Midcontinental Journal of Archaeology

ISSN: 0146-1109 (Print) 2327-4271 (Online) Journal homepage: http://www.tandfonline.com/loi/ymca20

A Problematic Mississippian Pipe from the William Vaux Collection

Richard Veit & Matthew Lobiondo

To cite this article: Richard Veit & Matthew Lobiondo (2018): A Problematic Mississippian Pipe from the William Vaux Collection, Midcontinental Journal of Archaeology, DOI: 10.1080/01461109.2017.1419916

To link to this article: https://doi.org/10.1080/01461109.2017.1419916

Published online: 29 Jan 2018.

MIDCONTINENTAL JOURNAL OF ARCHAEOLOGY, 2018
https://doi.org/10.1080/01461109.2017.1419916

Routledge
Taylor & Francis Group

A Problematic Mississippian Pipe from the William Vaux Collection

Richard Veit and Matthew Lobiondo

Department of History and Anthropology, Monmouth University, West Long Branch, NJ 07764, USA

ABSTRACT

William Samson Vaux, Esq., was an enthusiastic nineteenth-century collector of minerals, artifacts, and coins. Passionately interested in the sciences, particularly archaeology and geology, he amassed an unparalleled collection of Native American artifacts that he later donated to the Philadelphia Academy of Natural Sciences. Today these finds are housed by Bryn Mawr College. Included in the collection is a noteworthy Mississippian effigy pipe. Carved from stone, the pipe depicts a Birdman encircled by rattlesnakes and holding a chunkey stone. This article examines the pipe in its cultural, historical, and religious contexts. It also explores the larger question of the pipe's authenticity. Ultimately, we argue that the pipe is almost certainly an original Mississippian pipe and an important addition to the corpus of known Mississippian effigy pipes. Moreover, its study highlights the potential of museum collections to provide new information about both past societies and the history of archaeology.

KEYWORDS

Mississippian tobacco pipe; chunkey; authenticity; William Vaux

Geographical Locator

Cumberland Gap; Virginia

Introduction

This article examines an extraordinary artifact, a Mississippian stone pipe (Accession #21706 or original number 70.18.4) from the William Vaux collection of Native American artifacts curated at Bryn Mawr College. This richly decorated pipe, which we do not believe has been previously published, embodies a variety of Mississippian religious symbolism and is a significant addition to the corpus of figural Mississippian pipes that have previously been studied. It is also important for what it reveals about nineteenth-century archaeological practices and the delights and perils of revisiting older artifact assemblages with new eyes, new techniques, and new questions. For the purposes of this analysis, we call it the Vaux Chunkey Player Pipe or more simply the Vaux pipe.

William Samson Vaux was the quintessential Victorian gentleman–scholar (Figure 1). Born on May 11, 1811, he descended from old Philadelphia Quaker families, though he later became an Episcopalian. Independently wealthy, he was a "gentleman" according to census documents, a privileged position that

CONTACT Richard Veit rveit@monmouth.edu

Figure 1. William S. Vaux (1811–1882), portrait in oil (1873) by Herman F. Deigendeschi. Collections of the Academy of Natural Sciences of Philadelphia.

enabled him to indulge his interests in the sciences: collecting specimens, especially related to archaeology, mineralogy, and numismatics. He was part of the Philadelphia archaeological intelligentsia during the late nineteenth century and was a larger-than-life character in scientific circles during a time when Philadelphia was a significant center of archaeological research (Browman and Williams 2002; Fowler and Wilcox 2003). During this period, researchers at the University of Pennsylvania and at the Academy of Natural Sciences, along with other independent scholars, made significant contributions to our understanding of North American prehistory. The work of Charles Conrad Abbott, Daniel Garrison Brinton, Montroville Dickeson, Henry Chapman Mercer, and Ernest Volk remains well-known. However, from an archaeological perspective, William Vaux is a rather shadowy figure who existed on the margins of early archaeological inquiry. Indeed, he is much better known as a collector of minerals and coins than as an archaeologist.

Vaux devoted much of his considerable energy to supporting scientific and scholarly organizations. When just 23, he was elected to membership in Philadelphia's prestigious Academy of Natural Sciences; soon he was serving as the

organization's curator and later as its treasurer. He would also go on to found the Numismatic and Antiquarian Society of Philadelphia and to serve as a founding member of the American Association for the Advancement of Science (Wilson 2016). At his death in 1882, he left his extensive Native American artifact collection to the Academy of Natural Sciences, which was later transferred to Bryn Mawr College, where it forms the nucleus of their exceptional archaeological collection.

In order to provide a context for the Vaux pipe, we examined archival collections at the Academy of Natural Sciences and Bryn Mawr College. The results were not particularly illuminating. Although modest documentation relating to William Vaux survives at the Academy of Natural Sciences, it is concerned almost exclusively with his mineral collections, which were enormous. No specific mentions of this artifact, or indeed of most of the artifacts in his collection, were found. We also examined the annual *Proceedings of the Academy of Natural Sciences* from 1841 until 1914 (Biodiversity Heritage Library), which include the reports of the Archaeology Section and, in some instances, note new acquisitions by the institution. No specific reference to the Vaux pipe or to any of Vaux's acquisitions prior to the transfer of the collection to the Academy of Natural Sciences was found. Similarly, a review of the Academy of Natural Sciences archaeological papers did not reveal any specific references to the pipe (ANSP Archaeological Collection Papers, Coll. 177, Academy of Natural Sciences [ANS] of Drexel University).

Based on our review of these collections, it is our contention that the pipe was acquired by Vaux before his death in 1882. The pipe is listed in the Academy of Natural Sciences Hand List, which enumerated the transfer of Vaux's finds to the Academy chronologically. The entry for the pipe notes that the artifact is from the Vaux collection. It is dated May 25, 1912, and the pipe is described as "Effigy Pipe, Eagle Warrior, . . . with Rattlesnake, Cumberland, Virginia" (ANS 1912: Ethnological Collection, Hand List. Bryn Mawr College). It is listed with other Virginia and West Virginia finds. These include effigy pipes from West Virginia and some finds noted as being from the Holston area. In conclusion, the Vaux pipe was almost certainly acquired by Vaux before his death in 1882 and was transferred to the Academy of Natural Sciences in 1912. In 1997, the collection was formally transferred to the Special Collections at Bryn Mawr College, though it had already been physically present there since 1961 (ANS, Deed of Gift, 3 February1998, Bryn Mawr College).

As a whole, the Vaux archaeological collection consists primarily of approximately 3,000 "museum-quality" artifacts. Although the collection is particularly rich in northeastern artifacts, the Southeast is also well represented, as are Mesoamerica, South America, and Europe. Skeletal remains associated with the Vaux collection were transferred to the University of Pennsylvania Museum; however, there is no indication that there were any skeletal remains associated with the Vaux pipe.

The tobacco pipes in the collection are especially noteworthy, and this pipe is one of the most extraordinary items in the collection. Little is known about its historical or archaeological context except that it was purportedly found in the Cumberland Gap. A nineteenth-century paper artifact label, pasted to the bottom of the pipe, reads "Cumberland Gap, Virginia" (Figure 2). The label is corroborated by the hand list of the Academy of Natural Sciences of Philadelphia, which lists the pipe's find spot as Cumberland Gap, Virginia (ANS, Ethnological Collection 38). The Cumberland Gap is on the border of Virginia and Kentucky and leads into Tennessee. One of the major passes through the Appalachian Mountains, this was a well-traveled pathway extensively used by settlers and Native Americans in the historic and protohistoric periods and during earlier periods as well. Indeed, the Cumberland Gap served as a major trade connector between east and west, and although it was located outside the Mississippian heartland, elite goods have been found on both sides of the gap. As noted by Duane Esarey, "There are no less than 15 Mississippian villages with associated mounds within 40 kilometers of the Cumberland Gap, including several in the wedge of Virginia 25 kilometers due east of the Gap itself" (personal communication 2016).

Particularly relevant are sites near Saltville, Virginia, where there is evidence for a chiefdom-level society along the Holston River "powered by the extensive trade in salt for exotic wealth items" (Barber 1996:43; Glanville 2007a). Sites in this region have yielded Mississippian artifacts, including numerous

Figure 2. Original label on the base of the pipe, labeled "Cumberland, Gap 21706 [the Academy of Natural Sciences accession number] Virginia." The current accession number, 70.18.4, is written in ink directly on the pipe.

marine-shell gorgets (Glanville 2007b, 2010; Holland 1970; Wedel 1951). As Esarey notes, "The upper Holston River valley and ridge region, a major corridor for Mississippian marine shell gorgets, passes within 50 kilometers of the Cumberland Gap" (personal communication 2017). This further supports the possibility that the pipe was found near the Cumberland Gap. Jefferies (2001:Table 13) notes that it was at the Cumberland Gap that standard Mississippian "ceramic identities" began to give way. Moreover, scholars have long recognized that pipes were made by talented artisans and sometimes traded over great distances (Jones 1999[1873]:400). David Dye has argued that "a major object in warfare was the appropriation and destruction of one's enemies [*sic*] sacra and connections with the Other World" (Dye 2011:109; Dye and King 2008). This pipe may well have been believed to embody supernatural powers.

The pipe shows some similarities to the Mississippian stone statues of the Tennessee-Cumberland Region (Smith and Miller 2009). As previously noted, very little contextual information is available about the pipe, and it is not known if it was excavated or a surface find. Vaux likely acquired the artifact during his tenure at the Academy of Natural Sciences in Philadelphia, but the exact date is not known; nor do we know if he found it himself, acquired it from a dealer, or received it in trade from another collector.

Description

Based on its form, style, and decoration the Vaux pipe is Mississippian and reflects elements of the Southeastern Ceremonial Complex (SECC), formerly called the Southern Cult (Galloway 1989; Muller 1989:11; Waring and Holder 1945; Figure 3). Waring and Holder, who helped define the SECC, did so using a trait-list approach and noted that key elements of the SECC included motifs, god-animal representations, ceremonial objects, and costumes (see Knight et al. 2001). They also noted that images of what they term God-Animal Beings, especially anthropomorphized birds, and chunkey players are common elements of SECC iconography. This pipe has avian, Below World, and human characteristics and, at the same time, depicts a zoomorphic chunkey player.

We recognize that scholars are increasingly questioning the usefulness of the SECC concept, noting that it is not limited to the South and shows considerable variability across time and space (Knight 2006; Knight et al. 2001; Muller 1986, 1989). However, for the purposes of this analysis, the phrase, though dated, remains useful, with the realization that the term *Mississippian Ideological Interaction Sphere*, or MIIS, may be more accurate (Reilly and Gerber 2007:3). For our purpose, SECC and MIIS are interchangeable.

Scholars have recognized that Mississippian art had distinct regional styles, which varied over time and influenced each other (see Brown 2004; Knight 2006; Lankford et al. 2011; Steponaitis and Dockery 2014). However, the

Figure 3. The Vaux effigy pipe showing a rattlesnake-wrapped chunkey player.

commonalities that Waring and Holder (1945) examined are not illusions. As noted by Steponaitis and Dockery (2014:39), they likely reflect both a "widespread substrate of shared beliefs about the cosmos and the supernatural beings who inhabited it" and either a trade in religious items or pilgrimages by individuals involved in visiting sacred sites or acquiring religious knowledge. Moreover, as Steponaitis and Dockery have shown through fossil sourcing of Mississippian tobacco pipes (2011, 2014), artifacts are often found far from their places of manufacture.

The SECC is also linked with a rich iconography: hands with eyes, spiders, sun circles, feathered serpents, piasas, raptors, and the like. Among the objects associated with the SECC are engraved conch-shell cups, head pots, monolithic stone axes, large flint blades, and most importantly for the purposes of this study, effigy pipes (Fundabark 1957:42). Some of these pipes depict animals, humans, or anthropomorphic or zoomorphic creatures. As noted by Charles Hudson:

> Perhaps the finest of these pipes represent people kneeling or kneeling playing chunkey or perhaps humorously themselves smoking pipes. Seldom more than eight or nine inches in height, the finest of these pipes are admirably executed with the same lively quality as some of the engravings on shell cups and gorgets. Because some of the effigy pipes are quite heavy, weighing as much as eighteen pounds, the Indians must have smoked them while resting them on the ground [Hudson 1976:395].

Like many Mississippian ritual artifacts, which are exceptionally well made and have been collected as art objects as well as studied as archaeological finds,

the Vaux pipe shows a very high level of craftsmanship and ornamentation. These very well-crafted items were likely associated with high status individuals (Helms 1993).

The Vaux pipe is figural or realistic and depicts an individual chunkey player with some human, avian, and Below World characteristics. It is made from tight-grained brown stone (Munsell 7.5 YR 5/4), likely sandstone. For a pipe, it is large in size, measuring 90.932 mm (3.58 in) wide at its widest point; 115.824 mm (4.56 in) high; 146.812 mm (5.78 in) deep from head to "tail," and it weighs 1374 g. Its bowl measures 37 mm in diameter, while the bore measures 25.9 mm in diameter. The pipe is carved in the form of a zoomorphic creature: in part a kneeling chunkey player and in part a taloned, rattlesnake-wrapped being that may be a Birdman, a Great Serpent, or a Great Panther. The chunkey player's head is crowned by a tri-lobed design facing backward. This may represent feathers, horns, or antlers. A series of circles, or bulbs, representing hair are on either side of the head and he also has a beaded forelock. The hairstyle is consistent with elite Mississippian males and shows some resemblance to stone figures from Mound C at Etowah (Smith and Miller 2009:23, 98–104). What appear to be two serpents, one of which is clearly horned, meet in what may be a knot at the back of his head and drape over his shoulders.

The chunkey player's eyes are oval to trapezoidal or almond-shaped in form and have small pupils (Figure 4). The lips are full and the nose is short. His face appears to be tattooed, with lines running down from his mouth and lower lip to his torso. He has a three-pronged eye motif. According to Sampson (1988:180), at Spiro this motif is usually associated with underworld motifs, especially snakes. This is similar to depictions of the panther face seen on objects such as the Bellaire pipe, an incised vessel from the Berry site (Reilly 2011:126, Figure 6.3a), and a bowl from Blytheville, Arkansas (Diaz-Granados 2011:91, Figure 4.15b). His ears are simply depicted, as is often the case in stone Mississippian art from the Tennessee region. The chunkey player's torso, which extends or leans forward, is pierced through the back for both the bowl of the pipe and the stem. There are faint lines running horizontally, which may indicate an apron or a breechcloth, along with an unidentified upside-down T-shaped marking on the chest.

The Vaux effigy has patterned bands, representing shell beads, on his upper and lower arms and lower legs. Similar bands are found on other Mississippian artifacts, including conch-shell drinking cups from Spiro, Oklahoma (Fundabark and Foreman 1957: Plates 23, 27; Hudson 1976:146). In his left hand, he holds what is likely a chunkey stick, which appears broken (see Diaz-Granados 2004:145), while his right three-fingered hand holds a chunkey stone (Figures 5 and 6). Uncommonly, the thumb and thumbnail are clearly depicted (Smith and Miller 2009:28). Wrapping around both the hole for the pipe stem and the pipe bowl are coiled serpents or rattlesnakes (Figure 7). The player's legs are minimalist and are depicted as folded beneath his body. They are

Figure 4. Frontal view of the Vaux pipe showing the face, facial tattoos, hair, beaded forelock, and chest of the chunkey player. Details in this photograph were highlighted for visibility.

very thin, like birds' legs, and end in talons (Figure 8). The legs rest directly on the ground, without a base or platform. The base of the pipe is undecorated but bears the previously noted historic label. Unlike some Mississippian pipes

Figure 5. Side view of the Vaux pipe showing the chunkey sticks, armbands and leg bands, and tattoos. Details in this photograph were highlighted for visibility.

Figure 6. Side view of the Vaux pipe. Note the face and chest tattoos, armbands and leg bands, talons in place of feet, three-fingered hand, chunkey stone, and rattlesnake tail. Details in this photograph were highlighted for visibility.

that appear to have been reworked from effigies, this artifact was purposely made as a tobacco pipe.

The pipe is in exceptionally fine condition. It shows a small crack on the upper left quadrant of the bore. The nose of the chunkey player is also chipped, and there may be a small chip, or alternatively an error in carving, near the chunkey sticks held in his left hand. Overall, the Vaux pipe appears largely as it was when originally carved.

Symbolism and Interpretation

The symbolism embodied by the pipe is discussed here in light of the literature about Mississippian art and archaeology, with a focus on tobacco pipes. Ancient Native American tobacco pipes are often associated with religious practices. As noted by David Penny, "Throughout the history of indigenous North America, smoking pipes and tobacco have remained tied to core religious values and ritual practices. Tobacco is a sacred substance, and one of the first domesticated plants in North America" (Blanton 2015). A mild narcotic, it was employed in a variety of rituals by Native Americans, especially those of the Southeast (Blanton 2015:21–24). Some origin stories treat tobacco as a gift from the

Figure 7. Rear view of the Vaux pipe showing the horned serpents wrapped around the pipe bowl and pipe bore and the taloned feet. Details in this photograph were highlighted for visibility.

gods. The Vaux pipe was too large to have been comfortably held by the smoker and almost certainly rested on the ground while being smoked (Power 2004:91). Its use may have been linked to ritual practices.

The Vaux pipe displays an exceptional range of Mississippian symbols. To recap, the primary image is of a zoomorphic creature with some aspects of a human, a Birdman or falcon warrior, and other aspects of the Great Serpent or Great Panther. The individual is male, with an elite hairstyle, beaded forelock, and facial and body tattooing. He has bird's legs and taloned feet, which would seem to show an Upper World association (see Emerson 1989:76; Strong 1989). However, some depictions of the Great Serpent and Great Panther show claws or what could be interpreted as taloned feet, as is seen on a vessel from Pecan Point, Arkansas (Reilly 2011:128, Figure 4.6a); on a flare-rim plate from the Kent site in Arkansas (Reilly 2011:129, Figure 6.5a, c, e); and in images from Spiro, Oklahoma (Reilly 2011:132, Figure 6.8b, d), to point out a few. Falcon warriors reflected idealized combinations of the martial capacities of both humans and raptors (Bowne 2013). However, complicating this interpretation are depictions of a pair of serpents, a horned serpent rattlesnake, and a three-pronged eye surround, which are underworld symbols and

Figure 8. View of the Vaux pipe showing horned serpents and talons for feet. Details in this photograph were highlighted for visibility.

place the being clearly in the Below World or the Watery Beneath (Brown 2011:58–60; Diaz-Granados 2011:76–77, 90–91; Reilly 2011:118). These Below World symbols are in contrast to the avian symbols. To add another wrinkle, zoomorphic chunkey players are Above World beings (Brown 2004:106) and are not depicted in the Below World. Indeed, the mixture of ophidian and Birdman motifs may be unique.

The Vaux pipe is not simply depicting a static individual; the action of playing chunkey is integral to the meaning of the pipe. Chunkey was a game played by the Mississippians in which "pill shaped polished stones . . . were rolled across a specially prepared field and pelted with poles" (Milner 2004:140). Chunkey teams were exclusively male, and the stones they played with were kept "with the strictest religious care for generations [and] belonged to the town where they were used and prepared" (Power 2004:123). Many of these stones are beautifully carved and were made from exotic lithics. They vary over time and space (see DeBoer 1993). Towns had their own carefully maintained chunkey yards. Scoring seemed to vary from town to town and betting was common (Hudson 1976:423). Thomas Zych (2015:71) has characterized chunkey as a "grand public event, a new way for assorted people to coalesce under a common identity." Miranda Yancey and Brad Koldehoff (2010:492) further note that the game was highly ritualized and may have served as a substitute for war.

In a seminal article, Warren DeBoer (1993:83) has argued that Mississippian elites appropriated the game as a way of regulating gambling and exchange. More recently, Timothy Pauketat (2009a, 2009b) posits that the distribution of

Cahokia style chunkey stones reflects the spread of Cahokia's belief system. Moreover, he notes that "[c]hunkey could be seen as a microcosm of the greater cosmos" and that "[t]he rolling chunkey stone itself was sometimes specifically likened to the sun moving across the daytime sky, reflecting the belief that the cosmos was in constant motion, balanced between two extremes: male and female, day and night, sky and earth, life and death" (Pauketat 2009a:43–44). This is a relevant observation given the mixed iconography of the Vaux chunkey pipe.

Chunkey players are also seen in other forms of Mississippian art, most notably on gorgets. Indeed, the Eddyville gorget, from Lyon County, Kentucky, shows a similar player, differing only in that he has moccasin-shod feet rather than talons and lacks the encircling rattlesnakes (see Howard 1968:20). Duane Esarey compiled a list of 12 other known chunkey player effigies. They include nine gorgets, two figure pipes, a copper plate, a shell cup, and a stone figure (Table 1). Interestingly, the Vaux pipe, which is believed to have been found before William Vaux's death in 1882, is the third-oldest example.

Although chunkey had fallen out of favor by the eighteenth century and was largely replaced by ball playing or lacrosse, there are some parallels. Ball players were blessed by a priest who called to "the Red Hawk to grant him keenness of sight and to the Red Rattlesnake to make him terrible. Then the priest raised the player to the seventh level of the world for ultimate success" (Hudson 1976:416–417). One wonders if some of the iconography seen on the Vaux pipe relates to similar spiritual beliefs relating to playing chunkey.

The chunkey player resembles the dancing falcon warrior images seen in Mississippian art. For instance, a pair of dueling figures on a shell gorget from the Hixon site in Hamilton County, Tennessee, shows two battling or dancing warriors with birds' talons rather than feet (Power 2004:142).

The pipe is also something of a mixed metaphor in stone. The Vaux pipe has avian, serpent, and human characteristics. It is in some ways a Birdman figure: "An allegorical figure who played a central role in ensuring the triumph of life over death and the daily rebirth of the sun. . . . His counterpart, the Great Serpent, exercises discretion over the timing of death" (Dye 2013:246–247).

In addition to depicting a high-status individual or Other World being, the pipe may have been part of the ritual kit of an elite individual. Though documenting an event that occurred considerably later and outside the Mississippian area of influence, John Smith wrote that the "werowance of Rappahannah . . . caused his mat to be spread on the ground where he sat down with a great majesty, taking a pipe of tobacco, the rest of his company standing about him" (quoted in Fundabark and Foreman 1957:Plate 99), an observation that highlights the breadth of ritual-tobacco and ceremonial-pipe use.

The tattoos on the individual shown on the Vaux pipe are also noteworthy. Among the southeastern Indians, tattoos were worn by both men and women and generally adorned their faces, chests, arms, and legs (Hudson 1976:380).

Table 1. Table Showing Known Mississippian Chunkey-Player Images and Dates of Discovery.*

Item #	SPECIMEN	FORM	MATERIAL	LOCATION	DISCOVERY	PUBLICATION	CURRENT LOCATION	COMMENTS
1	St. Mary's Chunkey Player Gorget	Gorget	Marine Shell	St. Mary's, Perry County, MO	1871 or earlier	MacCurdy 1913:Figure 70	Yale (Peabody Museum)	
2	St. Mary's Chunkey Player Gorget	Gorget	Marine Shell	St. Mary's, Perry County, MO	1871 or earlier	MacCurdy 1913:Figure 73	Yale (Peabody Museum)	
3	Vaux Chunkey Figure Pipe	Figure Pipe	Stone	Cumberland Gap, Virginia	1882 or earlier	Unpublished in curation in William S. Vaux collection by his decease in 1882	Formerly Academy of Natural Sciences of Philadelphia, currently Bryn Mawr College	Tri-forked eyes, with serpent on hindquarters and underworld face tattoo (See Penny 1985: Plate 130).
4	Whelpley Chunkey Player	Figure Pipe	Stone	Probably Hughes Mounds, Muskogee, MO	1898	Fundabark and Foreman 1957:Plate 95	Whelpley Coll., Donated 1943 to St. Louis Science Center	
5	Eddyville Chunkey Player Gorget	Gorget	Marine Shell	Likely Eddyville, Kentucky	Before 1903	Holmes 1903	National Museum of Natural History, Cat. #1640	Shows "side-lock" beaded hair decoration, also seen on Magnum Plate #1 and Vaux pipe.
6	Spiro "Shell Gorget #7"	Gorget	Marine Shell	Spiro site, Oklahoma	1933–1935	Phillips and Brown 1978: Plate 7.	Three fragments in two repositories: NMAI 22/357 and Thomas Gilcrease Institute of Art and American History, 9025.2 and .3.	Paired chunkey players interpreted as having an encompassing serpent.
7	Spiro "St. Mary's style" chunkey player gorget	Gorget	Marine Shell	Spiro site, Oklahoma	1933	Burnett 1945:Plate 7; Phillips and Brown 1984: Plate 149b	NMAI #18/7913	
8	Spiro "chunkey player fragment	Gorget	Marine Shell	Spiro site, Oklahoma	1933–1935	Burnett 1945:Plate LXIII; Duffield 1964:Plate 4.1; Phillips and Brown 1984: Plate 149c	University of Oklahoma Stovall Museum, Lf40/34	
9	Spiro "St. Mary's style" chunkey player gorget	Gorget	Marine Shell	Spiro site, Oklahoma	1936	Phillips and Brown 1984: Plate 149a	Stovall Museum D302-1a and 1b	
10	Magnum Plate #1		Copper		1936	Cotter 1952	Unknown	

(*Continued*)

Table 1. Continued.

Item #	SPECIMEN	FORM	MATERIAL	LOCATION	DISCOVERY	PUBLICATION	CURRENT LOCATION	COMMENTS
		Copper Plate		Port Gibson, Claiborne County, MS				Shows side-lock also seen on Vaux pipe and Eddyville gorget.
11	MacDuffee Double Chunkey Player Gorget	Gorget	Marine Shell	MacDuffie site, Craighead County, AR	1960–1990	Brain and Phillips 1996; McGimsey 1964	University of Oklahoma, Stovall Museum	
12	MacDuffee Chunkey Player Gorget	Gorget	Marine Shell	MacDuffie site, Craighead County, AR	1960–1990	Brain and Phillips 1996: Westbrook 2008, also see CSAJ 1992 (April)	Unknown (stolen)	
13	Berlin Chunkey Figure	Figure	Stone	Fulton County, GA	Unknown	Unknown	Stolper Collection, Ethnographic Museum, Berlin	

Note: Table prepared by Duane Esarey and modified by Richard Veit.
*Specimens are listed in order of artifact discovery.

Tattoos could identify an individual as being a member of a specific lineage or indicate special honors achieved through politics, war, or religious rituals (Dye 2013:234; Reilly 2013:176). These tattoos could be read as a symbolic information system by individuals knowledgeable about the system (Reilly 2013:178). Moreover, tattooing could be associated with recording esoteric knowledge or recounting war honors. The face and chest tattoos depicted on the Vaux effigy are similar to the Braden style associated with artifacts from the Craig Mound at Spiro (Reilly 2013:182); however, other aspects of this style are not present but are consistent with Mississippian facial tattoos (Dye 2013:247).

Mississippian artists drew heavily on the human form and often comingled human depictions with animalistic elements. These joined animal and human forms are known not only from engravings on conch shells but also from tobacco pipes, copper plates, and shell gorgets. According to William Bartram, southeastern Indians also decorated the walls of buildings around their square grounds with paintings of human figures with mixed human and animal features (quoted in Hudson 1976:378).

The Vaux pipe depicts an otherworldly creature (Knight et al. 2001): a chunkey player who is part human and part bird. The emphasis is clearly on the upper body and torso, with the legs and lower body being considerably less detailed. This is similar to other artifacts in the Tennessee-Cumberland style (Smith and Miller 2009:21). It is possible that the pipe was painted to further accent certain features. Like many pipes, it is carved from a dense stone, apparently a fine-grained sandstone, and is compact in form. The most similar example in size, shape, position, and carving style is the effigy pipe known as the "Kneeling Prisoner." That pipe, now in the collections of the Brooklyn Museum of Art, has been described as showing a kneeling, bound prisoner, with carefully coiled hair and a beaded forelock (Figure 9). However, the Kneeling Prisoner is likely not a prisoner at all but rather a male individual with beaded-shell armbands and leg decorations (Vincas Steponaitis, personal communication 2016). The so-called Kneeling Prisoner has full lips, like the image on the Vaux pipe, but unlike the image on the Vaux pipe, it has blank eyes and appears to be in a trance or a deathlike state. In contrast, the chunkey player on the Vaux pipe is not restrained and has eyes with pupils. While one pipe may depict a prisoner and the other a chunkey player, they are otherwise very similar. The bodies of the two individuals are depicted in a parallel manner. The placement of the pipe bowl and of the stem hole, along with the shape of the eyes, noses, and mouths, all correspond.

Another bound-captive effigy pipe is known from Arkansas (Dye 2004:194, 195). Although one published source associates the Brooklyn Museum's Kneeling Prisoner effigy pipe with the Plaquemine culture of Louisiana (Power 2004:151), accession information at the Brooklyn Museum notes that it is in fact from Tennessee. However, even this may be suspect, as the accession information provides no detailed information about its find spot (Vincas Steponaitis, personal communication 2016).

Figure 9. The so-called Kneeling Prisoner tobacco pipe, attributed as Mississippian, c. 1400–1500 AD, and likely from Tennessee or Georgia. Currently in the collections of the Brooklyn Museum, this pipe shows strong similarities in form and style to the Vaux pipe but is less highly decorated. (Reproduced courtesy of the Brooklyn Museum.)

A third effigy pipe that is similar in scale and massing, though different in its orientation and subject matter, is in the collections of the University of Pennsylvania Museum. This pipe shows a male figure facing the smoker and holding a pot, which also serves as the pipe bowl (Figure 10). It too is carved from fine-grained sandstone. The individual holding the bowl is shown with broad lips, almond-shaped eyes, and a similar hairstyle to that of the image on the Vaux pipe. The pipe is from the collection of another Philadelphia archaeologist, Montroville Wilson Dickeson (Veit 1997, 1999). In 1837, Dickeson, a practicing physician, relocated to Natchez, Mississippi, and became engrossed with the region's ancient Native American sites (Veit 1999:22). He also amassed a substantial collection of artifacts, which were later displayed at Philadelphia's Centennial Exposition and were purchased by the University of Pennsylvania Museum in 1899. Like Vaux, he was a member of the Academy of Natural Sciences. Although the large figural pipe at the University of Pennsylvania Museum was purportedly found at the Ferguson Mounds in Jefferson County, Mississippi (Veit 1999:25), it shows similarities with the Vaux pipe described here.

Scholars divide Mississippian tobacco pipes into distinctive styles based on their form and the raw material used in their manufacture (Blanton 2015).

Figure 10. An effigy pipe from Ferguson Plantation near Natchez, Mississippi, collected by Montroville Wilson Dickeson (University of Pennsylvania Museum, Object 14328). The pipe, while lacking the otherworldly characteristics of the Vaux effigy pipe, shows similarities in terms of the image's hairstyle and the depictions of the ears, eyes, nose, and mouth of the bowl holder. (Reproduced courtesy of the University of Pennsylvania Museum of Archaeology and Anthropology.)

More directly relevant to this study is the two-part typology defined by Emerson (1983) consisting of the Cahokian style and the Tennessee-Cumberland style. According to Emerson,

> The Cahokian style: 'is characterized by highly developed, realistic portrayals of human or near human figures. The emphasis seems to be on portrayals of figures dressed in specific costumes and/or carrying out specific acts or deeds. The specimens occasionally seem to be portraying mythical acts or beings. Such sculptures have been found depicting warriors, sometimes engaged in ritual killings; individuals who may be shamans; chunkey players; and individuals smoking pipes, grinding corn, or occurring in conjunction with animals'" [1983:258].

Alternatively, effigies in the Tennessee-Cumberland style, first recognized by Webb and DeJarnette (1942),

> often depict a single kneeling individual. While the head and torso may be carefully shown, the delineation of the lower limbs is usually rudimentary. These figures may be of either sex and are sometimes found in pairs. The effigies are commonly carved from materials such as limestone, fluorspar, or sandstone and are never drilled for pipes [Emerson 1983:258].

The Vaux pipe, which depicts a part-man, part-avian creature equipped to play chunkey, is similar to the Cahokian-style pipes stylistically, but it is not made from

flint clay. Indeed, its raw material, a sedimentary stone, is more similar to that of Tennessee-Cumberland–style pipes.

Mississippian flint-clay pipes, such as the Birger Figurine and the famous Big Boy or Resting Warrior pipe from Oklahoma, are among the most famous Cahokian-style pipes (see Emerson and Hughes 2000; Emerson et al. 2003). These were likely reworked statues. One of the most famous was found around 1900 at the Hughes site in Muskogee County, Oklahoma (Brown 2004:109; Emerson et al. 2003). That pipe also depicts a chunkey player. Likely made at Cahokia, it stands 21.59 cm tall; shows the individual with ear spools, holding a chunkey stone in his right hand, and chunkey sticks in his left hand; and wears a bead on a necklace (Pauketat 2009a:48). It is less detailed than the Vaux pipe and more finely crafted, but the theme is the same. A third, unpublished, chunkey-player pipe is in the collections of the Ethnological Museum in Berlin, Germany. It shows a very finely carved player and was purportedly found in a mound in Fulton County, Georgia. Although it does not depict a chunkey player, the Macoupin Creek figurine, from Illinois, does show a priest/shaman holding a rattle and with a snake around his neck (Farnsworth and Emerson 1989:21). Moreover, there are other extraordinary pipes—including the Bellaire Stone pipe, from Moundville, in Alabama—that show mythical beasts (Power 2004:98–99).

The Case for Authenticity

The styles seen in the Vaux pipe raise questions regarding its authenticity. As Steponaitis notes, "It's a mashup of the Hemphill rattlesnake, a Braden chunkee player, and a Hightower Birdman, three different styles and three very different themes that never otherwise co-occur" (personal communication 2016). Indeed, the pipe is so unusual that some may see it as a fraud, a faux pipe acquired by the unwitting Vaux. Frauds have plagued American archaeology since its eighteenth-century origins (Williams 1991). They have taken many forms. The famous Walam Olum, published by the brilliant linguist Constantine Rafinesque, purportedly recounted a Lenape creation and migration tale and was so well-known that by the twentieth century it had been incorporated in Delaware folk traditions. However, careful research by David Ostreicher (1994) has shown that it was in fact a timely production of the fertile imagination of Rafinesque himself, not a Native American folk tradition handed down from time immemorial.

The Grave Creek Stone stumped Henry R. Schoolcraft, an otherwise careful scholar (Williams 1991:84). Similarly, the Newark Holy Stones were seen as evidence of a literate ancient society in the Ohio Valley. Found in the Delaware Valley, the Holly Oak gorget shows a mastodon and Indian hunters (Griffin et al. 1988). It too has been debunked. New York State has its incredible Cardiff Giant, carved out of stone, buried, and unearthed on the farm of William C. Newell near Cardiff, New York (Williams 1991:87).

Examples relating to historic groups are also well-known. Perhaps the most famous fraud is the Kensington Rune Stone and some purportedly associated Viking artifacts (Blegen 1968; Kehoe 2004; Wahlgren 1958). Even more curious are the now debunked Virginia Dare Stones (Childs 2013), purportedly carved by survivors of the ill-fated Roanoke colony. Making matters even more confusing, some actual artifacts were subjected to gross misinterpretation; take, for instance, Longfellow's poem "The Skeleton in Armor." This poem, based on the nineteenth-century discovery of a human skeleton buried with sheets and rolls of copper, was poetically interpreted as a Viking when in fact it was a contact period Native American interment richly adorned with copper or brass ornaments likely refashioned from kettles.

Could Vaux have been duped in acquiring this pipe? It is possible but unlikely. Vaux purchased artifacts from other collections and collectors. Charles Conrad Abbott (1881), a contemporary of Vaux's, believed that the latter had acquired fake Adena artifacts from Bridgeport, Gloucester County, New Jersey. He even felt he knew who had made some fraudulent artifacts, one Klingbeil, a Philadelphia cobbler (Carolyn Dillian, personal communication 2016). Even today, many of the New Jersey artifacts bear carefully written labels in white ink that read "FRAUD." However, a recent reexamination of these artifacts by Richard Veit and Gregory Lattanzi (Veit and Lattanzi 2016) revealed that most are in fact actual Adena artifacts made from exotic materials rare in the Delaware Valley, using flintknapping technology that would have been unknown and very challenging to replicate in the late nineteenth century. Nevertheless, Abbott felt that Vaux had been fooled. One wonders if the easily offended Abbott, a sometimes rabid artifact collector, was dismayed that Vaux had acquired artifacts that he himself had wanted and that his condemnation of the finds was a case of archaeological sour grapes.

Several lines of evidence point to the pipe's authenticity. First, there are only a small number of precontact images of Mississippian chunkey players. So, a nineteenth-century forger would have had very little material to work from. Indeed, the two nearly identical St. Mary's chunkey player gorgets were the only well-documented chunkey players known prior to Vaux's death in 1882. The documentation associated with Vaux's archaeological collection is both minimal and fragmentary. However, the pipe is clearly described and listed in the Academy of Natural Sciences ledger with a date of 1912. By 1912, two more chunkey player images had been identified: the Whelpley Chunkey Player (Table 1) and the Eddyville Chunkey Player Gorget. This means that there would have been very little material on chunkey players for a modern artisan to work from. Moreover, only the St. Mary's and the Eddyville gorgets would have been known through the nationally available literature. An artisan would have needed to access the relevant scientific literature and then transfer the design to an entirely new medium, stone.

Furthermore, the artisan would have had to have recognized the importance of even minor stylistic details, for instance the beaded sidelock (Phillips and Brown 1978:85). This is closely associated with Braden A shell art at Spiro (Duane Esarey, personal communication 2017). It is seen on two known chunkey players: Eddyville and Magnum Plate #1 (see Table 1). However, it does appear in two massive figural pipes: the pipe excavated by Montroville Dickeson on the Ferguson Plantation near Natchez, Mississippi, currently curated by the University of Pennsylvania Museum, and the so-called Kneeling Prisoner pipe at the Brooklyn Museum.

Again, if the piece had been produced in the late nineteenth century to dupe the unwary Mr. Vaux, the forger would have had to have both transferred a chunkey player to sandstone and added a pair of underworld serpents. This would have been a surprising move. While most of the current corpus of chunkey players lacks underworld referents, there is no reason that a chunkey player could not be associated with the underworld.

Finally, the Vaux pipe shows a face tattoo that complements the meaning of his tri-forked eye surround. This kind of lined face tattoo descending onto the neck is similar to those seen on felines, serpents, and "dog-pots" (Dye and Wharey 1989:352, 353; Penny 1985:178). It is more than surprising that the artisan would have to have known, in the late nineteenth century, to associate these underworld referents with the serpents on the Vaux pipe.

Admittedly, Vaux's chunkey player pipe is curious. It is one of a mere "baker's dozen" of chunkey player–themed artifacts known today. At the same time, it is unique in the corpus of Mississippian art and its symbolism seems contradictory. The artist who created it combined a series of acceptable and properly meaningful associations of Mississippian iconography. Would this have been possible before Vaux's death in 1882 or the object's enumeration in the Academy of Natural Science's ledger in 1912? Given the impoverished sample of materials known before 1912, and the challenges involved with accessing images of those finds, it seems unlikely. While the seeming conflation of styles is unprecedented, the forger would have had to have been deeply familiar with Mississippian iconography, both its symbols and its structure or grammar, during a time period when much of the material present-day archaeologists are familiar with, especially the finds resulting from C. B. Moore's Moundville expeditions (Knight 1986), and major excavations at Cahokia, Etowah, and the looting of Spiro had not yet occurred. Assuming the counterfeiter was a man, he would have to have been quite precocious. Indeed, given the extant literature on Mississippian iconography before 1882, there would have been little available to inspire the counterfeiter. Indeed, one might argue that the carver knew Mississippian symbols but did not understand their grammar. Nevertheless, the level of detail—from the beaded forelock to the horned serpent and beaded armbands—is noteworthy. Indeed, only the St. Mary's chunkey player gorgets,

found in 1871, appear to predate the Vaux pipe. As Thomas Emerson notes, forgers "seek to duplicate known and established styles and [forgeries] are almost always based on artifacts known or publicly exhibited" (personal communication 2016).

In considering whether the pipe is a forgery, it is also important to consider the material. The pipe appears to be made from fine-grained sedimentary stone, likely sandstone. Mississippian figural art utilized many different forms of stone and the material is consistent with other late Mississippian effigy pipes.

Another clue to a more recent origin could be how the pipe was made. Here too the jury is out. As a well-known numismatist, Vaux was almost certainly familiar with counterfeit coins. Counterfeits are generally identified by manufacturing characteristics—whether they are cast rather than struck, exhibit tool marks, are made from planchets of the wrong metal, and so on. A macroscopic examination of this pipe showed no evidence for metal tool marks, but a more careful microscopic examination may be warranted.

Style is a major issue with this pipe. Although the motifs it employs are all Mississippian, they are combined in unfamiliar ways. Could this be the result of an artisan conversant with Mississippian art generally but one who was not a full participant in any particular Mississippian artistic tradition? Alternatively, this may indicate that the various stylistic schools postulated by scholars studying Mississippian iconography may not be as rigid as they presume. Historic analogies come to mind, such as the "Barbarous Imitations" of Roman coins produced on the edges of the empire in the fourth century AD. These coins superficially resemble Roman coins, but the Latin inscriptions are at best ungrammatical and are often simply lines with no linguistic meaning and the portraits adorning the coins cannot be linked to specific Roman emperors (Hill 1949). The borderlands origin of the pipe may also provide a rationale for its puzzling iconography.

Alternatively, and less likely, different artisans with varying understandings of Mississippian art may have executed different parts of the carving at different times, resulting in a rather mixed message. Colonial gravestones, long thought to be the work of single carvers in shops, have been shown to be projects worked on by different artisans, sometimes with one artisan executing the iconographic carving and another the inscription, with still other individuals preparing the initial blank stone.

Another possible, but unlikely, interpretation is that the pipe is a copy of an earlier pipe. Many nineteenth-century collectors made plaster casts of unique artifacts that they wanted represented in their collections, and some, such as Montroville Dickeson, had artifacts reproduced in stone. His collection contains an almost certainly fake effigy pipe copy and he unwittingly published other fraudulent pieces as real (Ian W. Brown, personal communication 2016). In this case, the copy explanation seems unlikely.

Conclusions

In our estimation, the Vaux Chunkey Player Pipe, though enigmatic, is an exceptional Mississippian artifact and an important addition to the corpus of Mississippian figural pipes.

This pipe, with its extraordinary chunkey-playing Birdman figure, speaks to the supernatural realm and combines Upperworld and Below World themes. James Brown has argued that there were three similar cults within the broader Mississippian belief system (see Brown 1985; Knight 1986). According to Brown, these included "an ancestor shrine complex, a chiefly elite complex including a warrior cult, and a communal earth or fertility cult" (Brown 1985:102 cited in Smith and Miller 2009:157). Indeed, the Vaux chunkey-player effigy pipe may well be a sacred object associated with the warrior cult. However, the exact story it represents is not clear. As Knight, Brown, and Lankford note, "Because the primary themes displayed in the SECC corpus correspond to texts, that are lost to us, at least in their specificity, tracing thematic connections has to be done independently by reference to internal clues" (2001:131). Therefore, our interpretation is only a first step toward understanding this extraordinary artifact. It is important to not simply dismiss the Vaux pipe because it is an unusual artifact. Particular attention must be paid to the pipe due to its complex religious symbolism of the Mississippians.

The pipe shows marked similarities with the Kneeling Prisoner pipe at the Brooklyn Museum (see Figure 9). It also resembles a pipe collected by Montroville Dickeson near Natchez, Mississippi. All three pipes have proveniences that are poorly recorded, though both the Kneeling Prisoner and the Dickeson pipe are currently displayed in major museums. The Vaux pipe was possibly found at the periphery of the Mississippian world, and if a true Mississippian artifact, it likely dates to the period after AD 1200 ± 100. It may have been made far from where it was found as long-distance exchange was common among the Mississippians (Knight et al. 2001:130). It was acquired by William Vaux during the nineteenth century, at a time when artifact faking was endemic. Although well versed in American Indian artifacts, he was not immune to the temptations offered by attractive fakes. Was this artifact that Vaux acquired as he built his collection simply too good to be true? Barring discovery of further contextual information by researchers, the weight of the evidence points to it being an authentic Mississippian figural pipe. When was it made, who made it, and why does it combine regionally and temporally distinct Mississippian motifs? These questions will remain unanswered until more advanced analytical techniques are explored or new primary documents relating to its history are uncovered. For now, these mysteries remain. But it speaks to aspects of spiritual beliefs now only faintly understood. For Vaux, it was no doubt a powerful symbol of the ancient cultures of North America. Its study today highlights the wonder that Mississippians and their beliefs have inspired in generations of scholars.

Acknowledgments

We particularly want to thank Marianne Weldon for providing us with access to the Vaux materials at Bryn Mawr College and Jennifer Vess, archivist at the Academy of Natural Sciences at Drexel University, who assisted with their materials. We also wish to thank Thomas Emerson, Duane Esarey, Vincas Steponaitis, and two anonymous reviewers for extensive discussions and correspondence relating to this artifact. Duane was especially helpful in sharing information from his extensive files on Mississippian artifacts and helping us refine our arguments. Ian W. Brown also provided thoughtful comments and useful edits on an earlier draft of this paper. The efficient and speedy interlibrary loan staff at Monmouth University library's secured numerous hard-to-find sources for us and made our research possible. Carolyn Dillian of Coastal Carolina University also shared useful sources relating to the trade in archaeological forgeries in nineteenth century Philadelphia. Priscilla Nieto provided technical advice in the processing of the images.

Disclosure Statement

No potential conflict of interest was report by the authors.

Notes on Contributors

Richard Veit, Professor and Chair, Department of History and Anthropology, Monmouth University, 400 Cedar Ave. West Long Branch, NJ 07764-1898, 732-263-5699, rveit@monmouth.edu

Richard Veit, Ph.D., is professor of anthropology and chair of the Department of History and Anthropology at Monmouth University. He is a North American historical archaeologist whose research focuses on the Middle Atlantic region between the late seventeenth and early nineteenth centuries. Dr. Veit has authored or coauthored numerous articles and reviews and six books, including *Digging New Jersey's Past: Historical Archaeology in the Garden State* (Rutgers Press 2002), *New Jersey Cemeteries and Tombstones: History in the Landscape* (coauthored by Mark Nonestied, Rutgers Press 2008), and *New Jersey: A History of the Garden State* (coauthored with Maxine Lurie, Rutgers Press 2012). He regularly presents on topics relating to archaeology and New Jersey history and has been a TED speaker.

Matthew LoBiondo, Graduate Student, Department of History and Anthropology, Monmouth University, 48 Forrest Hills Road, New Windsor, NY 12553, matthewcoyte@yahoo.com

Matthew LoBiondo is a graduate student of the Department of History and Anthropology at Monmouth University. He is a North American archaeologist whose current thesis research focuses on the agency and identity of the Mohawk through the use of color symbolism and pXRF analysis of historic glass beads at a late seventeenth-century Mohawk village. In 2013, he received the Professional Development Conference Attendance Grant from the Student Government Association of the University of Vermont. He has excavated both early and late Mississippian sites, including the Audrey site, Ebert-Canebrake, and St. Catherines Island. He has also worked on numerous prehistoric and historic sites in both New England and the Middle Atlantic. Matthew was an intern at the Nels Nelson North American Archaeology Lab of the American Museum of Natural History in 2015 and 2016.

ORCID

Richard Veit http://orcid.org/0000-0002-7455-8360

References Cited

Barber, Michael B. (1996) Saltville and Environs: The Woodland Period. In *Upland Archaeology in the East, Symposium Number Five, Special Publication Number 38-Part Five*, edited by Eugene B. Barfield and Michael B. Barber, pp. 39–50. U.S. Department of Agriculture Forest Service–Southern Region and Archaeological Society of Virginia, Richmond, Virginia.

Blanton, Dennis B. (2015) *Mississippian Smoking Ritual in the Southern Appalachian Region*. University of Tennessee Press, Knoxville.

Blegen, Theodore Christian (1968) *The Kensington Rune Stone: New Light on an Old Riddle*. Minnesota Historical Society, Minneapolis.

Bowne, Eric E. (2013) *Mound Sites of the Ancient South*. University of Georgia Press, Athens.

Brain, Jeffrey, and Philip Phillips (1996) *Shell Gorgets: Styles of the Late Prehistoric and Protohistoric Southeast*. Peabody Museum Press, Cambridge, Massachusetts.

Brown, James A. (1985) The Mississippian Period. In *Ancient Art of the American Woodland Indians*, edited by David S. Bropse, Hames A. Brown, and David W. Penny, pp. 93–147. Harry N. Abrams, New York.

Brown, James A. (2004) The Cahokian Expression: Creating Court and Cult. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South*, edited by Richard F. Townsend and Robert V. Sharp, pp. 105–123. Yale University Press, New Haven, Connecticut.

Brown, James A. (2011) The Regional Culture Signature of the Braden Art Style. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by George E. Lankford, F. Kent Reilly III, and James F. Garber, pp. 37–63. University of Texas Press, Austin.

Browman, David L., and Stephen Williams (2002) *New Perspectives on the Origins of Americanist Archaeology*. University of Alabama Press, Tuscaloosa.

Burnett, E. K. (1945) *The Spiro Mound Collection in the Museum*. Contributions from the Museum of the American Indian, Heye Foundation. XIV. Museum of the American Indian, New York.

Childs, T. Mike (2013) The Dare Stones. North Carolina Pedia. Electronic document, http://ncpedia.org/dare-stones, accessed November 18, 2017.

Cotter, John Lambert (1952) The Mangum Plate. *American Antiquity* 18:65–68.

DeBoer, Warren (1993) Like a Rolling Stone: The Chunkey Game and Political Organization in Eastern North America. *Southeastern Archaeology* 12:83–92.

Diaz-Granados, Carol (2004) Marking Stone, Land, Body, and Spirit: Rock Art and Mississippian Iconography. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South*, edited by Richard F. Townsend and Robert V. Sharp, pp. 139–150. Yale University Press, New Haven, Connecticut.

Diaz-Granados, Carol (2011) Early Manifestations of Mississippian Iconography in Middle Mississippi Valley Rock-Art. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by George E. Lankford, F. Kent Reilly III, and James F. Garber, pp. 64–95. University of Texas Press, Austin.

Duffield, Lathel Flay (1964) *Engraved Shells from the Craig Mound at Spiro, Leflore County, Oklahoma*. Memoir #1. Oklahoma Anthropological Society, Oklahoma City.

Dye, David H. (2004) Art, Ritual, and Chiefly Warfare in the Mississippian World. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South*, edited by Richard F. Townsend and Robert V. Sharp, pp. 191–206. Yale University Press, New Haven, Connecticut.

Dye, David H. (2011) Mississippian Ceramic Art in the Lower Mississippi Valley: A Thematic Overview. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by George E. Lankford, F. Kent Reilly III, and James F. Garber, pp. 99–117. University of Texas Press, Austin.

Dye, David H. (2013) Snaring Life from the Stars and the Sun: Mississippian Tattooing and the Enduring Cycle of Life and Death. In *Drawing with Great Needles: Ancient Tattoo Traditions of North America*, edited by Aaron Deter-Wolf and Carol Diaz-Granados, pp. 215–252. University of Texas Press, Austin.

Dye, David H., and Adam H. King (2008) Desecrating the Sacred Ancestor Temples: Chiefly Conflict and Violence in the American Southeast. In *North American Indigenous Warfare and Ritual*, edited by Richard J. Chacon and Ruben G. Mendoza, pp. 160–181. University of Arizona Press, Tucson.

Dye, David H., and Camille Wharey (1989) Exhibition Catalogue. In *The Southeastern Ceremonial Complex: Artifacts and Analysis: The Cottonlandia Conference*, edited by Patricia Galloway, pp. 325–378. University of Nebraska Press, Lincoln.

Emerson, Thomas E. (1983) The Bostrom Figure Pipe and the Cahokian Effigy Style in the American Bottom. *Midcontinental Journal of Archaeology* 8:257–267.

Emerson, Thomas E. (1989) Water, Serpents and the Underworld: An Exploration into Cahokian Symbolism. In *The Southeastern Ceremonial Complex: Artifacts and Analysis, the Cottonlandia Conference*, edited by Patricia Galloway, pp. 45–92. University of Nebraska Press, Lincoln.

Emerson, Thomas E., and Randal E. Hughes (2000) Figurines, Flint Clay Sourcing, the Ozark Highlands and Cahokian Acquisition. *American Antiquity* 65:79–101.

Emerson, Thomas E., Randal E. Hughes, Mary R. Hynes, and Sara U. Wisseman (2003) The Sourcing and Interpretation of Cahokia-Style Figurines in the Trans-Mississippi South and Southeast. *American Antiquity* 68:287–313.

Farnsworth, Kenneth B., and Thomas E. Emerson (1989) The Macoupin Creek Figure Pipe and Its Archaeological Context: Evidence for Late Woodland–Mississippian Interaction Beyond the Northern Border of Cahokian Settlement. *Midcontinental Journal of Archaeology* 14:18–37.

Fowler, Don D., and David R. Wilcox, Eds. (2003) *Philadelphia and the Development of Americanist Archaeology*. University of Alabama Press, Tuscaloosa.

Fundaburk, Emma Lila, and Mary Douglass Fundaburk Foreman (1957) *Sun Circles and Human Hands: The Southeastern Indians Art and Industries*. Emma L. Fundabark, Laverne, Alabama. 2001 reprint University of Alabama Press, Tuscaloosa.

Galloway, Patricia (1989) Introduction. In *The Southeastern Ceremonial Complex: Artifacts and Analysis, the Cottonlandia Conference*, edited by Patricia Galloway, pp. 1–10. University of Nebraska Press, Lincoln.

Glanville, Jim (2007a) Unknown Holstonia: Southwest Virginia before the Settling of Jamestown. Paper presented at the Virginia Forum, Library of Virginia, Richmond.

Glanville, Jim (2007b) The Space Farms Museum Collection of Southwest Virginia Artifacts. *Quarterly Bulletin of the Archaeological Society of Virginia* 62(1):7–30.

Glanville, Jim (2010) Engraved Marine Shell Gorgets: A Review. *Prehistoric American* 44(2):3–14.

Griffin, James B., David J. Meltzer, Bruce D. Smith, and William C. Sturtevant (1988) A Mammoth Fraud in Science. *American Antiquity* 53: 578–582.

Helms, Mary W. (1993) *Craft and the Kingly Ideal: Art, Trade, and Power*. University of Texas Press, Austin.

Hill, Philip V. (1949) *"Barbarous Radiates": Imitations of Third-Century Roman Coins*. Numismatic Notes and Monographs 112. American Numismatic Society, New York.

Holland, Charlton G. (1970) *An Archaeological Survey of Southwest Virginia*. Smithsonian Institution Press, Washington, DC.

Holmes, William Henry (1903) Shell Ornaments from Kentucky and Mexico. In *Smithsonian Miscellaneous Collections*, Vol. XLV, pp. 97–99. Smithsonian Institution Press, Washington, DC.

Howard, James H. (1968) *The Southeastern Ceremonial Complex and Its Interpretation*. Missouri Archaeological Society, Memoir 6. Missouri Archaeological Society, Columbia.

Hudson, Charles (1976) *The Southeastern Indians*. University of Tennessee Press, Knoxville.

Jefferies, Richard W. (2001) Living on the Edge: Mississippian Settlement in the Cumberland Gap Vicinity. In *Archaeology of the Appalachian Highlands*, edited by Lynn P. Sullivan and Susan C. Prezzano, pp. 198–222. University of Tennessee Press, Knoxville.

Jones, Charles C., Jr. (1999) *Antiquities of the Southern Indians, Particularly of the Georgia Tribes, edited and with an Introduction by Frank T. Schlell, Jr.* Reprinted. University of Alabama Press, Tuscaloosa. Originally published 1873, D. Appleton and Company, New York.

Kehoe, Alice Beck (2004) *The Kensington Runestone: Approaching a Research Question Holistically*. Waveland Press, Long Grove, Illinois.

Knight, Vernon J., Jr. (1986) The Institutional Organization of Mississippian Religion. *American Antiquity* 51:675–687.

Knight, Vernon J., Jr. (2006) Farewell to the Southeastern Ceremonial Complex. *Southeastern Archaeology* 25:1–5.

Knight, Vernon J., Jr., James A. Brown, and George Lankford (2001) On the Subject Matter of Southeastern Ceremonial Complex Art. *Southeastern Archaeology* 20:129–141.

Lankford, George E., F. Kent Reilly III, and James F. Garber, Eds. (2011) *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*. University of Texas Press, Austin.

MacCurdy, George Grant (1913) Gorgets from Missouri. *American Anthropologist* 15:395–414.

McGimsey, Charles R., III (1964) An Engraved Shell Gorget from the McDufee Site. *Bulletin of the Arkansas Archaeological Society* V(7):128–129.

Milner, George (2004) *The Moundbuilders: Ancient Peoples of Eastern North America*. Thames and Hudson, New York.

Muller, John (1986) Serpents and Dancers: Art of the Mud Glyph Cave. In *The Prehistoric Native American Art of Mud Glyph Cave*, edited by Charles H. Faulkner, pp. 36–80. University of Tennessee Press, Knoxville.

Muller, John (1989) The Southern Cult. In *The Southeastern Ceremonial Complex: Artifacts and Analysis, the Cottonlandia Conference*, edited by Patricia Galloway, pp. 11–26. University of Nebraska Press, Lincoln.

Oestreicher, David M. (1994) Unmasking the *Walum Olum*: A 19th Century Hoax. *Bulletin of the Archaeological Society of New Jersey* 49:1–45.

Pauketat, Timothy R. (2009a) *Cahokia: Ancient America's Great City on the Mississippi*. Penguin, New York.

Pauketat, Timothy R. (2009b) America's First Pastime: Did Rolling Stones Spread Mississippian Culture across North America? *Archaeology* 62:20–25.

Penny, David W. (1985) Continuities of Imagery and Symbolism in the Art of the Woodlands. In *Ancient Art of the American Woodland Indians*, edited by David S. Brose, James A. Brown, and David W. Penny, pp. 147–198. Harry Abrams, New York.

Phillips, Philip, and James A. Brown (1978) *Pre-Columbian Shell Engravings from the Craig Mound at Spiro, Oklahoma*, Pt. 1. Peabody Museum of Archaeology and Ethnology, Cambridge, Massachusetts.

Phillips, Philip, and James A. Brown (1984) Pre-Columbian Shell Engravings from the Craig Mound at Spiro, Oklahoma, Part 2. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Massachusetts.

Power, Susan C. (2004) *Early Art of the Southeastern Indians: Feathered Serpents and Winged Beings*. University of Georgia Press, Athens.

Reilly, F. Kent, III and James Garber (2007) Introduction. In *Ancient Objects and Sacred Realms*, edited by F. Kent Reilly, III, and James Garber, pp. 1–7. University of Texas Press, Austin.

Reilly, F. Kent, III (2011) The Great Serpent in the Lower Mississippi Valley. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by

George E. Lankford, F. Kent Reilly III, and James F. Garber, pp. 118–134. University of Texas Press, Austin.

Reilly, F. Kent, III (2013) Identifying the Face of the Sacred: Tattooing the Images of Gods and Heroes in the Art of the Mississippian Period. In *Drawing with Great Needles: Ancient Tattoo Traditions of North America*, edited by Aaron Deter-Wolf and Carol Diaz-Granados, pp. 175–194. University of Texas Press, Austin.

Sampson, Kevin W. (1988) Conventionalized Figures on Late Woodland Ceramics. *The Wisconsin Archeologist* 69:163–188.

Smith, Kevin E., and James V. Miller (2009) *Speaking with the Ancestors—Mississippian Stone Statuary of the Tennessee-Cumberland Region*. University of Alabama Press, Tuscaloosa.

Steponaitis, Vincas P., and David T. Dockery (2011) Mississippian Pipes and the Glendon Limestone. *American Antiquity* 76:345–354.

Steponaitis, Vincas P., and David T. Dockery (2014) A Tale of Two Pipes. *Gilcrease Journal* 21 (1):36–45.

Strong, John A. (1989) The Mississippian Bird-Man Theme in Cross-Cultural Perspective. In *The Southeastern Ceremonial Complex: Artifacts and Analysis, the Cottonlandia Conference*, edited by Patricia Galloway, pp. 211–238. University of Nebraska Press, Lincoln.

Veit, Richard F. (1997) A Case of Archaeological Amnesia: A Contextual Biography of Montroville Wilson Dickeson (1810–1882), Early American Archaeologist. *Archaeology of Eastern North America* 25:97–123.

Veit, Richard F. (1999) Mastodons, Mound Builders, and Montroville Wilson Dickeson—Pioneering American Archaeologist. *Expedition* 41(3):21–31.

Veit, Richard F., and Gregory D. Lattanzi (2016) Fraud! Rethinking the Incredible Vaux Collection of Adena Artifacts from Bridgeport, New Jersey. Paper presented at the 2016 conference of the Middle Atlantic Archaeological Conference, Ocean City, Maryland.

Wahlgren, Erik (1958) *The Kensington Stone: A Mystery Solved*. University of Wisconsin Press, Madison.

Waring, Antonio J., and Preston Holder (1945) A Prehistoric Ceremonial Complex in the Southeastern United States. *American Anthropologist* 47:1–34.

Webb, William S.., and David DeJarnette (1942) An Archaeological Survey of the Pickwick Basin in Adjacent Portions of the States of Alabama, Mississippi, and Tennessee. *Bureau of American Ethnology Bulletin 129*. Burau of American Ethnology, Washington, D.C.

Wedel, Waldo R. (1951) Archaeological Reconnaissance near Saltville, Virginia, in 1940. *Quarterly Bulletin of the Archaeological Society of Virginia* 5(4):114–122.

Westbrook, Kent C. (2008) Chunkee Shell Player Gorgets. *Central States Archaeological Journal* 55:188–197.

Williams, Stephen (1991) *Fantastic Archaeology: The Wild Side of North American Prehistory*. University of Pennsylvania Press, Philadelphia.

Wilson, Wendell E. (2016) Mineralogical Record Biographical Archive. Electronic document, www.mineralogicalrecord.com, accessed November 17, 2016.

Yancey, Miranda, and Brad Koldehoff (2010) Rolling Icons: Engraved Cahokia-Style Chunkey Stones. *Illinois Archaeology* 22:491–501.

Zych, Thomas J. (2015) The Game of Chunkey. In *Medieval Mississippians, the Cahokian World*, edited by Timothy R. Pauketat and Susan M. Alt, pp. 71–74. School for Advanced Research Press, Santa Fe.