide as opposed to unifacial endscrapers. I believe that through experimental archaeology, this could be examined. By simulating the hide production process with modern unifacial and bifacial endscrapers, one could examine the how well the edge is kept before retooling and how effective the tool is after it has been sharpened.

I would also suggest a larger focus be put on excavation in and around salt licks. While some investigations have taken place in the past the majority have been geological and largely ignored more recent history. Investigation of the salt licks could further expand knowledge of how they were utilized over time by various Native Groups.

In a larger scope I believe that further investigations of how Indigenous groups maintained their long existing connections on the American continent long after the arrival of Europeans. I believe it is also worth investigating who makes a hide processing tool and who uses them if there. Does a distinction even exist? The best way to answer these questions most likely comes in the form of ethnohistoric research.

This project was something I never thought I could accomplish five years ago. I could not have accomplished it on my own. This experience has been eye-opening to say the least and I would like to thank my advisor, mentors and friends for being with me throughout this project. To conclude the process of creating this independent study has shown me how important it is to keep an open mind during the process of writhing a thesis. If I had not been open to new data and new ways of interpreting previous data than the ones I suggested in my initial proposals, this project could have come to an extremely different conclusion.

Bibliography

Ascher, Robert

1961 Analogy in Archaeological Interpretation. *Southwestern Journal of Anthropology* 17(4):317–325.

Ayotte, Jeremy B., Katherine L. Parker, and Michael P. Gillingham

2008 Use of Natural Licks by Four Species of Ungulates in Northern British Columbia. *Journal of Mammalogy* 89(4):1041–1050. DOI: [10.1644/07-MAMM-A-345.1](https://doi.org/10.1644/07-MAMM-A-345.1).

Bell, James

1992 On capturing agency in theories about prehistory. In Gardin, J. C., and Peebles, C. (eds.), *Representations in Archaeology*, Indiana University Press, Bloomington, pp. 30–55.

Binford, Lewis R.

1967 Smudge Pits and Hide Smoking: The Use of Analogy in Archaeological Reasoning. *American Antiquity* 32(1):1–12. DOI: [10.2307/278774](https://doi.org/10.2307/278774).

Boszhardt, Robert F., and Joelle McCarthy

1991 Oneota Endscrapers and Experiments in Hide Dressing: An Analysis From the La Crosse Locality. *Midcontinental Journal of Archaeology* 24(2):177–199.

Bourdieu, Pierre

1977 *Outline of a theory of practice*. Cambridge studies in social anthropology, 16. Cambridge University Press, Cambridge, U.K.

Braund, Kathryn

1993 *Deer Skin & Duffels. The Creek Indian Trade with Anglo-America 1685-1815*. Second. University of Nebraska Press.

Clay, Berle

1998 The essential Features of Adena Ritual and Their Implications. *Southeast Archaeology* 17 (1): 1-28

Cook, Robert

2008 *Fort Ancient Development in the Mississippian World*. University of Alabama Press.

- Dobres, Marcia-Anne, and Christopher R. Hoffman
1994 Social Agency and the Dynamics of Prehistoric Technology. *Journal of Archaeological Method and Theory* 1(3):211–258.
- Dornan, Jennifer L
2002 Agency and Archaeology: Past, Present, and Future Directions. *Journal of Archaeological Method and Theory*:27.
- Drooker, Penelope B.
1996 Madisonville Metal and Glass Artifacts: Implications for Western Fort Ancient Chronology and Interaction Networks. *Midcontinental Journal of Archaeology* 21(2):145–190.
1997 *The view from Madisonville Protohistoric Western Fort Ancient Interaction Patterns*. Regents of University of Michigan The Museum of Anthropology.
- Fitzgerald, William R., Laurier Turgeon, Ruth Holmes Whitehead, and James W. Bradley
1993 Late Sixteenth-Century Basque Banded Copper Kettles. *Historical Archaeology* 27(1):44–57.
- Genheimer, Robert
2013 Investigation into a Late Prehistoric Bison Kill/Butchering Event at Big Bone Lick State Park, Boone County, Kentucky. *Current Research in Ohio Archaeology*.
- Giddens, Anthony
1979 *Central Problems in Social Theory: Action, Structure, and Contradiction in Social Analysis*. University of California Press, November 29.
- Griffin, James B
1966 *The Fort Ancient aspect: its cultural and chronological position in Mississippi Valley archaeology*.
- Hedeen, Stanley, and John Mack Faragher
2008 William Clark's Bountiful Collection. In *Big Bone Lick*, pp. 96–111. 1st ed. The Cradle of American Paleontology. University Press of Kentucky.
- Henderson, A. Gwynn, and David Pollack
1992 Chapter V The Thompson Site. In *Fort Ancient Cultural Dynamics in the Middle Ohio Valley*, 8:. Monographs in World Archaeology. Prehistory Press.
- Hodder, Ian
2000 Agency and Individuals in Long-Term Processes. In *Agency in Archaeology*, edited by Marcia-Anne Dobres and John E. Robb, pp. 21–33. Routledge.

- Jackle, John A.
1968 The American Bison and the Human Occupance of the Ohio Valley. *Proceedings of the American Philosophical Society* 112(4):299–305.
- Kardulias, P. N
1984 History of Public Archaeology in Ohio. *Ohio History* 18: 103-130
- Lepper, Bradley Thomas
2005 *Ohio archaeology: an illustrated chronicle of Ohio's ancient American Indian cultures*. Orange Frazer Press, Wilmington, Ohio.
1998 Great Serpent timeline. *The Ohio Historical Society*. 15(5):30-45
1995 Tracking Ohio's Great Hopewell Road. *Archaeology*. 46(6):52-56
- McKern, W. C.
1943 Regarding Midwestern Archaeological Taxonomy. *American Anthropologist* 45(2):313–315.
- O'Brien, Matthew, and Thaddeus A. Liebert
2014 Quantifying the energetic returns for pronghorn: a food utility index of meat and marrow. *Journal of Archaeological Science* 46:384–392. DOI:[10.1016/j.jas.2014.03.024](https://doi.org/10.1016/j.jas.2014.03.024).
- Pavao-Zuckerman, Barnet
2007 Deerskins and Domesticates: Creek Subsistence and Economic Strategies in the Historic Period. *American Antiquity* 72(1):5–33. DOI:[10.2307/40035296](https://doi.org/10.2307/40035296).
- Phillips, James., Brown, James.
1983 *Archaic Hunters and Gatherers in the American Midwest*. Academic Press, New York
- Pollack, David, A. Gwynn Henderson, and Christopher T. Begley
2002 Fort Ancient/Mississippian Interaction on the Northeast Periphery. *Southeastern Archaeology* 21(2):206–220.
- Prufer, Olaf., Pedde, Sara, and Meindle, Richard
2001 *Archaic Transitions in Ohio and Kentucky Prehistory*. Kent State University Press, Kent, Ohio
- Purtill, Matthew P.
1999 Evidence for a Late Fort Ancient Fall/Winter Occupation in Southwestern Ohio. *North American Archaeologist* 20(2):105–133. DOI:[10.2190/9M5L-LGVN-G4PA-5UJU](https://doi.org/10.2190/9M5L-LGVN-G4PA-5UJU).
- Railey, Jimmy
1992 Chapter XI Chipped Stone Artifacts. In *Fort Ancient Cultural Dynamics in the Middle Ohio Valley*. Monographs in World Archaeology 8. Prehistory Press.

- Richards, John F., and J.R. McNeill
 2014 Furs and Deerskins in Eastern North America. In *The World Hunt*, pp. 1–54. 1st ed. An Environmental History of the Commodification of Animals. University of California Press.
- Robertson, James A.
 1984 Chipped Stone and Functional Interpretations: A Fort Ancient Example. *Midcontinental Journal of Archaeology* 9(2):251–267.
- Schultz, Jack M.
 1992 The Use-Wear Generated by Processing Bison Hides. *Plains Anthropologist* 37(141):333–351.
- Shanks, Michael., and Tilley, Christopher.
 1987 *Re-constructing Archaeology: Theory and Practice*, Routledge, London
- Shott, Michael., et al.
 1993 The Childers site and Early Late Woodland Cultures of the Upper Ohio Valley. *West Virginia Archaeologist*. 54:1-30
- Siegel, Peter E.
 1984 Functional Variability Within an Assemblage of Endscrapers. *Lithic Technology* 13(2):35–51.
- Tankersley, Kenneth B.
 1992 Bison and subsistence change: the protohistoric Ohio valley and Illinois valley connection. *Long-term subsistence change in prehistoric North America / editors: Dale R. Croes, Rebecca A. Hawkins, Barry L. Isaac*.
- Theler, James L., and Robert F. Boszhardt
 2003 The Oneota Culture. In *Twelve Millennia*, pp. 157–172. Archaeology of the Upper Mississippi River Valley. University of Iowa Press.
- Turnbow, Christopher, and Jobe Cynthia
 1992 Chapter VIII The Augusta Site. In *Fort Ancient Cultural Dynamics in the Middle Ohio Valley*. Monographs in World Archaeology 8. Prehistory Press.
- Webb, William, and Baby Raymond
 1957 *The Adena People No. 2*. Ohio Historical Society, Columbus, Ohio.
- Wylie, Alison
 1985 The Reaction against Analogy. *Advances in Archaeological Method and Theory* 8:63–111.