

Institutional Database of Staff Publications Tennessee Division of Archaeology

Title: Bat Creek Stone: Judeans in Tennessee?
Year: 1991
Name(s): Robert C. Mainfort, Jr. and Mary L. Kwas.
Source: *Tennessee Anthropologist* 16(1):1-19

TENNESSEE ANTHROPOLOGIST

VOLUME XVI, NUMBER 1
SPRING
1991

THE BAT CREEK STONE: JUDEANS IN TENNESSEE?

Robert C. Mainfort, Jr., and Mary L. Kwas

ABSTRACT

An inscribed stone reportedly excavated by the Smithsonian Institution from a burial mound in eastern Tennessee has been heralded by cult archaeologists as incontrovertible evidence of pre-Columbian Old World contacts. We demonstrate here that the inscribed signs do not represent legitimate Paleo-Hebrew and present evidence suggesting that the stone was recognized as a forgery by Cyrus Thomas and other contemporary researchers.

Introduction

Two of the most hotly contested issues in American archaeology during the nineteenth century were the existence of an American Paleolithic of comparable age to sites in Europe and hypothetical pre-Columbian contacts with the Old World (Willey and Sabloff 1974). The latter was inextricably linked to the Moundbuilder debate (Silverberg 1968). Many fraudulent antiquities appeared (Williams 1990), adding fuel to these already heated controversies; among the more well-known examples are the Davenport tablets and elephant pipes (McCusick 1970), the Kennsington runestone (Blegen 1968; Wahlgren 1958), the Calaveras skull (Dexter 1986), and the Holly Oak pendant (Griffin et al. 1988). Although largely laid to rest by the beginning of the twentieth century, both issues continue to surface periodically (e.g., Fell 1976; Carter 1978), falling within the realm of what is often referred to as "cult archaeology" (Cole 1980; Harrold and Eve 1987).

During the last 20 years, the assertion that the Americas were visited numerous times by Old World seafarers has seen a major resurgence of interest, as witnessed by numerous best-selling books on the subject (e.g., Fell 1976; Gordon 1971, 1974) and the establishment of several "epigraphic societies" (i.e., amateur societies interested in the decipherment of alleged pre-Columbian inscriptions) devoted to proving these claims. Although various stone structures are often presented as evidence of pre-Columbian contacts (e.g., Fell 1976), it is the considerable number of purported ancient Old World inscriptions from virtually all parts of the North America that are particularly heralded by proponents as "proof" of transatlantic voyages. Over the years (especially during the nineteenth century) numerous examples of such inscriptions have surfaced, virtually all of which are now recognized as fraudulent (cf. Peet 1890, 1892, 1895). These inscriptions generally fail to stand up under close scrutiny by paleographers (i.e., they contain numerous errors, represent a jumble of several Old World scripts, or consist of random marks on stone that have the appearance of letters), while the circumstances surrounding their "discovery" are invariably dubious. While few archaeologists would deny *a priori* the possibility of early voyages to the New World, the simple fact is that, with the exception

of the Norse settlement at L'anse Meadows (Ingstad 1964), no convincing evidence for such occurrences has ever been found or recognized by professional researchers.

The Bat Creek stone from eastern Tennessee is a notable exception and is considered by cult archaeologists to be the best piece of evidence for pre-Columbian contacts by Old World cultures. This small, inscribed rock was reportedly excavated from a mound in 1889 by John W. Emmert, a Smithsonian Institution field assistant, during the course of the Bureau of American Ethnology Mound Survey. Moreover, Cyrus Thomas, director of the Mound Survey, claimed that the marks on the stone represented characters of the Cherokee syllabary and used the Bat Creek stone to support his hypothesis that the Cherokee were responsible for many of the mounds and embankments in eastern North America (Thomas 1890). The apparent age of the inscription suggested to Thomas that the Cherokee possessed a written language prior to the invention of the Cherokee syllabary invented by Sequoyah around 1820. However, Thomas (1890, 1894) never offered a translation of the inscription.

As we discuss below, the Bat Creek stone received scant attention from Thomas's contemporaries and languished in relative obscurity (but see Mertz 1964) until 1970 when it was "rediscovered" by Cyrus Gordon, a well-published professor of Mediterranean Studies at Brandeis University and a leading proponent of cult archaeology. Gordon claimed that by inverting the orientation of the stone relative to the published illustrations (i.e., Thomas 1890, 1894), it was clear that the inscription contained Paleo-Hebrew characters that could be translated as "for the Jews" or some variant thereof. Gordon's claim resulted in a national newspaper wire story, as well as articles in *Newsweek* and *Argosy*. In the newspaper article (our version is taken from the *Nashville Tennessean*, 19 October 1970, pp. 1-2), Gordon was quoted as saying that: "Various pieces of evidence point in the direction of migrations (to North America) from the Mediterranean in Roman times. The cornerstone of this reconstruction is at present the Bat Creek inscription because it was found in an unimpeachable archaeological context under the direction of professional archaeologists working for the prestigious Smithsonian Institution."

Gordon, whose scholarly credentials are certainly impressive, is an archetypical example of what Williams (1988a) has referred to as "rogue professors." Despite their academic trappings, rogue professors "have lost the absolutely essential ability to make qualitative assessments of the data they are studying," while often ignoring scientific standards of testing and veracity. Lacking the critical standard of most scholars, rogue professors "have the opportunity to rogue or defraud the public..." (Williams 1988a:20). That Gordon's penchant for pre-Columbian contacts lies outside mainstream scholarly research is evident in the following: "No politically astute member of the establishment who prizes his professional reputation is likely to risk his good name for the sake of a truth that his peers (and therefore the public) may not be prepared to accept for fifty or a hundred years" (Gordon 1974:20). In context, Gordon is saying here that mainstream researchers who disagree with his contention that all "advanced" cultures are directly traceable to the Near East do so out of fear and peer pressure, rather than the fact that much of the evidence that he presents is of a very dubious nature (see also Chadwick 1969 and Lambert 1984).

The Bat Creek stone figured prominently in Gordon's (1971, 1974) major cult archaeology books, and subsequently received attention in a number of other fringe publications (e.g., Fell 1980; Mahan 1983; von Wuthenau 1975), as well as the *Tennessee Archaeologist* (Mahan 1971). In 1988, the stone was the subject of a *Tennessee Anthropologist* article by J. Huston McCulloch, professor of Economics at Ohio State University, amateur paleographer, and practitioner of cult archaeology. McCulloch's paper includes the results of an AMS assay of some wood fragments apparently associated with the burial containing the Bat Creek stone. The sample returned a calibrated radiocarbon age of A.D. 32 (427) 769 (McCulloch 1988; the age range was reported at two sigma), which is claimed to "rule out the possibility of modern origin" for the inscription (McCulloch 1988:116).

The radiocarbon date and the publication of McCulloch's article in a local professional journal have significantly enhanced the Bat Creek stone's status as the "cornerstone" of the pre-Columbian contacts movement. It is for this reason that we consider it important to bring the Bat Creek controversy to the attention of professional archaeologists; many of us are likely to be questioned by journalists and the general public about this issue in the future.

The Bat Creek Stone

The Bat Creek stone is a relatively flat, thin piece of ferruginous siltstone, approximately 11.4 cm long and 5.1 cm wide. Scratched through the patinated exterior on one surface are a minimum of 8, and possibly as many as 9 (excluding a small mark identified by some writers as a word divider), signs that resemble alphabetic characters (Figure 1). Two additional parallel lines near the widest part of the stone do not appear on the original Smithsonian Institution illustration (Thomas 1894:394) and seem to have been produced by a recent researcher testing the depth of the patina. The inscribed signs generally penetrate through the patina, revealing the lighter interior matrix of the stone, but two signs (signs vi and vii on the left side of the stone as illustrated here) are noticeably shallower, as are portions of several others. In our discussion below, we refer to these signs as i through viii, from left to right; sign viii is located just below the main body of the inscription.

Context of the Find

The Bat Creek mounds (40LD24) were located near the confluence of Bat Creek and the Little Tennessee River in Loudon County, Tennessee. The largest of these, Mound 1, was located on the east side of the creek. Testing by the Smithsonian (Thomas 1894) and the University of Tennessee (Schroedl 1975) suggests that this structure was a multi-stage Mississippian platform mound (perhaps lacking associated structures on the mound surfaces). Underlying the earthwork were a number of early Mississippian features. Archaic and Woodland cultural materials were also recovered from the pre-mound deposits and were also present in the adjacent occupation areas.

Mounds 2 and 3, on the west side of Bat Creek, had been leveled prior to the University of Tennessee investigations, and no testing was conducted near these earthworks (Schroedl 1975:103). Mound 2 was a burial mound approximately 3 m tall and 13 m in diameter. The earthwork was reportedly constructed over a limestone slab "vault" containing 16 individuals; a necklace of "many small



Figure 1. The Bat Creek stone (Catalogue No. 134902, Department of Anthropology, Smithsonian Institution). Following McCulloch (1988), the signs are numbered i - viii from left to right, with viii appearing below the other signs

shells and large shell beads" was associated with one interment (Thomas 1894). Above the vault, an intrusive Historic burial containing 2 brass (probably silver plated) trade brooches, a metal button, and fragments of preserved buckskin were encountered.

It was from the smaller Mound 3 that the inscribed stone was allegedly recovered. This earthwork "was composed throughout, except about the skeletons at the bottom, of hard red clay, without any indications of stratification." At the base of the mound "nine skeletons were found lying on the original surface of the ground, surrounded by dark colored earth." This description suggests that the mound was constructed on top of an occupation midden or old humus zone. Artifacts were associated with only one of the 9 extended interments. Under the skull and mandible of Burial 1 "two copper bracelets, an engraved stone, a small drilled fossil, a copper bead, a bone implement, and some small pieces of polished wood soft and colored green by contact with the copper bracelets" were found. "The engraved stone lay partially under the back part of the skull..." (Thomas 1894:393).

The Characters

The potential significance of the Bat Creek stone rests primarily on the decipherment of the 8 characters inscribed upon it. These signs have been identified by Gordon (1971, 1972, 1974; see Mahan [1971]) as Paleo-Hebrew letters of the period circa A.D. 100; McCulloch (1988) suggests the first century A.D. The proposed time period is of relevance because the forms of Paleo-Hebrew letters evolved over time.

We present below an assessment of the individual signs on the stone. Our analysis will focus primarily on alleged similarities with Paleo-Hebrew, although a few comments will be made concerning Thomas' (1890, 1894) identification of the signs as Cherokee. Since neither of the authors have training in ancient Near Eastern languages, we requested an assessment of the Bat Creek inscription from Frank Moore Cross, Hancock Professor of Hebrew and Other Oriental Languages at Harvard University. Much of the commentary below dealing with resemblances of signs to Paleo-Hebrew is quoted from his reply to our inquiry; the authors alone are responsible for all comments pertaining to Cherokee similarities.

i: Although identified by Gordon (1971, 1972, 1974) as "daleth", this sign is impossible as Paleo-Hebrew in the period 100 B.C.-A.D. 100, based on shape and stance. There is a vague resemblance to the Cherokee "se", as noted by McCulloch (1988:87).

ii: Identified by Gordon as "waw", this sign is also impossible as Paleo-Hebrew in the period 100 B.C.-A.D. 100, based on shape and stance. McCulloch (1988) identifies sign ii as "waw" based partially on a fourth century B.C. text. Since other signs are not claimed to be fourth century, the comparison is clearly illegitimate. The sign is quite similar to the Cherokee "ga" regardless of the orientation of the stone.

iii: This sign is impossible as Paleo-Hebrew in the period 100 B.C.-A.D. 100 based on the shape and stance; Gordon identifies this sign as "he." If reversed, the sign would represent a passable Cherokee "gun."

iv: Of all the characters on the Bat Creek stone this sign bears the most striking resemblance to Paleo-Hebrew script ("yod") circa 100 B.C.-A.D. 100 (but not the second century of the Christian era).

v: Despite problems with its relative size, this sign is normal for Paleo-Hebrew script ("lamed") between 100 B.C. and A.D. 100, but not for the second century C.E.

vi: We agree with the assessment by Gordon (Mahan 1971:43) that this sign is "not in the Canaanite system." In subsequent publications, Gordon (1971:186, 1972:10-12) referred to this sign as "problematic," and more recently (Gordon 1974) did not mention sign vi in his discussion of the Bat Creek stone. The sign is impossible for Paleo-Hebrew.

vii: Our comments pertaining to sign vi apply *in toto* here as well. In the illustration orientation, this sign resembles the Cherokee "tlun:: inverted, it is somewhat similar to a reversed "si."

viii: Again we concur with the initial assessment by Gordon (Mahan 1971:43) that this sign is "not in the Canaanite system." The sign is impossible for Paleo-Hebrew. Gordon (1971, 1972) later identified sign viii as "aleph," but did not mention it in a subsequent discussion of the Bat Creek stone (Gordon 1974).

As a strong advocate of pre-Columbian contacts between the Mediterranean region and the New World, Gordon's (1971, 1972, 1974) interpretation of the Bat Creek inscription could justifiably be criticized on the grounds that his zeal to make a case for the radiation of higher culture from a single Near Eastern center caused him to relax the disciplines of historical linguistics, paleography, and historical orthography. Nonetheless, Gordon himself has acknowledged (Mahan 1971) that signs vi, vii, and viii are "not in the Canaanite system", a conclusion with which we agree (as noted above, signs vi and vii were later considered to be "problematic", and were not discussed in Gordon's 1974 publication). Ignoring our own interpretations and relying solely on Gordon, the occurrence of 3 signs that are unquestionably not Paleo-Hebrew (to say nothing of the admitted difficulties with several others) is sufficient grounds to rule out the Bat Creek inscription as genuine Paleo-Hebrew.

Curiously, while urging readers to "seek out the views of qualified... scholars" about the signs on the Bat Creek stone, McCulloch (1988), an amateur epigrapher, offers interpretations of three signs (vi, vii, and viii) that contradict the published assessments of one of the stone's most outspoken proponents (Cyrus Gordon, a published Near Eastern language specialist), implying that despite his own lack of expertise in Paleo-Hebrew, McCulloch considers his own opinion to be as valid as those of specialists in the field.

Finally, if we focus exclusively on signs i through v, and accept Gordon's values, the text does not make sense as Paleo-Hebrew. There may be a broken sign on the left edge of the stone. It cannot be yod (cf. sign iv) or he (cf. sign iii), so to read lyhw dh or lyhw dym ("for Judea" or "for the Jews"), as advocated by Gordon (1971, 1972, 1974), is impossible (note that Hebrew is read from right to left). To read lyhw dm is also impossible on two grounds. The broken sign cannot be mem in the designated period and even if it could, it would not be the spelling used after the sixth century B.C. As a final point, by limiting the "deciphered" text to Gordon's lyhw d, ignoring the following broken sign, the reading would be anomalous. In Paleo-Hebrew, Judah (Judea) is spelled yhw dh, not yhw d. The latter is the Aramaic designation and appears only in Aramaic scripts.

Although the authors have no formal training in the Cherokee syllabary (nor do cult archaeology writers such as Gordon and McCulloch), it seems necessary to

make a few comments about Cyrus Thomas' (1890:35) claim that "...some of the characters, if not all, are letters of the Cherokee alphabet" and later (1894:393) that "...the engraved characters... are beyond question letters of the Cherokee alphabet..." In the only published analysis of the Bat Creek inscription as Cherokee, McCulloch (1988) makes a reasonable case for his contention that several signs are impossible for Cherokee and that the inscription is not translatable as Cherokee. Since, as discussed below, no contemporary Cherokee authorities seem to have regarded the inscription as genuine, McCulloch's conclusion does not represent a significant new interpretation.

In Thomas' defense, however, it is worth noting that some of the signs (ii, iii, and vii in the orientation illustrated by Thomas [1890, 1894], and i, ii, iii, and vii in the purported Paleo-Hebrew orientation) exhibit moderate to close resemblances with characters of the Cherokee syllabary. Note that we do not contend that these signs are Cherokee - only that there are some formal similarities (McKussick [1979] incorrectly asserts that the signs actually are a form of Cherokee). Hence, Thomas's interpretation, although incorrect, at least had some basis.

The Brass Bracelets

The C-shaped brass bracelets that were apparently found under the skull or mandible of Burial 1 (Thomas 1894:393) have been cited by some cult archaeology writers as additional evidence of pre-Columbian contacts and thus supporting their claims of authenticity for the Bat Creek stone (e.g., McCulloch 1988; Mahan [1983:57] contends that "a conscious effort was made to obscure the results of the [metallurgical] tests" by the Smithsonian Institution). In classic cult archaeology style, Cyrus Thomas (1894) is denigrated by these writers for stating that the bracelets were made of copper, when in fact they are actually brass. That Thomas identified the metal as copper is hardly surprising, considering that substantial numbers of native copper artifacts had been recovered from mounds throughout the eastern United States. Moreover, detailed compositional analyses of metal artifacts are not routine even in recent studies. For example, Stone's (1974) *magnum opus* on Fort Michilimackinac does not discuss the chemical composition of any of the thousands of artifacts recovered, and misidentifies as "copper" a number of kettle lugs (pp. 172-173) that are in all probability brass (cf. Mainfort 1979:357-359).

Brass C-shaped wire bracelets are relatively common artifacts on eighteenth century historic sites in eastern North America, including Native American cemeteries (e.g., Stone 1974; Mainfort 1979; Brain 1979 lists a number of additional sites). They were typically formed by bending sections of relatively heavy brass wire into a "C" shape. The specimens from Bat Creek (Figure 2), however, exhibit a seam and a hollow core indicating that they were wrought, rather than cut from brass wire. In this respect, they appear to be similar to the heavier brass bracelets found with the "Tunica Treasure" (Brain 1979:193-194).

The brass used to form the bracelets from Bat Creek contains 66.5 - 68.2 percent copper and 26.5 - 27.5 percent zinc. This ratio of copper to zinc is

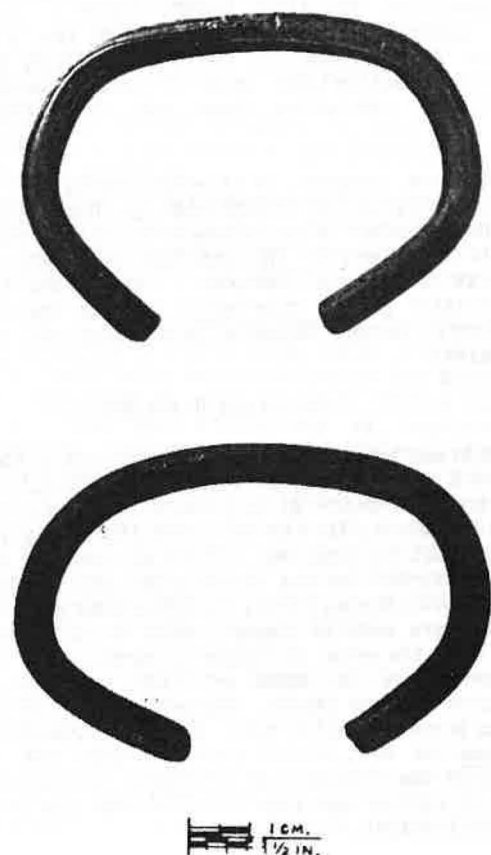


Figure 2. Brass bracelets from Bat Creek Mound 3 (Catalogue No. 134898, Department of Anthropology, Smithsonian Institution).

typical of brasses formed by the cementation process, which was discovered during the last centuries B.C. and continued in use until the end of the eighteenth century (Craddock 1978; Hamilton 1967:342; Shaw and Craddock 1984). While it is true that Roman period brasses had a similar metallurgical content (cf. McCulloch 1988), virtually identical brasses were produced in England during the eighteenth and nineteenth centuries (Day 1973; Shaw and Craddock 1984).

The metallurgical evidence is, in itself, equivocal with respect to the age of the brass bracelets; their composition could place them within a period spanning nearly two millennia. Specimens similar (albeit not necessarily identical) to the Bat Creek bracelets are well-documented from eighteenth century sites in North America. Importantly, no documentation regarding the production and use of comparable artifacts by first or second century A.D. Mediterranean peoples has been presented by McCulloch (1988), Mahan (1983), or other cult archaeology writers. Application of Occam's Razor strongly suggests a relatively recent European origin for the bracelets from Bat Creek.

The Radiocarbon Date

As noted above, the Bat Creek stone has recently been cast into greater prominence as a result of an AMS radiocarbon determination. A calibrated date of A.D. 32 (427) 769 (1605 $\pm$ 170 B.P.) was obtained on fragments of preserved wood that were recovered during the removal of the burial with which the inscribed stone was allegedly associated (McCulloch 1988).

Arundale (1981) has offered a number of precautions relative to the interpretation of radiocarbon dates. Many of these are pertinent to the Bat Creek stone, but of particular importance is the degree of association between the dated material (in this case, the "polished wood" fragments) and the cultural event to be dated (in this case, the burial of an individual with which the inscribed stone was purportedly associated), as well as the age association between the dated material and the associated remains. In the case of the former, the primitive excavation and recording techniques employed render the certainty of association between the wood fragments, the inscribed stone, and the skeletal remains indeterminant (or at best very tenuous). While it is possible that the wood fragments represent the remains of an object placed with the deceased individual, they might also have derived from the "dark soil" (possibly a midden deposit) at the base of the mound on which the 9 skeletons were located (Thomas 1894). Similarly, the age differential class between the wood and the burial (or the stone itself) is not precisely known. Furthermore, in his field notes, John Emmert mentions the presence of "wet and muddy" soil at the base of the mound (the level at which the burials were found), which raises the possibility of contamination from groundwater.

While it is possible that the recent AMS determination accurately dates the burial, McCulloch's claim that the date "rules out the possibility of a modern origin for either the inscription or the bracelets" (1988:116) is not only erroneous, but also represents a characteristic, non-skeptical, cult archaeology assertion about a topic in which he has no expertise. Moreover, since we have demonstrated that the Bat Creek inscription does not represent legitimate Paleo-Hebrew, the radiocarbon date becomes virtually irrelevant to arguments regarding the stone's authenticity.

A Fraud?

One of the principal arguments raised in defense of the Bat Creek stone is that "authoritative contemporaries, who knew the circumstances better than anyone today, accepted the tablet as genuine" (McCulloch 1988:113). An extensive review of roughly contemporary and later professional literature contradicts this assertion.

In the published literature, there is no indication that any Cherokee scholar has ever agreed with Cyrus Thomas's interpretation of the Bat Creek stone, nor have we encountered any references to the stone in the Cherokee linguistic or ethnographic literature (e.g., Mooney 1892, as well as examples noted below). Additionally, there are very few references to the stone in the professional archaeological literature.

Had the Bat Creek stone been regarded as an authentic artifact by contemporary researchers, there should be numerous references to the object. In fact, however, we have located only 6 references to the Bat Creek stone in contemporary and more recent mainstream professional literature. Two of these are Thomas's (1890, 1894) own publications, as cited earlier. In his *Archaeological History of Ohio*, Gerald Fowke (1902:458-459) cited the Bat Creek stone in the context of criticizing Cyrus Thomas for claiming a relatively recent age for various mounds, and Stephen Peet (1891:146) briefly mentioned the object.

Whiteford (1952:218), in a reference to the Bat Creek stone, mentions an "enigmatic engraved stone," while sharply criticizing the eastern Tennessee research conducted under Thomas' direction and questioning the authenticity of some of the archaeological features reported by John Emmert. Finally, McKussick (1970) attempted to rebutt the Paleo-Hebrew claims of Gordon and others, mistakenly asserting that the Bat Creek inscription was, in fact, a form of Cherokee.

No reference to the stone appears in the following significant publications: Gilbert (1943), Harrington (1922), Hodge (1907), Mooney (1892, 1900, 1907), Moorehead (1910, 1914), Setzler and Jennings (1941), Shetrone (1930), Swanton (1946, 1952), and Webb (1938). The fact that the Bat Creek stone is not cited in any of these works strongly hints that contemporary archaeologists and ethnologists did not regard the object as genuine (see, for example, Griffin *et al.* 1988).

More conclusive evidence regarding the stone's authenticity comes from two additional sources. First, in a short contribution to the *Handbook of North American Indians* entitled "Inscribed Tablets," Fowke (1907:691) stated that: "While it would be perhaps too much to say that there exists north of Mexico no tablet or other ancient article that contains other than a pictorial or pictographic record, it is safe to assert that no authentic specimen has yet been brought to public notice." Fowke did not make this statement out of ignorance of the Bat Creek stone's existence, because not only had he extensively studied the lithic material recovered by the mound survey (Fowke 1896), but also mentioned the stone in one of his own publications (1902).

Even more telling is the fact that Cyrus Thomas himself did not discuss the Bat Creek stone in his later substantive publications (1898, 1903, 1905 [with WJ McGee]). Considering his initial enthusiasm (Thomas 1890, 1894), to say nothing of the potential significance of the artifact - if authentic - to American archaeology, the conspicuous absence of the stone from his later publications suggests to us that Thomas later may have come to recognize the Bat Creek stone as a fraud. This possibility is certainly suggested by the following:

"Another fact that should be borne in mind by the student is the danger of basing conclusions on abnormal objects, or on one or two unusual types. Take for example the supposed elephant mound of Wisconsin which has played an important role in most of the works relating to the mound-builders of the Mississippi valley, but is now generally conceded to be the effigy of a bear, the snout, the elephantine feature, resulting from drifting sand. Stones bearing inscriptions in Hebrew or other Old World characters have at last been banished from the list of prehistoric relics. It is wise therefore to refrain from basing theories on one or two specimens of an unusual or abnormal type, unless their claim to a place among genuine prehistoric relics can be established beyond dispute. It is unfortunate that many of the important articles found in the best museums of our country are without a history that will justify their acceptance, without doubt, as genuine antiquities. It is safe therefore to base important conclusions only on monuments in reference to which there is no doubt, and on articles whose history, as regards the finding, is fully known, except where the type is well established from genuine antiquities. One of the best recent works on ancient America is flawed to some extent by want of this precaution. Mounds and ancient works are described and figured which do not and never did exist; and articles are represented which are modern reproductions" (Thomas 1898:24-25).

We believe that the "best recent work" alluded to by Thomas is his own final report on mound explorations (1894), and that the "articles whose history... is fully known" is a reference to the alleged discovery of the Bat Creek stone. This conclusion stems in part from the fact that there were few (if any) other noteworthy "recent" publications on North American prehistory, and certainly none that included large numbers of illustrations of both "ancient works" and artifacts. Moreover, Cyrus Thomas was never shy about naming names, whether by way of praise or criticism. Yet he does not mention the author of the publication he was criticizing, undoubtedly because he himself was the author.

This of course begs the question of why Thomas did not admit to the failings of his *magnum opus* in a more direct manner. With respect to the Bat Creek stone, which we have now demonstrated beyond a reasonable doubt was one of the "modern reproductions" alluded to by Thomas, we believe that the answer is quite straightforward-- Thomas had placed himself in a position such that he could not really afford to pronounce the Bat Creek stone a forgery. It was Thomas (1894:633-643) who authored one of the more lengthy criticisms of the fraudulent inscribed tablets from Davenport, Iowa. The Smithsonian's role in the Davenport controversy produced considerable hostility from many antiquarians (see McKussick 1970) at a time when "professional" archaeology was still in its infancy. Thomas (1894:642) rightly challenged the authenticity of the Davenport tablets in part

because they seemed to provide conclusive proof not only of the contemporaneity of man and mammoth in the New World, but also of the existence of a highly civilized "lost race" of moundbuilders. Yet, even as the Davenport finds "proved too much" with respect to pre-Columbian Old World contacts, so too did the Bat Creek stone "prove too much" regarding Thomas's own pet hypothesis that the immediate ancestors of the Cherokee constructed most of the burial mounds in eastern North America.

Having presented certain evidence that suggests that not only contemporary archaeologists and anthropologists, but also Cyrus Thomas himself, did not consider the Bat Creek stone to be authentic, we feel compelled to address the question: "Who was the forger and what were his motives?" Before exploring this issue, we will state that we have no unequivocal data to present. That is, we are not aware of written admissions of guilt. Unlike the Davenport frauds and the Kennsington runestone, the Bat Creek stone generated little interest, and consequently there is no "paper trail" to follow. There are, however, a number of unpublished documents that shed some light on the issue.

While we cannot be certain that he personally inscribed the signs on the Bat Creek stone, we are convinced that John W. Emmert was responsible for the forgery. Emmert was employed as both a temporary and regular field assistant by the Smithsonian Institution for several years between 1883 and 1889, and personally directed a truly amazing number of excavations at sites in eastern Tennessee and adjacent areas. Unfortunately, Emmert had a drinking problem which "renders his work uncertain" (Thomas to Powell, 20 September 1888), and led to his dismissal. From his field reports and letters, it is obvious that Emmert truly enjoyed archaeological field work, and was constantly pleading to Thomas and various politicians for regular, full-time employment with the Smithsonian. In a letter to Cyrus Thomas dated 19 December 1888, Emmert stated that "I have kept up a constant study of the mounds and who built them and should I ever have the opportunity of exploring them again I can certainly give you greater satisfaction than I ever did before... I have just received and read your Burial Mounds (i.e., "Burial Mounds in the Northern Sections of the United States" in B.A.E. 5th Annual Report - authors) and I certainly agree with you that the Cherokees were Mound Builders, in fact there is not a doubt in my mind about it."

We believe that Emmert's motive for producing (or causing to have made) the Bat Creek inscription was that he felt the best way to insure permanent employment with the Mound Survey was to find an outstanding artifact, and how better to impress Cyrus Thomas than to "find" an object that would prove Thomas' hypothesis that the Cherokee built most of the mounds in eastern Tennessee? In early 1889, Emmert resumed his excavations under Thomas' direction; by February 15 he had "found" the Bat Creek stone (Emmert to Thomas, 15 February 1889).

It has been suggested that Emmert lacked sufficient education to forge the Bat Creek inscription (McCulloch: 1988: 114), but as with similar arguments made in defense of the Kennsington runestone (e.g., Gordon 1974:30), this assertion is not valid. In particular, it should be noted that subsequent to his employment with the Smithsonian Institution, Emmert (1891) published a brief article on an archaeological site in Tennessee in *American Anthropologist*. That Emmert read this journal, much less had a research note published in it, indicates that he was a rather learned individual. Also relevant here is the

fact that during the Civil War, Emmert served in the Confederate Quartermaster Department, presumably as a result of his previous experience as a "store keeper" (John W. Emmert, Compiled Service Record, M268/346, National Archives). This again suggests that Emmert was certainly not an ignorant man. As to the specific signs on the Bat Creek stone, several are passable Cherokee, and the inspiration for the remainder could have been any number of published sources, including illustrations of the Grave Creek stone and the Davenport tablets.

McCulloch (1988) also suggests that if Emmert "was not above fabricating evidence" (i.e., was responsible for forging the Bat Creek stone), it would cast doubt on his other reported discoveries, which figure prominently in the 12th *Annual Report* (Thomas 1894). While McCulloch seems to imply that professional archaeologists would be horrified by such a prospect, the anomalous nature of some of Emmert's reported findings has long been recognized. Whiteford (1952:207-225) summarizes some of these:

"It is impossible to use the data presented by Thomas in the Twelfth Annual Report of the Bureau of American Ethnology with any conviction that they present a complete or even, in some cases, an accurate picture of the material which Emmert excavated in the Tennessee Area" (1952:217)...

"Mound No. 3 at Bat Creek is also rather similar (to Woodland mounds - authors) but apparently possessed non-typical traits such as copper ornaments and enigmatic engraved stone" (1952:218)...

"The relationships and cultural significance of much of the material excavated by the earlier archaeologists in this area can be explained in light of recent and intensive investigations, but some of the phenomena uncovered by Emmert has never been duplicated. Nothing resembling the mass bundle burials which he found on Long Island in Roane County and on the McGhee Farm in Monroe County has been recovered in more recent work. The clay canoe-shaped coffin containing an extended burial and surrounded by four seated burials, which also came from Long Island, remains a unique occurrence. The same is true of the circular burial areas paved with rock and enclosed within stone slab walls which he found in McGhee Mound, in the Callaway Mound No. 2, in the Bat Creek Mound, and on the Blankenship Place."

"Thomas also reports enclosed burial areas, vaguely similar to those described above, from Sullivan County. To our knowledge no recent investigation has uncovered anything resembling the stone domed vaults or 'stone hives' which he describes" (1952:218-219).

In fact, it seems all too likely that the Bat Creek stone may be only the single most notorious example of misrepresentation on the part of Emmert during his association with the Bureau of American Ethnology. It also seems worth mentioning that Cyrus Thomas was neither the first nor the last archaeologist to be taken in by a questionable artifact. For example, Frederic W. Putnam was the victim of the Calaveras skull hoax (Dexter 1986) and several professional archaeologists have recently championed the fraudulent Holly Oak pendant (see Griffin *et al.* 1988 for discussion).

Concluding Remarks

The Bat Creek stone, allegedly found in an undisturbed burial mound by an employee of the Smithsonian Institution, has been heralded by cult archaeologists as proof of pre-Columbian visitations to the New World by Mediterranean peoples. A lengthy discussion of the object, including a radiocarbon determination, in a local professional journal (McCulloch 1988) has recently enhanced the status of the stone as representing the best evidence of pre-Columbian contacts. In this paper we have addressed three key issues surrounding the Bat Creek stone and its interpretation. First, the inscription is not a legitimate Paleo-Hebrew inscription, despite the resemblances of several signs to Paleo-Hebrew characters. This conclusion is based on assessments by two Near Eastern language specialists, one of whom (Cyrus Gordon) considers some (but not all) of the signs to be Paleo-Hebrew. Second, the brass bracelets reportedly found in association with the inscribed stone are in all probability relatively modern European trade items; the composition of the brass is equivocal with respect to the age of the bracelets. Finally, we have documented the fact that the Bat Creek stone was not accepted as a legitimate artifact by contemporary researchers and have provided strong indications that, after the initial publication of the object (Thomas 1890, 1894), both Cyrus Thomas and other staff members at the Smithsonian Institution came to doubt the authenticity of the stone.

Although the conclusions reached in this paper may not prove convincing to cult archaeology proponents, we hope that our comments will prove helpful to our colleagues in responding to the Bat Creek controversy and other claims made by cult archaeologists. Perhaps more important, we hope that our efforts here will influence some of our colleagues to take an active role in countering claims made by cult archaeologists and particularly in providing the general public with accessible information about the remarkable discoveries made by mainstream archaeology (see Williams 1987, 1988a, 1988b).

Acknowledgements

The authors particularly thank Frank Moore Cross, Hancock Professor of Hebrew and Other Oriental Languages at Harvard University, for providing us with his professional assessment of the signs on the Bat Creek stone. Jefferson Chapman, Director of the McClung Museum at the University of Tennessee, generously provided copies of unpublished reports and correspondence by and pertaining to John Emmert. Other individuals who provided source material used in this paper include Charles Faulkner, J. Houston McCulloch, Joseph B. Mahan, Michael Moore, and Stephen Williams. Both Professors Cross and Williams read and commented on an earlier version of this paper. Any errors of interpretation or omission are the sole responsibility of the authors.

References Cited

Anonymous

- 1910 Cyrus Thomas Obituary. American Anthropologist 12:337-343.
1970a A Canaanite Columbus? Newsweek 76(17):65.

- 1970b Prof Says Jews Found America. Nashville Tennessean, October 19, 1970, pp. 1-2.
- Arundale, Wendy H.
1981 Radiocarbon Dating in Eastern Arctic Archaeology: a Flexible Approach. American Antiquity 46(2):244-271.
- Blegen, Theodore C.
1968 The Kensington Rune Stone: New Light on an Old Riddle. Minnesota Historical Society, St. Paul.
- Brain, Jeffrey P.
1979 Tunica Treasure. Peabody Museum, Cambridge.
- Carter, George F.
1978 An American Paleolithic. Anthropological Journal of Canada 16(1):2-37.
- Chadwick, John
1969 Review of "Forgotten Scripts: The Story of Their Decipherment." Thames & Hudson, London, 1968. Antiquity 43(170):150-51.
- Cole, John R.
1980 Cult Archaeology and Unscientific Method and Theory. In Advances in Archaeological Method and Theory, Vol 3., edited by Michael B. Schiffer, pp. 1-33. Academic Press, Inc., New York.
- Craddock, Paul T.
1978 The Composition of the Copper Alloys Used by the Greek, Etruscan, and Roman Civilizations. The Origins and Early Use of Brass. Journal of Archaeological Science 5(1):1-16.
- Day, Joan
1973 Bristol Brass: A History of the Industry. David and Charles, Newton Abbot.
- Dexter, Ralph W.
1986 Historical Aspects of the Calaveras Skull Controversy. American Antiquity 51(2):365-369.
- Emmert, John W.
1891 Ancient Cemeteries in Tennessee. American Anthropologist 4(1):94-95.
- Fell, Barry
1976 America B.C.: Ancient Settlers in the New World. Pocket Books, New York.
- Fowke, Gerard
1896 Stone Art. In: Thirteenth Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution 1890-'91, pp. 47-178. Government Printing Office, Washington, D.C.

- 1902 Archaeological History of Ohio. Ohio Archaeological and Historical Society, Columbus.
- 1907 Inscribed Tablets. In: F.W. Hodge (ed.), Handbook of American Indians North of Mexico, p. 610. Smithsonian Institution, Bureau of American Ethnology, Bulletin No. 30. Washington.
- Gilbert, William H., Jr.
1943 The Eastern Cherokees. In: Smithsonian Institution, Bureau of American Ethnology, Bulletin No. 133, pp. 169-413. Washington.
- Gordon, Cyrus H.
1971 Before Columbus: Links Between the Old World and Ancient America. Crown Publishers, Inc., New York.
- 1972 The Bat Creek Inscription. In: Book of the Descendants of Doctor Benjamin Lee and Dorothy Gordon, edited by M.B. Gordon, pp. 5-18. Ventnor Publishers, Ventnor, N.J.
- 1974 Riddles in History. Crown Publishers, Inc., New York.
- Griffin, James B., David J. Meltzer, Bruce D. Smith, and William C. Sturtevant
1988 A Mammoth Fraud in Science. American Antiquity 53(3):578-582.
- Hamilton, Henry
1967 The English Brass and Copper Industries to 1800. Second edition. A.M. Kelley, New York.
- Harrington, M.R.
1922 Cherokee and Earlier Remains on Upper Tennessee. Museum of the American Indian, Heye Foundation, New York.
- Harrold, Francis B. and Raymond A. Eve
1987 Cult Archaeology and Creationism: Understanding Pseudoscientific Beliefs about the Past. University of Iowa Press, Iowa City.
- Hodge, Frederick W. (editor)
1907 Handbook of American Indians North of Mexico. Smithsonian Institution, Bureau of American Ethnology, Bulletin No. 30. Washington.
- Ingstad, Helge
1964 Vinland Ruins Prove Vikings Found the New World. National Geographic 126(5):708-734.
- Lambert, W.G.
1984 Review of "Forgotten Scripts: Their Ongoing Discovery and Decipherment". Revised and enlarged edition. New York: Basic Books. 1982. (By Cyrus H. Gordon). Antiquity 58(223):137-138.
- Mahan, Joseph B. Jr.
1971 The Bat Creek Stone. Tennessee Archaeologist 27(2):38-45.

- 1983 The Secret: America in World History Before Columbus. Published by the author, Columbus, Georgia.
- McCulloch, J. Huston
1988 The Bat Creek Inscription: Cherokee or Hebrew? Tennessee Anthropologist 13(2):79-123.
- McKusick, Marshall
1970 The Davenport Conspiracy. The University of Iowa, Iowa City.
- 1979 Canaanites in America: a New Scripture in Stone? Biblical Archaeologist 42:137-140.
- Mainfort, Robert C., Jr.
1979 Indian Social Dynamics in the Period of European Contact. Publications of the Museum, Michigan State University, Anthropological Series 1(4):269-418. East Lansing.
- Mertz, Henriette
1964 The Wine Dark Sea. Printed by the author, Chicago.
- Mooney, James
1892 Improved Cherokee Alphabets. American Anthropologist 5:63-64.
- 1900 Myths of the Cherokee. In: Smithsonian Institution, Bureau of American Ethnology, Bulletin No. 19, pp. 3-548. Washington.
- 1907 Cherokee. In: Handbook of American Indians North of Mexico, edited by Frederick W. Hodge, pp. 245-249. Smithsonian Institution, Bureau of American Ethnology, Bulletin No. 30. Washington.
- Moorehead, Warren K.
1910 The Stone Age in North America (2 vols.). Houghton Mifflin, Boston.
- 1914 The American Indian in the United States, Period 1850-1914. Andover Press, Andover.
- Peet, Stephen D.
1890 Historic and Prehistoric Relics. American Antiquarian and Oriental Journal 12(1):54.
- 1891 Historic and Prehistoric Relics. American Antiquarian and Oriental Journal 13(3):131-150.
- 1892 Migrations of the Mound-Builders. American Antiquarian and Oriental Journal 14(1):52.
- 1895 The Beginnings of History. American Antiquarian and Oriental Journal 17(5):272-288.

- Schroedl, Gerald F.
1975 Archaeological Investigations at the Harrison Branch and Bat Creek Sites. University of Tennessee, Department of Anthropology, Report of Investigations No. 10. Knoxville.
- Setzler, Frank M. and Jesse D. Jennings
1941 Peachtree Mound and Village Site, Cherokee County, North Carolina. Smithsonian Institution, Bureau of American Ethnology, Bulletin No. 131. Washington.
- Shaw, Thurstan and Paul Craddock
1984 Ghanaian and Coptic Brass Lamps. Antiquity 58(233):126-128.
- Shetrone, Henry C.
1930 The Mound Builders. Appleton and Co., New York.
- Silverberg, Robert
1968 Mound Builders of Ancient America: The Archaeology of a Myth. New York Graphic Society, Greenwich.
- Stone, Lyle M.
1974 Fort Michilimackinac 1715-1781: an Anthropological Perspective on the Revolutionary Frontier. Publications of the Museum, Michigan State University, Anthropological Series, Vol. 2. East Lansing.
- Swanton, John R.
1946 The Indians of the Southeastern United States. Smithsonian Institution, Bureau of American Ethnology, Bulletin No. 137. Washington.

1952 The Indian Tribes of North America. Smithsonian Institution, Bureau of American Ethnology, Bulletin No. 145. Washington.
- Thomas, Cyrus
1890 The Cherokee in Pre-Columbian Times. N.D.C. Hodges, New York.

1894 Report on the Mound Explorations of the Bureau of Ethnology. Twelfth Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution 1890-'91. Government Printing Office, Washington, D.C.

1898 Introduction to the Study of North American Archaeology. Robert Clarke, Cincinnati.

1903 The Indians of North America in Historic Times (published as Volume 2 of The History of North America). George Barrie and Sons, Philadelphia.
- Thomas, Cyrus and W.J. McGee
1905 Prehistoric North America (published as Volume 14 of The History of North America). George Barrie and Sons, Philadelphia.

- von Wuthenau, Alexander
1975 Unexpected Faces in Ancient America, 1500 B.C. - A.D. 1500: The Historical Testimony of Pre-Columbian Artists. Crown Publishers, Inc., New York.
- Wahlgren, Erik
1958 The Kensington Stone: A Mystery Solved. The University of Wisconsin Press, Madison.
- Webb, W.S.
1938 An Archaeological Survey of the Norris Basin in Eastern Tennessee. Smithsonian Institution, Bureau of American Ethnology, Bulletin No. 118. Washington.
- Whiteford, Andrew H.
1952 A Frame of Reference for the Archaeology of Eastern Tennessee. In: Archaeology of the Eastern United States, edited by J.B. Griffin, pp. 207-225. University of Chicago Press, Chicago.
- Willey, Gordon R., and Jeremy A. Sabloff
1974 A History of American Archaeology. W.H. Freeman, San Francisco.
- Williams, Stephen
1987 Fantastic Archaeology: What Should We Do About It? In Cult Archaeology and Creationism, edited by Francis B. Harrold and Baymond A. Eve, University of Iowa Press, pp. 124-133.

1988a Fantastic Archaeology: Fakes and Rogue Professors. Symbols, December, 1988, pp. 17-21.

1988b Fantastic Messages From the Past. Archaeology 41(5):62-70.

1990 Fantastic Archaeology: The Wild Side of North American Prehistory. University of Pennsylvania Press. (in press)