The Oliver Site—
Coahoma County, Mississippi:
Collected Papers, Part I

A Late Woodland through Protohistoric Mound Complex in the Northern Yazoo Basin

Compiled and Edited by John M. Connaway

Assisted by
Jay K. Johnson, Mary Elizabeth Harty,
Jessica Crawford, and Marvin Jeter

Archaeological Report No. 39

Mississippi Department of Archives and History
Jackson, Mississippi

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Finally, and perhaps reluctantly, myself: compiler, senior editor, contributor, and initiator of this collection of researches; preparer of the National Register nomination for Oliver in 1971; director of the minimal and final salvage operations in 1990-1991; and endurer of numerous head and back aches, staring first at a typewriter, then at my computer, then at the walls, in the process of assembling the mass of literature herein.

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Introduction
The Oliver Site Publication Project
by John M. Connaway

Much credit is due the contributors to this volume (and the others planned on the Oliver site) for their efforts to glean as much useful information as possible out of a severe paucity of data, especially with regard to the land leveling salvage phase of 1990-1991. It seems pointless to apologize for the incompleteness of archaeological work done at the site; the permanent loss of untold volumes of data that could have been retrieved with adequate excavations, time, and funding; or even the ease with which the site was ultimately destroyed. Except for the Cemetery Mound, whose only reason for existence today is the presence on top of a 19th/20th-century cemetery, Oliver has been consigned to the obscurity of the twilight zone, and what is published in these volumes is all that is ever likely to be known about it. We are indebted to those who attempted at least limited investigations at the site in the past, for without them we would be left with little at all to say about it other than it is one more blank page in the book of Mississippi's prehistoric and historic past.

The contributions to this series of volumes represent an attempt to place the site in historical perspective and to present glimpses of the lifeways of those people inhabiting it through the centuries. The only extensive archaeological work at Oliver was conducted by Charles Peabody in 1901 and 1902 (reprinted as Chapter 2, this volume), which provides the majority of stratigraphic and artifactual data utilized herein. This was followed by a brief test excavation in 1941 by Philip Phillips of the Peabody Museum's Lower Mississippi Survey (Chapter 4, this volume), a general surface collection in 1977 by Ian Brown, a controlled surface collection in 1990 by the University of Mississippi, and finally the limited salvage work done by the Mississippi Department of Archives and History and the University of Mississippi in 1990 and 1991. Previous reports on work at Oliver, both published and unpublished (and some recently revised), are included in their entirety or excerpted in this and succeeding volumes, with commentary, from larger publications in an attempt to gather all known Oliver site information into one reference source.

To this end, the assistance of several researchers was solicited to analyze the materials recovered during Peabody's 1901-1902 excavations and the 1990-1991 land leveling salvage project, and to produce papers on their results. These will be included primarily in Part II, "Recent Investigations." Be forewarned that there will be some unavoidable repetition or redundancy among the papers discussing ceramics and ceramic typology, as well as some minor disagreements regarding ceramic, burial, and stratigraphic placement. But this is to be expected, especially in light of the excavation techniques employed by Peabody, and those necessarily used during the salvage work.

Since Oliver is one of the very rare sites encountered by the author in the northern Yazoo Basin with an unmistakable historic component, it seemed appropriate to enlist the aid of other researchers to consider the possibilities of De Soto-era and the post-De Soto occupations. For Part III, "Protohistoric Period Studies," several scholars have contributed papers, analyses, or excerpts from previous papers discussing various aspects of European contact, artifact trade, tribal connections, and how these left their marks at Oliver.

At some point following the salvage operation in 1991, and after a rather shocking revelation of the vast amount of information and archaeological potential lost at Oliver, this writer decided that the site deserved a publication that would gather together "everything you always wanted to know about Oliver!" Peabody deserved more recognition than his brief, and now rare, publication of 1904 afforded him. Additionally, the innumerable mentions and discussions of Oliver as part of larger prehistoric/historic interactions that have appeared for years in obscure and not-so-obscure publications deserved some cohesion. And the variety of data recovered from the site at various times did not deserve to remain unanalyzed in shelved boxes for another century or so, considering all the efforts expended to secure them. Thus a plan for these volumes came about, and after ten years of effort on the part of the contributors, editors, and others, what Dr. Peabody and his assistant, W. C. Farabee, started back in 1901 is being finished over 100 years later. We hope they would be proud of these efforts, and that this volume will provide many researchers with useful data in the future. Many thanks to the contributors for all their assistance with this project. It is hoped we have done it justice.

Chapter 1
A Tribute to Charles Peabody
by Stephen Williams

When one scans the American landscape at the beginning of the twentieth century with an eye to the field of archaeology, the informed viewer sees many changes, as has been noted elsewhere (Williams 1991:74-77, 1994:9-10). Eastern United States archaeology, where all the first significant antiquarian work was done (1750-1890), would be more or less left to the "others." The best and the brightest students turned instead to Mesoamerica and the American Southwest. True professionalism in the field had just begun with the first PhDs in Archaeology and Ethnology coming out of the red-brick diploma factory on Divinity Avenue in Cambridge: Harvard's Peabody Museum. Of the very few to work in the Eastern United States, one of those was Charles Peabody, who would indeed first toil there before turning finally to Europe.

James B. Griffin often accused the author of seeing all of the history of American archaeology as "tinged with a Crimson hue." But the facts are that Frederic Ward Putnam at Harvard, acclaimed, even by Franz Boas, as one of the "Founders of American Anthropology," was the only scholar in an academic post before the turn of the century capable of training archaeologists. In the decade between 1894 and 1904, Putnam turned out seven PhDs, with degrees in "American Archaeology and Ethnology," until 1903 when it was changed to "Anthropology." These degrees were awarded, in their chronological order, to George A. Dorsey, Frank Russell, Roland B. Dixon, John R. Swanton, William C. Farabee, George B. Gordon, and Alfred M. Tozzer.

Their dissertation topics, no matter what the degree said, ranged from archaeology to physical anthropology and from linguistics to ethnography. Gordon and Tozzer were clearly mainly in archaeology, and to my knowledge Dixon, Farabee, and Swanton all had experience in that field as well. Other well-known figures with Harvard PhDs in archaeology would follow in the pre-World War I period (1905-1917): Spinden, Merwin, Kidder, Sterns, and Guthe. But that is another story.

Now we also know that both Wyman and Putnam also trained many undergraduates in the field of archaeology; indeed Putnam may have been one of the first such students that Wyman trained in field work, beginning as early as the 1860s. Both Clarence Bloomfield Moore (Harvard Class of 1873) and Henry Chapman Mercer (Harvard Class of 1879) would engage themselves in field archaeology for some decades. Moore, of course, published extensively and is much the better known (Williams 1991:76; 117), but Mercer's contributions are in some ways no less important, although almost forgotten (Williams 1991:116-121). Of course, many of those PhDs mentioned above also had their undergraduate degrees from Harvard, and had thus been taught by others besides Putnam, such as Roland B. Dixon, a major, but little-known, figure as to his impact on American archaeology in the first three decades of this century.

But why has this paper gone on this long without discussing Charles Peabody, the centerpiece of this chapter and the established reason for this new volume? It was, after all, his pioneering excavations at the Oliver site that started the whole thing. Well, talk about enigmatic and forgotten pioneers: Charles Peabody is the quintessential lost person in the "History of American Archaeology." He is not even mentioned by Willey and Sabloff in their history of the discipline, despite their Harvard connections, and surely not by Trigger or any of the other writers on the subject. Indeed, the only early academic acclaim known to this author for Charles Peabody's pioneering work in Mississippi archaeology is to be found in Robert Heizer's *The Archaeologist at Work* (Heizer 1959:221-222), who deemed it probably the earliest "recognition of cultural-historical implications of archaeological stratigraphy" in North America (see Belmont and Williams 1965).

Not that those who have worked in Mississippi have been guilty of such neglect. Calvin Brown's 1926 masterpiece, *Archeology of Mississippi,* gives ample credit to Charles Peabody, with 15 text citations, since they met during his excavations within the state. Peabody gave some bone specimens to Brown for the Survey's collections (Brown, 1926: 284). And, more recently, all the Lower Mississippi Survey (LMS) publications have made obvious use of the materials collected by Charles Peabody and deposited at the Peabody Museum.

Well, before we go on to detail the significant contributions of Charles Peabody, let us put the basic facts into the record. He was born in Rutland, Vermont

on November 9, 1867, the son of Robert Singleton and Margaret Augusta (Goddard) Peabody. Charles' father, R. S. Peabody, was a nephew of George Peabody, the well-known nineteenth-century banker and philanthropist, who had, via urgings from another nephew, O. C. Marsh, founded both the Yale (1866) and Harvard (1867) "Peabody" museums. Robert S. Peabody was a graduate of Harvard College, Class of 1862, and got his Law degree there as well in 1864. He developed a strong amateur interest in American Indian artifacts, something he may have passed on to his son. He died in 1904.

At this time I am uninformed of Charles' youthful activities.[1] But he must have gone to Andover Academy, it would seem. Charles later attended the University of Pennsylvania and graduated in 1889 with a BA at the age of 22. He then moved to Cambridge and quickly gained first an MA (field not designated) in 1890 and then a PhD in Philology in 1893, when he was 26. He married Jeanette Ennis Belo a year and a half later on January 8, 1895. They had five children, (three girls and two boys): Jeanette Felice, Margaret (died in childhood), Caryl, Alfred Horatio, and Belo. Other data available from "Who Was Who" indicates that Charles was an Episcopalian and a Republican, not very surprising information. Following his PhD in 1893 and his marriage in 1895, we lose track of him for some years, but by 1900 he is taking up excavations in Mississippi. It is interesting to guess what he might have been doing from 1895 to 1900. The well-known Harvard-trained Egyptian archaeologist, George A. Reisner, got his degree in Philology in 1893, the same year as Charles, and they surely knew each other. The degree in "Philology" is still something of a mystery to me, but it certainly did include Classical and Middle Eastern languages, since Reisner would teach such languages immediately at Harvard. What other courses in the Classics and Old World Archaeology were needed for that degree are unknown to me.

At the turn of the century things come into clearer focus. In 1901 his father, who had long been a significant collector of Indian relics, along with his mother jointly funded establishment of the Robert S. Peabody Foundation for Archaeology at the Phillips Andover Academy in Andover, Massachusetts. R. S. Peabody had long been in contact with Warren K. Moorehead, a well-known archaeologist and friend of many collectors. Moorehead was brought in as Curator, while Charles took the post of Director.

Although the record is slight, there seems to be little doubt that Charles Peabody was in essence the student of F. W. Putnam. Whether he had been working at the Peabody after getting his degree is not now known. But it is a matter of record that in May 1901, Dr. Charles Peabody and William C. Farabee, a Harvard graduate student at that time (MA, 1900), went to northern Mississippi to excavate two mound sites, Dorr and Oliver.

It would be a very busy summer for Farabee, since he would later go to Chaco Canyon with Alfred M. Tozzer to initiate him, then a young graduate student, into the art of field archaeology. Farabee, not a well-known figure in American archaeology, would get his PhD in Anthropology from Harvard in 1903. He served as an Instructor in Anthropology from 1903 until 1913. During his 10-year tenure at Harvard, he instructed many well-known archaeologists, including A.V. Kidder and Sylvanus Morley. Farabee died in 1925.

I do not know if Charles Peabody had any prior experience in the field, but there is that 7-year period between his PhD and the turn of the century that would have given him plenty of opportunity to get some training in field archaeology. My suspicion is that sometime between 1895 and 1900 Peabody was probably introduced to European archaeology via field trips to that continent. Indeed for two years (1906-1908), after his work in Mississippi, Peabody was a Harvard Instructor in European Archaeology. His courses seem likely to have been the very first such courses in Prehistory given in America, excepting those in Classical Archaeology, which were then plentiful at Harvard. So, it is my hypothesis that Peabody obtained field experience in Europe, just as another Harvard student, Henry Chapman Mercer, had done in the late 1880s. Whether Peabody had field experience in North America during this same period is not known to me.

Also it was in this decade from 1900 to 1910 that Charles Peabody was very active in fieldwork all over America, as will be mentioned later, even doing careful cave excavations[2].

Charles Peabody did say, in reference to his Mississippi field methods, "the system of excavating was that practiced by the Peabody Museum," thus, the "Putnam" technique. This is neither the time or place to go over these excavations in great detail, but suffice it to say that the recording techniques were of a quality such that years later a Harvard student, John S. Belmont, could reconstruct the burial stratigraphy and make a significant contribution with that careful re-analysis (Chapter 3, this volume). Few, if any, other early twentieth-century archaeological practitioners

left records of that quality. Charles Peabody did recognize, as Heizer had pointed out, stratigraphic divisions that separated two different cultural layers. Peabody correctly identified the top level as dating to Historic times, although his attempt to ethnographically connect those materials with the recently removed Choctaw can now be seen to be incorrect. Were they ancestral Tunica instead? Perhaps.

A brief review of his volume shows that Charles Peabody was quite well-read in the general works of the Eastern US archaeological field, using the standard works of the Smithsonian Institution's Bureau of American Ethnology by Cyrus Thomas (1894) and C. C. Royce, as well as the works of David Brinton and Fiske's "Discovery of America." How much he knew of the works of other Southeastern archaeologists, such as C. B. Moore, or the late nineteenth-century volumes on Missouri archaeology by Potter and Evers, well known at the Peabody, can only be guessed at.

In Mississippi Peabody was fortunate to meet and get to know Charles W. Clark of Clarksdale, both a member of the founding family and a very interested amateur with a large personal collection of artifacts from the Yazoo Basin. Peabody also mentions Captain Lamar Fontaine of Lyon, Mississippi and his "enthusiasm" for archaeology. Peabody was generous in his description of Lamar Fontaine as a character of the "first class," with a great ability for telling tales of his life before moving into the Yazoo Basin. Fontaine did some land surveys in the region in the 1870s, and made an archaeological collection there. However, those materials were destroyed in a house fire before he moved to Lyon, just north of Clarksdale.

Thus Peabody was certainly trying to contact local sources, an admirable way to carry out fieldwork in a new area. How his interest turned originally to this region is unknown. Peabody had no contacts there, as far as I am aware. In terms of general field methods, we do also know that Charles Peabody did make extensive surface collections of potsherds and stone artifacts at the sites prior to his excavations.

Overall, the 50-plus-pages report, counting the illustrations, was a striking contribution, including no sherd counts, but details on burials and their associated artifacts, a primitive site map, and a now-famous cross section of the main mound. There is a brief appendix on some of the skeletal remains (seven skulls) by Farabee, and some useful discussions of the artifacts found, but often not complete analysis. However, certain pertinent facts regarding ceramic temper (shell) and some means of manufacture were described. Some good photographs (the negatives still exist) of the excavations and artifacts complete the work; unfortunately, they were only modestly well reproduced in the original volume.

Unfortunately, there was some mixing in the report of the two sites that were excavated over the two field seasons, but clearly indicated by Peabody (1904:37-38). Modest excavations were carried on at the start of the 1901 season at the Dorr site, while the rest of that season and all of the 1902 season were devoted to the "Edwards Mounds," now known as the Oliver site. However, the museum cataloging does allow modern workers to keep materials from the two sites separate.

While the Oliver site report is correctly cited as an important piece of work in archaeology, there is another important side to Charles Peabody's stay in the Yazoo Delta. He recorded in his field notes the words and music of some of the songs that his black field hands sang while at work. These materials were later published (Peabody 1903b), and may be the earliest record of such music. He was surely a wide-gauged and multifaceted scholar.

One other outstanding aspect of Peabody's work at Oliver was that it was promptly reported in the literature. Unfortunately there is no acknowledgments section in the report, apart from a report of one specialist thanked in a footnote. However, as I am quite familiar with another Peabody monograph of this era (Will and Spinden's 1906 Mandan report), I think that there may be seen herein the advice of Roland B. Dixon. I can only guess, but I would imagine that Peabody brought the materials back to Cambridge and immediately set to work on them. Indeed, speed of reporting characterized almost all the research that Charles Peabody ever did. Fieldwork for the next decade would be promptly reported on, whether it was caves in the Ozark Mountains, reconnaissance in west Texas, mounds in North Carolina, two field seasons in France, and finally a journey to the Near East (see his following bibliography).

One other thing is certain for the period from 1900 to 1916; there is great evidence for the close personal and professional relationship between Frederic Ward Putnam and Charles Peabody. Along with being the Director of the R. S. Peabody Museum in Andover from 1901 to 1923, Charles Peabody also had concurrent appointments at the Harvard Peabody Museum. Their close ties are seen in Putnam's review of "Archaeological Research in the United States" (Putnam 1901:235), where he made an oblique reference to Peabody Museum work in a Mississippi mound

"sponsored" by one of the two "students," obviously Peabody and Farabee. This close dual arrangement of Putnam and Peabody is clearly set forth in many Harvard documents, none more clearly than at the construction of the third and largest portion of the Peabody Museum in May 1913. The ground-breaking ceremony was elaborate and well documented (Putnam 1913), though not well remembered by most scholars. It was the crowning event of Putnam's long tenure at Peabody and only two years before his death. Indeed Putnam was unable to give the address at the ceremony on May 23rd due to illness. Instead, Charles Peabody read it for him. Sod was cut and put in a wheelbarrow, just as had been done in June 1854 when the Agassiz Museum was begun. Putnam himself had been present then, as an 18-year-old Agassiz assistant, and had preserved a piece of that "sacred sod" all those 59 years! I guess his museum collecting concerns were instilled at a very early age.

With that amount of history tied up in "sod cutting," nothing would do but that a "pillar" of earth was left uncut from May until June 21st, when Prof. Putnam was well enough to visit the site. A small group joined them, including Charles Peabody accompanied this time by his son, Alfred. They removed the last sod even as other excavations for the basement of the new wing were going on. Appropriate photos recorded this event. In Putnam's published address there is a reference to the "fact that among those who have given substantial aid toward the completion of the Museum building, is the grandnephew of George Peabody" (Putnam 1913). Charles had put some of his own money forward to help complete his granduncle George's original 1866 gift. That year, 1913, Charles was also formally made "Curator of European Archaeology" at the Peabody, a title that he retained until his death in 1939. Putnam (1911) had previously listed him as "Assistant in European Archaeology."

The next year, 1914, Charles undertook an archaeological reconnaissance in Syria and Palestine. Typically he shortly published a note on that work in the *American Anthropologist* (Peabody 1915d). Of course, as war clouds gathered over Europe, he was forced to turn to New World topics (see his bibliography). Unable to do any European fieldwork, Charles Peabody undertook in 1918 a previously unknown third season of about six weeks (July 6 to August 20) of field excavations in the Mississippi Delta. Of course, one can understand his return to the States due to the war, but why go to Mississippi? There can be little doubt, I believe, that he liked the Yazoo Delta, but that may just be a projection of my own feelings about the region. His fieldwork was done first at the Spendthrift site and then at the Alligator site, another large mound site. He was alone in this work, without the trusty Farabee, and operating under the banner of the R. S. Peabody Museum of Andover, not Harvard. But he was not without some direct Mississippi connections.

One can suggest that his contacts with Charles Clark of Clarksdale, which had been extensive sixteen years earlier, were part of this. We know for sure that Peabody visited with Clark, thanks to the arrival in 1905 of the first resident Mississippi archaeologist on the scene. Calvin S. Brown came to a post at the University of Mississippi and almost immediately began to take notes on the local archaeology. He would shortly have a copy of Charles Peabody's 1904 report in his hand. How can I be so sure? Well, thanks to the "Ole Miss." Archives and the help of Dr. Janet Ford of the Department of Anthropology at that institution I can read the actual research notes that Calvin Brown took.

Although the 1926 Letter of Transmittal by E. N. Lowe, Director of the Mississippi Geological Survey, that leads off Brown's great treatise on the *Archeology of Mississippi* suggests that Calvin Brown had worked on his archaeological investigations for more than 10 years, Brown's own handwritten notes double that time to twenty years. Unfortunately a considerable portion of his detailed notes are missing or lost, although happily those at hand (pp. 185-225) cover the period of Charles Peabody's later work in 1918. Therein we get to read of Calvin Brown's first meeting with "Dr. Peabody," as he referred to him. We can understand what a great opportunity it was for Brown to get acquainted with Peabody, a trained archaeologist, and with his methods of fieldwork.

Thanks to these notes from 1918 we know that Brown and Charles Clark drove down to the Alligator site one afternoon to visit Peabody's dig. The three of them had dinner that night, August 6, 1918, at Clark's home and "chatted about archaeological matters." The next day the two of them (Brown and Peabody) spent the morning studying Clark's collection. While looking over the collection, Brown made some brief notes as to its contents, noting the now famous copper "Clarksdale" bells. In the afternoon they went back to the Alligator site, where Calvin Brown had some luck at surface collecting and, ever the gentleman, turned his finds over to Dr. Peabody.

The following day (August 8th) the two (Brown and Peabody) took an "auto" field trip, seeing some mound sites along the way, and ended up at the important collection of Dr. Davies at Walls, Mississippi.

Here they spent a lot of time. Brown took notes on these materials, too, describing mainly the ceramics that seemed to fill the house to overflowing. The important Davies collection later came to the University of Mississippi through the good offices of Calvin Brown. Decades later, Phil Phillips and Jimmy Griffin, during the first LMS work, would make a pilgrimage to Oxford to see both Calvin Brown and the Davies collection. Presumably in the late afternoon or early evening, Peabody and Brown then returned to Clarksdale, although Brown's notes are silent on that topic. How familiar this all sounds to someone like myself who has traveled the same territory with the very same objectives: see the excavations, see the other sites, and see the collections that are in the hands of amateurs. There is no other way to do regional research, is there Jimmy?

Unlike almost all of Charles Peabody's other archaeological fieldwork, the 1918 Mississippi excavations were never, to my knowledge, written up.[3] I can state that members of the Harvard LMS team (Williams, Brain, and Belmont) have indeed briefly looked over the R. S. Peabody collections from the 1918 expedition. They seem to be in quite good order, carefully catalogued, etc. Thus there remains the opportunity to gather more significant data from the north end of the Yazoo Delta without any more excavations in these days of NAGPRA and growing restrictions of time and money. This third Mississippi expedition was Charles Peabody's last fieldwork in the United States.

Charles Peabody's deep concern for European archaeology was obvious from early on. By 1908 he was taking part in European archaeological congresses (Peabody 1909d) and would continue to do so both before and after World War I. In 1913 he is carrying out excavations (Peabody 1913b) in France, and the next year doing a Middle Eastern survey. After the war, his work in Europe would continue (Peabody 1919), and 1921 would see him co-found the American School of Prehistoric Research in Europe, together with Dr. and Mrs. George Grant MacCurdy and Dr. Henri Martin. Peabody directed the 1922 summer "term" of that school.

During these years (1910-1920), Peabody was still very active as Director of the R. S. Peabody Museum, as the account of the 1913 event at the "other" Peabody Museum, related above, indicates. Also in this period Warren K. Moorehead conducted extensive work (1912-1920) in Maine shell heaps (Moorehead 1922), and he noted that Dr. Peabody was very interested in this work and at times took part in the excavations. However, in 1923 Charles Peabody, and presumably his family, moved to France where he made his home for the rest of his life, dying there on August 17, 1939, as war again loomed over that region. He continued research and publication until the early 1930s. It is somewhat ironic that Charles Peabody, who wrote a number of obituaries for others, was honored, as far as I know, by only one short notice, which was not published until nine years after his death (MacCurdy 1948).

So what can be said now for that long-lived (72 yrs) and prolific scholar, whose range of publications was unusual in their scope, but virtually ignored by his American colleagues? He was generous with his own time and efforts. Putnam noted in the introduction to Ernest Volk's lengthy volume on the *Archaeology of the Delaware Valley* (Volk 1911) that Charles Peabody's "untiring interest in the work of Mr. Volk led him not only to prepare Mr. Volk's reports for publication and personally to make the photographs for the specimens figured, but also to furnish the means for the publication of these reports as Volume V of the Museum Papers" (Putnam 1911:vii).

For one trying to understand Charles Peabody's character in a modest fashion, these words by Putnam are very valuable. He was certainly a "hands-on" person, willing to donate time, personal ability, and funds to support a cause he felt worthwhile. No laid-back lazy plutocrat, he. One other glimpse of his personality can be found in some of his field notes, provided to me by John Connaway. In the field, following the pattern of the "Putnam method," as far as we can discern it, Charles Peabody dutifully recorded the temperature three times a day at the site, as another Putnam student, Clarence B. Moore, did just as regularly on almost of all his many field trips. I think we see a recognizable pattern of instruction, not from any printed document, but from the recorded behavior of these Putnam students.

Since we have so little now-known data with which to build a profile of Charles Peabody, we can clutch at any straws available. There is one final vignette from Peabody's field notes that I will share with you, dated circa May 9, 1902: a sketch of a canvas campstool, next to the profile of a gent in a rather stiff collar (Peabody?), and the following "poem":

How wonderf'ly we're made, alas!
A man may be an awful ass,
May even be a sheep, or goat,
Or humble artist and not know it.

Yes, there are lots of things still to be learned about Charles Peabody, but I hope this first attempt to provide some sense of who and what he was will spur others to fill out the picture of this interesting archaeological scholar, one whose major Mississippi excavation report is the subject of this volume.

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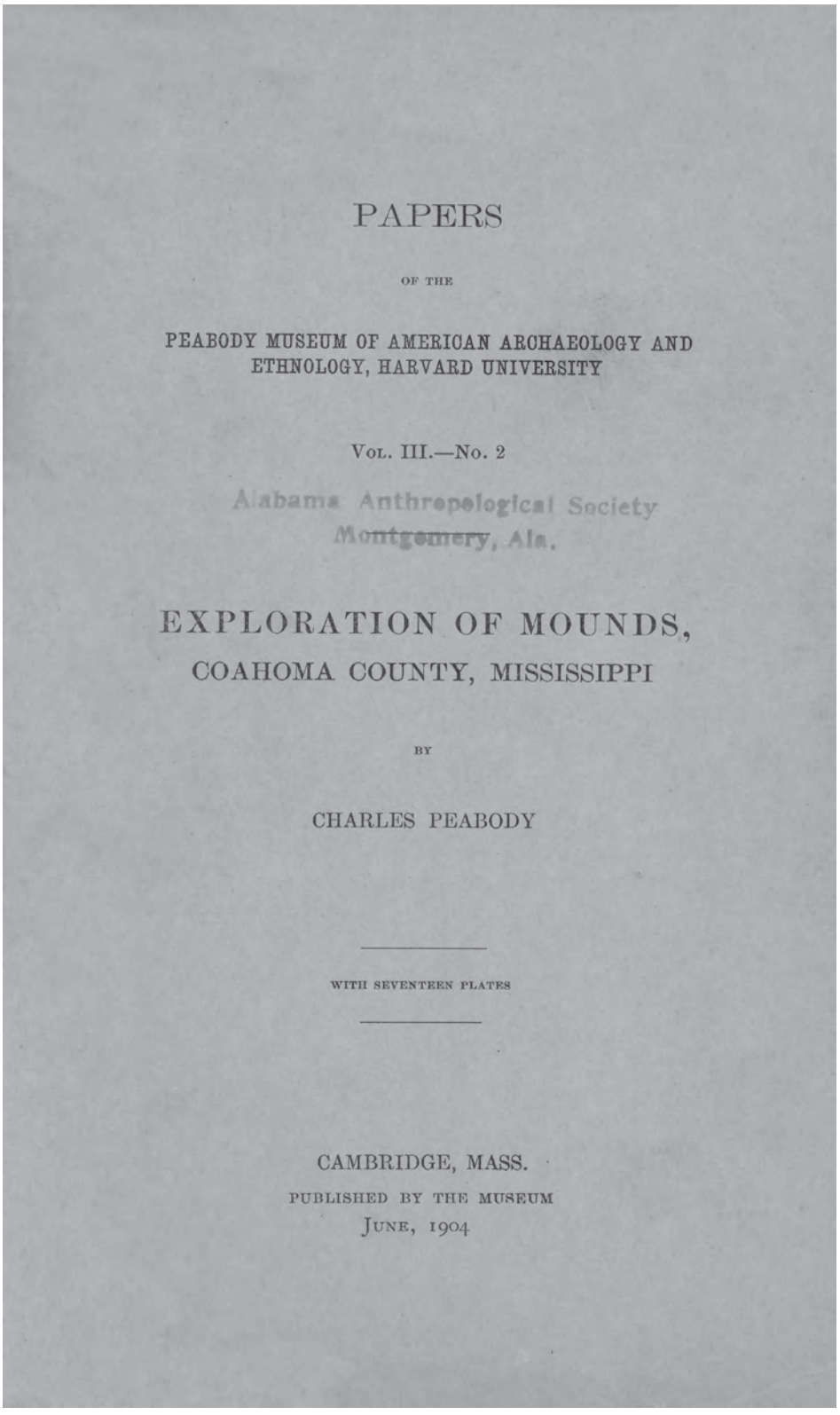
Footnotes

1. Charles Peabody was a private person, and no substantial personal archives are known to exist. An inquiry to the R. S. Peabody Foundation got a reply that only a few letters were known in their files. However, there may be another untapped source; Warren King Moorehead, long-time curator of the R. S. Peabody Museum at Andover, created voluminous records that are archived at the Ohio State Museum in Columbus. I have looked at only a few of the more than 100 file boxes of correspondence deposited there by his younger son, Robert Singleton Moorehead, an architect at Williamsburg, who is noted for the site drawings in A. V. Kidder's famous "Pecos Report." "Sing" was also a classmate and friend of Phil Phillips at the Harvard School of Design.
2. One interesting aspect of Charles Peabody's fieldwork is that, although he used American standard "foot and inches" in his Mississippi work, when he in 1904 excavated at Jacobs Cavern in Missouri he used the metric system, in the European style. Not only that, but by 1912, if not earlier, Warren K. Moorehead, in the employ of the R. S. Peabody Museum and working in Maine shell heaps under the surveillance of Charles Peabody, also used the metric system in his digs (Moorehead 1922). That was certainly not the case in Moorehead's work at Cahokia or at Etowah.
3. Untypically, the third season's excavations in Mississippi by Charles Peabody remained unstudied. These data reside at the R. S. Peabody Museum in Andover, MA.

Chapter 2
Exploration of Mounds, Coahoma County, Mississippi
by Charles Peabody (facsimile reprint of 1904 edition)



PAPERS

OF THE

PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY, HARVARD UNIVERSITY

VOL. III.—No. 2

EXPLORATION OF MOUNDS,

COAHOMA COUNTY, MISSISSIPPI

BY

CHARLES PEABODY

WITH SEVENTEEN PLATES

CAMBRIDGE, MASS.
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(*See page 3 of cover.*)

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EXPLORATION OF MOUNDS, COAHOMA COUNTY, MISSISSIPPI.

INTRODUCTORY.

UNDER the auspices of the Peabody Museum of Harvard University, an expedition, directed by Mr. W. C. Farabee and the writer, was sent out to conduct explorations in Coahoma County, Mississippi. The work was carried on continuously from May 11, to June 28, 1901, and from May 9 to July 3, 1902. Two mounds were excavated: one on the plantation of Mr. Ellerton L. Dorr, Jr., at Clarksdale, and one on that of Mr. P. M. Edwards, in the town of Oliver, on the Sunflower river, sixteen miles south of Clarksdale. The method of exploration in both cases was the same: that of making successive cuttings down to the level of the surrounding ground, and thus, by throwing the soil from each new cutting into that preceding, making possible a thorough examination of the distance excavated, yet leaving the ground more or less in its original condition.[1] At each five feet, descriptions of the wall of soil in front of the excavators were taken and for these cross sections, reference may be had to the Peabody Museum Laboratory, where they are filed.

DORR MOUND.

The excavation of the Dorr Mound was continued from May 11 to May 18, 1901. The surface measurements were: length, north to south, 90′; breadth, east to west, 60′; height, 9′ 6½″ above the surrounding field.

The shape resembled a rectangle with the longer sides running parallel northwest and southeast. The surface was covered with rough grass and bushes.

Near the top ran a transverse trench, one foot two inches deep, probably the result of tentative excavations previously made by

[1] In connection with these excavations: in the catalogue of the Peabody Museum the successive "cuttings" are given the name "trenches," also in the Maps and Plans in the Laboratory of the Museum.

the owners; for further data, the map in the Laboratory may be consulted. As the objects found in the mound were similar to those from the second mound, it will be simpler to speak of them together. Of the skeletons however, the statements should be made here. The remains of fifty prehistoric burials were found. The burials lay scattered through the mound with a greater number in the southwest quadrant. Their depth below the surface varied from one foot (No. 7) to eight feet (No. 29). As a whole they lay deeper than the surface burials of the Edwards Mound. Here follow the statistics of those whose data were obtained:

Manner of burial:

Intrusive, 1.
Full length, 6.
"Bundle,"[1] 2.
With the knees doubled up (most of these on the side), 8.

Orientation by direction of the skull:

N. 5, N. E. 4, E. 13, S. E. 7, S. 0, S. W. 0, W. 4, N. W. 1.

Details of accompanying objects:

Projectile Points

One on the breast of skeleton 2.
One large point in red pigment between the skulls of skeletons 46 and 47.

Pottery

Fragments with skeletons 3 and 9.
Fragments of three vases with skeleton 7.
Charcoal in small bits with skeletons 3, 9, 13, and 26 (3).

The bones of the intrusive burial were better preserved than those of the others. Besides these there were fifteen modern burials in the mound.

The excavation of the mound was carried on from the north, east, and south and a parallelogram 80′ from north to south and 52′ from east to west was dug through down to the level of the surrounding field. The soil varied from heavy sandy loam to the very heavy alluvial soil called "Buckshot". No soil foreign to the district was noted. The so-called "Sod-line" of dark soil two inches to four inches thick appeared plainly at times as, *e. g.*, in the sections at stakes VII, X, XI, XIV, 1 and 3. The soil near

[1] For "Bundle" burials see references; foot note, page 37.

the bottom of the mound was wetter on the north side than on the south; this was due perhaps to the sun's influence, and to the drainage of the field northwestward into the Sunflower river. A few shells were found, 16′ west of stake VIII, 6′ 9″ down.

With horses and a scraper the mound was restored on May 18th, nearly to its original appearance, and cotton was immediately planted upon it. Four small mounds in the neighboring field vary from 2′ to 5′ in height. There may have been others whose traces have disappeared through successive ploughings, storms and floods.

EDWARDS MOUND.

Oliver, Coahoma Co., Mississippi, is situated on the Sunflower river sixteen miles south of Clarksdale, the county seat and the civil centre of the district. The nearest railway station is Mattson, on the Greenwood branch of the Yazoo and Mississippi Valley Division of the Illinois Central R.R. Thence mail is brought twice a week, on mule-back to Oliver. The settlement of Oliver consists of a series of small plantations, bordering the Sunflower on both sides, and covering a space of cleared land, one-half mile east and west of the river. The population is nearly equally divided between negroes and white people. Friendly relations with both were established and continued unbroken. To the white plantation owners the thanks and acknowledgments of the excavators are due for active assistance and sympathetic interest. It may be said that while the usual tales of great buried wealth, of "gold-hunting," and of gigantic extinct races were current, the people were of sufficient broadness of mind to put these away at an early period. The land to the east and west of the line of farms is covered by forests of cypress, and consists of an absolute plain broken only by occasional ravines containing bayous or by lakes. The Sunflower river has by erosion and building up constructed a ravine,[1] with steep banks, 30′ in height above the average water-level. The water in the spring sometimes overflows even these banks.

The flood comes, save by the breaking of the Mississippi levee, from down stream, starting at the mouth near Vicksburg. The recurring floods provide one reason for mound building, though it is a debated question, whether great floods, covering whole counties

[1] See Plate VI. "Sunflower river looking west from the Camp."

in area were more or less frequent, deep and extensive, before the building of the Mississippi levees. The same floods furnish a very plausible excuse for those who do not wish the mounds excavated. In time of high water a refuge is provided by them for stock. At Oliver are the so-called "Shoals" of the Sunflower River, where it flows with a current of four miles an hour for several hundred feet over a pebbly bottom of small flinty stones. The existence of this stratum of gravel, which extends about three feet above low water, is the probable cause of the large village site which lies on both sides of the river. The stream, whose general course is north and south parallel to the Mississippi, here runs nearly east and west, and in descriptions, that direction of flow will be assumed. North of the Sunflower are at least three mounds; south of it are nineteen small mounds and the large mound or Edwards mound proper. Originally there were more which have been reduced by successive ploughing and floods. One mound (No. 4), visible in 1901, was invisible in 1902 (compare Map Plate VII).

The builders of these mounds are not known. The entire region is included in the district from which the Choctaws were obliged to move by the Land Cession of September 27 and 28, 1830.[1] Admitting that the Indians of the Choctaw gentes built mounds,[2] we can establish a later limit. The centuries of history and "pre-history" before this gave us no light. Articles of European or white-man manufacture, if found, not intrusive, in the mound, establish that part of the mound as post-Columbian, and probably of a period since DeSoto passed near in 1541.[3] In the case of the Edwards mound, it is possible that its construction was continued at more than one period.

But little serious archaeological work has been done in northern Mississippi. Visits to Coahoma and neighboring counties were made by Col. P. W. Norris and Professor W. H. Holmes,[4] and some excavations undertaken. From the report from Sunflower County,[5] a mound was discovered and described that may be the Edwards mound. The reasons for this view are, first, the nearly

[1] Royce, Charles C.: Report of the Bureau of Ethnology, 1896-7. Part 2, No. 156 (Map), pages 726-7.
[2] Brinton, D. G.: American Race, pages 86-7.
[3] Fiske: Discovery of America, II, page 510.
[4] Rep. Bur. Eth.: 12, '90-'91, p. 253 ff.
[5] Rep. Bur. Eth.: 12, '90-'91, p. 258 ff.

similar dimensions; second, its position near the Shoals of the Sunflower river; and third, the lack of information obtainable about any other Shoals. The reasons against identity are, first, that the report places it in Sunflower County, and the Edwards mound is in Coahoma County; second, the apex of the Edwards mound was near the west end, that of the mound of the report, near the east; third, there is no trace on the Edwards mound of the white oak six feet in diameter mentioned in the report; and, fourth, the lack of information obtainable as to the expedition from the "oldest inhabitant." It seems probable that the mound was not touched by the Smithsonian expedition. In any case their excavations were not carried to any great extent.

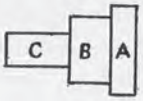
Some digging near the mound had been done by Mr. Charles W. Clark, of Clarksdale, to whose interest and courteous assistance the writer is entirely indebted for his knowledge of the mound and the opportunity of exploring it.

Mr. Clark has at his home in Clarksdale a valuable representative collection of Mississippi specimens, gathered in great part by his own personal researches. Save for his intellectual interest and for the enthusiasm displayed by Captain Fontaine of Lyon, Mississippi, few results have been obtained or researches undertaken in that region.

Surface specimens were abundant and good. Arrow- and spear-points and knives of flint of fine workmanship were scattered about by the hundreds, and knives, celts, and other stone implements, discs and sherds of pottery were picked up in great numbers.

The natural soil containing no stone, any found there has necessarily been brought in by some agency, and as floods carry little stone to this level, the presumption is in favor of human handling, a position strengthened by the absolute lack of stone of any kind in the soil save where traces of mounds could be seen. Excavations were carried on here from May 17 to June 28, 1901, and from May 9 to July 3, 1902. The working force varied with the conditions of the labor market and general health, from six men to fifteen men, under the same excellent foreman in both years, B. S. Brockman. The men were negroes and good workmen. The crew and the excavating party each had a cook, and the services of a water-boy were required. Tents were the quarters for

the first year, a cabin for the second. The system of excavating was that practised by the Peabody Museum and described above, — complete examination by slicing, and reports made by graphic cross-sections of the mound at parallel distances of five feet, (Plates VIII and IX.) In this way a space in the mound was dug through down to the original level of the field: a space which may be represented by three rectangles.



The rectangles are represented as looked upon from above: the sizes are from surface measurements: A (eastern) (1901) 105′ x 10′, B(middle) (1901) 95′ x 55′, C(western) (1902) 65′ x 80.′

Rectangle A covered 1050 sq. feet, average depth 7 feet, equals 7350 cu. feet.

Rectangle B covered 5225 sq. feet, average depth 10 feet, equals 52250 cu. feet.

Rectangle C covered 5200 sq. feet, average depth 11 feet, equals 57200 cu. feet.

The total surface 11475 sq. feet, total 116800 cu. feet.

At times the height of the mound made three terraces necessary to provide for the disposal of the excavated soil, and to prevent landslides.

Excavations on a small and informal scale were made in the Cemetery mound[1] (No. 3), by Mr. Farabee: tentative digging was tried elsewhere. Three pits to determine, if possible, the continuance of the "Sod-line" were dug (A, B, and C) and trips to sites at greater distances were undertaken by Mr. Farabee.

The surface measurements of the Edwards Mound were: length from north to south 190′, length from east to west 180′, distance from apex to northern boundary 97′, distance from apex to eastern boundary 102′, distance from apex to southern boundary 93′, distance from apex to western boundary 78′, perpendicular height of the apex above the average level of the surrounding field 26′.

[1] See the Map, Plate VII.

The deepest excavation on May 17, 1902, was 21′ in four perpendicular terraces; the discrepancy may be explained by the roughness of the field methods of measuring surface altitudes and by the lowering of the surrounding levels by erosion. The mound was therefore quite symmetrical on the major or north and south axis, but distinctly steeper on the western end of the minor or east and west axis. To facilitate the determination of position a row of stakes was set upon the east and west axis at intervals of five feet, numbered in Arabic numerals, from zero to thirty-six.

At the same time along each successive cutting at intervals of five feet, stakes were set northward from the east and west axis lettered from A to K and southward from L to U. Using these lines as coördinates, the exact position of any object can be given. The first cutting lay between stakes 2 and 3, and from K to U; cutting two, from stakes 3 to 4, etc. The mound had been ploughed over on the eastern slope three quarters of the distance to the top. Elsewhere it was covered with a growth of shrubs, and small trees; the absence of large stumps or other surface indication of age was to be noted.

A China-berry tree, growing near the middle on the south side, was left *in situ*. The mound was composed of material obtained in the neighborhood. Sandy loam, a more tenacious clay known as "gumbo" and a still more tenacious clay called "buckshot" were used in the building and formed the principal strata. Throughout the mound were other strata, pockets, pits, lines, and traces of ashes, charcoal, burnt clay and shell. No stone whatever constructively used occurred.

The long irregular depressions in the surrounding fields may have been formed originally by taking the soil for building, and rain and ploughing have since lowered these hollows till their significance has vanished. Searching the fields and woods near by failed to reveal large pits, such as are in evidence near the Carson group of mounds in the same County.[1]

Strata.

The so-called "Sod-line," a stratum of dark soil, varying from a few inches to less than a foot in thickness, remained con-

[1] See Rep. Bur. Eth.: 12, 1890-91, pp. 253 ff.

stant from the section at stake 4 to that at stake 31. Towards and at the west side of the mound, the "Sod-line" had occasionally variations of level of small significance. To determine the further extent of this stratum, a trench was dug running west, from the line of stake 28 at Q. At a distance of fourteen feet west of Q, the "Sod-line" became indistinct, and vanished at thirty feet west of Q, where the level of the field becomes almost constant.

For the same purpose pits were dug as noted above to the eastward as follows:

Pit A 35′ east of the line of stake 0 at N, contained a layer of dark soil, one foot down, 1′ 1″ thick.

Pit B, 175′ east of the line of stake 0 at N, layer of soil 5 inches down and 1′ 2″ thick.

Pit C, 262′ east of the line of stake 0 at N, layer of dark soil 6 inches down and 1 2″ thick.

From the thickness of this and its nearness to the surface it seems that, in comparison with the "Sod-line" on the west side which vanishes at a depth of two feet, there is no necessary connection between them. The "Sod-line" may therefore be assumed to be a part of the mound proper and the bottom of it, though below the "sod-line" were found occasional objects and pockets as follows:

Intrusion of black soil	at stake	7 B/C
Ashes	" "	11 R/S & T
Ashes and shells	" "	18 18/L
Earth, charcoal and shells (1′ 6″ below)	"	19/L
A chipped stone (1′ below) . .	" "	20 C
Charcoal, shells and potsherd . .	" "	24 C & E
Ashes and charcoal	" "	25 A/25 & O/P
Shells, ashes and charcoal . .	" "	26, L
Charcoal	" "	28, M & L

In the "Sod-line" was a well defined and very compact stratum of mussel shells, several inches thick, beginning at section at stake 10 (C to M) continuing through that at 16 (A to M) disappearing between the sections at 26 and that at 27. The greatest length from north to south was thirty feet, from east to west, eighty feet.

Next in importance to the "Sod-line" was a stratum of y low

"Buckshot" denoted by stratum A in the sections, lying above a stratum of dark loose soil with ashes and charcoal, denoted stratum B.

Their positions are as follows at the various cross-sections taken:

	STRATUM A			STRATUM B		
SECTION AT STAKE	HEIGHT OF TOP OF STRATUM A ABOVE THE "SOD-LINE"	EXTENT, STAKES	THICK-NESS	POSITION OF TOP OF STRATUM B	EXTENT, STAKES	THICK-NESS
10	4' 6" to 9' 6"	J to Q	1'	6' to 7' above "S-l."		
11	7' to 9'	E to Q	1'	Under Str. A	C to M	1'
12	8' 6" to 10'	E to R	1'	Under Str. A	D to R	1' to 2'
13	7' 6" to 9' 6"	E to S	1' to 3'	" " "	E to R	6" to 1' 6"
14	9' to 11'	F to R	1' to 3'	Under Str. A Interrupted, A-N	F to R	6" to 1'
15	Omitted in Sections					
16	10'	G to Q	1' to 2'	Under Str. A	G to Q	8" to 2'
17	8' 6" to 10'	G to Q	1 to 3'	" " "	G to Q	6" to 2' 6'
18	9' 6" to 10'	G to Q	1' to 3'	" " "	G to Q	1" to 2'
19	9' to 10'	G to Q	1' to 1' 6"	" " "	G to Q	6" to 2'
20	9' to 10'	G to P	6" to 2'	" " "	G to P	1' to 2'
21	9' to 10'	G to P	1' to 2'	Irregular	G to P	6 ' to 3'
22	8' 6" to 10' 6"	G to P	1' to 1' 6"	Under Str. A	G to P	2' to 3'
23	9' to 10'	G to Q	6" to 2'	" " "	G to Q	6" to 2'
24	7' 6" to 10'	Interrupted G to Q	6" to 1' 6"	" " "	G to Q	6" to 2' 6"
25	7' to 10' 6"	G to Q	6" to 1' 6"	Under Str. A Interrupted	G to Q	1' to 2'
26	7' to 9' 6"	G to O	6" to 1'	Under Str. A	G to Q	1' to 3' 6"
27	5' 5" to 7'	C to P	6" to 1'	" " "	A to Q	1' ±

Summary of stratum A:

Top above "Sod-line", four feet six inches to eleven feet.

Thickness, six inches to three feet.

It extends practically across the excavation north and south, and from stake 10 to stake 27 east and west.

It rises from the east and west towards the middle.

Near stake 10, stratum A was two feet to five feet below the surface.

Near stake 21, it was three feet to ten feet below the surface.

Near stake 27, it was one foot to two feet six inches below the surface.

Summary of stratum B:

Position, directly under stratum A.

Thickness, one inch to three feet.

Extent, nearly identical with that of stratum A.

In the section at 21, stratum A has retained the irregular contour line, that would be produced, by the throwing on of the soil from baskets: the size of the lumps is also suggestive of this.

Shells were numerous in the northern eastern portion of the mound. Burnt clay in strata or nuggets was abundant throughout, especially near the surface.

Intrusions properly so called were not numerous. The largest occurred in the line of stake 20, under stake A. Its top was 2 feet below the surface; its depth 6 feet, its north and south diameter 8 feet, its east and west diameter possibly 6 feet. It had within hard soil with a perpendicular layer of burnt clay to the south, and less to the north. There was charcoal on the bottom and to the north of the centre. Another intrusion occurred in section 11 near stake A. Its top was 1 foot below the surface, its depth 4 feet, its diameter 3 feet. It contained some wood or bark.

Pottery fragments and animal bones were more numerous above strata A and B than below, and in the eastern half of the mound than in the western. Burials and unbroken pottery were more frequent on the western slope, and holes in the eastern half.

Holes.

The characteristic feature of the Edwards mound was formed by the holes that occurred in great numbers, and one hundred and ninety one of these were found and measured during the two years' work. Details and statistics may be seen in the field notes. They were found from cutting 1 to cutting 24 and from letter J to letter T. Their greatest abundance was from cuttings 9 to 13 16 to 18 and 20 to 22. They ranged from 1″ in diameter (No. 168) to 2′ 10″ in diameter (No. 99).

From 6″ down at the top (No. 5) to 15′ 3″ (No. 52).

From 8″ in length (Nos. 65 and 116) to 5′ 5″ (No. 177).

They were usually perpendicular: otherwise the base trended indifferently to the north, east, south or west. The great major-

ity of them were empty or with an accumulation of soft soil at the bottom. The damp tenacious soil of the river bottom is such as to continue indefinitely shapes or cavities imposed in or on it. The holes not empty were usually of larger diameter, and could otherwise be distinguished from the greater number.

Details of contents:

Nos. 4, 5, 7, 10, 13, 71, 95, 96, 97, 99, 104, 116, 159, 162 and 163 contained charcoal. Of these Nos. 7, 10, 13, 159, 162 and 163, contained charcoal edges or charcoal near the side.

No. 71 contained charcoal over wood as of a burnt post.

No. 95, charcoal and decayed wood.

No. 99, charcoal three inches thick with a perpendicular grain, accompanied by decayed wood.

No. 116, contained a charred post.

No. 2, pottery and stone.

No. 10, shells.

Nos. 2, 4, 97, 98, 106, ashes.

No. 96, burnt clay.

No. 7 (a wide shallow hole), corn in considerable quantity at the bottom.

Nos. 87, 88, and 89, designated "wood holes," had contents as follows:

No. 87, charred wood on northern edge, the wood being burned on the outside and on the top of sticks; also blue ashes and loose earth.

No. 88, large broken bones, snail-shells, wood, blue ashes and loose earth.

No. 89, wood charred at the top, blue ashes and loose earth.

More significant than the size or contents of the holes was the level of the tops. Considering strata A and B as forming a critical level (produced slightly southeast of the limits of the strata given above) we have:

Total number holes, ...	191.
Holes whose tops are at or near the "critical level,"	106.
Holes whose tops were at or near stratum B, . .	73.

These 73 holes when plotted on the map suggest a rude circle, with a centre not far from stake 16. The southwest circumference is incomplete owing to a lack of excavation. Now, while to reach an absolute low level, the row of stakes with arabic numbers

was continued westward to No. 36, the ground hardly begins to rise towards the east till stake 32 is reached. A geographical middle line of the mound would therefore not be far from stake 16. We have then: the apex of the actual mound was perpendicularly above a point between the rows of stakes 20 and 21.

The geographical centre of the ground plan of the mound is near stake 16.

The centre of the circle described by the holes is near stake 16. A corresponding calculation north and south is not feasible, as the sides were not cut away; the centre of the circle of holes seems to have been south of the line of the apex, and of the geographical centre.

We have further as above: holes whose tops were at or near the level of stratum B, 73.

Of these there are included within limits of stratum A or B, 65.

Holes outside the limits of stratum A or B, 8.

On the northeast, east and southeast, the holes followed fairly closely the boundary lines of the two strata; on the west, they fell well inside. The holes otherwise were exceedingly irregular and were present in very great abundance in the southeast portion of the mound.

The Burials.

In the Edwards mound were discovered and noted, 158 burials. In many cases the skull when taken out was found not worth preserving. The weight of the damp earth often crushed and broke the bones. Otherwise the larger and stronger bones were in a better state of preservation than at Clarksdale. When buried in the so-called "gumbo" or "buckshot," to excavate the skeletons even with a trowel was a matter of some difficulty and not always of success. Burials were very numerous on the western slope of the mound from the line of stake 22, to that of stake 28. No regularity as to their position in the mound was observed, nor any reason for their greater frequency towards the south and west. The statistics of the burials follow, according to their form, whether the so-called "bundle" burials or the full length burials.[1] The impossibility of determination and a greater detail of recording during the second year account for the large number occurring in the "undetermined" column.

[1] See reference p. 37.

EXPLORATION OF MOUNDS, COAHOMA COUNTY, MISSISSIPPI. 35

I. ORIENTATION OF "BUNDLE" BURIALS.

Bundles lying		Skull at or near what end or side:			
N. and S. 21	N. 8	S. 14	Above 1
E. and W. . . . 43	N. E. . . . 4	S. W. 2	Near Middle . 6
N. E. and S. W. 10	E. 36	W. 18	Underneath . 6
N. W. and S. E. 7	S. E. . . . 7	N. W. 6	Undetermined 13
Perpendicular 1	55	40	26
Undetermined 37		Total 121, less repetitions (2) 119	
Total 119			

Of the 21 N. and S. Bundles
The skull was at end as follows:

N. . . .	4
E. . . .	2
S. . . .	9
W. . . .	1
N. W. .	1
U.[1] . . .	4
Total	21

Of the 43 E. and W. Bundles
The skull lay at end or side as follows:

N.	1
E.	28
S.	1
W.	8
Middle	1
Undetermined	4
Total	43

Of the 10 N. E. and S. W. Bundles
The skull lay in position as follows:

N.	2
E.	2
S.	1
W.	2
N. E.	1
Middle	1
Underneath . .	1
Total	10

Of the 7 N. W. and S. E. Bundles
The skull lay as follows:

N.	0
E.	1
S	0
W	0
N. W. . . .	2
S. E	3
Undetermined . .	1
Total	7

ORIENTATION OF SKULLS, "BUNDLE" BURIALS.

The skulls faced:

N. or N.E.	19
E. or S. E.	14
S. or S. W	6
W. or N. W. . .	11
Upwards.	13
Downwards . . .	15
Undetermined. .	41
Total	119

Burials with the skulls facing away from the bundle or with the top of skull towards the bundle:
14. . . . viz. Nos. 16, 28, 45, 105, 109, 110, 117, 129, 131, 143, 150, 153, 156?, 157.

DEPTHS OF BURIALS.

Least depth (No. 139)	8″
Greatest depth Nos. 72/3,	5′
Less than 3′	93
3′ or more down	18
"Not deep"	6
Undetermined	2
Total	119

VASES or pottery were found with 41 burials.

[1] U. Undetermined.

ORIENTATION OF BURIALS OF FULL-LENGTH TYPE.

Burials extending

N. and S.	14
E. and W.	13
N. E. and S. W.	1
N. W. and S. E.	5
Undetermined.	2
Total	35

Of the 14 N. and S. burials
Skull at or near what end or side:

N.	3
E.	0
S.	11
W.	0
Total	14

Skulls at or near what end or side:
Of the 13 E. and W. burials

N.	0
E.	9
S.	0
W.	3
S. E.	1
Total	13

Of the 1 N. E. and S. W. burial
The skull was over N. E. end . . 1

Of the 5 N. W. and S. E. burials
The skulls were

N. W.	4
S. E.	1
Total	5

Irregular: In Skeleton 116 the top of the skull was upwards and the face turned toward the remainder of the skeleton.
Skeleton 35 was without skull.

POSITION OF SKELETONS FULL LENGTH:

On Back	23
On Face	3
On Right Side.	0
On Left Side.	1
Undetermined.	8
Total	35

DEPTH OF BURIALS:

Least Depth 8″ (No. 146)	
Greatest Depth 15′ 2″ (Nos. 58(1, 2, 3))	
Less than 3′	9
3″ or more down	26
In or below critical level	19
Vases or pottery found with	6

IRREGULAR BURIALS

	DATE	DEPTH	POSITION	
No. 11	June 5, 1901	4′ 2″	3′ 6″ E of E. Cutting 8.	"Flexed" on back with legs doubled up and running N. E. from the spine Skull at S. end, top to S. facing up. Accompanied by charcoal.
No. 14	June 15, 1901	1′ 2″	1′ S. of D. Cutting 11.	"Scissors-shape" E. and W.[1] Legs folded at full length on top of the body. Skull E. of centre, top to E. facing up. Accompanied by a brass bell in former contact with the skull.
No. 35 (Included in full-length burials)	May 23, 1902	3′	1′ 1″ E. of F. Cutting 18.	No skull. Accompanied by five arrow points, as follows: On the right side. A in right pelvis B by back bone C among ribs D between ribs, left side, pointing under back bone E between the spines of back bone, right side, point upward; not in deep enough to have penetrated spinal cord.

[1] See Plate X, "Skeleton 14."

No. 36[2]	May 27, 1902	1′	2′ E. of L. Cutting 19.	"Bundle," but arms and legs continuous. E. and W. Skull at E. end facing up.
No. 49	June 3, 1902	5′ 9″	1′ 3″ E. of L. 1′ 8″ S. of L. Cutting 20.	"Sitting Posture." Skull on back to S. E.[1]

BURIALS[2]: SUMMARY.

Burials of the so-called "Bundle" Type	119
" " " " "Full-length" type. . . .	35
" " " " Irregular	4
Total	158

ORIENTATION OF "BUNDLE" BURIALS.

Of the 82 which were determined there lay

N. and S.	21	or 25.6%
E. and W.	43	or 52.4%
N. E. and S. W. . .	10	or 12.2%
N. W. and S. E. . .	7	or 8.5%
Perpendicular. . .	1	or 1.2%
Total	82	99.9%

Of the 106 determined, the skull lay at or near the East end in 36 cases or 34%
Of the 43 E. and W. bundles there were with the skull at or near the E. end 28 or 65.1%
Of the 119 "Bundle" burials, vases or pottery were found with 41 or 34.5%
Of the 111 determined "Bundle" burials there were less than 3′ down 93 or 83.8%

ORIENTATION OF "FULL LENGTH" BURIALS.

Of the 33 determined cases there were

N. and S.	14	or 42.4%
E. and W.	13	or 39.4%
N. E. and S. W. .	1	or 3 %
N. W. and S.E. .	5	or 15.2%
Total	33	100.0%

Of the 14 N. and S. burials there were with the skull at the S. end 11 or 78.6%.
Of the 13 east and west burials, there were with the skull at the east end, 9 or 69.2%.
Eastern orientation is better carried out on the whole in the class of "bundle" burials than in that of full length.
Of thirty-five full length burials there were three feet or more down, 26 or 74.3%.
Of thirty-five full length burials, there were below the critical level, 19 or 54.3%
Of thirty-five full length burials, vases or pottery were found with, 6 or 17.1%.

Objects found during the Excavations.

All specimens found during the two years in Coahoma County, Mississippi, will be considered as a whole, whether from the sur-

[1] See Bureau Eth. Rep. I, p. 121 (J. M. Spainhour, quoted by Yarrow); Jones, C. C.: Antiq. So. Inds. p. 184; Thomas, C.: Bur. Eth. Rep. V, p. 14.

[2] For "Bundle" burials See Bur. Eth. Rep. I, p. 169, where Yarrow quotes Bartram "Travels," p. 516, Choctaws; Morgan: "League of the Iroquois" p. 173. See Plate XI, "Skeleton 12."

face or below it, and whether from the Edwards, Dorr or other mounds. In cases of importance the provenance will be noted.

ARTICLES OF CLAY.

Following the method used in describing the holes and the burials of the Edwards mound, the following statistics are of the vases found in that mound:

With accompanying skeleton 55 or 80.9%, without accompanying skeleton 12, undetermined 1; total, 68.

With "bundle" burials 35, with full length burials 6, undetermined 14; total, 55.

Direction of vases found from skeletons or bones, or at what end. N. 9, N. E. 8, E. 15, S. E. 5, S. 3, S. W. 0, W. 2, N. W. 1; irregular 2, undetermined 10; total, 55.

Vases near the skull, 38 or 69.1%; not near the skull or undetermined 17; total, 55.

Vases with skeletons of adults 16; with those of young persons or children 26.

Depth of the vases. Less than three feet 52, three feet or more 15, undetermined 1; total, 68.

Greatest depth (vase Q) 15′ 2″ (with 3 skeletons, 58, etc.; S. E. of skull of E skeleton). Least depth (vase L) 6″ without visible skeleton. Below or in stratum B, 5.

During the two years' work in all places, the following vessels of pottery were found:

Bowls	41	Wide-mouthed bottles . .	5
Pot-shaped vessels . . .	20	Long-necked bottles . . .	7

The pure bowl shape[1], with or without a more or less flattened rim, is very frequent; the above table shows the great preponderance of the vases of this class.

More, in proportion, than those of the other classes, vases of the bowl type are decorated with animal forms. The shape of the bowl varies from unusually shallow platters to deep vessels, verging on the class of the pot-shaped vases. The bottoms of nearly all the bowls were round or curved. One vessel however has a circular, nearly flat bottom with the sides rising at an obtuse angle. Peculiar shapes in the first and other classes are shown in the plates.

[1] Holmes, W. H.: Bureau Eth. Rep. 4, 1882-83, "Ancient Pottery of the Mississippi Valley." See also Plates XII-XV.

The greater number of the vases and fragments are uncolored save by burning, but a black, red, or red and white slip together, has occasionally been used. Of vases and fragments with a red slip, enough were secured to show that the makers had considerable skill in its use. It is to be noted that incised decoration is less usual on the fragments with red slip. Decoration in relief occurs both inside and outside, generally the latter; in bands or geometric designs, very frequently near the top, less so on the rims, on the ears, or near the bottom. The designs vary from the criss-cross of the very roughest and primitive character through ray-like symbols to geometric rectangular figures, and to scrolls quite similar to those of the Mycenean age in Hellenic pottery and suggesting the Swastika and tetraskele. In decoration by the insertion of the finger nail or some other broad faced implement, the potters were skillful. The impressions are usually arranged in parallel rows around the rim or top, and of these rows there are from one to six or even enough to cover the entire outside of the vase. Decoration by variation of form is shown in the diverse designs of the rim, and the designs and numbers of the ears. This is exemplified by the usual conventional animal heads and opposite tails above or on the rims of bowls (the animals being quite impossible of identification). Further decoration of this class is in the spikelike points or knobs on the body of the vases, perhaps (as suggested by Professor Putnam) representing the members of an animal; by conventionalized protuberances, and by the conversion of the body itself into that of an animal (Plates XIII and XIV).

The material is usually a yellow clay with tempering of the mussel-shell abundant in the Sunflower river. The firing in preparation and use is more or less evenly distributed and upon it the variation in color not due to the slips depends. The shaping of the vessels is carefully done: in some instances there may be seen the marks of cords and knots of a texture within which the vessel was moulded.

Among the fragments found are many with a quite complex decoration by incision and color; also ears broken off representing grotesque heads and faces. Incisions made by hollow reeds are numerous, the circular figures resulting having been used in one instance to represent the eyes of an animal.

Two small vases (Plate XVI), two and a half and one and three quarters inches in diameter respectively, were found that may

have had merely a ceremonial use or a purpose of amusement. A rude clay ball one and three quarters inches in diameter, burnt on one side, may have been a toy or an accidental form. Forty-six clay discs, unperforated, are found from one and a quarter to three inches in diameter; they are quite rude, and of a type found throughout the middle West. Notably were they present in Mr. Harlan I. Smith's excavations in Kentucky. One perforated disc and one such fragment suggest spindle whorls. Perforated objects of clay and stone are few compared to the numbers of beads of other material. Perforated fragmentary rims of vases are however not uncommon. Three rude clay pipes were found: two of the platform or monitor class,[1] and one somewhat resembling that from New York, in figure 111 of McGuire's article on Smoking Customs.[2] One of the former has a series of notches encircling all that is left of the platform. The third pipe is undecorated. Two fragments of tubes, possibly of pipes, were found. Burnt clay occurred in great quantity in the mounds and on the surface: in the former making level floors or strata several inches thick, difficult to break even with a pick, and on the latter occurring in massive lumps in which the moulds of cane or reeds are often visible.[3]

ARTICLES OF STONE (PLATES XVII-XIX).

CHIPPED STONE.

Projectile Points and Knives.

The collection may be classified as follows: following suggestions made by Mr. Thomas Wilson[4] and Mr. Gerard Fowke.[5]

The articles are divided into larger and smaller: the larger are two and a half inches in length or more, the smaller less than two and a half inches.

Larger chipped points.— Those with convex edges are often quite pointed and the base somewhat convex and narrow, approaching a point.

[1] McGuire: Rep. U. S. Nat. Mus. 1897, I, p. 468, "Smoking Customs."
[2] " *op. cit.* p. 493.
[3] Thomas: Bur. Eth. Rep. 12, 1890-91, p. 259 (Miss. Mounds).
" " " " " p. 587 (Ark. Mounds).
[4] Rep. U. S. Nat. Mus. 1, 1897, p. 890 ff.
[5] Bur. Eth. Rep. No. 13, pp. 142 ff. See also Moorehead, W. K.: "Prehistoric Implements," pp. 191 ff.

The general type resembled Fowke's type L (*op. cit.*) with a more rounded base.

Plate XVII shows two Divisions 1, B, γ, and one of Division 3, A, α. In the latter case the edges are nearly straight.

Division 1 (Leaf shaped)	A. Pointed at both ends			0
	B. Less pointed or rounded	with base	α. Concave	0
			β. Straight	0
			γ. Convex	7
	C. Long parallel sides			0
Division 2 (Triangular)	A. Base Concave		α. Concave Edges	0
			β. Straight Edges	0
			γ. Convex Edges	0
	B. Base Straight		α. Concave Edges	0
			β. Straight Edges	0
			γ. Convex Edges	0
	C. Base Convex		α. Concave Edges	0
			β. Straight Edges	0
			γ. Convex Edges	0
Division 3 (With stems)	A. Stems straight or wedge shaped		α. Straight Edges	1
			β. Convex Edges	11
	B. Expanding			2
			Total	21
Division 4 (Irregular)				

Smaller articles. Plates XVIII and XIX.

Division 1 (Leaf shaped)	A. Pointed at both ends			6
	B. Less pointed or rounded	with base	α Concave	6
			β. Straight	31
			γ. Convex	57
	C. Long parallel sides			2
			Total Division 1	102
Division 2 (Triangular)	A. Base Concave		α. Concave Edges	2
			β. Straight Edges	11
			γ. Convex Edges	15
	B. Base Straight		α. Concave Edges	2
			β. Straight Edges	14
			γ. Convex Edges	109
	C. Base Convex		α. Concave Edges	1
			β. Straight Edges	6
			γ. Convex Edges	51
			Total Division 2	211

Division 3 (with Stem)	A. Stem straight or wedge shaped	16
	B. Stems expanding	42
	Total Division 3	58
Division 4 Irregular	A. With beveled edges or chipped almost exclusively on one side	6
	B. With serrated edges	1
	C. With a notch in one side of base	3
	D. Triangular with two angles sharp and one angle rounded	10
	E. Knife-shaped	2
	Total Division 4	22

Summary:	Division 1	102
	" 2	211
	" 3	58
	" 4	22
	Total	393

A further Classification of Division 3 A:

With Base of Stem Broken	4
" " " " Concave	0
" " " " Straight	6
" " " " Convex	4
" " " " Pointed	1
" " " " Irregular	1
Total	16

Further Division 3 A. Classified by notches or by the angle (generally rounded) formed by the edge of the stem and the edge of the end of the shoulder

With obtuse angle	8
" right "	4
" acute "	3
Irregular form ("Bunt")	1
Total	16

The general form of Division 3A resembles Fowke, Figure 204, p. 151 (*op. cit.*). (Bur. Eth. Rep. 13).

For the "bunt" compare Fowke, p. 168(*op. cit.*).

No. 61878 (Peabody Museum) is abnormally asymmetric and resembles the knife figured by Wilson, p. 946.[1]

Remarks.— Of the first two classes an overwhelming proportion was found on the surface. Of the two stemmed forms a far larger proportion than of the others came from the Edwards mound during

[1] Rep. U. S. Nat. Mus. 1, 1897.

general digging or in burials. The two specimens of Division 1, class C, corresponding more or less with that of Wilson's p. 890, are rare, especially in the light of that author's statement of the provenance of the class from the Pacific Coast: The points however of the Mississippi specimens are not sharp.

Perforators[1].— Few of these were found and, naturally, often broken; twenty-three are classified as follows (Plate XIX):

Round, oval or rectangular in cross section	9
With minor axis of cross section proportionately smaller	11
Round, with a broad flat stem	2
Irregular	1
Total	23

Scrapers.—These nearly all resemble type B of Fowke.[2] They are divided as follows (Plate XIX):

Class 1, flat type	78
" 2, with but one or two scraping edges	49
" 3, with three chipped edges	126
" 4, unusual in form	5
Total	258

The great abundance of these scrapers (they are occasionally of small size, *e. g.* base 1/2″, length 5/8″) and the care shown in manufacture (for instance in working over a broken projectile point to serve as a scraper) make this type characteristic of the neighborhood. Among class 4 are a triangular scraper with convex base and concave sides all carefully chipped; one a complete square with four chipped sides; a shouldered spall, chipped on the base and steeper side, and a leaf-shaped spall, with rounded ends and parallel sides chipped with great care to a long ridge following the major axis (Plate XIX).

Celts and celt-shaped forms. — Class A. Chipped and pecked forms (Plate XIX).

These are very rough, not unlike the "Rejectage" from Virginia shown by Holmes in Plate LXII[3]. Rude as they are, there

[1] See Fowke: *op. cit.* p. 164. Wilson: p. 944, class K.
[2] *Op. cit.* p. 170.
[3] Holmes, W. H.: "Stone Implements of the Potomac-Chesapeake Tidewater Province." Bur. Eth. Rep. 15, '93-'94.

is little doubt that they are to be considered implements. Many of them show signs of hitting or pecking on the top or sides, probably done in the course of manufacture. They very frequently possess the well known polish popularly supposed to come from use, at or near the edge. They come both from the surface and from within the mound. The majority of them retain some of the original natural surface of the stone unmodified. The specimens of Class A are from 2″ to 4″ long. They may be arranged as follows:

Class A.

1.	Showing flaking alone with little or no pecking	5
2.	" " followed by pecking	29
3.	Undetermined	1
	Total	35

Class A. (A further classification.)

1.	Oval forms	4
2.	Longer, tapering away from the edge	17
3.	Shorter, with a fracture nearly at right angles with longer axis	11
4.	Unusual forms	3
	Total	35

Nearly one-third of these have polish at or near the edge sometimes brilliant, sometimes merely the lustre due to the later processes in celt making.

Of spades and larger flat implements, such as occur in Tennessee[1] but three fragments were found; that such implements occur in Mississippi is known however.

POLISHED STONE.

Celts and celt-shaped forms (Class B). Celts of the same general class and shape as those of class A were found both on and under the surface. Many were broken, but where the fragment was large enough to be significant it is rated here as an implement. The complete forms are from $1\frac{3}{4}$″ to $3\frac{3}{4}$″ long.

[1] *Cf.* Peabody Museum specimens and Thruston: "Antiquities of Tennessee," Plate XIII.

These may be classified as follows:

1. With chipping not entirely pecked or abraded away (characteristic and numerous in proportion[1]).	11
2. Polished with few signs of chipping	22
3. Celt with subsequent chipping	1
Total	34

Or they may be divided as follows:

Celts Class B.

1. Long thin type (nearly corresponding with the individuals of class 1 above)	12
2. With blunter edge often fractured at right angles with major axis	21
3. Peculiar form	1
Total	34

A further classification may be made as follows:

Celts Class B.

1. Long thin type	
a. Oval	1
b. With fracture at right angles	1
c. Tapering from the edge	10
2. With blunter edge	
a. Oval	2
b. Tapering from edge	7
c. With fractures at right angles	12
3. Peculiar form	1
Total	34

The material of the chipped celts, Class A, is usually a flint or chert of a yellowish color; of the polished Celts, Class B, reddish, pink or yellow flints in the thinner type; for the blunter type, flint, quartz or quartzite. Besides these there is in the collection a celt (the gift of Mrs. E. L. Dorr, Jr.) 8″ long, from the surface near Clarksdale; it is bell shaped and has been broken near the edge. See class G, of Fowke p. 78 (Plate XVII).

[1] See Holmes: *op. cit.* Pl. LXIII.

OTHER STONE OBJECTS.

Hammerstones of various shapes, natural stones brought from the river shoals, and dropped on the ground were common, as well as the usual awl sharpeners. On one of the last a certain rude design of criss-cross lines seems to have been intentional.

Stone disks. Eight stone disks were found showing some variety, as follows:

No.	Diameter	Sides	Edges	See class[1] (Fowke p. 99)	Thickness
1.	$1\frac{1}{4}''$	Flat	Rounding	D	$\frac{1}{3}''$
2.	$1\frac{3}{4}''$	Convex	Straight	F	$\frac{1}{2}''$
3.	$1\frac{3}{4}''$	"	"	"	$\frac{3}{4}''$
4.	$2\frac{1}{4}''$	Flat	Convex	P	$1''$
5.	$3\frac{1}{2}''$	"	Rough		$1\frac{1}{2}''$
6.	$3''$	1 Convex 1 Pitted	Convex	O	$1\frac{1}{2}''$
7.	$2\frac{3}{4}''$	1 Convex 1 Straight	Straight	O	$1\frac{1}{4}''$
8.	$2\frac{1}{4}''$	Convex	Rough	L	$1\frac{1}{4}''$

Two plummets (Plate XVI) were found, both rough: one from the surface and one from the mound. They are both pear-shaped, that from the mound oval, that from the surface tapering from near the bottom, and both are grooved for suspension. That from the mound (broken) is two and one-quarter inches long, that from the surface two and one-half inches long.

Three perforated pendants were found: one was a flat pebble, one and a half inches long, one, a flat pear-shaped stone three and a half inches long, with the sides worked to a blunt edge and with parallel scratchings on one side; the third was a flat pear-shaped pebble one and one-half inches long, found under the skull of skeleton 121.

SHELL.

Shells, as remarked above, were very numerous, occurring as the refuse of ancient feasts, or as the débris from the workshops where shells were used in tempering the pottery. Outside, however, of beads and occasional ornaments, the only modification of the natural forms was by perforation; five perforated unio shells

[1] See Bur. Eth. 13 (*op. cit.*).

were found, four of which may have been used as spoons or scrapers, and one as an ornament.

MISCELLANEOUS OBJECTS OF SHELL AND OTHER MATERIALS.

(PLATE XX)

OCCURRENCE.

1. Of shell.

Eight shell beads were found by the arm, thigh and neck of Skeleton 12 (bundle burial).

Position: 1′ down in the Edwards Mound.

Two shell beads were found with Skeleton 19, one near the chin (full-length burial).

Position: 1′ down in the Edwards Mound.

One shell bead, two beads of quartz and a brass bell were found with Skeleton 25 (bundle burial and a child's skeleton).

Position: 2′ down in the Edwards Mound.

Shell beads were found with Skeleton 32, near the neck and near the left wrist; in the latter case they lay in order as if having been on a string; there were also some beads near the neck.

Position: 2′ 3″ down in the Edwards Mound.

Shell beads were found near the neck of Skeleton 34 (bundle burial in a seeming intrusion).

Position: 2′ 10″ down in the Edwards Mound.

Four shell beads were found with Skeleton 36 (probably a bundle burial; that of a child).

Position: 1′ 8″ down in the Edwards Mound.

Shell beads were found with Skeleton 138 (bundle burial).

Position: 3′ 10″ down in the Edwards Mound.

Shell beads were also found in the general digging of the Edwards Mound (see No. 61777, Peabody Museum) and on the surface of the surrounding field (see No. 61861, Peabody Museum).

A shell bead and a brass perforator were found under a skull in the Cemetery Mound.

2. Beads of glass.

Two series of glass beads were found under the chin of Skeleton 4 (bundle burial).

Position: 2′ 9″ down in the Edwards Mound.

Beads of glass, a brass point and small shells were (all) found under the skull of Skeleton 5 (bundle burial).

Position: 3′ 1″ down in the Edwards Mound.

Eleven glass beads were found in a group with Skeleton 7 (bundle burial).

Position: 3′ 4″ down in the Edwards Mound.

A glass bead was found with Skeleton 8 (bundle burial).

Position: 1′ 5″ down in the Edwards Mound.

Glass beads were found under the left humerus of Skeleton 28 (a bundle burial).

Position: 1′ 6″ down in the Edwards Mound.

Glass beads were found with Skeleton 31 (a bundle burial).

Position: 1′ 3″ down in the Edwards Mound.

Glass beads were also found on the surrounding surface near the Edwards Mound.

3. Beads of other substances.

One bead of jasper was found in the general digging of the Edwards Mound in cutting 15.

One bead of galena was found with an unworked piece of the same substance 8″ down in the Dorr Mound (see Nos. 57253 and 57256, Peabody Museum).

Two beads of quartz were found with Skeleton 25 (a bundle burial of a child).

Position: 2′ down in the Edwards Mound.

A long bead of brass was found inside the occiput of Skeleton 151 (a full length burial in an intrusion).

Position: 1′ 6″ down in the Edwards Mound.

Two beads of brass were found with Skeleton 157 (a bundle burial of a child).

Position: 11″ down in the Edwards Mound.

4. Other articles.

A stone tube (see No. 61855, Peabody Museum) found on the surface was presented by Mrs. P. M. Edwards.

One brass bell was found under the left ear of Skeleton 25 (a bundle burial of a child).

Position: 2′ down in the Edwards Mound.

One brass bell was found with Skeleton 14, near, or in contact with the skull (a "scissors-shaped" burial).

Position: 1′ 2″ down in the Edwards Mound.

A brass point was found with Skeleton 5 under the skull, accompanied by glass beads and shells (a bundle burial).

Position: 3′ 1″ down in the Edwards Mound.

A brass perforator was found with a skull in the Cemetery Mound.

Brass was found near the neck of Skeleton 32, the bone near it being discolored by the brass.

Position: 2′ 3″ down in the Edwards Mound.

Quartz was found in the Dorr Mound (see No. 57251, Peabody Museum) and with Skeleton 28 (a bundle burial).

Position: 1′6″ down in the Edwards Mound.

Mica was found with Skeleton 139 (a bundle burial).

Position: 8″ down in the Edwards Mound.

Parched corn was found at the bottom of the hole No. 7; the top of this hole was 1′ down, the bottom 2′ 10″ down in the Edwards Mound.

The greatest depth recorded at which articles possibly of white man's manufacture were found was in the Edwards Mound: for glass 3′ 4″; for brass 3′1″.

There is no reason to believe, from the evidence of the articles found, that the lower part of the Edwards Mound was constructed or disturbed after white contact.

Form of the beads. The beads of glass are all globular; the smaller flattened, the larger elliptical; they are of iridescent blue color. The size varies from a diameter of 1/10″ with a perforation 1/30″ in diameter to 4/10″ in diameter with a perforation 1/10″ in diameter.

The beads of shell are many of them discoidal. The size is from 1/5″ in diameter, 3/20″ in thickness, with perforation 1/10″ in diameter, to 8/10″ in diameter, 4/10″ in thickness, with perforation 1/5″ in diameter.

Seven beads of shell of the massive type were found. The largest is 1 1/10″ in diameter, 9/10″ in thickness with a perforation 1/10″ in diameter.

The jasper bead is tubular, 3/4″ long 6/10″ in diameter, with a countersunk perforation 3/10″ in diameter at the end.

The quartz beads are tubular and countersunk, one quadrangular, one hexagonal.

The hexagonal bead is 9/10″ long, 7/10″ in diameter, with a perforation 3/10″ in diameter at the end.

The quadrangular bead is 1 1/10″ long, 6/10″ in diameter, with a perforation 5/20″ in diameter.

The galena bead is tubular and massive, 1″ long, 1″ in diameter with countersunk perforation 3/10″in diameter at the end.

The ends are flat and parallel and the section rudely quadrangular with beveled edges.

The tubular brass bead is made of a rolled sheet and is 1 1/10 long and 3/10″ in diameter.

ARTICLES OF BONE[1] (PLATE XX).

Awls, perforators and projectile points were found in the mound, not on the surface; they were made from the bones of either the deer or the turkey. They may be classified as follows:

Awls and *perforators*.

1.	Long forms with slender tapering points, 2 3/4″ to 7″ long	14
2.	Very slender and polished	1
3.	Blunter forms of antler (some unworked)	5
4.	With a flatter section above the point	6
5.	Very slender and with sharp points	5
	Total	31
	Projectile points	8

A bone specimen of doubtful authenticity (No. 61885, Peabody Museum) may be a fragment of an atlatl; two bear's teeth were found near the ears of skeleton 55.

MISCELLANEOUS.

In the Dorr mound three lumps of galena were found not connected with a burial. Pieces of quartz occurred in both mounds; in the Edwards mound with skeleton 28. Pigments of a pink color were found eight feet down in the Edwards mound. Bark, decayed wood and ashes were common throughout this mound. Blocks and unidentified objects of cannel coal were presented by Mrs. P. M. Edwards found by herself near the river bank one-half mile from the Edwards mound.

In addition to the beads mentioned over one hundred minute discoidal beads of turquoise were found with a child's skeleton

[1] Beauchamp, W. M.: Bull. N. Y. State Mus., No. 50, Mar. 1902. Willoughby, C. C.: Am. Anthrop., N. S. Vol. 3, No. 3, 1901, p. 431.

(No. 137) in connection with the enamel of the teeth. Also a small turquoise pendant; the beads were some of them less than one tenth of an inch in diameter, divided equally between the two sides and the perforation; the thickness was one forty-fifth of an inch or less. The pendant was half an inch long and half an inch broad, shaped like a section through a pot-shaped vase, with a round handle. The skeleton was not deeply buried and some glass beads were also found with it. This turquoise is the same as that used by the Pueblo Indians, and, as suggested by Professor Putnam, there is little doubt that it was obtained from some Pueblo Indian by trade in early white man's times.

THE BONES OF ANIMALS.

The following animals have been identified from bones found during the exploration.

Deer — *Cariacus virginianus.*
Bear — *Ursus americanus.*
Raccoon — *Procyon lotor.*
Opossum — *Didelphys virginiana.*
Beaver — *Castor canadensis.*
Wildcat — *Lynx rufus.*
Rabbit — *Lepus aquaticus.*
Squirrel — *Sciurus carolinensis.*
Dog — *Canis familiaris.*
Turkey — *Meleagris gallopavo americana.*
Sheepshead — *Aplodinotus grunniens.*
Alligator Gar — *Lepidosteus tristoechus.*

Conclusion.

The Edwards Mound may be considered as a typical Indian mound of a later period placed within a typical village site. The characteristic features are first, the division of the mound into an upper and lower part, separated by strata A and B, and second, the variety and richness of the articles, found at or near the surface of the surrounding field.

Below the "Critical level" were the greater number of full length burials; above it the greater number of bundle burials. Below the "Critical level" were found but five of the sixty-eight vases, and very few manufactured articles of any kind, while above it they

were frequent. These facts, coupled with the amount of ashes in stratum B and with the rude ring of holes[1] above referred to, induce to the opinion, that the mound has been built in two periods: that the lower portion was gradually built and used as a burial place, that a stockade of posts was set up about a centre to the east of a later apex; that, after a period of occupancy, this stockade was burnt down, and another population continued to build the mound to a conical apex some ten feet higher. Further we conclude that the latter people buried their dead from time to time, generally intrusively in the bundle fashion and deposited pottery, and necklaces and strings of stone, shell and glass beads with the bones; further that the latter people were undoubtedly Post Columbian and were well skilled in working stone and had some acquaintance with white people and other tribes, at least by trade. More than this can hardly be asserted. The most striking characteristic of the specimens found during the expedition's continuance is the consummately good workmanship bestowed on the smaller flint implements, particularly the scrapers, in comparison with the rudeness and the infrequency of the larger forms belonging to the stone age. The specimens, except the turquoise, are what would be expected from the civilization of the Arkansas-lower Mississippi district. In connection with this a paucity of worked shell is to be noted.

APPENDIX I.

HUMAN BONES. By W. C. Farabee.

The human bones found during the two years' excavations were in such an advanced state of decay that it was impossible to preserve many of them for study. Of the large number of skeletons exhumed, the skulls of only seven were sufficiently preserved for the taking of measurements. The most notable feature of this small collection of skulls is the antero-posterior shortening, which produces an extreme grade of brachycephaly. The average cranial index is 90.4; the extremes are 84.8 and 97.5 respectively. In most cases there is depression in the occipital

[1] See geographical centre and centre of circle of holes on p. 34.

region only, but in some cases the frontal region also is similarly deformed. Many fragments of occipital and frontal bones show the same influence.

Since the series is so small and the measurements are so affected by this artificial deformation, it seems useless to enter into any discussion of particular measurements or indexes. The table is subjoined in the hope that it may be of some value in a comparative study with other skulls from the same region.

In general character and especially in artificial deformations, these skulls very closely resemble those from the burial mounds in the St. Francis River region of Arkansas, but as we have no measurements of this collection a comparative study cannot be undertaken at this time.

The collection from Mississippi contains a few very interesting anomalies:

Skull 57813[1] which bears no evidence of artificial deformation, has both auricular cavities completely closed with bony tumors.

In the lower jaw of 57830 there is a supernumerary canine tooth fully formed and large as normal, lying below and back of the normal canine tooth on the right side.

There are two cases showing sternal foramina; one (57833) 3 mm. in diameter and the other (57838) 10 mm. in diameter.

The olecranon fossa is perforated in 12 of the 28 specimens; 3 of males and 9 of females; 3 lefts and 9 rights.

There are three specimens which clearly show the results of violence. The shaft of the left femur of skeleton 57817 has been fractured just above the second trochanter, the upper part being displaced forward about half its diameter and slightly twisted outward upon itself. The ends are rounded off and the opening of the medullary cavity is obliterated.

The right tibia of 57836 had an oblique fracture from the upper part of the lower third on the inside to 7 cm. above the external malleolus. The lower part has been drawn upward about 3 cm. and forward 2 cm., making an angle of 12° with the shaft. There is a great deal of roughening from an ossifying periostitis which extends around the bone. The fibula of the same leg suffered even a greater displacement, for the broken ends moved by each other and in this new position were firmly soldered by a strong bony mass.

[1] The numbers refer to the catalogue of the Peabody Museum.

MEASUREMENTS OF CRANIA.

CATALOGUE NUMBER	57808	57837	57807	57806	57813	57835	57834	AVERAGE	
SEX	F	F	F	M	M	M	M	FEMALE	MALE
Capacity	1380	1250					1547	1315	1547
Length	158	164	163	173	185	162	167	162	172
Breadth	154	139	141			145	158	145	151
Biasterial breadth	110	103	111	102		108	111	108	107
Biauricular "	124	103	111	105	108	116	121	113	113
Bistephanic "	122	109	109		110	116	124	113	117
Interpterion "	120	103	112	105	110	113	123	112	113
Minimum frontal breadth	101	92	94	94	96	95	99	96	96
Bizygomatic "			130			135	136	130	136
External biorbital "	100	91	92	97		94	93	94	95
Internal " "	29	23	22	21	26	23	27	25	24
Bijugal "	117	105	110	114		112	113	111	113
Bimaxillary "	103	94	97			95	102	98	99
Bialveolar "	65	62	64		71	62	67	64	67
Maxillary length	50	50	54	59	53	50	56	51	55
Basi-alveolar "	100	91	93	104	102	90	96	95	101
Basi-nasal "	102	92	88	99	109	98	96	94	101
Basi-bregmatic height	142	132	131	147	150	144	147	135	147
Basion-obelion	138	129	134	145	142	129	147	134	136
Basion-lambda	120	115	119	120	126	109	127	118	121
Length of foramen magnum	35	35	—	39	41	38	38	35	39
Breadth " " "	31	28		27	32	29	27	29	29
Malar height	43	42	44	47	46	49	46	43	47
Naso-alveolar height	76	64	67	70	76	70	71	69	72
Spino-alveolar "	24	19	22	22	28	21	28	22	25
Orbital breadth	40	34	37	41	43	38	37	37	40
" height	34	34	35	34	37	37	32	34	35
" depth	47	45	44	47	52	55	48	45	51
Bidacryc breadth	22	22	18	18	20	18	21	21	19
Nasal height	56	46	42	50	50	51	44	48	49
" breadth	25	24	26	27	23	24	25	25	25
Palatal length	43	43	39	47	41	40	43	42	43
" breadth, canines	24	26	21	23	24	23	24	24	24

CATALOGUE NUMBER	57808	57837	57807	57806	57813	57835	57834	AVERAGE	
SEX	F	F	F	M	M	M	M	FEMALE	MALE
Palatal breadth, 2nd molars	44	38	39	41	43	43	40	40	42
Dental length	39		41		41		42	40	42
Height of choanae	24	22	25	25	24	23	25	24	24
Breadth of "	30	24	26	25	30	26	29	27	28
ARCS									
Naso-malar	110	98	99	107		105	100	102	104
Frontal	114	111	113	122	128	125	124	113	125
Parietal	118	118	121	132	125	120	122	119	125
Occipital	102	103		110	113	99	127	103	112
Total sagittal	334	332		364	366	344	373	333	362
Maximum transverse	474	418	430		445	452	481	437	459
Supraauricular	355	304	320		324	335	375	344	345
Preauricular	275	257	255	268	280	270	274	262	273
Total horizontal	490	476	487	494		490	512	484	499
INDICES									
Cranial	97.5	84.8	86.5			89.5	94.6	89.3	92
Vertical	89.8	80.5	80.4	84.9	81.1	88.9	88	83.6	85.3
Breadth-height	92.2	94.9	92.9			99.3	93	93.3	96.1
Orbital	85	100	94.6	82.9	86	97.4	86.5	93.2	88.2
Nasal	44.6	52.2	61.9	54	46	47.1	56.8	52.9	50.9
Uranic	130	124	118		134	124	119	124	126

APPENDIX II.

"THE COPIAH COUNTY WALL."

(Plates XXI and XXII)

After the conclusion of the work in Coahoma County in 1901, the writer, in company with Mr. C. W. Clark, of Clarksdale, made an excursion to Brandywine, Claiborne County, Mississippi, for the purpose of looking at the so-called prehistoric wall of that district.

July second was spent in examining and photographing the "wall." As far as can be asserted from such a brief study, the "wall" is a perpendicular stratum of white sandstone of natural formation which presents several outcrops near Brandywine. At the surface the stone is broken by natural cleavage with blocks of a general size of, say, 4′ 5″ x 2′ 6″ x 2′ 1½″. Between these is a soft deposit of so-called "Cement," found upon examination at the Mineralogical Museum of Harvard University by Dr. Palache,[1] to consist of decomposed sandstone, produced by weathering possibly, with perhaps some admixture of iron. Other outcrops of a similar formation occur not far distant.

See Plates XXI and XXII which show views of an outcrop of the "wall" taken from the south and east, respectively.

[1] Dec. 2, 1903, Professor C. Palache on examination, a second time, pronounced the rock and the cement to be practically identical with no trace of calcium carbonate; a slight trace or stain of iron in the cement may have arisen through weathering or outside influences. One can have resulted from the other by mechanical decomposition.

DESCRIPTION OF PLATES.

DESCRIPTION OF PLATE VII (MAP).

Mounds (indicated by circles) noted in 1901 (besides large Central Mound or Edwards Mound).

1	Height 3′ 5″	4	Small Mound (invisible in 1902)
2	" 3′ 3″	5	Height 2′ 6″
3	" 5′ 5″ (Cemetery Mound)	6	Small Mound

Mounds described in 1902.

A	Height 1′ 8″	E	Height 1′ 7″
B	" 1′ 4″	F	" 1′ 2″
C	" 10″	G	" 1′ 2″
D	" 1′ 6″	H	" 1′ 4″

P. A.; P. B.; P. C. = Pits (see text, page 30)
J J = approximate line of a depression 2′ ± deep
K K = Course of Sunflower River

DESCRIPTION OF PLATE VIII; TYPICAL CROSS SECTION.

(See page 28)

Edwards Mound; looking West.

Sections 1, 2 and 3, united; taken under Stake 21 on May 29, June 9 and June 16, 1902.

A A = x x x = "Stratum A" (See pp. 31, ff.), "Buckshot."
B B = ///// = "Stratum B" (See pp. 31, ff.), containing charcoal, loose earth, etc.
"Stratum A" here often appears as if thrown from baskets.
C C = Burnt clay.
D = Charcoal.
E = Hole filled with loose earth.
F G = "Sod-line."
F′ G′ = Floor of excavated trench.
H = Pocket of ashes.
I = Human bones.
J = Ashes.
K = Ashes, burnt-earth; charcoal.
L L = Shells in "Sod-line."
S K = Skeleton.

NOTES: Under Stakes A/B above and below the "Sod-line" and to the northward above "Sod-line" is brown and yellow discoloration.

Scattered shells and charcoal.

Figures = Height of surface above "Sod-line." Trench at Q not fully excavated; a china-berry tree (T) was left *in situ*.

DESCRIPTION OF PLATE XII.

	DIAMETER.	HEIGHT.	WHERE FOUND.
At top of plate (line 1).			
Plate-shaped bowl.	1′ 2″	3¼ ′	Cemetery Mound.
Line 2 (left to right).			Edwards Mound E. of Skeleton 21. 1′ down.
1. Bowl with flat rim.	7¾″	2¾″	
2. Bowl with flat rim.	8⅝″	4⅜″	Edwards Mound E. of Skeleton 21 1′ down.
Note (in line 2) peculiar, similar, incised pattern on rims.			
At bottom of plate (line 3).			Cemetery Mound.
Plate-shaped bowl.	8″	1⅞″	S. of Human Bones.

DESCRIPTION OF PLATE XIII.

	DIAMETER.	HEIGHT.	WHERE FOUND.
Line 1 (left to right).			
1. Vase with conventional knobs.	6¼″	3¼″	Cemetery Mound.
2. Vase with ears resembling animal forms.	Nose to tail. 7½″	To top of head 4¾″	Cemetery Mound with six Skeletons.
Line 2.			
1. Tall bowl with triangular base.	Maximum 4½″	5″	Dorr Mound. North side
2. Vase with conventional knobs.	6″	2⅞″	Edwards Mound. With human bones 1′ 11″ down.
Line 3.	Nose to tail.	To top of head.	
Bowl with ears resembling animal forms.	11¾″	4⅞″	Edwards Mound E. of skull of Skeleton 156. 1′ 2″ down.
Contains rattles within the head.			
Line 4.	Maximum.		Edwards Mound. With human bones. Below "Stratum B"
1. Tall bowl with so-called "Compass-rays."	5¼″	5½″	
2. Tall bowl with quadrangular base.	Maximum 4⅜″	7′	Edwards Mound. With a human skull 2′ 3″ down.

DESCRIPTION OF PLATE XIV.

	DIAMETER.	HEIGHT.	WHERE FOUND.
Line 1. Left to right.			
1. Vase with a conventional pattern of four scrolls.	Overall 7¼″	5⅜″	Edwards Mound S. of skull of skeleton 126. 1′ 7″ down.
2. Vase with ears and four knobs.	Overall. 6¼″	4⅞″	Cemetery Mound.
Line 2.			
1. Vase of rare "tea-pot" shape. With red slip.	Tail to spout. 6¾″	To top of spout. 4¾″	Surface near Edwards Mound.
2. Vase of rare "tea-pot" shape.	To end of spout. 5′	To top of spout. 4¼″	Edwards Mound. With human bones. 1′ 11″ down.
Line 3. Vase with eight scrolls.	Orifice. 2⅜	4″	Edwards Mound. N. of skull of skeleton 25. 2′ down.
Line 4.			
1. Vase with three scrolls.	4¼″	4⅜″	Edwards Mound. E. of skull of skeleton 157. 11″ down.
2. Vase in rare fish-form.	6′	5¼″	Edwards Mound. N. E. of skull of adult skeleton. (Skeletons 17 and 18). Not deep.

DESCRIPTION OF PLATE XV.

	DIAMETER.	HEIGHT.	WHERE FOUND.
Vase at the top.			
Vase of unusual triple formation. Covered with red slip.	7⅛′	6⅛″	Cemetery Mound.
Line 2. Left to right.			
1. Vase with pattern of intertwined tetraskeles. Body of vase red; pattern in white.	7⅜″	7¼″	Edwards Mound. 2′ down. Without accompanying skeleton.
2. Vase similar to no. 1, in color and design.	7½′	6¾″	Edwards Mound N. of skull of Skeleton 7. 3′ 4″ down.

DESCRIPTION OF PLATE XVI.

	DIAMETER.	REMARKS.
Line 1 (left to right).		
1. Disc of pottery.	$1\frac{3}{8}$''	With concave sides.
2. Disc of stone.	$1\frac{3}{4}$''	With convex sides. Surface near Edwards Mound.
Line 2.	LENGTH.	
1. "Plummet" of stone.	$2\frac{3}{8}$''	From the surface.
2. "Plummet" of stone.	$2\frac{1}{4}$'	Edwards Mound.
Line 3.	DIAMETER OVER THE TOP.	Edwards Mound. See page With pelvis of Skeleton 78. 7' 6'' down.
1. Small vase of clay.	$2\frac{1}{2}$''	Skeleton of young person.
2. Small vase of clay.	2''	Edwards Mound.

DESCRIPTION OF PLATE XVII.

	DIVISION.	LENGTH.	
Three articles of stone at the top (left to right); see p. 41			
1. Point or knife of stone.	(Large) 1. B γ	4''	Edwards Mound. 7' 10''down.
2. Point or knife of stone.	(Large) 1. B γ	$3\frac{5}{8}$''	
3. Point of stone with tang broken.	(Large) Div. 3, Aa.	$5\frac{1}{2}$''	Said to be from the surface of the Dorr Mound, North side
At bottom of plate. Polished Celt.		LENGTH. 8''	Vicinity of Dorr Mound. See p. 45.

DESCRIPTION OF PLATE XVIII.

(See pages 41 and 42.)

	CLASSIFICATION.	LENGTH.	REMARKS.
Line 1. (Left to right.)			
Specimen 1.	Div. 1. A.	1½″	
" 2.	Div. 1. B. α.	1⅜″	
" 3.	Div. 1. B. β.	1½″	
" 4.	Div. 1. B. γ.	2⅜″	
" 5.	Div. 1. C.	1½″	
Line 2.			
Specimen 1.	Div. 2. A. α.	1″	
" 2.	Div. 2. A. β.	1″	
" 3.	Div. 2. A. γ.	1⅝″	
Line 3.			
Specimen 1.	Div. 2. B. α.	1⅜″	
" 2.	Div. 2. B. β.	1⅛″	
" 3.	Div. 2. B. γ.	1″	
Line 4.			
Specimen 1.	Div. 2. C. α.	1⅜″	
" 2.	Div. 2. C. β.	⅞″	
" 3.	Div. 2. C. γ.	1⅝″	
Line 5.	Div. 3. A.	1⅞″	
Line 6.			
Specimen 1.	Div. 3. B. α.	1⅞″	Without well defined shoulders.
" 2.	Div. 3. B. β.	1⅞″	With well defined shoulders.
" 3.	Div. 3. B. γ.	2″	Barbed.
Line 7.			
Specimen 1.	Div. 4.	⅞″	With a rounded base-angle.
" 2.	Div. 4.	1½″	Serrated.

DESCRIPTION OF PLATE XIX.

(Perforators; see page 43.)

Line 1. (Left to right.)	LENGTH.	REMARKS.
Specimen 1.	2⅛″	Round in section.
" 2.	1⅝″	Flat in section.
" 3.	2¼″	Stemmed.

(Scrapers; see page 43.)

Line 2.		
Specimen 1.	1″	With three chipped edges.
" 2.	1¼	With one or two scraping edges.
" 3.	1⅝″	Flat type.
" 4.	2′	Peculiar form.

(Chipped Celts; see page 43.)

Line 3.		
Specimen 1.	2½″	Oval type.
" 2.	3⅛″	Tapering type.
" 3.	1½′	Fractured; with polish.

(Polished Celts; see page 44.)

Line 4.		
Specimen 1.	3⅛″	Polishing incomplete.
" 2.	2¾	Polishing complete.

DESCRIPTION OF PLATE XX.

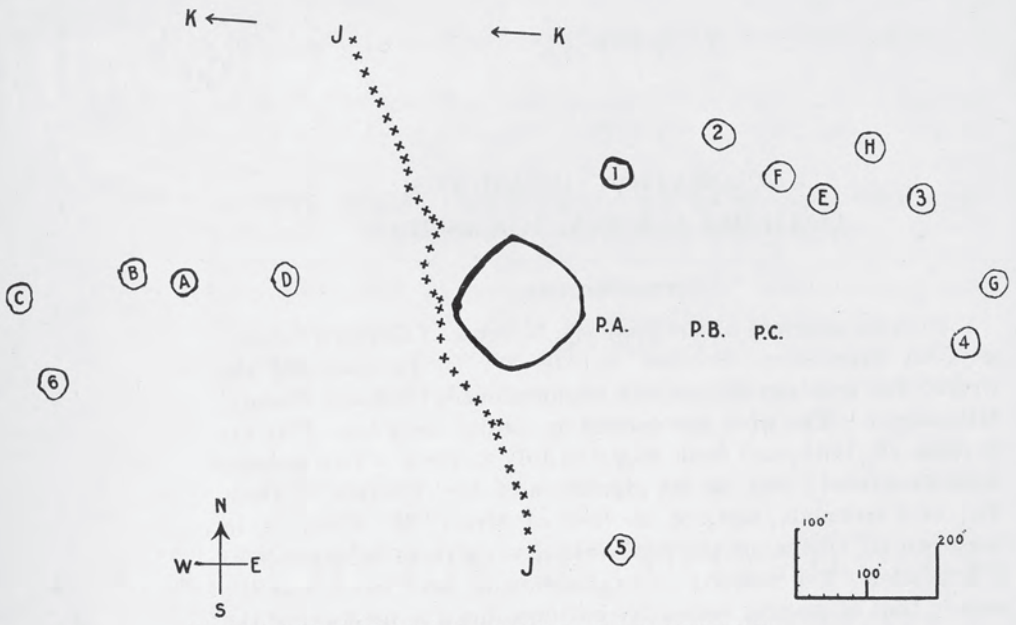
(See pages 46 ff.)

Line 1. (Left to right.)	DIAMETER.	TYPE.
1. Four beads of shell.	$\frac{3}{8}$''	Discoidal.
	Across wing.	
2. Bead of shell.	$1\frac{1}{4}$''	Massive.
	Across wing.	
3. Bead of shell.	$\frac{7}{8}$''	Massive.
Line 2.	AVERAGE LENGTH.	
Beads of glass in a string.	$\frac{3}{8}$''	
Line 3.	LENGTH.	
1. Bead of brass.	$1\frac{1}{8}$''	Tubular.
2. Bead of jasper.	$\frac{7}{8}$''	Tubular. See p. 48
3. Bead of quartz.	$\frac{7}{8}$''	Tubular. See p. 48 Six sides.
4. Bead of quartz.	$1\frac{1}{8}$''	Tubular. See p. 48 Four sides.
Line 4.	LENGTH.	
Awl of bone.	$6\frac{7}{8}$''	
Line 5.		
Awl of bone.	$6\frac{1}{4}$''	
Line 6.		
Awl of bone.	$4\frac{5}{8}$''	
Line 7.		
1. Fragment of "atlatl" bone.	$2\frac{1}{2}$''	
2. Projectile point of bone.	$2\frac{1}{8}$''	

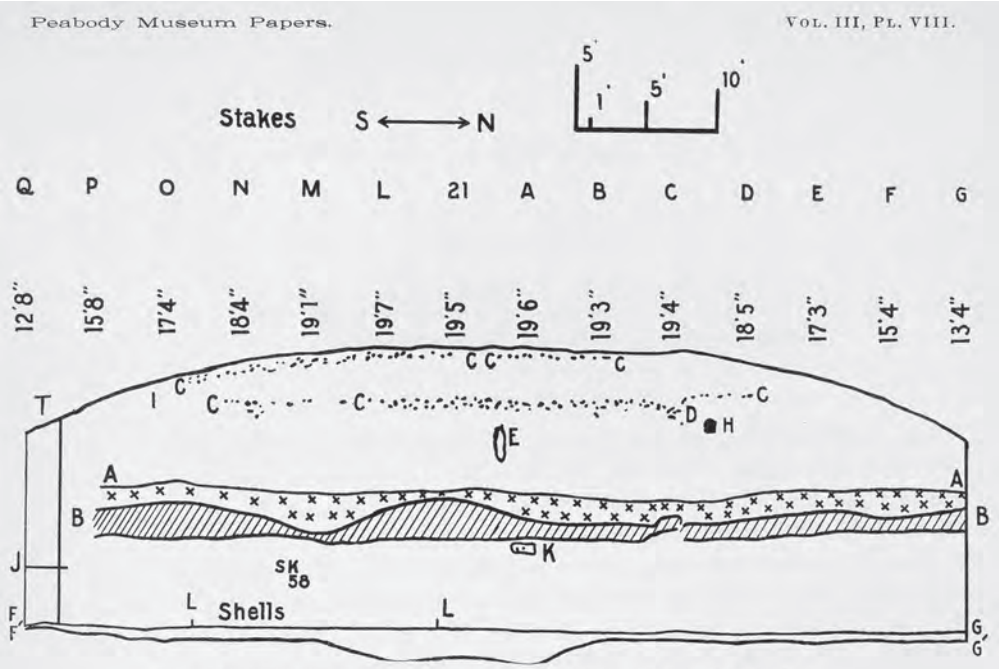
Peabody Museum Papers. Vol. III, Pl. VI.

VIEW OF THE SUNFLOWER RIVER, LOOKING WEST FROM THE CAMP AT OLIVER, MISSISSIPPI.

Peabody Museum Papers. Vol. III, Pl. VII.



PLAN OF EDWARDS MOUND AND VICINITY, OLIVER, MISSISSIPPI.



TYPICAL CROSS-SECTION OF THE EDWARDS MOUND. TAKEN AT STAKE 21.

PHOTOGRAPH SHOWING METHOD OF EXCAVATION. EASTERN SLOPE OF EDWARDS MOUND.

Peabody Museum Papers. VOL. III, PL. XI.

TYPICAL "BUNDLE" BURIAL. SKELETON 12, EDWARDS MOUND.

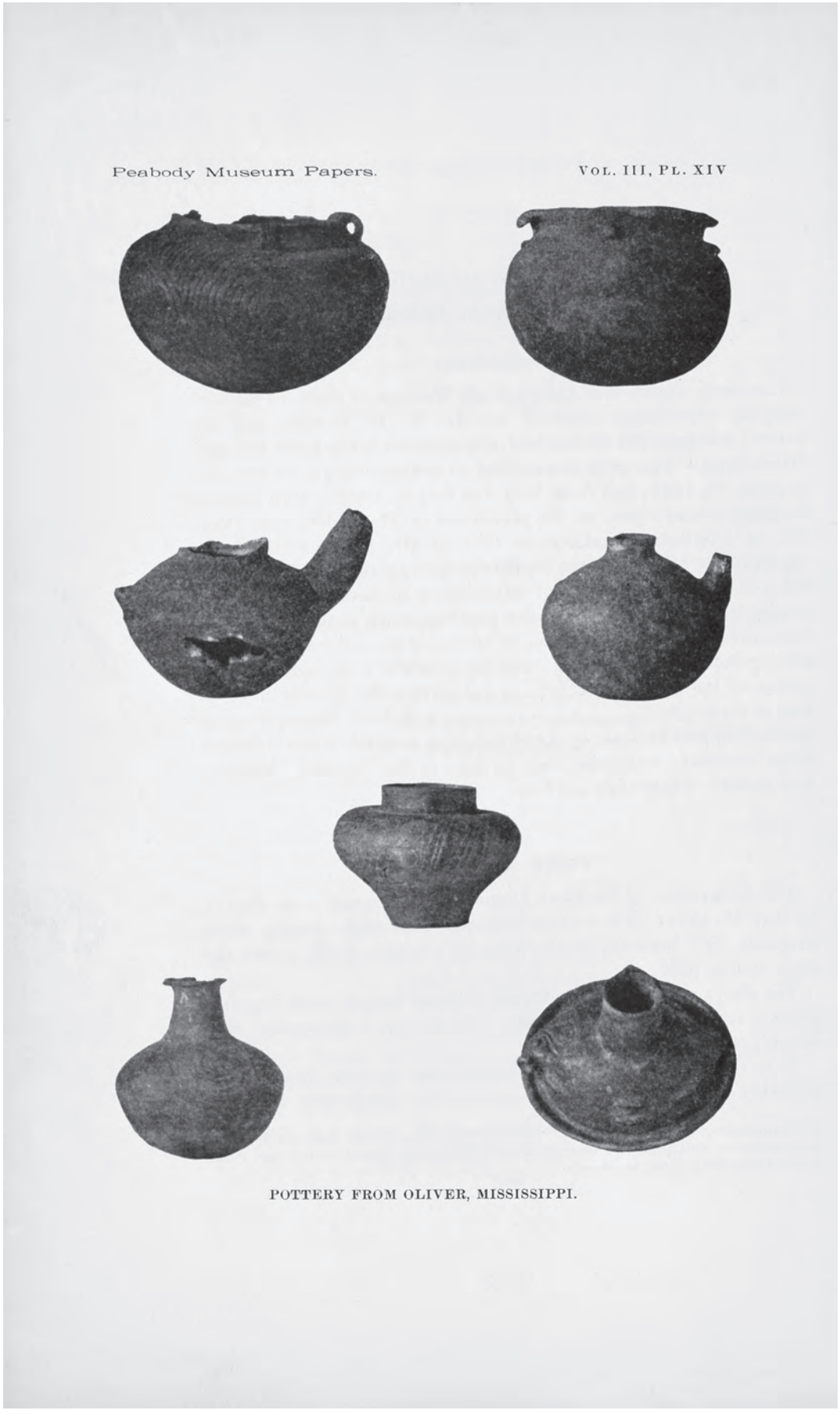
Peabody Museum Papers. VOL. III, PL. X.

"SCISSORS-SHAPE" BURIAL. SKELETON 14, EDWARDS MOUND.

Peabody Museum Papers. VOL. III, PL. XII.

POTTERY FROM OLIVER, MISSISSIPPI.

POTTERY FROM COAHOMA COUNTY, MISSISSIPPI.

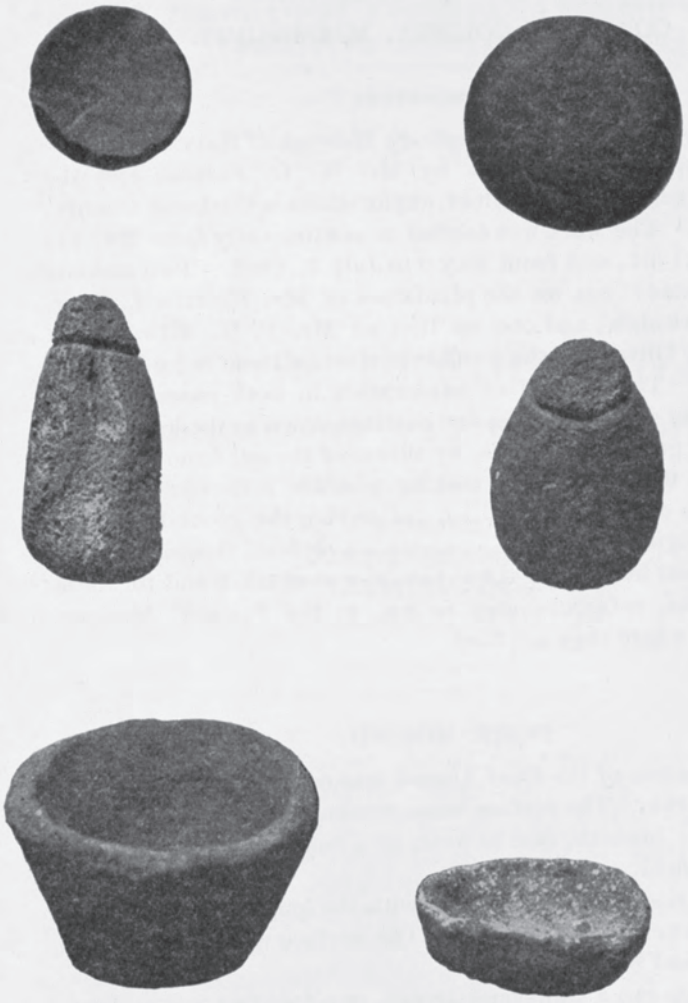


POTTERY FROM OLIVER, MISSISSIPPI.

Peabody Museum Papers. VOL. III, PL. XV.

POTTERY FROM OLIVER, MISSISSIPPI.

Peabody Museum Papers. VOL. III, PL. XVI.

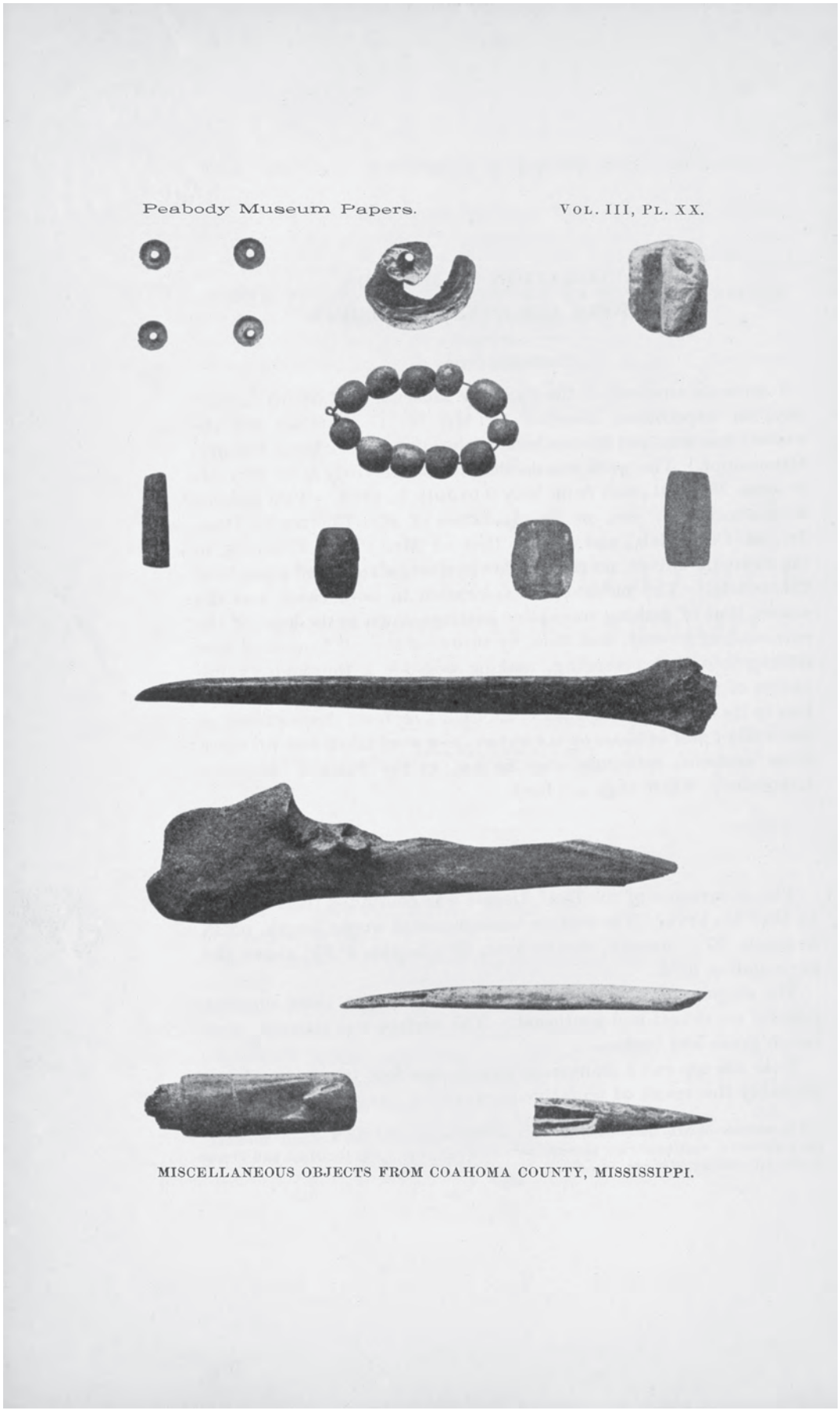


OBJECTS OF CLAY AND STONE FROM OLIVER, MISSISSIPPI.

OBJECTS OF STONE FROM COAHOMA COUNTY, MISSISSIPPI.

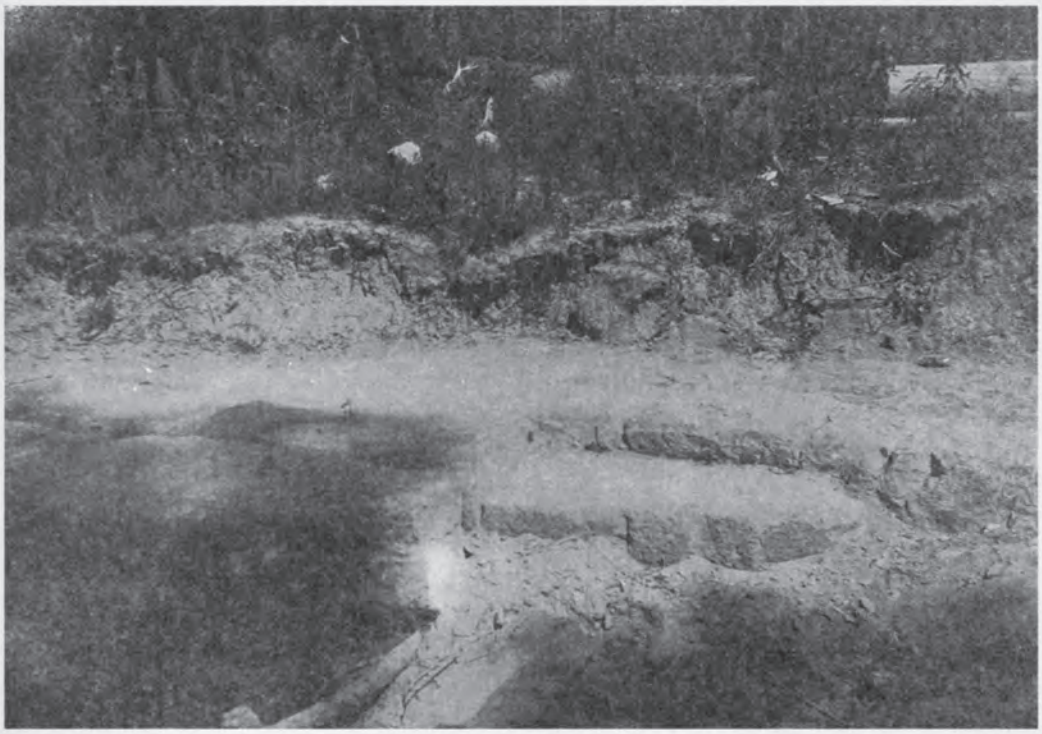
SMALLER CHIPPED POINTS FROM OLIVER, MISSISSIPPI.

OBJECTS OF STONE FROM COAHOMA COUNTY, MISSISSIPPI.



MISCELLANEOUS OBJECTS FROM COAHOMA COUNTY, MISSISSIPPI.

Peabody Museum Papers. Vol. III, Pl. XXI.



THE "COPIAH COUNTY WALL." OUTCROP NEAR BRANDYWINE, MISSISSIPPI. FROM THE SOUTH.

Peabody Museum Papers. Vol. III, Pl. XXII.

THE "COPIAH COUNTY WALL." OUTCROP NEAR BRANDYWINE, MISSISSIPPI. LOOKING WEST.

Chapter 3
The Peabody Excavations, Coahoma County, Mississippi, 1901-1902
by John Saltonstall Belmont [transcript of 1961 Harvard University thesis]

[**Editorial Note by John M. Connaway:** Although John Belmont questioned the need for publishing his thesis, he nevertheless gave his permission to do so in this volume. I believe he thought it dated in regard to ceramic typology and cultural chronology. However, aside from the basic site report published by Charles Peabody 1904 (reprinted as Chapter 2 of this volume), Belmont's thesis remains the only major attempt ever undertaken to impose some order on Peabody's excavation notes based on the modern cultural chronology of the northern Yazoo Basin. It is thus the foundation upon which most recent work is based, such as Mary Starr's ceramic analysis. In editing this thesis, I have taken the liberty of making a few additions and changes to clarify certain aspects of Belmont's analysis. These include:

1. Addition of a few footnotes, as well as a few comments and additions in brackets.

2. Addition of Peabody Museum catalog numbers for specific vessels and other artifacts, where I could determine them. Belmont's text does not provide catalog numbers, making comparisons with other analyses impossible.

3. The map symbols in Figures 3-5 through 3-12 have been changed from Belmont's color-coding to various symbols that can be reproduced in black and white.

4. Vessel photos have been redone, since we did not have the originals, except for the last one, which is from another site and not available to us for photographs. Belmont's Plates 1 through 6 now appear in Starr's chapter in a later volume.

5. Unfortunately, Belmont did not usually refer to burials by number, making it difficult to associate burials with vessels discussed in his text. Catalog numbers have been added where possible, but I have not tried to label burials. The Peabody Museum catalog is attached to this volume as Appendix A.

6. I have updated Belmont's reference citations to conform to *American Antiquity* style.

7. The four Dorr site maps are placed after the Dorr discussion and before the Oliver section.

8. An updated correlation of Upper Sunflower cultural chronology (Table 3-1) has been added to the chronological chart following the Dorr Mound discussion.

9. New references have been added.

10. Measurements are changed to numerals.

11. Belmont's chapter designations are changed to parts.]

A Thesis submitted to the Department of Anthropology in partial fulfillment of the requirements for the degree with honors of Bachelor of Arts, Harvard University, April 1961. [Reprinted with permission of the author.]

Prefatory Note: I wish to gratefully acknowledge the invaluable assistance of Dr. [Stephen] Williams and Dr. [Philip] Phillips. Only by making continual demands on their time, knowledge, facilities, and hospitality was this paper made even remotely possible. They are also due an apology for the late date of completion of the labor.

James Ford and John Goggin were also most obliging, and supplied data crucial to an understanding of the Oliver material. Lastly, some sort of acknowledgment is due to Charles Peabody and his assistant W. C. Farabee. The mixed blessing of their field notes forms the improbable heart of this paper.

Part I: Introduction

A. Aims and Final Scope

The sole aim of this paper is to provide a key to the considerable amount of raw data in the Peabody Museum from the excavations of Charles Peabody in Coahoma County, Mississippi, in 1901 and 1902. There is a pre-existing publication of these excavations—Peabody's own (Peabody 1904) [see Chapter 2, this volume]. This however is entirely unsatisfactory to the modern archeologist for two reasons: (1) Peabody had no way of dividing up his material into cultural units and does not attempt it. (2) The stratigraphic data in the publication is very incomplete, as Peabody himself admits; on the first page he urges the interested student to consult his notes on file at the Peabody Museum (Peabody 1904:23).

The interpretation and eventual publication of Peabody's data is one step in a long-range plan of Dr. Stephen Williams to make available to the profession

all the data stored in the Peabody Museum concerning Eastern United States prehistory. As the only large scale scientific excavation ever attempted [prior to 1961] in the Northern Delta region, Mississippi, the Peabody dig assumes great importance and became one of Williams' primary targets. I set out to do what I could to retrieve this material from oblivion.

Complete analysis of the data would involve these steps: (1) Intensive analysis of the field notes with a view to extracting all data on stratigraphy, burials, and structures. (2) Preliminary analysis of the major artifact categories, especially ceramics, chipped stonework, and tentative separation of the material into phase units. This could be done with the assistance of comparative material from the surface collections of the Lower Mississippi Survey (Phillips et al. 1951). (3) Correlation of the phases with the stratigraphy, burials, and structures, eventually arriving at a more exact and complete definition of the cultural complexes. (4) In the case of the historic component, arriving at an ethnographic identification of the inhabitants of the last phase at Oliver through intensive study of all available historic and archaeological data. (5) Through examination of surface collections, define the limits of all the phases and construct a complete sequence of cultures for the Northern Delta. (6) Establish closely the relationship of these phases to others in the general area through extensive reading and, if possible, study of actual material, and fit the Northern Delta sequence tightly into the whole framework of Southeastern prehistory. (7) Make an extensive comparative analysis of the minor categories of artifacts which could not be placed by means of typology or stratigraphy, fixing them into phases; using reference from surrounding phases in spheres (such as domestic architecture in which there is no data from Peabody's excavations), construct pictures of the way of life of the peoples involved.

Table 3-1. Chronological Chart: Upper Sunflower Sequence.

	[Choctaw]	
	[Natchez]	
AD 1700	Late Oliver	←Historic Horizon
AD 1600	Early Oliver	
AD 1500		
AD 1400		
AD 1300	↑	
AD 1200	Hushpuckena	
AD 1100	↓	←Mississippian
AD 1000		
AD 900		
AD 800		
AD 700	Coahoma	
AD 600		←Temple Mounds
AD 500		
AD 400		
AD 300		
AD 200		
AD 100	↑	
	Dorr	
100 BC	↓	← Hopewell

Only when this stupendous task is complete will the Peabody material be ready for publication. It was soon discovered by the investigator that the task could not be completed in the time available, so the scope of the paper was curtailed. It was attempted to do as much as possible with the result that certain phases of the research were woefully incomplete: the half-finished nature of some sections will soon become apparent to the reader. Fortunately the first three objectives were accomplished—the field notes were completely deciphered and their data reduced to graphic form, phases were established, and fairly complete summaries of them were made. A sincere attempt was made to accomplish the fourth objective and the results of what was done will be found in the Oliver Phase, late Mississippian. This last is divided into prehistoric and historic subphases. Tentative dating for these phases will be found in the chronological table [Table 3-1].

Finally it may be noted with some regret that lack of space and time forced me to assume a considerable amount of knowledge on the part of the reader. No definition of most archaeological terms are given; in the absence of a comparative section a knowledge of the sequence of cultures in the Lower Mississippi Valley is all but indispensable to an understanding of what follows. Such local geographic terms as "the Delta," meaning the low-lying land between the Mississippi and the Yazoo, are used indiscriminately. This paper is basically a translation of the archaeological jargon of yesteryear into the vastly more complex archaeological shorthand of today; with that warning the reader may proceed.

B. History of the Northern Delta

This brief section can only be a very partial undocumented summary based on the preliminary conclusions I reached after three weeks of almost fruitless research in countless sources, a few of which are listed in the bibliography. A few negative conclusions may be put down to begin with: (1) No secondary source or compilation of primary sources of the colonial period surely mention the Oliver site or indeed any Indian village in the region. No maps in the collections at Widener Library, Harvard University, show any

village at or near Oliver. (2) The French were entirely ignorant of the geography of the Northern Delta in the eighteenth century. Maps of the mid-century period have the area as a blank; the Sunflower is shown extending only a few miles north of its junction with the Yazoo. The earliest map I could find that showed the whole course of the Sunflower was Collot's map of 1796 (in Swanton 1922). French plans for expeditions against the Chickasaw in the 1730s never even entertain the possibility of crossing the Delta. (3) Although in the early 1800s ownership of the Delta was divided between the Choctaw and the Chickasaw, extensive research revealed no evidence whatsoever that either of these tribes had any towns in the Delta. During the 1700s, the Chickasaw seem to have had impermanent settlements on the bluffs above Memphis, and during the latter part of the century, Choctaws seem to have farmed the bluffs above the southern Delta. Chickasaw expeditions against the Quapaw in the 1700s may have originated around Memphis. Myer (1928) reports a Chickasaw warpath through the present Tunica County, but his sources are unknown. Adair (Williams 1930:149) mentions a region with no stones as being part of Chickasaw territory in the period around 1750. This may refer to some portion of the Delta. Aside from these few hints, the two great tribes of Mississippi are never connected with the Delta. Village lists show none anywhere near the area.

Three tribes are vaguely associated with the northern Delta: the Chakchiuma, the Quapaw, and the Natchez. The Tunica are associated with the Tunica Old Fields and Tunica County in the Northern Delta, but all records, from La Salle on, place these people to the south. If they were even in the region, it was in the prehistoric period and no documentation may be brought to bear on the subject. Other tribes (the Taposa, the Ibitoupa, and the Tchula) are sporadically mentioned as living on the bluffs of the Northern Delta in the early 1700s. These tribes are only names in the records and nothing may be said about them.

The Chakchiuma are a knotty problem. The confused account of them in Swanton (1911:292-296) does little to clarify the question of their location. He cites legends that they were originally united with the Chickasaw and Choctaw, and they may well have spoken a Muskogean tongue. Yet the evidence (Swanton 1911:334) that their burial customs were the same as the Yazoo's suggests that they had some connection with the little-known tribes of the Southern Delta. The mode of burials, by the way, was extended, which makes them poor contenders for the people of the Oliver phase at Oliver, who used bundle burial.

The Chakchiuma are associated with two rather far removed regions: the area around Clay and Oktibbeha Counties in eastern Mississippi, and the area around the present town of Greenwood, near the bluffs of the central Delta. H. S. Halbert (1904) seems convinced the former was their native land, and Adair (Williams 1930:318, 336) says there were some in that area in his day (1740s). But maps and other records (especially see Rowland and Sanders 1927-1932) consistently place a group of them in the Greenwood area in the 1700s. This group is referred to as "the Chakchiuma nation," but it seems likely that this was only one village of them.

What is probably the Greenwood location is first referred to by Iberville in 1702 (see Swanton 1911:294—the original is more specific). The earliest map I could find with the Greenville location on it dates at 1721. Records for the 1730s are fairly vociferous concerning this group (cf. especially Rowland 1928-32: passim). In 1733 they attacked the Chickasaws under French instigation, but by 1735 the French governor grew suspicious of them for some reason and had them moved south to the old Yazoo village at Haynes Bluff. The next year he decided to send the Tunica against them to wipe them out. They escaped, however, and went back to their old village. Two years later they are mentioned as being used for guides on the Yazoo, which indicates they had some familiarity with the eastern portions of the Delta. The last mention of them I could find was in the report of the Englishman, Atkins (Jacobs 1954:44), made in 1755. At this time they are still around Greenwood. Some years later the last remnant of the Chakchiuma in eastern Mississippi were wiped out (Swanton 1911:295). As it does not appear on maps of the late 1700s it is presumed that the Greenwood group was extinguished by around 1770.

Tradition (reported in Swanton 1911:293) gives the origin of the Chakchiuma, along with the Choctaw and Chickasaw, as somewhere west of the Mississippi. Little confidence may be placed in this myth. All the evidence I have been able to find suggests that the Chakchiuma are a hill tribe like the others, but a group of them, perhaps incorporating refugees from the Delta itself, lived on the Delta's edge. The only thing which connects them with the Upper Sunflower is Myer's (1928) map of trails and he has a "Chakchiuma trail" going across the Delta from the Greenwood region to the mouth of the Arkansas, passing fairly near the Oliver site. That such a trail existed is plausible if not proven. There conceivably could have been a Chakchiuma town at or near the Oliver site, undocumented because the area was unknown to the Europeans, who cared little about the villages of militarily unimportant tribes anyway. I personally do not believe there was any sort of town in the middle of the swamps, viewing the evident hill-tribe connections of

the Chakchiuma, but I do mention the possibility to point out how impossible it is to prove anything from the available records.

The historic connections of the Natchez with the Northern Delta may be summarily dealt with. Most of the pertinent data is in Rowland and Sanders (1927-1932). The final dispersion of the Natchez in 1733 did not satisfy the French, who evidently wanted to kill off the Natchez to the last man. A large group of Natchez found refuge among the Chickasaw. During the 1730s the French put considerable pressure on the Chickasaw to kill off or get rid of their Natchez. Although the Chickasaw do not seem to have actively persecuted them, many of the Natchez moved away to other tribes or fled to inaccessible regions. In 1738 a party of Quapaw captured some Natchez on the Mississippi and it became evident that a remnant of the tribe was hiding in the northern swamps. Quapaws were ordered to root them out but met with no success. After the French expedition against the Chickasaw in 1739-40, the Natchez remaining with the Chickasaw evidently became aware that they were no longer welcome guests, and most of them dispersed, some into the western swamps. Thereupon the Chickasaws promised the French they would do their best to root them out and by next year (1741) were able to assure the French that there are no more Natchez around. That Atkins in 1755 (Jacobs 1954:45) mentions a village of Natchez near the Mississippi, not far from the Chickasaws, is evidence that actually they stayed somewhat longer. When they at last moved out is not known.

The Natchez then are the only people known to have had a village somewhere in the North Delta swamps during the eighteenth century. Unfortunately their village was not Oliver. Aside from one Natchez-looking pot [Peabody Museum catalog #64267] in a burial, the site is devoid of Natchez ceramics, and analysis of the trade goods indicated that Oliver was abandoned for the last time by about 1700. Where the Natchez were located remains a mystery.

One other tribe remains to be considered: the Quapaw. The early history of this tribe is so well-covered by Phillips (Phillips et al. 1951:392-419) that I will attempt to add little. There is one point which I shall question: the location of the towns. Were they really all as close together as Phillips has them (Phillips et al. 1951: Figure 72)? How did the French measure their distances—were they taking into account the bends in the river and estimating distance as the crow flies, or were they estimating how far they had floated? I ask these questions because most of the maps from mid-century show old Kappa, usually called "Ancient Village of the Arkansas" up opposite Friar's Point, Mississippi, and several of the secondary sources say it was that far up. It is certainly possible for a mistake to be made on one map and then be perpetuated on others, but is this the case? If indeed the villages were as spread out as these old maps suggest Oliver would be inland, somewhere between Tongigua and Tourima in latitude. It is between these two villages that La Metairie reports the existence of two other villages "*plus esloignez dans la profondeur des bois*" (in Phillips et al. 1951:402), or "further back in the depths of the swamps." As Phillips notes, this mention, made in 1682, is the only reference that can be found to Quapaw villages not on the major rivers. It is too bad that La Metairie does not specify which side of the river these villages were on, so we cannot say this is proof that the Quapaw included some part of the Delta in their territory. As it is we have only the tantalizing possibility that some Quapaw deigned to mention once the existence of the back swamp hamlet that was Oliver. This is the only documentary record I can find that conceivably refers to our humble site.

There is, however, a little more evidence that the Quapaw inhabited part of the Delta, on a map evidently from La Salle's expedition, a photostat of which is in Widener. This map includes much of the Delta within the borders of the Quapaw; but it shows no villages in the region. Swanton (1911: frontispiece) on his map gives the Quapaw an enormous amount of territory including a slice of the Delta taking in Oliver. His sources for this are unknown. Quapaw in late times are found in hunting expeditions to the St. Francis, the Ouachita, and the Tensas, but the Northern Delta is no more mentioned in connection with the Quapaw than it is in any other connection. We know that in early times they had control of both banks of the river, that one of their historic towns (Tongigua) was on the eastern bank. It seems likely that in early historic times they controlled the Upper Sunflower as they controlled the swamps around the Lower Arkansas, but that is all one can say.

As for the history, a fine source for the early part of it is Phillips et al. (1951:394-412; for the later part, see Faye 1943, 1944).

The Quapaw were perhaps first seen by Marquette and Joliette in 1673, but it is not certain they actually traveled this far down the Mississippi. In 1682 La Salle came and stayed for a period at the Quapaw towns, of which there were at least four: Kappa, Tongigua and Tourima on the Mississippi, and Osotouy up the Arkansas. Four years later Tonti came down on his way to look for La Salle's lost Texas expedition. On his return he left ten men at the village of Osotouy. These men and the cabin they built constituted the first Arkansas post. The next year the survivors of La Salle's expedition reached the post, and three years later (1690) Tonti visited again, possibly bringing more

trade goods. After that no Frenchmen except those stationed at the post seem to have been in the area for a decade. During this time great changes took place; there was a terrible epidemic of smallpox. The population estimate at 1700 is 1500 people, as opposed to 6000 twenty years earlier. At this time there are only two occupied village sites: Osotouy and "New Kappa" somewhere near the mouth of the Arkansas, incorporating the inhabitants of Kappa and Tourima. This new situation was first reported by a bunch of missionaries Tonti was ferrying down to the lower valley. They passed the Quapaw villages around Christmas time 1698; at this time the epidemic was still raging.

If Oliver was a Quapaw village it was probably abandoned about this time along with other villages ravaged by the plague. From now on the French keep fairly close tabs on the Quapaw, since they were useful allies. If there had been a Quapaw village in the Delta at this time or especially during and after the Natchez troubles, it would have been recorded.

Be that as it may the Quapaw were, after 1679, the subject of fairly frequent visits by Frenchmen. They were surprisingly constant allies despite the fact that English traders from the Carolinas had penetrated to their towns as early as 1699. By 1705 the plague seems to have dwindled and life continued normally for a while.

Then in 1721 the first French farmers came and six years later a priest was sent up to take care of their needs. No missionary ever seems to have been provided for the Quapaw themselves. Bossu, who visited them in 1751, described religious dances, idols consisting of dried ravens and snakes, and stated that they worshipped a Great Spirit who was a serpent (Bossu 1771). Evidently the native culture was still thriving.

In 1722 the village of New Kappa moved off the Mississippi and up the Arkansas to be nearer the post, and to escape marauding Chickasaws on the river. If the people of New Kappa felt themselves isolated at this time it is most improbable that any Quapaw still remained in the Delta almost completely cut off from tribal support.

The Quapaw were docile during the Natchez war, but after the war, from 1732 to 1749, they conducted a continual series of battles with the Chickasaw, each raiding the other alternatively. For variety they were also attacked sporadically by the Osage. In 1739 the French established a post at the mouth of the St. Francis and some Quapaw went up to establish a village. They went back, however, within the year. In 1746 there were 250 Quapaw warriors, which shows the population had stayed fairly constant since the turn of the century.

Then the plagues began again, hitting them in 1747-48 and 1751. In 1749 the post was moved upriver a ways, and the Indians eventually joined it. At this time they had been reduced to one village with 150 warriors—perhaps 600 souls in all. No longer do they have any military or political significance in the Southeast.

In 1766 the Spanish arrived to take over the Post, over violent objections of the natives. The Spanish period was an uneventful one, and the population seems to have increased a little, to 700 souls. In the 1770s the English established a rival trading post across the river, and a band of Quapaw moved over to take advantage of it. The Spanish drove the British out in 1780, and presumably then the Quapaw moved back.

Arkansas Post got its taste of the Revolution in April, 1782, when the half-breed Colbert and his band of Chickasaws raided it in the name of the Americans. The attack was repulsed. In 1800 the post reverted briefly to the French, and the Americans took over in 1803. No one bothered to make a treaty with the Quapaw, however, until 1818, when they were confined to a small reservation on the Arkansas. It is of interest that this treaty mentions the relinquishment of claims to lands east of the Mississippi, which suggests that the Quapaw still felt themselves to have a historic right to parts of the Delta opposite the Arkansas (Royce 1899:688-9). In 1824 the Quapaw were removed to the Caddo area, only to return two years later and be finally removed [to the Kansas, Missouri, Oklahoma area] in 1834. Over on the Mississippi side of the river, the Choctaw had the only claim recognized by the U. S. to that part of the Delta, which included Oliver. The Choctaw-Chickasaw line ran along what is now the northern border of Coahoma County. In 1820 the Choctaws ceded the Southern Delta, and in 1830 they ceded all the rest of their lands east of the Mississippi. Perhaps 130 years after the abandonment of Oliver, the last Indians to rove the area were gone and for a time the Upper Sunflower was entirely deserted. But this was not for long; already Americans had settled along the Mississippi at Friar's Point. In 1836 Coahoma County was organized. The back swamps remained unreclaimed for a long period afterwards; an army map of 1864 shows no signs of habitation on the Upper Sunflower. By 1878 settlements have pushed into the northeastern section of the county. Clarksdale was presumably founded at about that time and between 1884-6 the levee system on the Sunflower was finished. The whole country was thus opened up only fifteen years before Peabody arrived on the scene; Edwards' farm, far from the nearest town, was probably started in the mid-80s at the earliest. Thus the Oliver site was in basically its aboriginal form when

Peabody arrived—even the smallest mounds were visible. It is noteworthy that one mound noted in 1901 was invisible a year later—cultivation was beginning to take its toll.

No archaeological history of the region is attempted. Suffice it to say that although Thomas (1894) records a big mound at Clarksdale, he does not specifically note the smaller Dorr Mound nearby. No mention of either Dorr or Oliver could be found in the archaeological records before Peabody's time. How Peabody himself came to know of their existence is a mystery. Since his time the only recorded archaeology [until 1990] at Oliver has been the work of the Lower Mississippi Survey. A surface collection was made in November 1940, and three test cuts were made the next spring. The Dorr Mound was never positively identified by the Survey.

Part II: Dorr Mound

A. Location

The Dorr site is located about a mile from Clarksdale, Mississippi, on the Sunflower River. It consists of four small mounds and a large one (see Map 1 [Figure 3-1]). The exact location of the site is not known. This site is not that reported by Thomas (1894) at the town of Clarksdale. This latter site, now presumably, like Dorr, demolished, had its big mound on the river bank, washing into the river. This mound, moreover, seems to have been of the pyramidal type. The Dorr Mound was 400 yards from the river and was conical. Thomas' mound, moreover, had the Clarksdale village church on top of it and was in the village of Clarksdale, tiny as the village was at the time (about 1890). The Dorr Mound ten years later had no signs of modern construction and was almost a mile from the steadily growing town.

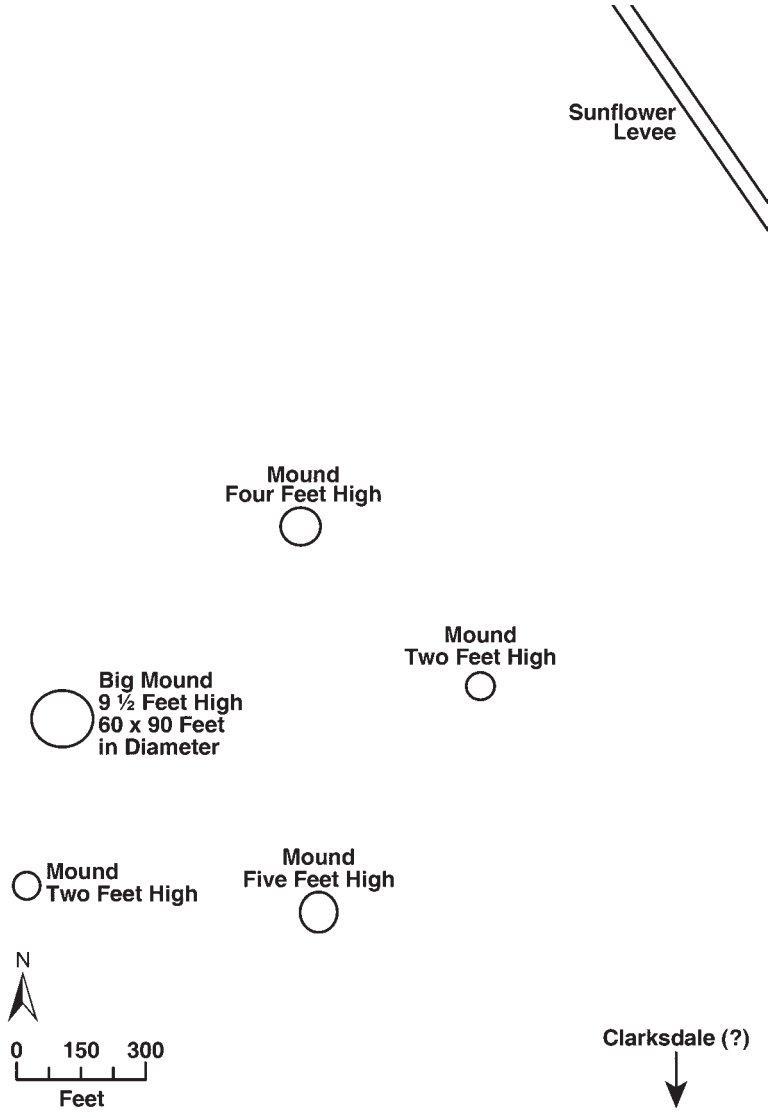


Figure 3-1. Map 1: The Dorr site.

B. The Dorr Data and Methods of Excavation

Charles Peabody and his assistant Farabee arrived at Dorr on Friday, May 10, 1901. The big mound at that time was covered with brush, but no trees. Cotton was planted all around it, but not on it. Mrs. Dorr, the wife of the owner, had previously dug a small shallow hole near the top of the mound. The hole clearly shows in none of the profiles; the shallow depression a bit east of the center on Map 2 [Figure 3-4] may be this disturbance. Other modern intrusions are represented by the up to 12 modern (Negro?) coffin burials to be discussed.

On May 10, Peabody laid out an east-west row, and a north-south row of stakes. The E-W row was numbered from 0-12 in Arabic numerals, starting at the east end. The N-S row was numbered 0-XVIII in Roman numerals, starting at the south end. Each stake was 5 feet from the next. Then Peabody proceeded to measure radii of the mound from the summit and center, stake 6 (W), IX (N). This method was a peculiar one: he seems to have walked around the foot of the mound more or less on the level, putting stakes in at 10-foot intervals. He then measured the distance from the center to each of these stakes. The resulting circumference is the dashed ink line on my Dorr Map 2 [see Figure 3-4]. Except possibly on the east side, his line seems to run at about the 2½-foot level.

On May 11, Saturday, excavation was begun. Farabee was put on the north end; Peabody worked on the south, digging down to a pre-set level in 5-foot strips, working toward the center. There was no digging the next day (Sunday), but Monday a 25 man crew was put on, and the mound was totally demolished by the following Friday and the excavation filled in on Saturday.

The data for this excavation are very meager. It consists of two small field note books (one for Peabody, one for Farabee) written in virtually illegible hands, and a sheaf of paper on which all the burial data was assembled by Peabody later on. One or two additional facts may be gleaned from the brief published account (Peabody 1904:23-25).

Detailed study of the field notes has revealed a chaotic and almost completely uncoordinated dig. Peabody and Farabee continually hop around from end to end of the mound, recording each other's burials. Profiles were done, such as they were, by whoever happened to have the tape. Peabody became aware of stratigraphy on the 14th, but he does not seem to have informed Farabee of this until the afternoon of the 16th. On the 17th, Peabody left to reconnoiter the Oliver site and the dig, if it can be imagined, deteriorated even further.

Only a few of the profiles were drawn, and these crudely—most of the profile data consist of a series of figures, e.g. "Breast (i.e., cross-section) at Stake XVI, W to E: 0′, 3′ 1″, 10′, 4′, 11′, 20′, 6′ 2″, etc." These are measurements of the height of the mound at 10-foot intervals from the west end of each trench. Although the zero E-W stake is at the east end, measurements were made from the west end, presumably because the profiles on the south (Peabody's) side of the mound were drawn with the west on the left side of the page. Farabee, working towards the south, was also compelled to put west at the left side of the page, with the result that his profiles are drawn backwards from what he actually saw, since he faced south, with east on his left, while drawing.

There is a further complication. One would assume that zero on the profiles would be at the western limit of the grid, i.e., at stake 12. Only comparatively recently in my investigation did I discover that this was unfortunately not the case. The trenches were started at zero on the east and dug west, only once to the full 60 feet, and usually between 52 and 57 feet. Thus "zero" on the profiles can mean almost anything. The dig area (see Map 2 [Figure 3-4]) thus resembled a typed page with one ragged margin. It took a great deal of work and unfortunately some guesswork to figure out where the western margin was on each trench and thus to be able to construct a reasonably accurate contour map of the site.

About halfway through the dig, Peabody tired of the humdrum slicing from north and south and began trenching in from the east also (see Sequence of Digging map [Figure 3-2]). In the last few days the mound was thus the victim of a three-sided attack. It must have been quite a scene. The Negroes were probably given a two or three minute rest while the profile drawups of the previous trenches were polished off. Then they were lined up along three sides and dirt flew. Needless to say the data at the two corners suffered. There is one corner especially where Peabody's and Farabee's teams overlapped, and seem to have fought over the peculiarly thick burials at that point. Farabee recorded the heads and Peabody the lower portions of what must

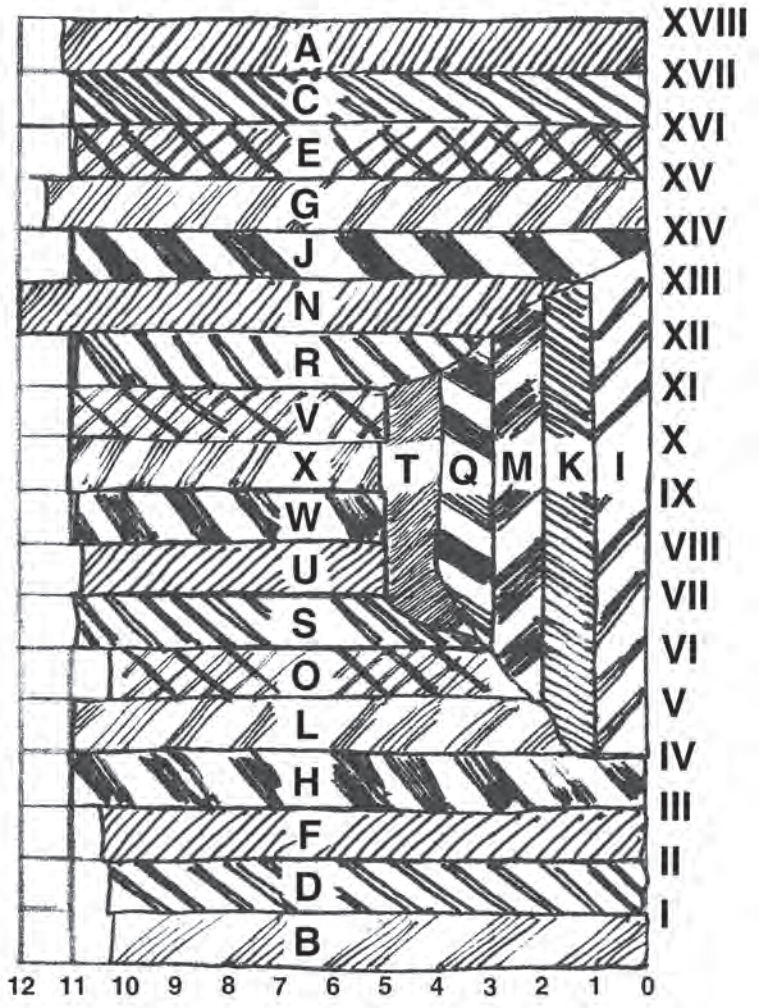


Figure 3-2. Sequence of digging at Dorr. (Letters represent the sequence in which the trenches were finished.)

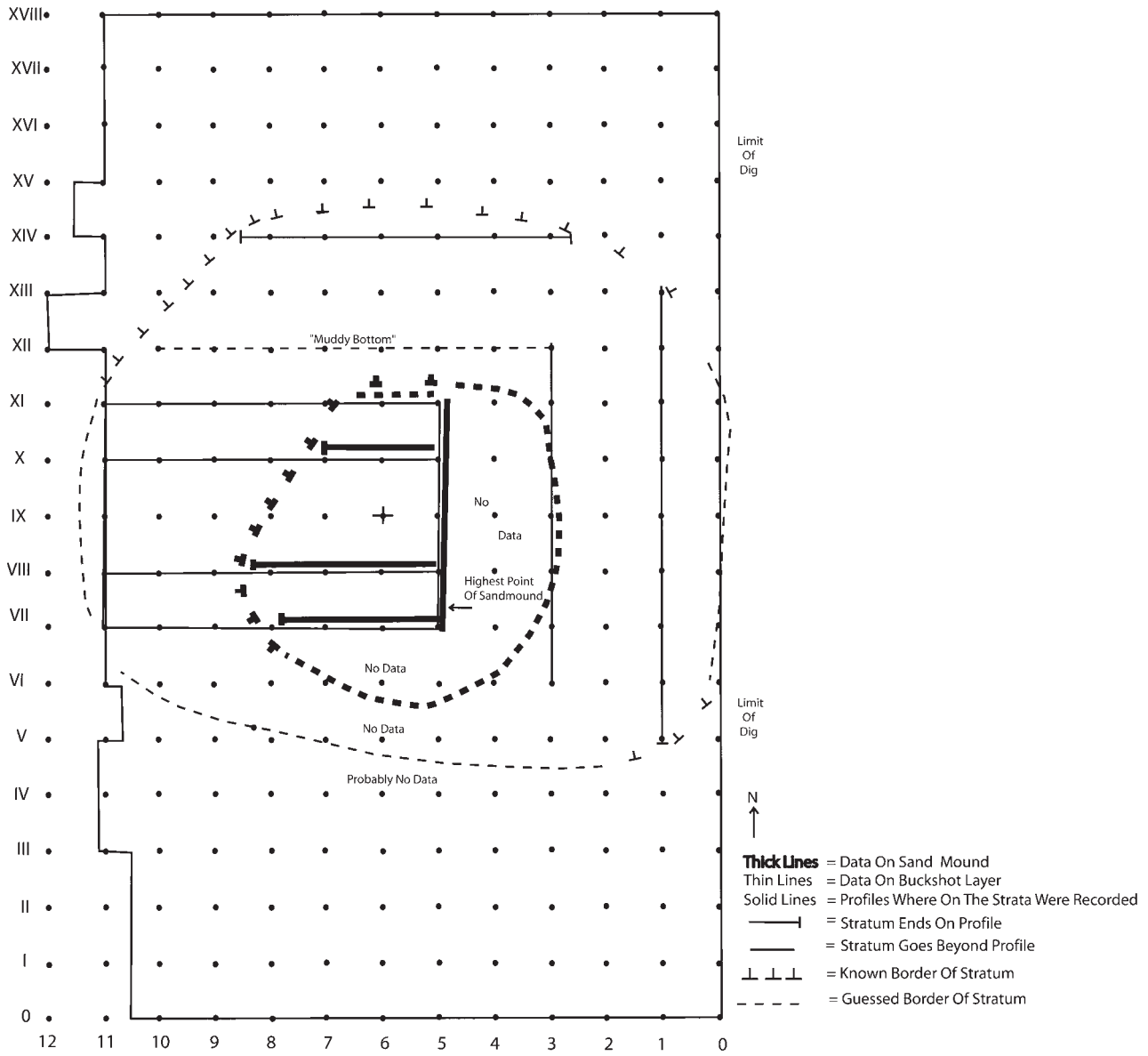


Figure 3-3. Stratigraphy of Dorr Mound.

be the same skeletons. Lower Valley archaeology in 1901, if not scientific, was certainly fun.

But why go to all the trouble of drawing a contour map and establishing which trenches were dug when? The reason is the method of burial recording used. Only four burials were noted in the profiles or tied with them. These four were not recorded in the text, but are noted in the form of grave pits on two of Farabee's last-day profiles. Farabee's motive for doing this seems to have been haste. The records of this day are incredible; Farabee was totally at a loss as to controlling the horde of Negroes placed under his hesitant supervision. The burials that he did record all have such hasty notation as "N.G." (no good), "of no advantage," or "could not save it." His notebook was divided into "North Side" and "South Side" sections. A number of the burials are recorded in both sections; many were probably not recorded at all. He quoted from one of his workers: "Funny thing to dig in God's earth and not know what you're diggin' fur." Evidently the harassed student fully sympathized with this sentiment.

Be that as it may, Farabee and Peabody had related but different burial recording methods. A typical burial of Farabee's is recorded thus: "Skel. 26, 12ºE. of stake XI, 4½' deep, head N, trace, N.G.," which means: (1) As near as he can judge from the activity in Peabody's section this is the 26th burial found. (2) It is 12 feet east of the center line of stakes. (3) On the N-S line, it is more or less opposite stake XI. Whether it is in the trench from XII-XI or that from XI-X, or one of the eastern trenches can only be discovered by correlating it with the sequence of digging. (4) It is 4½ feet from the surface of the mound at that point.

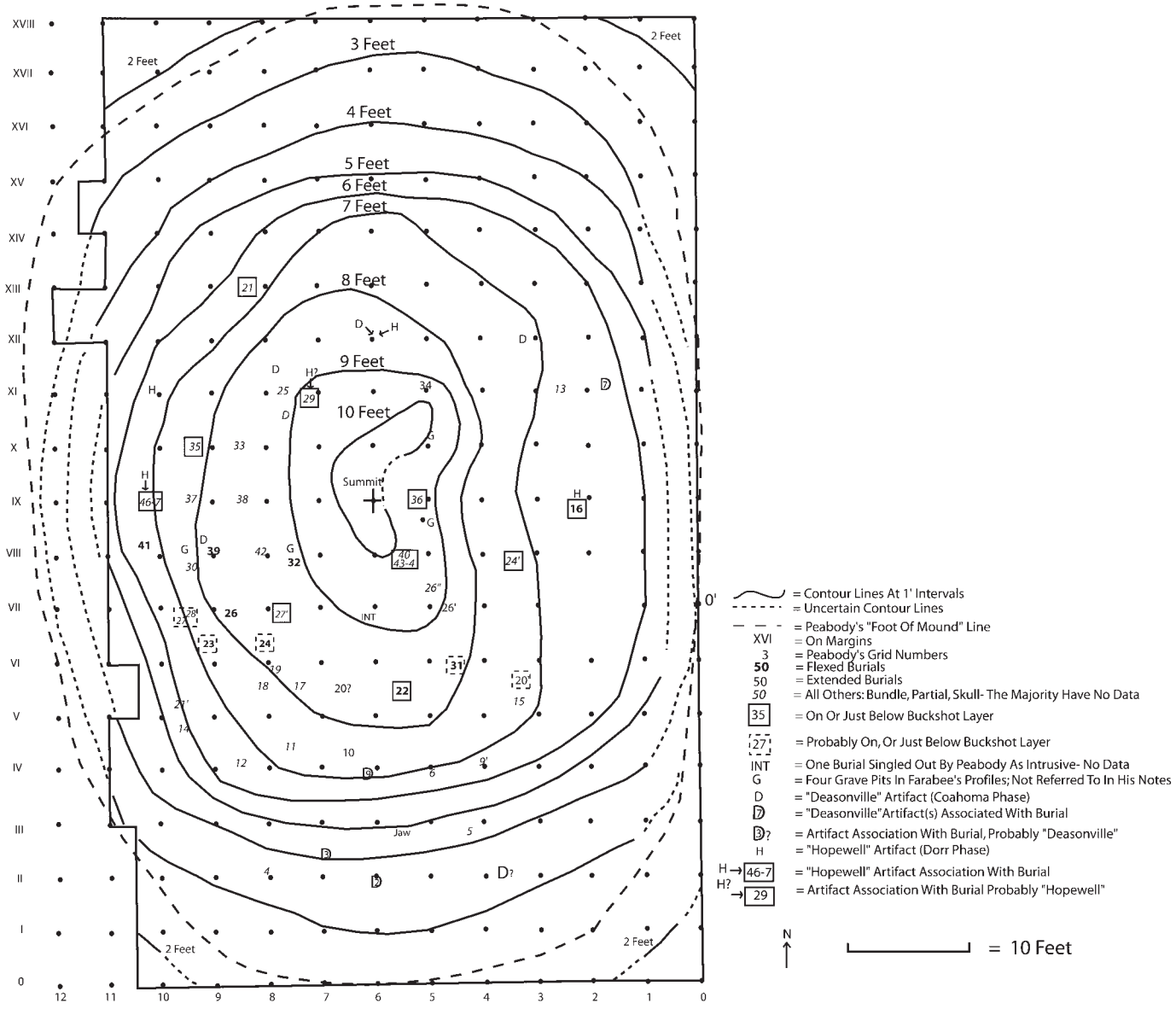


Figure 3-4. Map 2: Dorr Mound.

Absolute height, or height from the presumably level bottom of the excavation, can only be determined by placing the burial as accurately as possible on the contour map (see Map 2 [Figure 3-4]). (5) Peabody insisted that the direction of the head be included in all possible burial notations. Thus Farabee included it whether what he found was a full skeleton, just a skull, one leg bone, or, as in this case, a "trace," which generally means a patch of rotten bone. Here "head N" means the longer axis of the bone patch was N-S. The fairly complete data on head direction is virtually useless, aside from being meaningless in most cases. Once in a while Farabee has such notations as "on back," "on right side, knees bent," or "skull only," which give all too rare clues as to the type of burials.

Peabody's method of burial recording, which Farabee seems to have, unfortunately, used as his model, differs in only one respect. Instead of "12⁰ east of IX", he have "21⁰ SW of VIII." On his first two burials he mentions the compass angle, but then he lapses. This notation does not mean, as I had first hoped, 21⁰ to the west of stake VIII, a bit to the south, i.e., in Trench VII-VIII, as opposed to VIII-IX. It means anywhere in that quadrant of the mound southwest of stake VIII along an arc with radius of 21 feet. Especially as one gets far from center, this is about as bad as not locating the burial at all. This was the main reason why I established the sequence of digging. Luckily Peabody had no special arrangement to his field notebook, so when Burial X appears after Profile A and before Profile B, it was found in the trench between these two profiles. Thus the applicable arc is considerably shortened. I need not mention the difficulties that arise in the periods when Peabody made Farabee do his profiles. Then one must depend on double recording of burials, such notations as "S.W.," etc., for correlation.

A few burials have even less data, such as one which has merely "in breast (profile) of Stake VII." But 90 percent of the burials with some work may be placed within 5-10' of their original position virtually, and 1' horizontally.

The data on stratigraphy are very meager. All that can be squeezed out of it is shown on the map "Stratigraphy of the Dorr Mound" [Figure 3-3]. The major stratum seems to be a thin layer of dark, clayey earth referred to by the writers as the "buckshot layer." It was first noticed by Peabody when he came over to inspect Farabee's profile at XIV. Farabee was looking for strata on profiles to the north, but on each he says "no strata visible" or "homogeneous." It is doubtful whether he had learned to distinguish strata whether they were there or not. However the fact that at Profile XIV the buckshot layer does not, as in most other profiles to the south, extend across the whole face of the pit indicates that XIV is near the northern limit of the layer. Right after he did XIV Peabody went back and drew his own profile at stake IV, and since he does not mention it, it is likely that the layer was not present this far south. On the profiles at V, VI, XIII, 2, and 4, the authors omit drawings or comments on the profiles. On all the other profiles around the center of the mound, however, the buckshot layer is present. In all likelihood the stratum underlies the whole central mound area. Indeed it is possible that its limits represent the original limits of the mound before it started to wash down and spread out.

Information is scanty and even contradictory, but in general this buckshot layer is about one foot from the bottom of the excavation and 3-4 inches thick. At the very center of the mound, if one can take Farabee's impressionistic drawings at face value, it seems to grow thicker and a little higher. It is not a construction level of the mound. In his publication Peabody calls it a "sod-line" (Peabody 1904:24). This interpretation is probably valid.

Within and above this layer is a stratum of sandy soil up to 2 feet thick, but generally about 1 foot thick. It rests directly on top of the buckshot layer. The evidence for this interior primary mound of sand is slim, consisting of a vague comment of Peabody's about Profile VII, and three very crude drawings of Farabee's. But the existence of similar primary mounds in the coeval Crooks and McQuorquodale sites leads us to accept the meager evidence at face value.

Artifacts are comparatively scanty. Only three burials have certainly associated artifacts. Other burials have artifacts nearby, but they are recorded separately. After the 14th Farabee seems to have given up describing artifacts with burials, and the investigator must again do his own correlations.

The published data on the Dorr Mound are practically non-existent. There is, we have seen, a fair amount of unpublished evidence; but it is so chaotic and hazy that interpretations are in no cases certain. Those that are moderately sure are presented below.

C. Phases Present at Dorr and Their Burials

In the Dorr collections are a vast majority of Coahoma sherds, some Dorr Phase pottery, and part of a single Hushpuckena Neeley's [Ferry] pot. What with the lack of stratigraphic data and the poor quality of the burial data, it was found impossible to assign most of the burials to one phase or another.

At Oliver, as we shall see, all the Coahoma Phase burials were extended, so we may tentatively say that most of the extended burials here are Coahoma and that those burials of other positions are of another phase, probably Dorr. The presence of only one large Hushpuckena pot fragment in the collections makes it unlikely that very many of the burials derive from this culture. There is one burial, of unknown position, described in the field notes as intrusive, having better preserved bones than the majority. This burial might be Hushpuckena, although of course that Peabody called it intrusive means very little as all the Coahoma burials are probably intrusive also.

All the burials whose numbers are surrounded by penciled squares on the map (Dorr Map 2 [Figure 3-4]) are evidently on the ground level and were presumably placed there before the mound was constructed. They may all be assigned to the Dorr or Hopewellian *[Marksville]* Phase. Three of these burials are flexed, some seem to be simply skull burials, most have no positional data. Burial 46-7 is a two skull burial and had with it a good Hopewellian point encased in a cake of red ochre. Another Hopewellian point was found at ground level at coordinates XII, 6. If there was once a burial with it, no traces were noticed by the excavators. Burial 29 was on the ground level; it is mentioned that sherds accompanied it. These sherds may have been of the Dorr Phase. The other two "H's" on the map represent pieces of galena found near the surface, and which are considered Hopewellian simply in view of the predilection of those people for that mineral. All the other flexed burials, noted in ink, are four feet or more below the present surface of the mound, and there is a high probability that they also date from the Dorr occupation. In summary we may say that Dorr Phase burials seem to be usually skull, partial or flexed burials, that grave goods are rare, that most of the burials were put down just before or during the construction of the mound, and that none of the certainly Dorr Phase burials are close enough to the surface to be considered intrusive.

As for Coahoma Phase burials, they seem to tend more toward the slopes of the mound and can be considered generally intrusive. Four burials had Coahoma artifacts associated (one point, the others pots); two of these were extended, the others had no data; all were superficial. Other scattered Coahoma artifacts recorded in the mound were all within three feet of the present surface.

A comparison with the well documented Coahoma burials at Oliver suggests that the burial patterns at the two sites are similar in the moderately rare occurrence of grave goods, in the preponderance of extended burials where there is documentation of position, and in the trait of intrusive burial into a conical burial mound. It will be seen, however, that the "burial mound" at Oliver is a vestigial affair at best. Does the sheer size of the mound here indicate that this component of the Coahoma Phase is earlier? I believe not—a brief look at the pottery shows no difference between Dorr and Oliver Coahoma components. This mound is large because the Dorr Phase people made it that way. Just because the Coahoma folk here had a big burial mound to bury in, and did not have to use the humble tiny type of burial mound[1] which was in use at Oliver does not mean a thing in terms of relative strength of the burial mound traditions at the two sites. Are we to assume from the presence of nineteenth-century American burials in this mound that this culture also was steeped in the venerable burial mound tradition? Not at all. In sum we may hypothesize that despite their use of a magnificent old burial mound the Coahoma people at Dorr had a culture and traditions very much like those that shall be described for their compatriots at Oliver.

Part III: Stratigraphy of the Big Mound at Oliver and Associated Data

A. Introductory

This part will serve as an explanation and comment on the maps at the end of the chapter. These maps are a graphic distillation of all the stratigraphic, structural, and burial placement data contained in the field notes of Peabody and Farabee pertaining to the Big Mound at Oliver.

In this dig Farabee wrote notes on the appearance of burials (positions, bones present, grave goods) the first season. We have no notes from Farabee for the second season, in which he dug up the smaller Cemetery Mound, except for a one page summary of the dig. Whether he wrote field notes then is uncertain: if they ever existed they are now lost.

Peabody's notes begin as random comments on anything he saw, but after a while they become formalized. In the second season he has two sections of the same book for burials and for finds, features, etc., noted during the digging of the trenches. There is a separate book for profile data. Later he recopied almost all his data—burials onto cards, profiles onto profile maps, and post holes and stray finds and comments onto separate sheafs of paper. There are three problems with this recopied data: there are copying mistakes, there is no correlation of data, and the arrangement into separate categories is faulty. Burials which he only recorded as stray bones, appear in the stray-finds papers, bones seen in the profiles appear in the profile maps or are ignored. Postholes appear usually in the section reserved for post holes, but there is a category of features which he calls "ashpits," which seem to be sometimes ashfilled post holes, sometimes trashpits, and sometimes firepits. These appear in the stray-finds section; post holes seen in the profiles are recorded only in the profile maps.

There is a certain amount of duplication of data. Burials could conceivably be recorded in four places: once as stray bones in a trench, once as bones in a profile, once as a burial in the next trench, if that is where the skull was, and once as a "stray" pot found nearby. Correlating his finds required a great deal of effort.

Burial data are generally good. He records the burial position, location in three dimensions, grave goods or objects which he believes are associated, and whether the skeleton is of an adult or a child. Posthole data are quite good for post holes, which he believed originated in his "critical layer." Postholes and features elsewhere are recorded only sporadically and evidently the data are incomplete.

Stratigraphic data are generally of high quality. At the beginning of the first year he noticed the "sod layer," a thin layer of midden at the bottom of the mound. Features on this, though few, are watched for and well recorded. Unfortunately he soon formed the opinion that this layer represented the original turf under the mound, assumed that it was level, and subsequently made all measurements of height in his profiles from it. During the second half of the first year he dug down to this layer only. During the second year, however, he dug below it and gave measurements both to the sod layer and to the floor of his trench. It is evident from the figures that one or the other is exceedingly uneven. In his profile drawings he makes the sod layer straight and his trench floors uneven and we must assume that this was the case. Thus in measuring height of the total mound and of the various strata we must assume that the sod layer is indeed level and use it as our absolute datum. The only check we have is his "critical level," whose height from the sod layer was measured accurately at ten-foot intervals in each profile. If we

assume, as he does, that the sod layer is indeed flat, in the drawings the "critical level" turns out horizontal also, to within about a foot. This indicates that the sod layer was indeed roughly level.

On one of the last days of the dig Peabody dug a long trench from the west edge of the mound into the plaza to see if the sod layer did in fact come to the surface when he got beyond the mound tailings. He discovered to his horror that his theories were all wrong, that the sod layer in fact dipped sharply and petered out at a point where it was considerably below the surface. It was not indeed a "sod layer," but a layer of midden whose seeming near-levelness under the whole mound is a matter of luck.

Peabody noticed the "critical level" (whose nature will be dealt with shortly) about half way through the first season. From then on his preoccupation with it grew; he recorded its height and thickness with increasing accuracy and went to great pains to find all the post holes evidently emanating from it. He recognized no other strata in the mound as such, yet, because he was careful to note all the soil changes he saw in the profiles, we are able to reconstruct what are probably all the major strata in the mound.

The one class of data which is almost totally lacking is artifact placement. True all graves goods and whole pots are recorded, but the overwhelming majority of sherds, stone and bone artifacts are unplaced. A few sherds are catalogued by trench number, but this gives us no clue as to their vertical position. Thus the phase placement of the various mound stages can only be deduced from burials when they occur, from stray hints, and from guesswork. Let us now get on to the maps.

B. The Maps

This map [Figure 3-5] showing by one foot contours the height and shape of the mound in 1901-02, is relatively self-explanatory. It will be noted that on this map and on most of the others North is not at the top, but to the right. This is because that is the way Peabody's own maps are arranged, and because the shape of the excavated area (surrounded by ink lines) is such that it fits onto a piece of paper easier this way.

The contour lines on this map, as on the others, are at one-foot intervals. The figures represent height not from any absolute datum but from, as I have indicted, the sod layer.

In digging Peabody started at the east end, digging 5 foot wide north-south trenches. It is to be noted that they got shorter as time went on. The trenches are numbered from 1 to 29 starting at the east. The other set of numbers starting at 2 and going to 31 are the numbers of the profiles at the end of each trench. To be more accurate, they are the numbers on our east-west row of stakes, one for each profile, placed on the east-west axis of the mound in the middle. The north-south stakes are lettered in the rather peculiar fashion shown on the map. The non-lettered stake in the middle bore the east-west number.

The notation "no data" in the center of the map bears some explanation. Throughout the higher part of the mound Peabody dug his trenches in stages or steps, working on as many as three or four trenches at once. At the end of the first year he had finished trench twelve and had dug one stage on trench thirteen. Over the fall and winter of 1901 erosion occurred in trench thirteen and in the not yet excavated portion of the mound directly to the west. On account of this in the beginning of the second season he dug Trench 13 down another level, dug a deep level in Trench 14, and cleared the tops of Trenches 15 and 16 without recording anything. Thus we can only infer the total original height of the mound in this region from data taken down in nearby trenches.

Two facts that Peabody never saw are evident from this map: (1) The mound is not round but roughly rectangular. (2) The orientation of the mound is not east-west or even north-south. The long axis is actually northeast-southwest, the shorter axis northwest-southeast.[2]

It is evident that the western slope is a good deal steeper than the eastern. One reason for this may be that the ground on the east is a foot or two lower, due to a depression of some sort on that side. Another reason is simple differential erosion. The top on the western side has slumped down considerably, as a discussion of the higher strata will show. Otherwise, this map is self-explanatory.

This next map is a cross section of the mound from west to east at the numbered stakes. An exception was made for Strata A and B, stages of a small mound within the mound whose lower slopes are all that reach as far north as this. In order to show their relation to Strata 3 and 4 they are drawn as at their highest cross-section, at about stake N. Stratum A reaches to the top of Stratum 2, Stratum B reaches almost to the top of Stratum 4, and at one point seems to break through. The borders of A are dotted because we know them only roughly.

Stratum 1 is the "sod layer," which averages under a foot thick. It was not noticed at the beginning of the dig, at Profiles 2 and 3, probably because Peabody was not at first expecting it. It is an axiom of archeology that one sees what one looks for. However, it is possible that the layer had thinned to the point of invisibility in this far eastern region. The sod layer is actually a

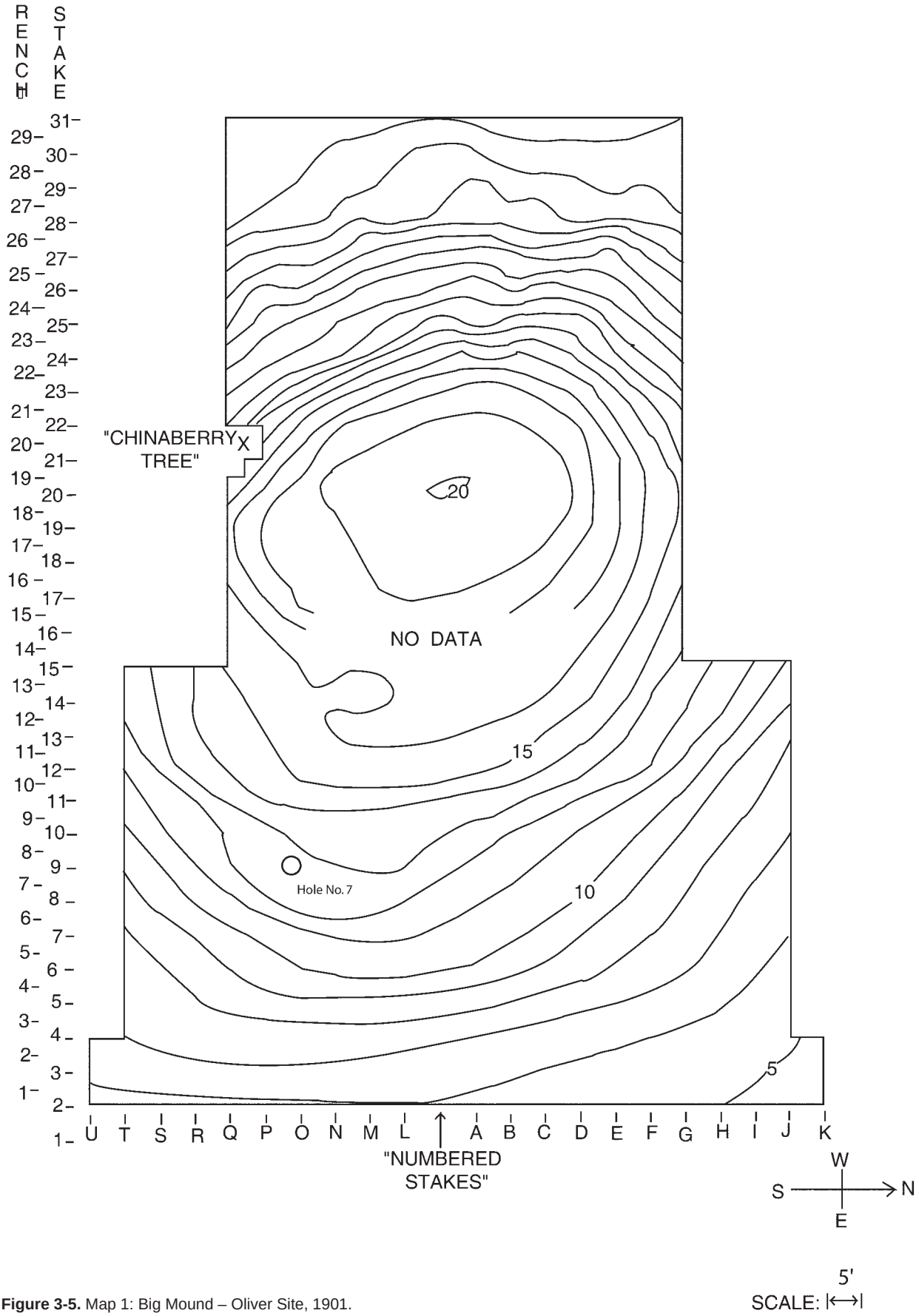


Figure 3-5. Map 1: Big Mound – Oliver Site, 1901.

layer of dark rich midden soil; it is not certain whether there are any man-made strata below this. The soil underneath is described as yellowish sand and buckshot, which is completely sterile; signs of loading are not mentioned: thus it is presumed to be natural soil.

Stratum 2 consists of clay and "dirt" generally of a light color. Basket loads of dirt are sometimes seen. This stratum is evidently mound fill; on top of it, below Stratum 3, is burnt clay, etc., indicating an occupation layer.

Strata 3 and 4 together form Peabody's "critical layer," and are shown as Strata A and B in Peabody (1904: Plate 8). The lower layer is generally described as the "ash stratum;" it is rich in cultural material and is evidently a layer of pure midden material. The upper layer is described as light-colored buckshot or hard clay. A perusal of the map (or diagram) will show that the bottom of 3 and top of 4 are quite even, whereas the joining between the two strata is very irregular. The thickness and irregularity of Stratum 3, coupled with the fact that all the burnt clay is found below this stratum leads me to believe that this does not represent an occupation layer, as Peabody suggests here and there in his notes. His belief was based on the fact that the large number of post holes he found at this general level originated within the critical layer. This was because he always noticed the post holes while digging through the "critical layer" or just after he got below it, and is, as we shall see, a faulty interpretation.

Since these layers bear a very close relationship to each other, it is my contention that they represent part and parcel of one construction stage. Evidently a thick layer of midden or garbage dirt was spread over the old floor, and this unstable medium was covered with a cap of buckshot. A strikingly similar method of mound construction was observed in Mound C at Lake George [22YZ557; Williams and Brain 1983] in the southern Delta. Mound C was an early temple mound dating from about the same time period as the early part of this mound.

Above Stratum 4 there was evidently another occupation layer, although no features of any sort except for post holes are assignable to this level. A possible reason for this is that the site was abandoned for a long period after this construction stage, and rain and erosion may have washed away all the soft midden matter above the durable clay cap. Burials assignable to this occupation level and also that above Stratum 2 are from the Coahoma Phase. Since this is the earliest occupation of any size on the site, the "sod layer" must also belong to this phase. At Mound C, Lake George site, "pre-mound" and "primary mound" levels were also found to belong to the same culture.

Stratum 5 is another construction stage composed of loaded earth with a moderate amount of cultural material included within it. Stratum 6 is not exactly a stratum and was certainly not recognized as such by Peabody; it is a thin layer of burnt clay, ashes, etc., from which many post holes and intrusions seem to emanate. Evidently this is another occupation floor. Cultural identification of this layer is difficult. Careful study indicated that the two floor layers on each side of the mound (Strata 9 and 10) were of the same age as Stratum 6. Stratum 10 had Hushpuckena Phase vessels associated with it. Stratum 9 may actually not be a floor but burnt clay washed down in quantities from the top of the mound. Burnt clay patches appeared in considerable quantities on the western slope of the mound and were of great help in determining the shape of the mound during the Hushpuckena period. The brown dots on the west side of this map indicate burnt clay, although no pieces were actually on the numbered stake line. They merely serve to indicate the slope of the mound at the time of the burning of the structure on the Stratum 6 floor, as determined by extrapolation from the depth of the actual chunks of burnt clay (daub).

The identification of Stratum 6 with Stratum 10, the floor containing Hushpuckena material, is admittedly uncertain, since much of the eastern slope as it was in Hushpuckena times is eroded away. There are, however, other indications; a few burials from their depth and location are definitely assignable to this occupation layer. These contain no diagnostic grave goods, but one is in flexed position and another is a bundle, types of burial which do not occur in the Coahoma Phase. Moreover there are so many Hushpuckena sherds in the collection that one floor at least in the mound must be assigned to this phase. Lastly, the post holes assignable to this floor generally indicated that a true house stood atop the mound at the time. As we shall see, the two Coahoma layers did not seem to have houses as such. All these indications add up to a Hushpuckena identification.

Stratum 7 is another mound fill layer which Peabody does not distinguish from Stratum 5. Above this is Stratum 8, the remnants of another clay floor. Since there at no point is over six inches of dirt above this floor, it seems probable that this was as high as the mound ever got, and Stratum 8 represents the last occupation. It is impossible to be absolutely sure whether this floor belongs to the Hushpuckena or the Oliver Phase. Certainly Oliver people buried extensively in the mound, but this proves nothing about the floor. The Oliver people could have put the extra few feet of dirt on the mound and built on it, they could have built just a new house on an old Hushpuckena floor, or they could have done nothing.

Faint indications suggest that the Oliver people did build atop the mound:

1. Peabody found a considerable amount of sherds, points and other cultural material of the Oliver Phase; but of course it is possible they all came from the few trenches that extended out into the "plaza" area.

2. Although Oliver burials seem to swarm all over the mound, there are none on the very top, possibly because there was a structure there.

3. There *may* be a structure on this floor oriented to the points of the compass, not to the axes of the mound. If so, this could only have been built at a time when the mound had deteriorated considerably in its form so as to be a directionless mass of earth, by a people who had no knowledge of the previous use of the mound.

4. There is historical evidence that the Quapaw, possessing a very similar culture to that of Oliver, utilized mound-top structures. There is no evidence that Stratum 7, the last mound construction layer, was built up by Oliver folk. My guess is that they did not do it, that major earthmoving projects were beyond the scope of these marginally Mississippian johnny-come-latelies. Nevertheless, I may be under estimating them.

That in brief is the stratigraphy of the Big Mound at Oliver. A tribute is due to Charles Peabody. Without having any comparative data, without knowing that burnt clay in quantities means a floor, that buckshot caps almost always mean the top of a construction layer, he made records accurate enough to provide all the information on this map and the others. At a time when stratigraphy was believed to be nonexistent in America, when existence of stages within a mound had never before been demonstrated, Peabody's power of observation were keen enough, his preconceptions few enough to take down all this data in lucid form, ignorant as he was as to its true meaning. Moore was a good archaeologist for his time; Peabody was twenty years ahead of it.

With the help of the key, this map of the "sod layer" should be self-explanatory. Peabody gives little data on the height of the heap (or heaps) of shell in the middle; evidently it was at no point over a foot high. Whether this heap is contemporaneous with the fireplaces, etc., around it is uncertain. The small holes, with and without ashes, may be post holes in some cases, but they form no visible patterns. One thing worth noting is that both the shell heap and some spots of ashes go right under the little mound, Stratum A. This indicates that most or all of the occupation represented by the "sod-layer" occurred before the moundlet "A" was built.

It may be remarked that the abrupt cessation of the shell heap at Profile 10 indicates only that Peabody was not aware of it before this point. The lack of profile lines on this map reflects our tentative assumption that the sod-layer was quite level.

This map shows all the post holes, or at least all that Peabody recorded, in the "critical level" in the Big Mound. The recognition, recording and plotting of the post holes on this level represents Peabody's most remarkable scientific achievement. In his field notes he recorded position, depth of top below mound surface, length, direction and diameter of all the post holes. Then he made tables and a large map of them, computing the height above the ground of the tops of the post holes by subtracting their depth from the total height of the mound above each of them, as noted in his profile drawings. The profile drawings themselves, compiled from notes and rough sketches made in the field, are no mean achievement.

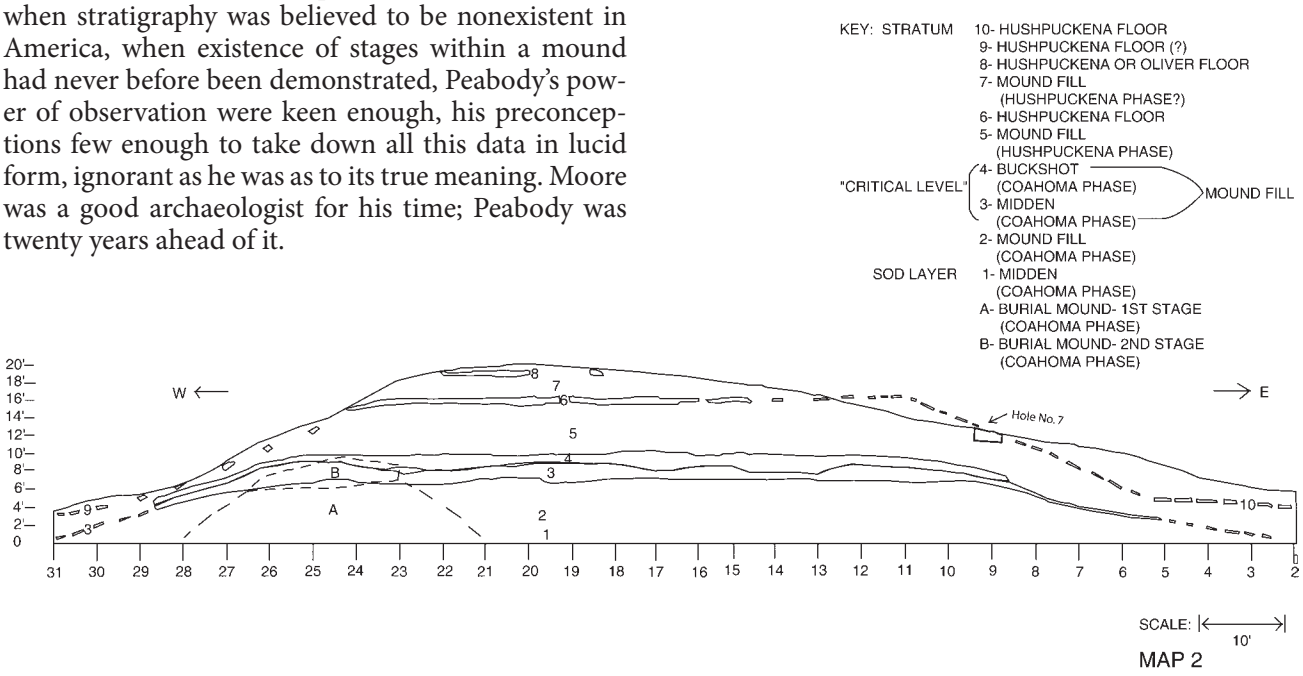


Figure 3-6. Map 2: Section through Edwards Mound at numbered stakes.

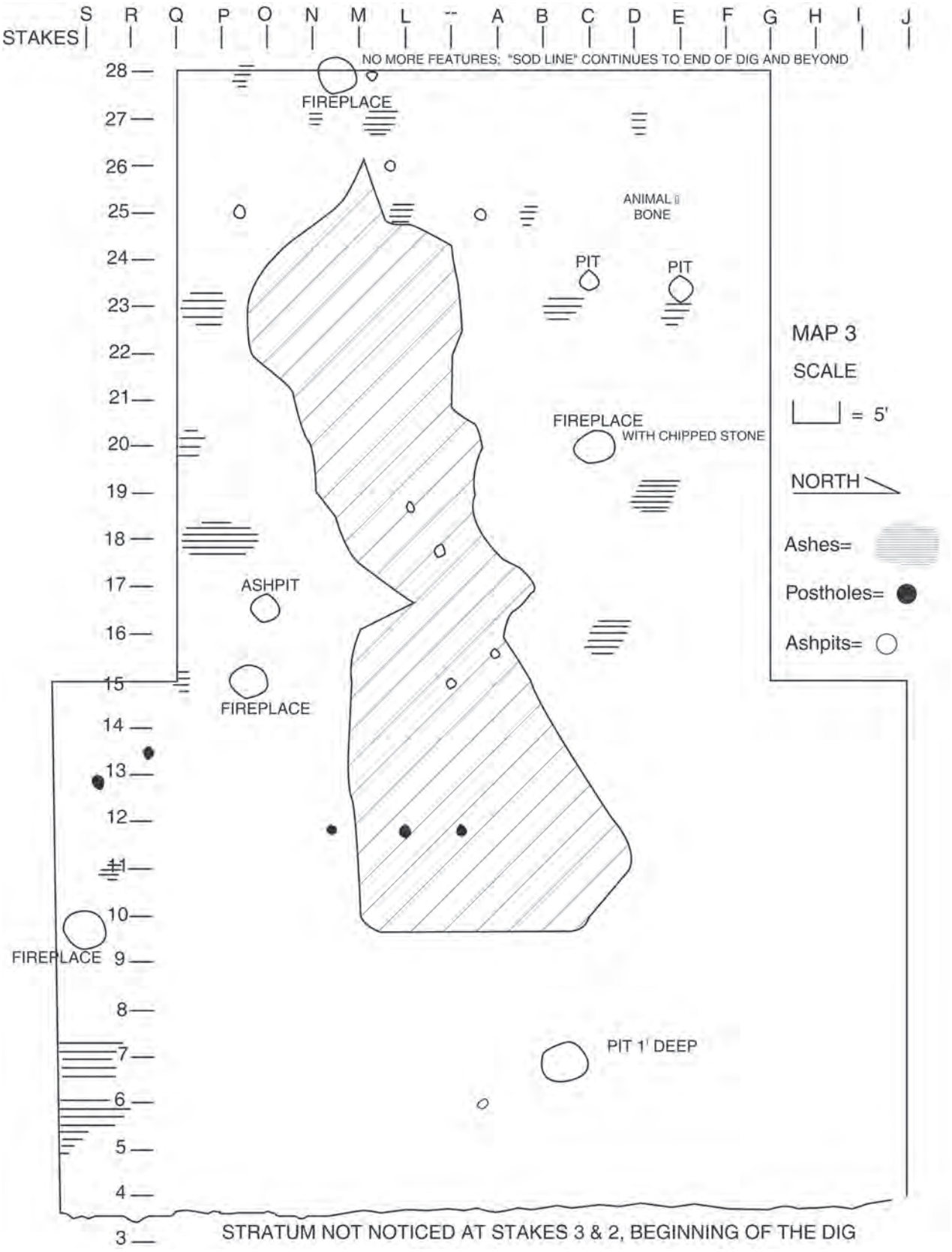


Figure 3-7. Map 3: Features on the "sod layer," Coahoma Phase.

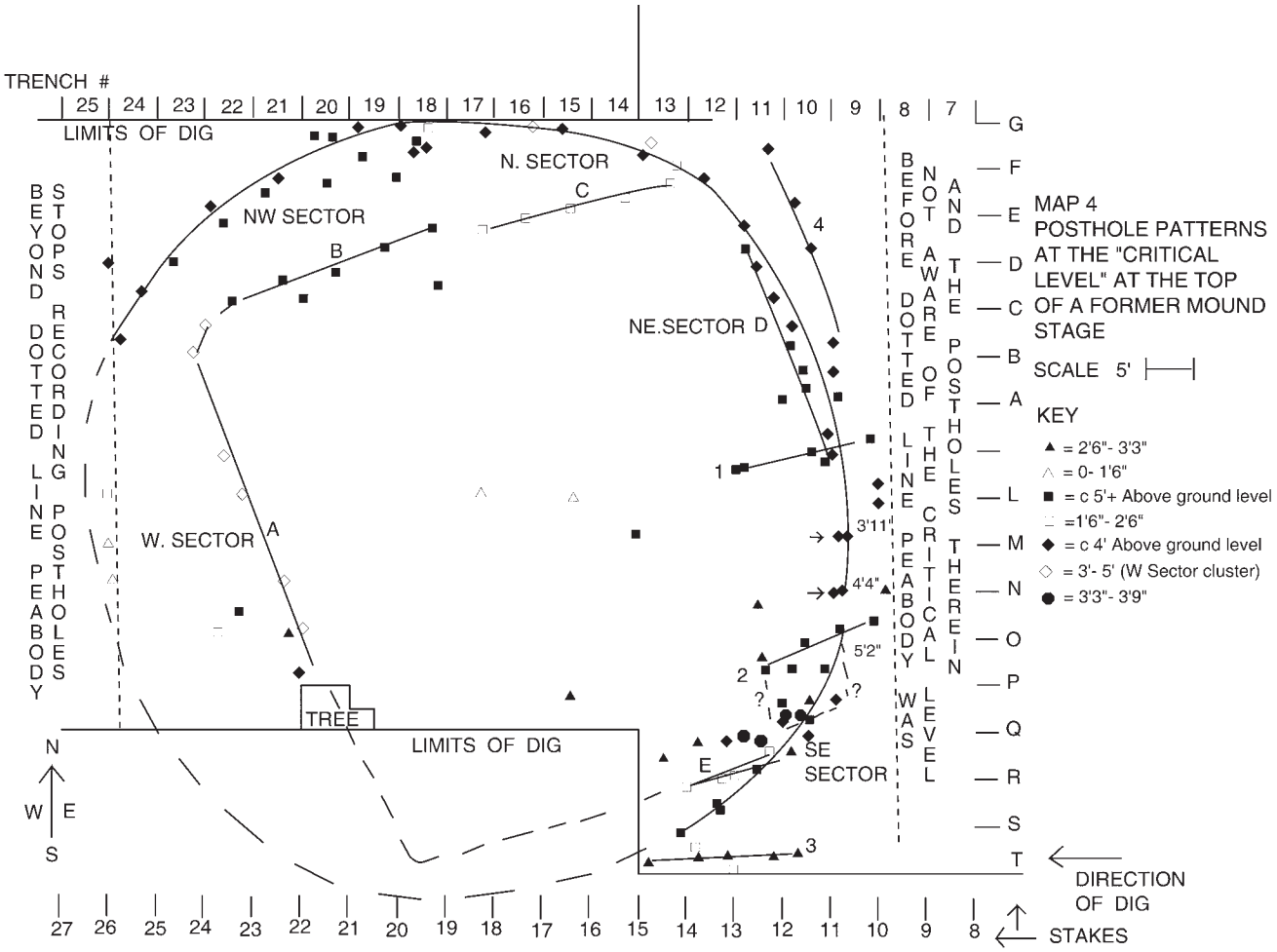


Figure 3-8. Map 4: Post hole pattern at the "critical level" at the top of a former mound stage.

I made an elaborate check of all the data on his maps and drawings against that contained in the field notes. There were few post holes omitted or wrongly placed and some inaccurate computations of height, but the correlation was so near perfect that I carried the check only as far as the first year's field notes. He has done virtually the best job possible of arranging the raw data in intelligible form.

But one must not go overboard; there are limits to the data. He recorded only the large post holes (they average 6" in diameter) and these in the main seem to have been empty (as on Mound A, Lake George) and thus painfully obvious to the most casual observer. There may have been smaller post holes and perhaps wall trenches, but we shall never know.

Moreover, there are grave difficulties with his data on height of post holes. For the first six or seven trenches he dug them down in one stage to an arbitrary level. But he soon tired of this and began digging down only to what he called the "sod-line," actually a premound occupation level (Coahoma Phase). This is generally flat but not entirely so; thus we have no truly absolute datum level on which to tie our computations.

From Trenches 7 to 12 his methods underwent an elaborate evolution. He began to dig his trenches in two stages. The first stage was dug not down to any level but to a rough depth below the surface of the mound, usually about five feet. All features above this level are recorded in terms of depth below the surface. Features in the second stage are recorded partly this way, partly in terms of height above the bottom. Correlating these, and arriving at absolute heights for his profiles is extremely difficult. Since by the time he reached the bottom of a trench the first stage of the next trench on was already dug, he never had a complete profile to work with, but had to refer back to his field notes to compile the data on any one trench.

There is an interesting problem here. Let's say we have a post hole on the floor of the first stage at the back of the trench near the last one, say at point "L" on the E-W axis. What does the figure he gives for height below surface mean—height below surface at the front (west) wall of the trench, or height below the surface

above the post hole itself? A careful perusal of his notes indicates that it was the former. Although the floor of the first stage was curved in the north-south dimension, it was flat in the east-west dimension, so on the upslope of the mound, the given depth of say seven feet for a post hole at the back of the trench may mean the true depth below the surface at that point is six feet or less.

A further "refinement" in Peabody's method soon occurred when he realized that most of the post holes appeared about a foot below the level of his first stage. So he then dug the trenches in three stages: first to about 5 feet below the surface, at which point he made accurate measurements of the height of his profile, noting that profile height actually varied from 4'6" to 5'6". Then he would dig say a rough foot and a half further and proceed to record his post holes. So in one trench the tops of all the post holes are recorded as 6'6" from the surface. This measurement is nothing but a very rough approximation. Moreover it does not measure the tops of the post holes but merely the point at which he stopped digging, surely almost always somewhat below the top.

Soon it occurred to Peabody that these post holes were related to the "critical level" stratum, so from then on he made his second or post hole-recording floor at the level of the midden. From then on what he records as the top of the post holes is merely the level of this fairly thin midden at that point. So any attempt to segregate his post holes by height of tops in hopes of discerning two or more building stages within the midden is foredoomed to failure. One may be reasonably sure that the holes he assigns to the critical level actually belong there as the nearest other occupation level is five feet above. But this is all.

All one had then was the roughly circular pattern of post holes seen on the map, if one ignores the differing colors [now changed to symbols] and the pencil lines. How then did I derive the two rather attractive rectangular and circular patterns shown by the pencil lines? It is a long story. First I tried segregating the post holes by diameter, but could get nothing significant. Then it occurred to me that although the tops of the post holes were not accurately derivable from the data, the bottoms were. One can cut off tops, but within the limits of accuracy imposed by Peabody's round about ways of getting absolute height, the bottoms of the post holes were where he says they were. I then made the doubtful assumption that in building any one structure, the Indians would in all likelihood sink all the major post holes (which are all we have) to the same depth. Surprisingly enough, this seems to work. I divided the post holes into sectors as shown on the map. Then for each sector I plotted the bottom-height of the holes on a graph and in the main the heights clustered beautifully. These conclusions were made:

(1) For the whole northern half of the excavations, most of the holes with around 4 feet bottom height (blue color) [color now changed to a solid diamond] formed a perfect arc of half a circle.

(2) In the incredible jumble of the southeastern sector this arc was continued, for some reason, by post holes of green color [color now changed to a solid square], about 5 feet in depth.

(3) There are five rather brief rows of post holes (A—E on the map) which, although they vary greatly in depth between themselves, are internally consistent. Row E is really too short to be significant, but since it parallels Row C and is of the same depth I reason it may be related. Where it would extend to the southwest is unexcavated. These five segments form a fine rectangle.

(4) No continuation of the rectangle may be found on the [Row] E side. The two possible short rows of "green" [color now changed to a solid square] posts (1 and 2) indicate that this may have been an entrance.

(5) Other short possible rows (3 and 4) have unknown significance, if any. We seem to have two structures here, a round one and a rectangular one. The round one seems to have been built in one stage, the posts all being sunk to about the same depth. The rectangular structure, however, seems to have been built in short segments, probably over a fairly short time. The huge size of these structures (respectively about 80 and 60 feet across),[3] and the complete lack of central posts indicate that these were not houses, and were not roofed over. Rather they seem to have been palisades or fenced enclosures. Whether or not there was wattling between the large posts is unknown. I would think there was, because if people wanted to enclose an area, they would really close it. I have noted the possible entrance to the rectangular structure. On that same side the circular structure has two sets of double posts indicated by small arrows. This may have been its entrance. On the other hand the entrances to both these structures may have been in the unexcavated southwest portions.

Any consideration of these structures must take into account the unbelievably similar post hole patterns found by Collins (1932) on the Deasonville site. He on two occasions found square structures inside round ones of about this size. There are differences; his entrances are on the west, his structures were not on mounds, he had wall trenches. But that we are dealing with the same culture pattern is likely. Both sites have a cord marked component. That the Oliver structures are Coahoma in date is undeniable, and

from this it is suggested that the structures at Deasonville derive from the earlier component there.

The strange fact that at both Deasonville and Oliver square structures were found within round ones lead me to believe at first that in all the cases the structures were contemporaneous, and that we were dealing with a very peculiar architectural pattern. Further study suggests, however, that this is not the case, but before we go further let us take a look at Maps 5 and 6.

In our perusal of these drawings let us for the moment ignore the dashed deep blue [color now changed to the thicker black dashes] lines signifying the circular and square structures, and consider the other features.

The pencil lines on Map 5 [Figure 3-9] indicate the contours of the top and slopes of the mound as they existed after the adding of Stratum 2 and before the addition of Strata 3 and 4. These contours were in the main drawn by taking the height of the bottom of Stratum 3. This stratum is not present in the northwest corner, so here the slope of this primary mound is uncertain. Figuring out the contours on the eastern slopes was most difficult, as here the critical layers of strata were not recognized by Peabody. However he does sporadically, on this profile or that, mention layers of midden or buckshot extending partially across the profile. These strata are often given different names from one profile to the next and tracing them from Profile 14, where most of the strata on our Map 2 [see Figure 3-6] have been recognized, to Profile 5, was a Herculean labor. A check was provided by the variously noted ash or shell "strata," seemingly small lenses or patches. It was assumed that they represented areas of midden soil on the slopes of former mound stages. When the slope of the critical layer strata was tentatively calculated, it was found that a large number of these patches appeared just below them. Evidently they derived from the second occupation layer, which is now being discussed. Correlating the data from these patches and the rare notations of the critical layer strata, I arrived at the rather reasonable looking slope.

Unquestionably the mound was flat-topped at this time, but the contours give us no real indication that the shape of the mound was rectangular: it may well have been round.

The dashed ink circle indicates the approximate circumference of the little mound, Stratum A. The light blue [now changed to the thinner black dashes] pencil represents the horizontal limits of the buckshot formation which forms one of the major bases for our belief in the existence of Stratum A itself. The formation was not noticed by Peabody before Profile 24, but it in all likelihood extends further east. It has a peculiar shape; the top side of it begins at the sod layer on the northern edge. From there it rises sharply for five feet or to the southward in the profiles, then levels off and peters out. The highest point in Profile 24 is 5 feet above the sod layer, in Profile 27 only 2 feet. On the southern side the buckshot does not go to the bottom, but only forms a sort of band averaging 2 feet thick. The total shape of the whole thing can be visualized thusly; curl your finger slightly (keeping them together) and place the heel of your hand on the desk; keep your thumb at the level of your first knuckle. The sort of quarter dome formed approximates the shape desired. Upon visualizing this shape it immediately occurred to me that it looks like about a quarter of a buckshot cap on a little mound.

This sheds light on a knotty problem connected with Stratum B, above and to the south. This peculiar layer of buckshot, chock full of burials, is continually described by Peabody as a little mound, despite the fact that it is shaped in cross section like a crescent, concave side down. The meaning of this odd structure mystified me until I extended the line of the top of it down on the northern side–it coincided strikingly with the outer edge of the quarter dome of buckshot below, if the level southern segment of it (the thumb of the hand) is ignored. Extrapolating from the outer curve of the lower buckshot and on the other sides from the top curve of Stratum B, the circumference of the putative mound "A" shown in Map 5 [see Figure 3-9] was arrived at. If such a mound exists, the peculiar buckshot formation is explained as a part of the loading on the northern edge and interior of the mound; Stratum B is a buckshot cap on top of the mound. The case for the existence of mound or Stratum A is further strengthened when it is realized that all of a group of burials whose average height above the "sod layer" is 3 feet (shown in Map 5) are contained within the putative limits of the mound! In the same way a higher group of burials, marked on Map 6 [Figure 3-10], are all contained in the cap of buckshot, which is evidently an addition to the original mound.

The evidence, especially the noteworthy concentration of burials, points to nothing other than a small "conical" burial mound made in two stages, buried under a temple mound! The next problem is, how do the burial mound stages relate, if at all, to the temple mound stages? That the sod-line goes blithely under Stratum A as it goes under Stratum 2 has been established. As far as can be told from thickness of submound midden, Strata A and 2 would seem to have been constructed at very nearly the same time.

The burials are all of about equal depth (3 feet above "sod") except for the westernmost, which is a foot lower. These depths, it must be admitted, correspond to the temple mound far better than to the burial mound; if they were sunk down from the top of

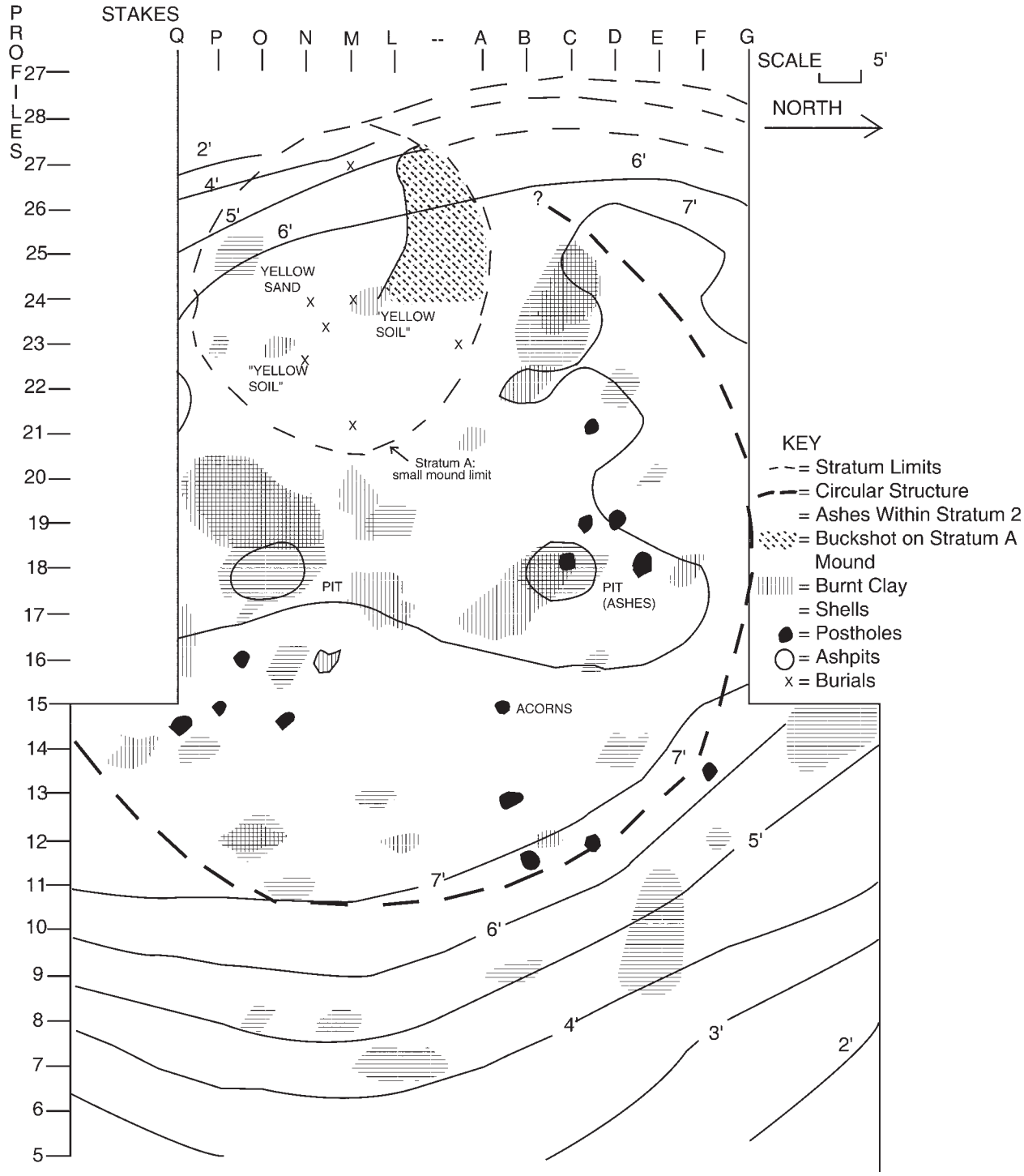


Figure 3-9. Map 5: Features on floor above Stratum 2, Coahoma Phase.

stage two, each burial would have had a three-foot to 4-foot pit, which seems reasonable for extended burial. But since Peabody did not often note burial pits or the lack of them, we cannot be sure when the burials are intrusive or were laid out during the construction of Stratum A.

A glance at Map 5 will reveal an interesting fact: ashes are scattered all over, but burnt clay (orange) [color now changed to vertical line fill pattern] occurs only at the top of the mound. On the top of the mound there is one area in which burnt clay is conspicuously absent: over the region of Stratum A. There is only a small patch of ash, and three little areas of "yellow soil" which might mean almost anything except burnt clay, which Peabody is only too happy to call by name.

Whatever burnt clay means—burnt floor, fireplaces or daub—it is evident that the burial region of the mound was kept clear of it. What about other evidence of structures? Back to the big circle and Map 4 [Figure 3-8].

Long after setting up these groups of post holes by bottom height, it finally occurred to me that Peabody's data on the height of tops of the post holes might not be so useless after all. However much an archaeologist has cut off the top of his post holes, there is a good chance that he would have caught some quite near the top. Thus the maximum figure for top height in any pre-established structural group of post holes ought to be about the correct height of all of them. It was found upon investigation that the tops of most of the post holes in the large circle were around 6 feet plus above the sod layer, and the maximum was 8 feet for one post hole, about 7½ for a couple of others. This however excludes the southeast sector of the circle, which has heights ranging up to and even over 8 feet consistently.

The top of the buckshot of Stratum 4 (see Map 6) is just under 10 feet; the top of Stratum 2 averages 7 or more feet. The fact that not a single post hole even approaches 10 feet is a good indication that this structure was built before the addition of Strata 3 and 4, in other words on Stratum 2.

Map 5 shows two small confirming bits of evidence: (1) the higher southeast segment of the circle is reflected by a rise in the floor level on this Stage 2 (Map 5). All the burnt clay is within the limits of the large circle, but not within those of the square structure. It looks as if the circle belongs to this level. There are no recognizable internal features on the floor within the circle, except for the two very large and shallow (up to 2-3 feet) pits filled with ashes shown at Profile 16. Perhaps these were places for great fires of some sort. There are a number of small "ash pits" but nothing that could interpreted as internal support for the structure, so we must continue to believe it is only a palisade.

We have noted previously that the post holes of the circle seem to give out west of Profile 26, possibly because Peabody stopped recording them, possibly because there were none there. Since a continuation of the structure would run it right over the "hallowed ground" of Stratum A, this section of the circle's arc could have been left blank.

Let us review the probable sequence of events so far. After living for a considerable period on the ground surface, the Coahoma people decided to build a small steep burial mound some 35 feet in diameter and 7 feet high. Whether or not burials were inserted at this juncture is uncertain. After a very brief period, it seems, minds were changed and it was decided to build a temple mound of sorts incorporating the burial mound into the western slopes. On top of the new mound a clay floor was put down, carefully skirting around the burial area, and then a circular stockade was put up encompassing the floor and maybe the burials, too. If the little platform mound was indeed round, the circular structure enclosed the whole top.

This temple mound is unquestionably a marginal example of one; it seems to be round, it has no house on it but only a circular stockade, there is a small burial mound incorporated into its structure as a burial area. Transitions are rare in archaeology, but here is reasonable evidence that a burial mound-temple mound transition occurred at this site. I do not mean the temple mound was invented here, sprung forth at Oliver out of the burial mound tradition. Rather, here seems to be a new and imperfectly understood religious practice coming up from the south (?) and being employed in an ignorant and quaint fashion. How the builders of Mound C at Lake George would have been amused to observe their zealous if ill-tutored imitators upriver.

Let us move on to Map 6 [see Figure 3-10]. This represents the mound after the midden (brown) [now enclosed by lines labeled str-3] and buckshot (light red) [now enclosed by lines labeled str-4] layers had been added. There are three more feet on the mound and from the look of the contour lines, the mound had been squared up, and the structure built on top of it (dotted blue line) [color now changed to the thickest black dashes] is square, and oriented, at least on the southwest and northeast sides, exactly with the mound axis.

What evidence is there that this square structure is indeed associated with Stratum 4? The maximum height of post holes in Sections A, B and D (see Map 4 [see Figure 3-8]) of the square is ten feet, and most of the holes are around eight feet above the "sod layer." This is too high to be emanating from the first mound

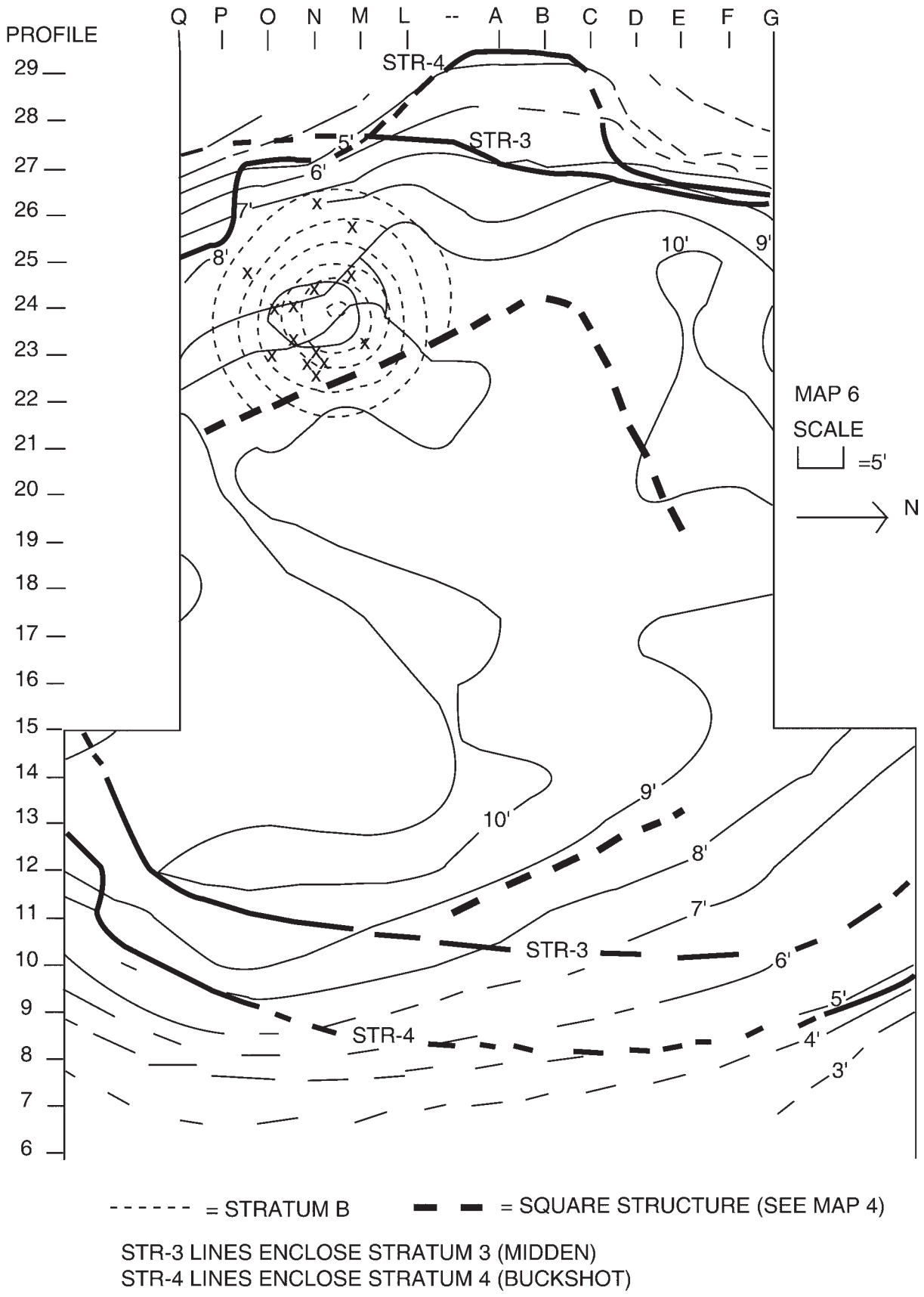


Figure 3-10. Map 6: Features above Stratum 4, Coahoma Phase.

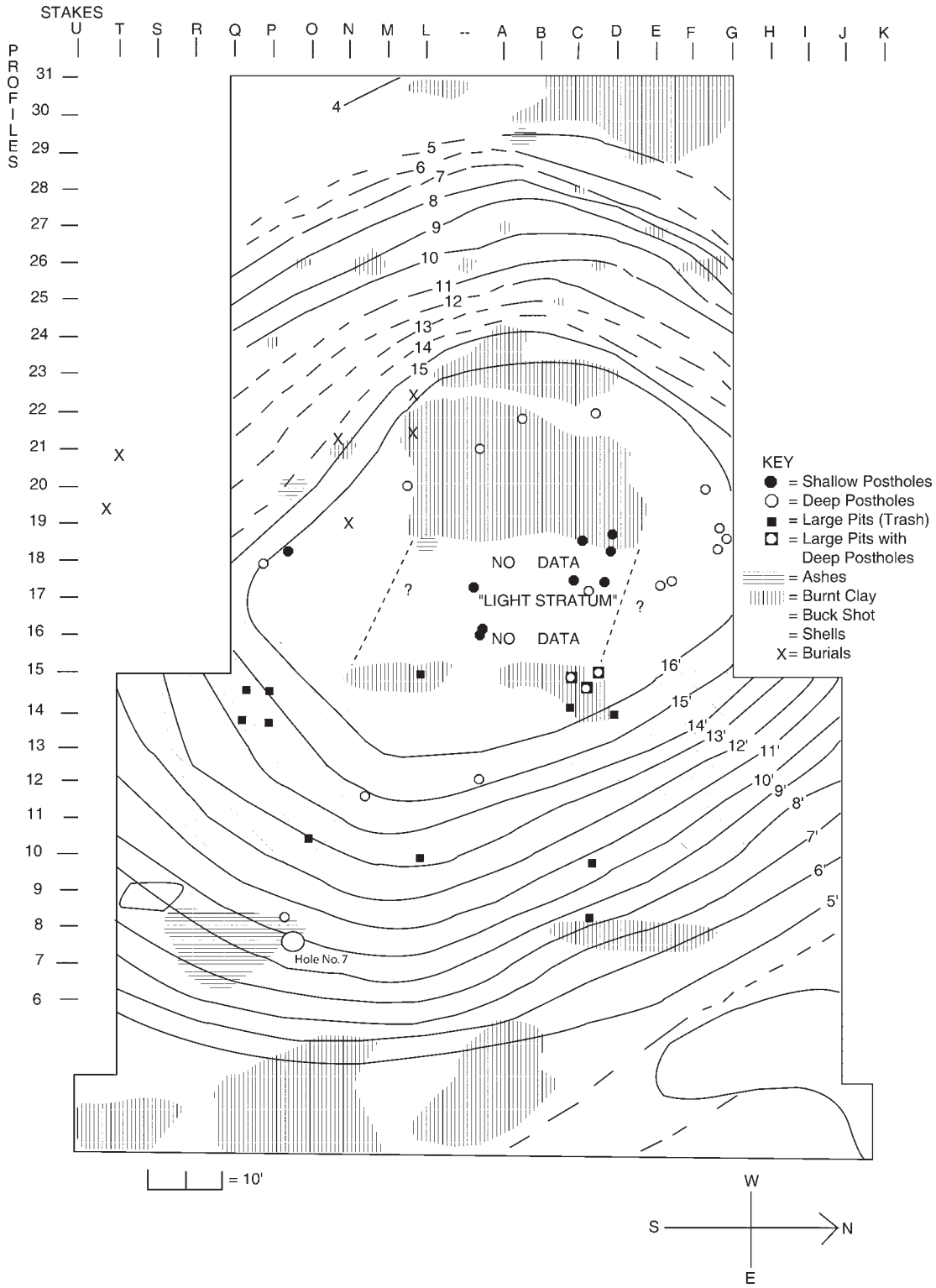


Figure 3-11. Map 7: The Big Mound during the Hushpuckena Phase.

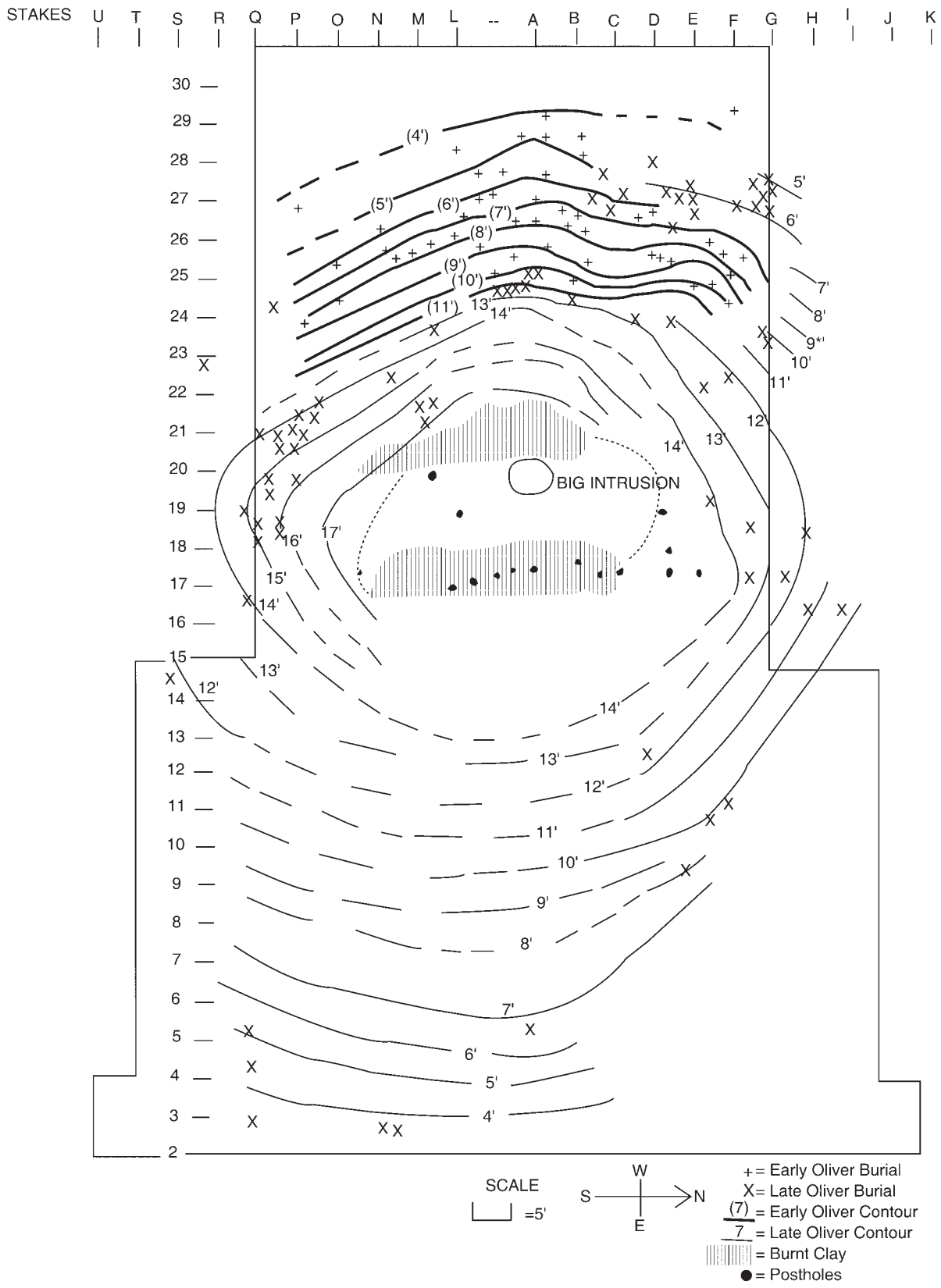


Figure 3-12. Map 8: The Big Mound during the Oliver Phase.

floor or to be contemporaneous with the circle. That one structure fits vaguely within the other is simply due to the fact that both were enclosing the top of essentially the same mound, not to architectural habit.

A problem is created by Segments C and E, supposedly of the square structure: the tops of none of the post holes therein rises above six and a half feet, and moreover the holes would have been an unbelievable seven feet deep if they originated at this level, as opposed to the four feet of the other holes. These holes are probably the remains of an abortive attempt at structure building on the earlier level. Possibly the same holes were reused at this upper level—Segment C does fit beautifully into the square—but it cannot be proved. Thus only the higher segments are included in Map 6. Indeed the square may never have been finished, after all it was only a stockade surrounding a special area, not a complete wall needed to hold up a roof.

Other evidence concerning the placement of most of this square structure on this upper level is derived from a study of Stratum B. This peculiar cap of buckshot is not shown in profiles east of number 23, but a partial circumference could be drawn around the west side from the profile data. If extended, the circumference reached well beyond Profile 22 on the east, and well inside the square structure. Was the square rammed in across the mound like a modern super highway, without respect for preexisting features? Doubt forced me to continue investigation.

Plotting the fourteen burials that were found in the cap revealed a striking fact: the burials all seemed to be one to two feet from the surface of the buckshot cap, except for a few enigmatic burials on the east. These few burials, at or to the east of Profile 23, were placed at only five feet above the "sod layer," while the height of burials less than five feet to westward is eight feet. Why did all the burials conform so nicely to the contours of the buckshot cap except these only? Idly I drew contour lines through a diagram on which all the burials were plotted, including the peculiar ones. The resulting contour form was a nice little mound, the eastern third of which was sheared off sharply in an almost vertical cliff. The estimated line of the cliff, not quite north-south, looked familiar. All of a sudden it hit me—this was the line of the square structure. Plotting the southwest wall of this structure in it was found indeed to conform to the bottom of our cliff.

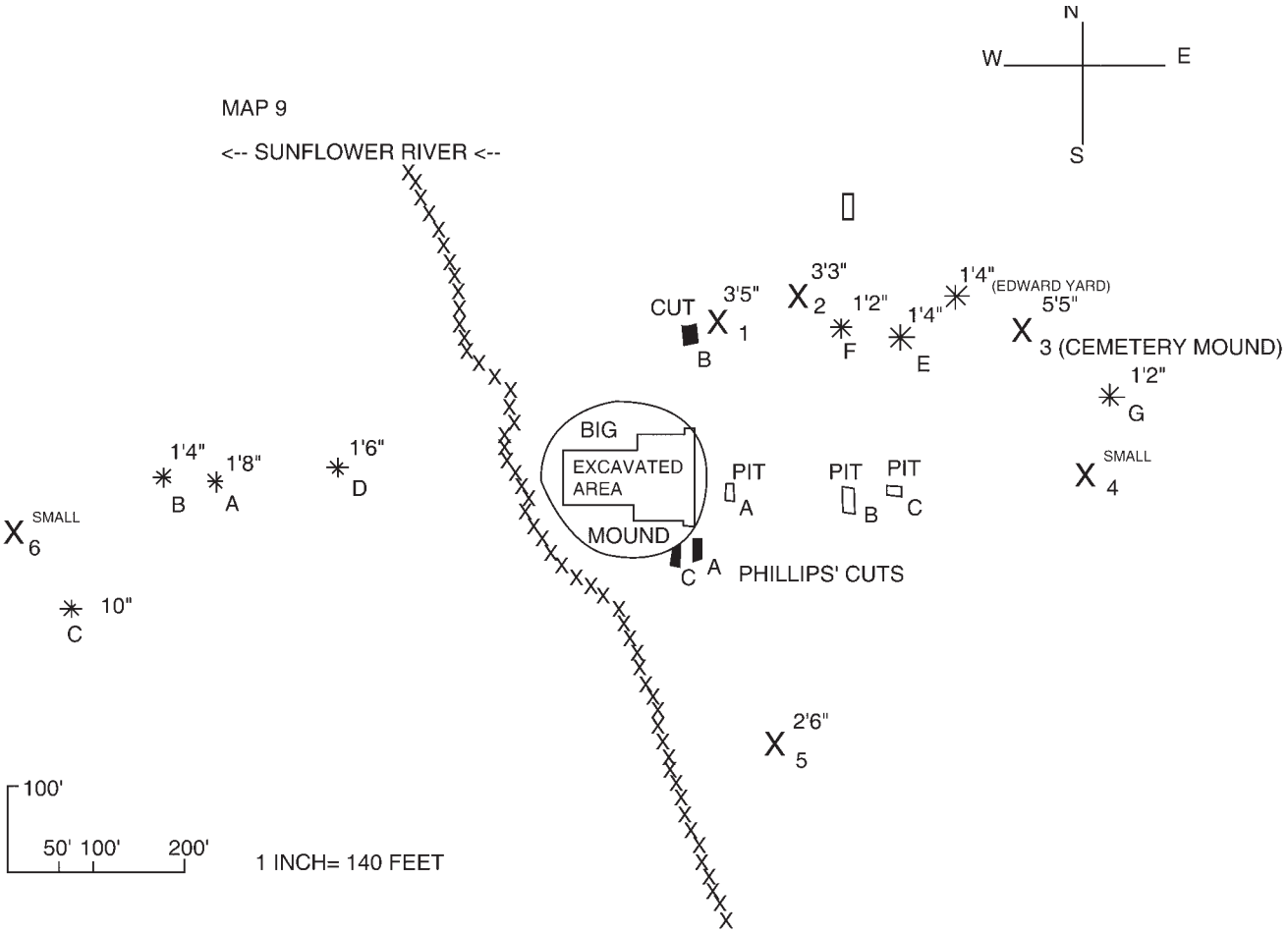


Figure 3-13. Map 9: The Oliver site (after Peabody).

All the burials, now that lower-level burials had been separated out, were outside the square structure but as it were bunched against the wall, clamoring to get in. Realize that the "X" marks on the map signify only the skull; look up six feet on the side and visualize how big those extended burials are, and how packed in against the wall. From the incomplete data it seems most of the skeletons are oriented southeast, i.e., parallel to the wall.

What we seem to have then is a mound of buckshot built over Stratum A as a part of the general construction program. This cap however did not cover quite the whole area of the old burial mound. Post holes for a new structure were sunk into the flanks of the old burying area and the new cap was mounded up against the wall or stopped just short of the wall. Burials were only a foot or two deep: evidently it was thought that the durable buckshot would not wash away enough to create embarrassing exposures even with such shallow burials as these. Shallow burials, a severely restricted burial area, excluded, shut outside the walls, segregated from the main mound area: by now the burial function was unquestionably secondary to the temple functions of the mound. The mound was newly squared up, with a new square palisade to match. True it wasn't exactly a temple yet, it had no roof, but still it was an area certainly dedicated to the rites of the living, no longer to the rest and peace of the dead.

The burial mound tradition was by this time about defunct at Oliver. All that remains of it is that the burials are placed in a special soil in a special restricted area. But the "burial mound" is no longer round in places, neither does it extend above the surface of the ground around it. Indeed there seem to be thin portions of Strata 3 and 4 extending over parts of the area. Whether this earth was placed there or merely has washed over from elsewhere on the top is uncertain.

In summary there is evidence of a major transition at Oliver during the Coahoma Phase, from the Burial Mound tradition to the Temple Mound tradition. Temple mounds are introduced; at the end they are even square with corresponding square structures on top. Burial mounds lose all significance before our very eyes. All this occurs in the framework of one ceramic phase. It is evidently a change only in religious-structure tradition; the concept of a temple mound or burial mound "culture" is quite inapplicable here. Remember that the change from circular to square sacred stockades reflects not at all on the domestic architecture. It, like everything else of a secular nature, probably remained the same.

This map shows the mound during the Hushpuckena Phase, at the level of Stratum 6. The contours show that at this time the whole mound was steep, rectangular and imposing. Figuring the contour lines on the west was relatively easy with the help of the pieces of burnt clay which had washed or fallen down from the burnt structure above. The eastern side presented much graver problems. There were, however, continuous notations of buckshot at the north and south ends of all Peabody's early profiles. Previous investigation had proven that these were too high up to have anything to do with the buckshot of Stratum 4. Plotted horizontally the shape of the buckshot made no sense. However, it seemed possible that these buckshot areas were part of a clay mantle associated with Stratum 6, so their height data were worked into the contour map with the results shown. Note that the buckshot is on the middle of the southeast and northeast slopes, whereas the less steep corner, evidently requiring no stabilizing cap, was left bare.

The relation between the plaza floors below the mound and the mound itself is not entirely certain. We have some evidence that the buckshot tailings of Stratum 4 go under the floor on the east, and further building of the mound beyond this stage would mean the plaza floor would be partially covered by the lower slopes of the mound. So this seems the most plausible mound stage to which one can assign the floor on the plaza.

A comment about the shells in the northeast corner of the excavation is in order. According to Peabody there are actually two very thin shell-bearing strata about a foot apart. These may belong to slightly different occupations, but one of them at least is certainly associated with the burnt clay nearby. For this reason I have combined their very similar horizontal outlines and put them on this map.

The deeper post holes at the top, represented by purple dots [color now changed to an open circle], may form a vague rectangle. If this indeed is the mound-top structure it seems of modest enough size to be considered a true house, not just a palisade as before.

It must be remembered that these contour maps were made by milking everything possible out of the evidence. They must not be considered accurate and definite reconstructions, although no line was put in without some evidence. These maps show rather the probable general shape and slope of the mound. Big mistakes are possible; all the reviewing of the data could produce no suggestions of a ramp anywhere, for instance, yet one in all likelihood existed.

The labors that went into the construction of this map are described in some detail in the section on Oliver Phase burials. Suffice it to say here the contours were arrived at by plotting the height of Oliver Phase burial pits, working on the assumption that most pits

would be dug to about the same depth. The contour lines have numbers in parentheses since they represent pit-height, not surface height. One cannot be sure what was the depth of the pits and thus what is the figure to be added to arrive at a surface height estimation. Most of the burials, however, seem to have been in pits about two feet deep. Children were sometimes shallower, extended burials usually deeper than the norm. The contours drawn from Early Oliver burials are not drawn continuous with those from Late Oliver burials, since the late burials are a little higher, due to greater slope washing.

The odd dent in the contours at the west side of the mound requires some explanation. Here the burials are much deeper than usual under the modern (1901) surface of the mound. Detailed analysis gave no evidence, however, that these burials were any earlier than the mass of "Early Oliver" burials on the west side of the mound. This being the case the apparent dent is taken at face value. If this feature really exists it must be a gully of some sort. An examination of the "modern" map, Map 1 [see Figure 3-5], shows that there was indeed a somewhat shallower gully there in Peabody's day. Whether there are any circumstances in which such a gully will tend to fill itself up over the years I do not know, but it seems possible.

The features shown on the top of the mound are those belonging to Stratum 8, although one cannot be sure that this was an Oliver occupation layer. The post holes shown are all those whose tops are above sixteen feet, on the level of Stratum 6, or whose bottoms are above 15 feet, at which level they would be too shallow for Stratum 6. There seems to be a north-south row which may be the wall of a house. If this is a house its orientation has nothing to do with the original orientation of the mound. This along with the possible gully suggests that during the Oliver occupation the mound had fallen into sad disrepair and had lost its fine rectangular shape. If this is true, the Oliver people may well not have been mound builders at all but simply mound-users having no taste for the construction of earthworks. Ethnography suggests that this was the status of many tribes at the historic horizon.

The Southeastern archaeologist finds it fashionable to look at the sorry remnants of mounds in the middle of cotton fields, and curse the white man for his ravagings of the monuments of the past. It is most enlightening to realize that little or none of the deterioration of the Big Mound here (before Peabody got to it) was due to the white man.

Evidently the mound was cleared when Peabody arrived, with the exception of a lone chinaberry tree. It was however not cultivated upon. Moreover this area of Mississippi was not subjected to the plow until the 1870s at the earliest. In sum, Peabody found the mound in pretty much its aboriginal shape. One must remember that less than two centuries intervened between the end of the aboriginal occupation and Peabody's dig.

On the other hand if, as we suspect, the Oliver people did nothing to maintain the mound, upkeep may have ceased as early as 1300, the possible end date of Hushpuckena. This means that at about 1700, the horizon this map supposedly represents, the mound had been deteriorating under the heavy hand of nature for four centuries. This deterioration must have been materially assisted in the last century by the Oliver savages themselves who (we believe) built on the mound, littered it with their artifacts, and riddled its flanks with burials.

Little wonder then that Map 8 portrays the mound in a pitiable condition, for which the cotton planters can in no way be blamed.

This map is simply a copy, with a few emendations, of a map Peabody himself made to show what the Oliver site looked like. I have located the cuts Dr. Phillips made, and also three pits Peabody dug out in the plaza.[4]

It would be of interest to compare the strata Phillips found (Phillips et al. 1951:253-260) with the stratigraphy in Peabody's pits and in the big mound.

The top of Peabody's Pit A was at a level of about 2.5 feet above the sod layer datum. However, since it took him 3 feet to reach sterile soil, we may infer that this first midden had dipped about six inches in some thirty-five feet from the major excavation's edge: this is surprisingly little.

Pit B was 140 feet farther to the east; its top was about half a foot above our old sod layer datum. This means that in 180 feet from the edge of the mound, the modern surface had dropped four and one half feet. In Pit B the line between artifact-bearing and sterile soil was one foot seven inches down; in other words it had also dipped down another half foot from its level in Pit A, a bit over a foot from its level throughout Peabody's major excavation. Pit C, 90 feet further east, is a little higher than B—the center of the plaza has seemingly been passed. This "absolute" height of the top of the pit is two feet above our crude datum. Artifact-bearing soil goes down one foot eight inches only—the "sod layer" level has returned to approximately its original level under the Big Mound. There is however no sign of the thin black sod layer itself as an entity in any of these pits.

The stratigraphy in these pits is of little interest. Pit A has at the top a foot of soil with much burnt clay, under which there are two feet of dark soil with a few

shells in it. Pits B and C have six inches of "top soil" which may be a plow zone, or may be analogous to the first zone in Pit A. Below this in both is a zone about fourteen inches wide undoubtedly analogous to the second zone in Pit A. Below this, Peabody dug two to three feet further into sterile soil in all pits. He divides this sterile soil into three layers from the top: sandy soil, buckshot, sandy buckshot. If these layers have any meaning, it is geological, not cultural.

How do these levels correlate with the strata defined in the mound? The strata in the profile at Stake 2, the first profile, are described thus: (1) upper 1.5 feet not characterized, (2) next two feet very dark soil, (3) next two feet fairly dark brown soil, (4) bottom two feet, "light loam." Ten feet to the west, in the profile at Stake 4, Peabody first draws in the sod layer; there it is a little less than two feet above the bottom of his trench. Evidently then the bottom of Layer 3 in Profile 2 corresponds to the "sod line," the "light loam" corresponds to the sandy, or first sterile layer in the three pits. Layer 2 in this profile must then be the same as the foot of top soil with burnt clay in Pit A. The top foot and a half of Profile 2 must then be a new stratum: in a word, mound tailings of some sort.

There is another feature in the profile at 2: the Hushpuckena floor, Stratum 9, runs across most of the profile two feet or less from the surface, evidently then between Levels 1 and 2, as recorded by Peabody.

This same floor is mentioned by Phillips (Phillips et al. 1951:259) as it appears in Cut C. Cut C is in somewhat closer to the mound so there are a full two and one half feet of soil above it. Since this stratum is between four and five feet above the sod line, this means Cut C is somewhere to the southward along the seven-foot contour on Map 1 [see Figure 3-5]. Note that this floor has nothing whatsoever to do with Peabody's "critical layer," a feature whose tailings are far below. Phillips' Zone II then corresponds to the first (above floor) layer in Profile 2, Peabody's second or very dark layer and perhaps to part of his third or dark brown layer. Cut C gets nowhere near the "sod-line" level and sterile soil.

Let us now examine Phillips' Cut A. Phillips (Phillips et. al. 1951:259) tells us that the floor in Cut C corresponds to the break between Zones III and IV in Cut A. If this is the case, there are twenty inches of soil above the floor in this cut, which places it (on Map 1 [see Figure 3-5]) somewhere to the south on about the six-foot contour. This means that, in Cut A, Zones II and III correspond to Peabody's first layer, Zones IV and V to his second and perhaps part of his third layers. Evidently where one places the border between Peabody's Layers 2 and 3, and Phillips' Zones IV and V is largely a subjective matter.

Cut B is a separate little problem. One can see from Map 9 that it is not in the middle of the plaza as Phillips seems to have thought, but over at one edge. It is near enough to Peabody's Mound 1 so that Phillips' Zone II may well be mound outwash, as he suspected. Zone III is then comparable to Peabody's second layer in Profile 2, and to the "top soil" or uppermost stratum in his plaza pits.

Further correlation of these various strata is almost impossible. Evidently from Phillips' sherd count charts, the floor of Stratum 9 marks the bottom of the Mississippian occupation. The cultural layer or layers below it are pretty pure Coahoma in Cuts A and C, and also in Peabody's Profile 2. These soils probably stem in part from Coahoma occupation on the flat, in part from mound outwash, including the outwash from the thick construction layer, Stratum 5, if our correlation of Strata 6 and 9 is correct. This seems plausible because even though Mississippians built this stage, they probably used dirt containing mainly Coahoma cultural material, especially if the mound construction occurred early in the Hushpuckena occupation.

As for the plaza pits it would be silly to call both cultural layers Coahoma just because they are both below the absolute level of Stratum 9. Certainly at least some Mississippian occupation is represented; Peabody's twofold division into "top soil" and "dark soil" probably means little in cultural terms.

Unfortunately Phillips' stratigraphy cannot be correlated closely with that in the center of the mound. At least some correlation with Peabody's plaza stratigraphy has been possible.

C. Summary

This part, I repeat, is not meant as a complete elucidation of Peabody's stratigraphic data. It is rather an explanation, interpretation and occasional commentary on the maps, which are the major product of my wrestlings with the Oliver field notes. It is hoped that the reader will peruse the maps carefully and be able thereby to gain some idea of the former history of the Big Mound at Oliver.

PART IV: Phases at Oliver–Ceramics

A. The Dorr Phase and Other Possible Early Manifestations

The Dorr Phase, based as it is on a few unstudied sherds from Dorr, a single sherd in Phillips' Oliver surface collection, and one pot from Peabody's collection, must remain largely undescribed. It is tentatively defined as the major Marksville manifestation of the Northern Delta. Since most or all of the stamped

sherds are of the "cord-wrapped stick" variety, the phase seems to be contemporaneous with Marksville in the Red River region, not with the later Troyville-Issaquena Phases. The pot mentioned above is a beautiful example of Mabin Stamped, about three inches high. It has a crude but recognizable bird design, bona-fide hemiconical punctates, crosshatched rim—everything one might ask for in a Marksville pot. Aside from Moore's Anderson Landing specimens, it holds the distinction of being the only Marksville pot from the State of Mississippi.[5]

Sadly, this pot is the victim of one of Peabody's unscientific lapses. No mention of it can be found in the field notes, and the catalogue says simply "Neighborhood of Edwards' Plantation." My guess is that there is no Dorr component on Oliver itself, but there is one somewhere quite nearby, just as there is a Poverty Point component next door to the Lake George site. Nevertheless only future investigation can reveal the probable provenience of this fine vessel.

It may be noted here that conversations with James Ford have revealed that the "Hopewellian" Helena Crossing site, which he just excavated across the River near Helena, Arkansas [Ford 1961], bears little close relation to the Dorr Phase. Ford's pottery collections contain a considerable amount of red-slipped and rocker-stamped pottery on a very unfamiliar thin paste, neither of which appears in the small Dorr Phase collections. Moreover the incising was of a shallow, wet-looking variety as opposed to the bold, deep, clean, "u-shaped" lines on Dorr material. Burials were in log tombs, a feature not found in the Dorr Burial Mound. Which of these two manifestations is earlier, or whether they were contemporaneous groups from different parts of the Hopewell country I cannot say. However it does look as if the hypothesis of one little Hopewell migration into the Lower Valley is a bit oversimplified.

Other early pottery types at Oliver include four sherds of Yates Net-Impressed in the Peabody collection, probably from one vessel; one sherd of Withers Fabric-Impressed, and Indian Bay Stamped sherds from the bottom of Phillips' cuts. That these sherds were found stratigraphically low raises the possibility that the "sod-layer" or Stratum 1 is pre-Coahoma in time. The presence of only one Withers sherd in the Peabody collection however makes this exceedingly unlikely. More probably these types derive from a very thin occupation scattered over the site. Their time position is unfixed; even the contemporaneity of Indian Bay and Withers is not proven. All we can say is that an unknown phase (or phases), probably between the Dorr and Coahoma Phases in time, is feebly represented at Oliver.

There are a few early looking artifacts in the collections: a baked clay ball, a bone atlatl hook [#61885; see Yerkes in a later Oliver volume], and a boatstone [#61850; see Johnson in a later Oliver volume]. Dr. [Stephen] Williams informs me however that none of these objects need necessarily be pre-ceramic, as a beginner's knowledge of Southeastern archaeology at first suggests.

B. Coahoma Phase Pottery

This pottery received only a partial analysis, despite the fact that it forms the majority of the Peabody collections. No attempt was made to separate out subphases on the basis of stratigraphy or typology. The pottery counts in Tables 3-2 and 3-3 give a rough idea of the relative percentages involved. It must be remembered that only the collection from Phillips' Cuts represents a random sample. The figure of 11 percent for Larto [Red-filmed] in the Peabody collections is, for instance, entirely off the beam. Moreover in the Peabody collection of Mulberry Creek Cord-marked, there are 205 rims, constituting 55 percent of the sample, while in the Cuts rims make up about 8 percent of the total. The Peabody sherds are in all cases very large, and clearly represent the cream of his finds. In the future an extensive modal analysis of these beautiful sherds must be made, as they constitute one of the finest collections of Mulberry anywhere.

An astounding feature of this phase is the relative lack of decorated pottery. In the Cuts decorated pottery is 2.7 percent of the whole complex; in the Mississippian pottery of these same Cuts, decorated sherds amount to 8.1 percent of the complex. The percentage of decorated pots in Mississippian is actually relatively even higher, since Barton [Incised], the major decorated type, covers only the shoulders, and many sherds from the lower portion of Barton pots are counted as Neeley's [Ferry Plain]. In the Coahoma Phase, Larto [Red Filmed], the major decorated type, covers the whole body.

1. Mulberry Creek Cord-Marked: This type, on which the whole exterior surface is covered with the marks of a cord-wrapped paddle, is by far the most common on the site, comprising about three-quarters of the whole complex. A better than average whole example is pictured in Illustration #1. This vessel [#64278] is probably shallower and smaller than most, the cord-marking finer. The rim is quite typical. The lip is flat or round, and as on almost all the examples a little clay dribbles out over the exterior of the lip. This slight overhang is evidently produced by smoothing the inside of the vessel when it is wet, pushing a little excess clay out over the lip. A byproduct of this action is the slight eversion of the rim, which is quite char-

Table 3-2. Coahoma Phase Pottery, Oliver Site.

Type	Phillips Surface	%	Phillips Cuts	%	Peabody Collection	%
Mulberry Creek Cord-marked	3440	78.0	6292	70.4	376	72.0
Baytown Plain	819	18.6	2408	27.0	68	13.0
Larto Red-Filmed	105	2.4	86	1.0	59	11.3
Mazique Incised	28		63		5	
Oxbow Incised [Alligator var. Oxbow]	9		30		3	
Woodville [Zoned Red] and French Fork [Incised]	5	1.0	23	1.7	4	3.7
Quafalorma [Red and White] and Landon [Red on Buff]			4		3	
Unclassified Incised and Punctated	7		32		3	
Chevalier Stamped	1		5		1	
Rhinehardt Punctated			1		1	
Total	**4414**	**100**	**8944**	**100.1**	**524**	**100**

Table 3-3. Relative Percentages of Decorated Types.

Type	%
Larto [Red-Filmed]	52.2
Mazique [Incised]	20.1
Oxbow [Alligator Incised var. Oxbow]	8.8
Unclassified	8.8
Woodville [Zoned Red] and French Fork [Incised]	6.7
Quafalorma [Red and White]	1.5
Chevalier [Stamped]	1.5
Rhinehardt [Punctated]	0.4
Total	**100.0**

acteristic. This slight gentle eversion is to be distinguished from true eversion, wherein the top inch or so of the rim is sharply bent out at an angle of ten to twenty degrees. This true eversion occurs on 16 out of 362 [4.4%] rims in Phillips' surface collection, on eight out of 205 [3.9%] rims in Peabody's collection.

Here we have an example of a functional feature—slight eversion—being transformed into a special embellishment of a few specimens. There are two other examples of this phenomenon. The first concerns the slight overlap of the lip. On many pots a considerable amount of clay or even the whole top half inch or so of the rim is folded over. This fold-over, when great, is crudely melded back into the side of the vessel. These especially large fold-overs seem to have in general been made before the pot was paddled, as the paddling extends over it. On some rims these fold-overs, whose bottoms are always very irregular, disappear completely at the end of the sherd, indicating that the rim was folded over only on one side of the vessel. Perhaps this occurs when the potter discovers that one side of his [or her] rim is higher than the other. Often rims with large fold-overs also have small fold-overs like that in the illustration, indicating that the rim-evening operation was carried out twice.

Some of the large fold-overs are left unmarked; a few are the recipient of a special re-paddling, as is indicated by the differing angle of the cords on the fold-over.

The unmarked fold-overs are generally poorly melded into the vessel wall, since the melding was evidently accomplished in part by the paddle itself. These unmarked fold-overs in profile have the appearance of long, flattish exterior rim-straps. That they are not in most cases intended for decoration is evidenced by the ragged and uneven bottom edges of the "straps." Nevertheless, as with the everted rim, there are cases in which the strap seems intentionally that. The line between intentional and unintentional strap is admittedly a little fuzzy, but most rims can be put into one category or the other.

There are 22 intentional straps out of 205 *[10.7%]* rims in the Peabody collection, 15 out of 362 *[4.1%]* in Peabody's surface collection. There are two types of strap—the long (1-inch) flat variety, evidently a development out of the fold-over, and the short, thick, round variety, evidently developed from such slight roll-overs as on the pictured pot. The latter type is never cord-marked; the former is, somewhat less than half the time. These straps are recognized by their unthinned and straight and even bottom edges and by their carefully constructed appearance. These may in some or all cases consist of added strips of clay. Indeed some of the so-called fold-overs may be the same thing, added, however, not for special decorative effect, but only to thicken up the rim a little, if smoothing the inside has made it too thin. The rim-straps in Mulberry differ from those in other types of this complex in that the bottom of the strap is thick and prominent, not melded into the rest of the vessel to create a bulging rim area. On the no-strap vessels the rim area is the same thickness as the rest of the pot.

The third mode that seems to have been inspired by a constructional peculiarity of Mulberry [Creek Cord-marked] is rim punctation. A fine example of the functional precursor of punctation is provided by the illustrated pot [#64278]. Here a row of what seem to be small punctations surrounds the rim. This phenomenon only occurs on those pots where the slight eversion is sharper than usual. Close inspection reveals that these "punctations" occur at the end of every cord. In fact they are simply the mark left by the bulge in the cord as it rounds the corner of the paddle, which is pressed into the slight concavity under the rim. Whether this effect was considered decorative or not is immaterial. The important fact is that a similar effect was sometimes produced by a row of "burred" finger punctations around the rim.

There are 32 rims with added punctations in the Peabody collection of 205 rims [15.6%]; Peabody evidently selected for this relatively rare mode. There are only seven such rims in Phillips' collection of 362 [1.9%]. Usually the punctations are just below the wet-clay roll-over at the top of the rim. A few are under fold-overs or true straps, five are a full inch below quite unelaborated rims. Two sherds have a double row of punctations. A rare vessel (four specimens) has notch punctations on, not under, large roll-overs.

There are a few other rare modes of decoration. Four sherds in the Peabody collection have Oxbow [Incised] or Salomon [Brushed] treatment on the body over the cord-marking. Five sherds in the combined collections have small notches on the lip, a treatment found on Larto [Red-filmed]. That this treatment was brought over from the Larto part of the complex is indicated by the fact that one of these Mulberry sherds is red-slipped on the interior!

Bottoms exhibit a great variety. Some, as in the illustrated specimen, are round. Others are flat and slightly squared, still others are definitely squared with the corner and edges accentuated. Still others, and this is a purely Mulberry trait, have clay added to the corners and not smoothed out on the upper edges, producing a sort of castellated bottom.

The major shape is, as I have said, a long straight-sided jar with slightly everted rim. There are however a few sherds that must come from shallow bowls, and one that seemingly comes from an "olla-shaped" specimen.

Paste variations and variations in the cord-marking itself were not studied; undoubtedly, however, they exist.

2. Baytown Plain: Only a brief study of this type was made, but it was enough to indicate differences from Mulberry that go far beyond the mere lack of cord-marking. True, there are body sherds of Mulberry on which the cord-marking has been wiped over or obliterated, but rims are always distinguishable.

Perhaps the main difference is that there are no messy ragged edges of clay as found in the Mulberry castellated bottoms and rim roll-overs and fold-overs. Rim straps exist on Baytown [Plain], but they are usually melded into smooth bulges, although sometimes the bottoms of straps are indicated or accentuated by an incised line. Straps are either long or short, often on the interior of bowls. This is a feature never found in Mulberry [Creek Cord-marked]. Lips are smoothly rounded or rarely sharp. There are round and square, but never castellated, bottoms. One whole vessel has a tri-cornered bottom. Shapes are shallow bowls, semi-bowls of about the same proportion as the illustrated Mulberry pot, or tall jars. Rims on many vessels are uncurved, again a non-Mulberry mode. Finger punctates are absent, but one sherd has a row of hole-punctates around the rim. Lugs are present; one variety is a rectangle with rounded corners, the other is triangular and quite large. This type of lug is typical of the Bayland Phase of the southern Delta. Lips are rarely decorated with a single incised or stab and drag line. Some few sherds have a single stab and drag line below the rim; a treatment labeled "Six-Mile" by Williams and Phillips [see Phillips 1970].

Dr. [Stephen] Williams helpfully divided up a batch of Baytown [Plain] into three groups on the basis of paste, groupings which he is using with the Bayland material from the south. The first variety is Sharbrough[6], which has a fine, well compacted, rather thin paste, and smooth, often polished surfaces. A second variety is Reed, characterized by very thick, crude paste and rough surfaces. Baytown U. *[Unspecified]* is the name given to the third variety, which falls in-between. Twelve out of thirteen Sharbrough sherds, however, were rims, whereas Reed had only six rims out of twenty sherds, and six bottoms. Bottoms tend to be thicker in all cases here and it may well be that this classification has little typological meaning at Oliver, reflecting in large part only the part of the vessel from which a particular sherd derives. Yet it is unquestionable that a wide variation in the paste and surface finish of the Baytown here exists. One whole vessel in the collection is definitely fine Sharbrough from top to bottom. I once thought that the fine paste was typical only of Baytown, and that the rough paste sherds were from obliterated Mulberry vessels or Mulberry-type vessels from which the cord-marking had been omitted. This does not, however, seem to be the case. The special Baytown type rims appear throughout the paste range and, moreover, a brief look through the Mulberry sherds suggests that the paste range on them is fully as great as that on Baytown.

Figure 3-14. Vessel Peabody Museum Catalog #64267.

Figure 3-15. Vessel Peabody Museum Catalog #64268.

Figure 3-16. Vessel Peabody Museum Catalog #64269.

Figure 3-17. Vessel Peabody Museum Catalog #64284.

Figure 3-18. Vessel Peabody Museum Catalog #64311.

Figure 3-19. Vessel Peabody Museum Catalog #64379.

Figure 3-20. Vessel Peabody Museum Catalog #64384.

Figure 3-21. Vessel Peabody Museum Catalog #64391.

3. Larto Red-filmed: A quick study was made of 53 Larto [Red-filmed] rims, and it was found that they were typologically similar to those in Baytown *[Plain]*. Five rims were from shallow bowls with a bulging interior strap and a line under it; fifteen others were from straight or incurving rim bowls without straps; five others were from deep bowls with small exterior straps; seven were from vessels with a small exterior strap not melded into the vessel; thirteen shallow bowl rims had interior straps with no lines under them; five more similar sherds had notches on the lip. There were three rather special sherds: one evidently came from a very shallow four-cornered bowl, really a plate, possessing an interior strap with an incised line through the middle. Another sherd had a stab and drag line under the rim in the Six-Mile fashion. The last had two exterior incised lines and is the only sherd in the collections which comes close to the classification of "Hunt Incised," a new type from the south [now Coles Creek Incised var. Hunt].

It will be noted that most of the sherds came from bowls of various descriptions, and that interior and exterior rim straps, usually of the "bulging" Baytown type, are common. The paste tends to the finer end of the scale. Slip color ranges from a fairly dark red to a light red to an almost yellow hue. I have no information on bottom shapes. No lugs were found in the rather small sample.

4. Incised Types: A rather hasty examination of 118 incised sherds indicated that the simple division between Mazique (Alligator variety) [Incised] and Oxbow [Incised; now Alligator Incised var. Oxbow] obscured what seems to be a sort of continuum of incising from fine to sloppy. Four basic divisions were made and 16 sherds, mainly quite small, remained unclassified.

The first division, all the sherds of which would be classified as Alligator [Incised] in Phillips' system, is characterized by broad, somewhat U-shaped lines, running parallel and so close together that the space between the lines is about half the width of the lines. Designs are usually triangles or quadrangles of parallel lines running in a zone around the upper part of the vessel. The lines do not usually run in just two directions, as in the later Barton Incised, but tend to shift back and forth randomly at various angles away from the vertical around the pot. Each set of parallel lines is separated from the next by a zoning line which generally is not parallel to the set of lines on either side. No lines (except zones) are vertical, but some sets of lines are horizontal. A few sherds have a set of horizontal lines going all around the rim with the usual triangles beginning below it. Five sherds had a row of small punctates just below the rim, a general mode popular in many types during this phase.

The one whole vessel [#64286] of this type was in the shape of a long "U." The design went all the way down to where the sides began to curve for the bottom; there was a roundish exterior rim strap. Paste here, as in the other divisions, tended to be fine and thin, but surfaces were often not polished. No general shape analysis was possible, but rims were mostly neither everted nor incurved and the shallow bowl did not seem to be represented. There were fifty sherds assignable to this division.

Sixteen sherds were placed in a second division, characterized by somewhat thinner lines with the space between them much wider than the width of the lines. Designs, as far as could be determined, were the same as those of the first division, except for one large sherd which evidently came from a pot with only a series of diagonal lines around the rim. This division might also be placed within Mazique [Incised].

The next division consists of twenty sherds with lines of varying width, but always widespread. On many sherds a seeming parallel-line design is attempted, but a poor job is made of it; the lines are bowed and often cross each other. Some sherds have a sort of cross-hatch design, others seem to exhibit a quite random pattern. The one pot [#64271] of this division (actually transitional between this and the last) is long and cylindrical with a squared bottom. The design on it consists of rough areas of vaguely parallel lines, very wide-spaced.

The fourth division, consisting of sixteen sherds, is characterized by very thin scratchy lines. Designs were usually undistinguishable; many sherds just had a couple of lines straying across the surface. Two sherds had two close-spaced lines around the rim; one large sherd in the Oliver collection though has a well done triangular cross-hatch design.

Both this division and the last could probably be subsumed under Oxbow, but in the type of line employed they are quite distinct. A glance at Phillips et al. (1951: Figure 82) will provide the reader with good illustrations of three of my divisions: division one, sherd K; division two, sherd H; division four, sherd O; division three is not represented.

If one lumps these divisions together, and there are indeed transitional sherds between all divisions, one arrives at a decorated category almost as large in the sherd counts as Larto [Red-filmed], large enough to be considered definitely native and reasonably popular.

5. Other Types: The other types represented at Oliver are all rare and are either unusual modes or completely alien trade sherds.

There are a few sherds approaching our division three of incising, but which have broad, brushy lines.

If these are indeed produced by brushing, we might call them Salomon [Brushed]. The existence of this type here is, however, very doubtful.

One sherd is from a shallow bowl with a rim interiorly thickened so that the lip is over a half-inch across. There are two lines on the lip [now called Coles Creek Incised var. Keo]. Two other sherds like this come from Dorr, which also has a pot with two lines on a normal thin lip. This rare but distinctive treatment serves to link the Coahoma Phase temporally at least with Coles Creek in the south.

There are a number of variations on the red-painting theme; I have already mentioned the red-slipped-interior Mulberry [Creek Cord-marked] sherd. A similar sherd has extremely fine, close parallel-line incision on the outside. This is by far the most carefully incised sherd in the collections and looks like no other, though some of our division one [incised] sherds approach it. Another sherd, like the last classified as Woodville [Red-filmed; now Woodville Zoned Red], has a strange lobed shape and curvilinear zoned punctation and filming. This is almost certainly alien.

Most of the sherds classified as Woodville are simply variants on more usual Coahoma themes. Seven are simply division one Alligator with red paint over the whole thing; two others are incised on one side, filmed on the other. One sherd has a crude example of division two incising on it, but between two parallel-line zones is a blank space with red in it.

Zoned red painting or red and white painting may or may not be a product of Oliver potters. One rather large sherd has only white on it; others have red and white splashes of paint. One very fine sherd has a red (actually more yellow) rim and a white body with one line of very broad, deep, atypical incision running across. Another sherd has a swipe of red paint across it with the surface of the pot showing at the ends; it is thus classifiable as Landon [Red on Buff]. These variations of painting are so rare anywhere on this time level that I am loathe to discuss them as trade. Most of the "Woodville" sherds are native-looking; the status of the red and white sherds must remain a mystery until considerable comparative study is done.

The few other sherds are of value mainly for dating purposes. In French Fork [Incised], both the punctated ("Larkin") and the incised ("McNutt") variants are represented by a few sherds. One sherd of the incised variety is so crude it might be a native copy, but curvilinear designs and zoned punctation are both so poorly represented in the collections that these techniques cannot be considered a part of the normal Coahoma repertoire.

Two zoned punctate sherds might be either Rhinehardt or crude Churupa; two others with unzoned bands of very fine atypical punctation might be dubbed "Evansville"; most of the Chevalier [Stamped] sherds come from one level and perhaps one pot; in paste, appearance, and techniques they have no recognizable Coahoma characteristics.

6. Comparative Dating of Coahoma Ceramics: The Coahoma Phase may date anywhere from the time that Marksville-type ceramics died out in the Valley (about AD 300) to the time of introduction of Mississippian ceramics, perhaps as early as AD 1000. Maybe Coahoma ceramics were made throughout this period in the Upper Sunflower. We are more concerned, however, with dating the specific component of this phase of Oliver.

In the southern Delta the only phase with considerable amounts of cord-marked pottery is Deasonville, dating about AD 300-500[7] (these dates are from Stephen Williams, personal communication). After that the Coles Creek culture comes in and continues in some form or another until about 1300[8]. This culture certainly had some influence on the northern Delta, but never was present there as an entity. Through most of this period, a Deasonville-derived ceramic tradition held sway[9]. In all probability, the Coahoma[10] component at Oliver is contemporaneous not with Deasonville in the south, but with some part of Coles Creek.

This conclusion is derived from three facts: (1) the Coahoma people at Oliver had a temple-mound of sorts. This type of earthwork did not reach the southern Delta until the Bayland Phase—ca. AD 500-600. If, as seems likely, this idea was filtering up from the south, it would not have reached Oliver until even later. (2) Certain Coles Creek-like modes are present on Oliver Coahoma Phase pottery. One is the double-line on the lip, which appears rarely here; this is characteristic of the Aden Phase, ca. AD 600-800. Another is the large triangular lug characteristic of Bayland Phase. Oliver Baytown is in general quite similar to that found in the Bayland Phase. (3) The third bit of data is the presence of Coles Creek-like trade pottery. The *Larkin* and *McNutt* varieties of French Fork [Incised] represented here are characteristic of the Aden Phase or later. The Chevalier [Stamped] is present as early as the Bayland Phase.

Another factor is the differences between the Coahoma ceramic complex and good Deasonville. The major one is the lack of good [Coles Creek Incised var.] *Hunt* here. The absence of much real Salomon [Brushed] may also be significant. A study of the modes present in true Deasonville Mulberry [Creek Cord-marked], Baytown [Plain], and other types might reveal more differences.

The Coahoma occupation at Oliver was seemingly rather long. There are a pre-mound and two mound stage strata in the Big Mound assignable to this phase. Moreover, the sheer abundance of Coahoma sherds on the site argues for a long occupation. Keeping all this in mind, I would date the Coahoma component at Oliver at AD 600-800.

I have previously pointed out the striking differences between the Mulberry and the rest of the ceramic complex. Much of this may be due simply to the special constitutional problems a paddled pot creates. It is doubtful, since many modes are shared by both groups of pottery (especially paste and some strap types) that this difference is significant chronologically. It may well be that Mulberry originally came from a different pottery tradition than Baytown, Larto, and Alligator-Oxbow. If so, however, the two traditions were already well merged in the south by AD 300.

My conclusion is that the Coahoma component is indeed a single and relatively homogeneous one, however diverse the origins of its material culture may have been.

C. Hushpuckena Phase Pottery

This phase was first separated out from the later Mississippian Phase [meaning Oliver] on the site on the basis of the astounding difference between the burial pottery on the Big Mound and the pottery from Phillips' cuts. Future study showed that a single burial pot and some partial pots from the floor on the east side of the mound, plus a few pots from the smaller "Cemetery Mound" could be placed in this phase. Moreover, a considerable number of sherds in Peabody's "general diggings" category, evidently deriving from the fourth occupation layer, are of Hushpuckena styles.

The shapes of this pottery may be briefly summarized. Perhaps the most common shape is a simple jar with unelaborated rim. It is round bodied with a gently in-sloping shoulder, which just as gently slopes upward again so that the rim is straight up or slightly outflaring. Neck and shoulder areas are ill-defined, and there is no differentiated rim area at all. Lips are rounded or flattened. Handles are present, but not common, there probably rarely if ever being more than two to a pot. They are large, generally more "loop" than "strap" shaped, and extend from the shoulder to the lip. There are a few nodes, but they are rare. Lugs are fairly common. They are invariably quite large, hemispherical when viewed from the top, in the shape of a quarter circle or more rarely a rectangle when viewed from the side. Invariably they may be characterized as "fat" in direct opposition to the thin and flimsy looking lugs of the next phase. Almost always they are attached to the lip, but one example is attached to the neck about an inch below the rim. Griffin (in Phillips et al. 1951:117) says that the lugs on Barton are merely modifications of the lip. This does not seem to be true at Oliver. One lug in the collections is vertically perforated; two others have incisions on them.

There are two types of bowl. One is a simple hemisphere, unfortunately not usually distinguishable from those of the later phase. The other shape is more of a plate, being quite shallow with a distinct strongly everted plate rim usually a little over an inch wide. The curves between the flattish bottom and the side, and the side and rim are very gentle and graceful, being in all respects similar to the curves on the jar. A variant of this shape is a "four-eared" plate, probably formed by cutting four semi-circular slices out of the plate rim, thus resulting in four broad ears in the shape of a cross. A moderately rare mode is broad notches on bowl lips, sometimes closely-spaced and deep enough to give a scalloped appearance to the rim.

Owing to the paucity of whole specimens from this phase, no general comments may be made about special forms; individual pots will be discussed in the type descriptions.

1. Neeley's Ferry Plain [now Mississippi Plain, var. Neeley's Ferry]**:** This is of course the most common type in the collection. The shell tempering ranges from moderately coarse to so fine as to be invisible. In general there is no high polishing and no slip (with one exception). Bowls are almost always better polished with a finer paste, thinner construction and darker color than jars, but there is a wide continuum with no sharp breaks. It would be meaningless to separate out the better bowls and call them "Bell" [Plain] or any other such name. Although in the survey (1951) some sherds from this site were called "Bell," none of them, with the possible exception of two or three sherds, fit into the classic definition of this type.

It is hard to differentiate objectively between the paste of this Neeley's [Ferry Plain] and that of the later phase to be described. The color on this Neeley's is yellowish (especially on jars) or grayish (bowls). Both colors are found in the later phase, but there is also a dirty brown color on the cruder specimens. Moreover, the surface of the later pots often exfoliates off, a feature never found here.

There is one Neeley's bottle [#64262] of this period. It has a subglobular body and a long, wide, slightly outflaring neck. The joint between the neck and body is smooth and unangled, again exhibiting the typical Hushpuckena gentle curvature. In general proportions it is similar to St. Francis bottles, but the construction and general look of the bottle is very different. One interesting feature, also found in a bottle sherd from

Peabody's collection, is a deep indentation in the bottle [base] analogous to the indentation in modern wine bottles. I find no mention of this mode in Griffin's description of more northerly bottles (Phillips et al. 1951:158-159). Perhaps it will someday be found characteristic of the Hushpuckena phase. There is a bottle sherd in the collections bearing this mode.

Near this bottle in the "Cemetery Mound" was a simple rounded-bottom cylindrical cup [#61896] of extremely attractive proportions, about one and one half times as wide as high. This may again be a characteristic shape.

There are two complete Neeley's effigies plus a number of tails and heads. The tails are identical to the lugs on the jars. The heads are in all determinable cases out-facing, and are generally well modeled. Features are incised and punctated or, perhaps more often, consist of appliqué eyes and noses. Appliqué frog's (?) legs and arms are found on one vessel and two sherds. One fine head is very similar to that illustrated in Phillips et al. (1951: Figure 95g). Within the hollow in the head are small holes about the right size, if I may speculate, for the insertion of feathers. The three recognizable creatures depicted are frogs, birds, and humans.

The two complete effigies are worth describing, though both may be atypical. The first [#64309] is the only Hushpuckena pot found in a burial of the Big Mound. The burial was a bundle, like most of the others in the mound, and does not seem to be deep. If it were not for the pot, the burial would certainly be placed with the large group of "Oliver" Phase burials. Conceivably the burial is late and the pot is early. Certainly Hushpuckena burials with pots were not rare on the site and this might have eroded out of a mound or been dug up and prized as a beautiful example of the potter's art, which it is. The animal is perhaps a frog or maybe a mammal with limbs in relief and an absolutely characteristic Hushpuckena lug-tail. The pot is atypical in that it has a definite brownish slip and is very highly polished. It perhaps might be called "Bell." The slip and ware is identical to that of an Old Town Red effigy to be described, except that the slip has no ochre in it. One cannot set up a variety on the basis of one vessel, but this seems a perfectly legitimate combination of Hushpuckena techniques, and when enough of such vessels are found a variety might be set up, preferably not called Bell.

The finding of this particular burial is worth relating to give a picture of Peabody's dig in its final phase. It was the next to last burial found, on the last day of the dig, July 2, 1902. During the previous two weeks Peabody had torn through the western third of the mound in a frenzy to meet his deadline. Unexpectedly this slope teemed with burials. He hurriedly recorded about a hundred of them, dismissed others with such simple notations as "Trench 26, human bones" and undoubtedly ignored others completely. His modest original plan of cataloging his pots by letters of the alphabet had proved hopelessly inadequate. The last pot in his trenches was, suitably, Omega [#64308], the end of the Greek alphabet. In the last days all scientific concern for the humble post hole was abandoned and notes on stratigraphy became distressingly sketchy. No longer does he have time for rough sketches of his partner Farabee (or is it himself?), for the composition of bits of doggerel, for the recording of snatches of melody composed or caught from the lips of his Negro workmen. No longer do his field notes exhibit the engaging variety of a well tutored mind—all is pots and skeletons.

The day before, his last trench was finished, but his thirst for booty was far from quenched. On this last day he yielded to his baser urges, and as he bluntly puts it "began scratching on south slope." He tore up the earth to a depth of three feet, roughly recording the burials found in relation to a stolid chinaberry tree which still stood alone and defiant near one side of the great swath of destruction through the mound. Sadly, only three pots were found, this among them. It was dubbed Aleph [#64309], first letter of the Hebrew alphabet. By the end of the day he was only at Gunel [#64311], third letter, and gave up. There was no back filling to be done as he had thrown the dirt from each trench into the last, so the next day he left. The Oliver site was abandoned to the willing hand of Mrs. Edwards, wife of the owner, who by this time had taken to emulating the Yankees and was engaged in tearing up a small mound in her back yard.

That we have any data on the provenience of this pot at all is due only to Peabody's admirable (for the day) scientific habits and the happy location of the chinaberry tree within easy tape-reach.

The other Neeley's effigy [#64376] is from the Cemetery Mound in an incredible burial to be described later. The bowl is small and oval shaped, short from back to front. The head is column-shaped with gruesome incised features. The tail is a sort of loop hanging down from the rim with the end touching but not attached to the side. The pot has evident similarities to the "serpent-cat" effigy described by Phillips et al. (1951:161) for the Walls area, but is cruder and differs in shape of the bowl and direction of the tail. Both these effigies have resemblances to Walls pots, but there is no reason to call them trade items, or even to postulate any close historic relationship between the Walls and Hushpuckena phases, though such may exist.

2. Barton Incised, *var. Barton*: This is the most common decorated type of the phase. The shape is universally the simple jar previously described. The paste is identical to Neeley's [Ferry Plain]. Overwhelmingly the most common design is, as described in Phillips et al. (1951:115-119), oblique parallel lines forming triangles extending from the rim to the shoulder. There is never a zoning line on the top and only on a minority of specimens one on the shoulder. The lines are wide spaced, "V"-shaped, generally forming little clay ridges by their sides. The depth and width of the lines generally varies with the space in between them; that is, on small vessels the lines are narrow and shallow, and closer together, on large vessels the opposite. Rarely the bottom is zoned by a row of finger punctates. On only one sherd does Barton seem to be combined with punctates all over the body. On two sherds punctates, not lines, make up every other triangle.

A rare design variant is cross-hatched lines. The lines on these sherds (and on one pot [#61836] of unknown provenience, illustrated here as pot number 3, are scratchier and shallower than usual. Barton, *var. Barton*, here differs from the type description (Phillips et al. 1951:114-119) only in that the handles tend to be more round in cross section, the lugs larger, and in that the design goes down further on the shoulder with its lower border ill-confined.

3. Barton Incised, *var. Wallace* [now Wallace Incised, *var. Wallace*]**:** There are twelve provocative sherds in Peabody's general collection which might be called Wallace Incised, and yet do not fit the type description which was set up for the Lower Arkansas [River] area (Phillips et al. 1951:134-136). I should like to present my thoughts on this type. The Oliver sherds are all from jars of the typical shape for the phase. The design is from well down on the body of the vessel up to the neck. These sherds show the rim area; on all it is undecorated, on two of the sherds there is a Barton-style zoning line at the neck, on the others none. The bottoms are unzoned. One sherd has a typical fat lug, though a little smaller than usual. It has Barton incising on the top. The lines are very broad, brushy looking, squarish or slightly shallow U-shaped in cross section; their ends are square and abrupt. The lines are identical to those on Wallace from the Lower Arkansas [River area]. The designs are curvilinear.

A thorough investigation was made of the Wallace Incised from the type sites of Menard and Wallace. It was found that the type of line and the design was identical. As stated in the type description, designs were generally either curvilinear on the body or rectilinear, Barton-like designs on the rim; never were the two combined. Rare modes were brushing between the lines, and various combinations with punctations. A glance at the table (Table 3-4) will show that rectilinear designs on the rim are by far the most common, with 100 sherds in all, and that the curvilinear on the body variant was next in frequency. All these body sherds were presumed to come from everted-rim bowls, but with many it was impossible to tell. Much rarer, but definitely present, are the opposite arrangement. What is significant are the three sherds from simple bowls and the two from jars. There may have been more sherds from these shapes, but these were the only sherds where the shape was absolutely certain. The sample is all too small, but the fact that all these sherds were found in one of the cuts, not on the surface, suggests that these shape variations may be earlier.

Classic Barton, *var. Barton*, on the normal Hushpuckena Mississippian jar shape is present in small numbers at both Menard and Wallace. A restudy of the pottery from the cuts at Menard shows that Barton occurs in small numbers throughout the trenches. The sample again is too small, but it seems probable that Barton is early on the site. James Ford (personal communication) holds this opinion. Certainly in Oliver no true Barton exists during the last occupation. A shape very close to the Wallace everted-rim bowl is found only in the later phase at Oliver.

My conclusion is this: the difference between the Hushpuckena Phase at Oliver and the major manifestation at Menard is mainly a matter of time, not space. There is an earlier phase at Menard, albeit poorly represented, which had classic Barton, *var. Barton*, lacked the late trait of everted bowls, and probably had some sort of Wallace not on everted bowls. If the Oliver Wallace sherds are an example of early "proto-Wallace," the evolutionary development is clear. The differences between this early Wallace and Barton, *var. Barton*, are basically threefold. The first is the movement of the design onto the body. This occurred to the north in Kent Incised [now Barton Incised, *var. Kent*] and to the south in Arcola [Incised; now Barton Incised, *var. Arcola*]. It seems also to have occurred here. The second is the development of the broad line technique which seems to have occurred locally here in the Lower Arkansas and Upper Sunflower [rivers] regions. The last is the development of the curvilinear design, which occurred on Ranch, Wallace, Blanchard, and Oliver [which never became a type or variety] Incised, not to mention Leland to the south. All three developments seem to have occurred late in the life of classic Barton, *var. Barton*. The late position of these various "types" will be discussed further in the section on the Oliver Phase.

The evidence for the contemporaneity of Barton, *var. Barton*, and some sort of proto-Wallace is admit-

tedly slim. It was certainly not a major type anywhere that we know of. But the existence of a Proto-Historic-to-historic phase in the Upper Sunflower would not be known except for Peabody's excavation. Likewise large-scale excavation on the Lower Arkansas might reveal a phase contemporaneous with Hushpuckena, and probably also Nodena and Walls. This putative phase would, if our guesses are correct, have significant amounts of "Wallace" on early type pots, call the type what you will. A reexamination of collections from the northerly area might well also reveal small amounts of this type, if the criterion of the everted-rim bowl shape were dropped.

Suffice it to say then that a sort of formative Wallace is present in the Hushpuckena phase, as witnessed by the presence on the sherds of early lugs and Barton zoning lines, and the early shape.

4. Parkin Punctated: By far the most common punctated variety at Oliver is a type made by making a deep jab with the finger[nail] so that a small ridge of clay forms on one side. These are usually spaced fairly close together over the whole body of the pot. Two variants are: (1) placing the punctates directly together so that there is a corrugated effect, (2) lining the ridges up to produce a ridged pinched effect. In the sample of the cuts at Oliver plus the Peabody surface collections, 40 out of 59 [67.8%] punctated sherds were of these varieties. Out of 38 punctated sherds at Menard, only seven [18.4%] were of these varieties, and four of them came from the tenth level down in Cut A. Moreover, the more common types of punctate at Menard in Oliver are found only in the surface collections and the top two levels of Cut B. Here we seem to have a much clearer case of the temporal distinction hinted at in the incised material. Slash, fingernail, dot, and other types of punctates are characteristic of a later period. In the Hushpuckena Phase, and probably also at a related phase in the Lower Arkansas [River area], the punctation is generally of the classic type with a "burr" or ridge (Phillips et al. 1951:110), usually covering the body. The single row of punctates found sometimes under the Barton, *var. Barton*, are, in all the examples I have seen, also of this type.

5. Red Painted Types: Most of the painted ware is plain red of a dark, almost crimson color, usually on bowls. Paste is good, temper generally fine, as on Neeley's [Ferry Plain] bowls of the phase. We have two partial vessels, a simple bowl [#64385] and the back part of an effigy [#64270] with a lug-tail identical to that on the Neeley's effigy previously described. There is also a stratigraphically unplaced tripart vessel [#64386], which is perhaps the most beautiful pot at Oliver and is illustrated in Peabody (1904: Plate 15). Its deep red color places it probably in the Hushpuckena Phase.

Painted designs are generally in bands, though no sherds are large enough to tell whether the designs are curvilinear. The commonest treatment is red bands on a buff background (Carson Red-on Buff), usually on bowl bodies. There are no rim sherds with a band of red around them in the Menard manner. Other sherds have contiguous bands of red and white paint, a few have red and white with a strip of the buff pot surface separating them. One sherd is red, black and buff. Though there are a few plain white sherds, they are all tiny. It is unlikely that any vessels were pure white. All in all the painted pottery here shows considerable variety.

6. Trade Type—Leland [Incised]. A few sherds bearing designs which could be called "Leland" may be assigned to this phase. I am certainly in no position to separate out varieties of this poorly known type. A few pots, entirely alien in shape, and a few sherds, all on fine paste with "dry" incision and curvilinear designs come from the late phase. There are a few sherds that are entirely different, but also may come under the broad definition of Leland. There are two sherds especially from Peabody's collection with a very fine brown paste, highly polished, which have a deep bowl shape and a large rim strap in the shape of a quarter circle. The design is the Leland Guilloche executed in very dry scratchy lines of variant widths. These are entirely unrelated to the late burial Leland to be described and possibly are on a Hushpuckena time level.

7. Other Pottery Objects: ***Pipe:*** There is a pipe [#81823], which by temper may be tentatively assigned to this phase. It is simply a tube of clay with a small hole and larger hollows for bowl and stem-fitting at each end, bent into an elbow. The center section is flattened and compressed as a result of this bending. May it be noted that this specimen bears not the faintest resemblance to the Siouan disc pipe, being rather an "Algonkian" elbow pipe. The Hushpuckena Phase has few elements which can be called Quapaw by the farthest stretch of the imagination.

Sherd Discs: There are 44 specimens in the Peabody collections catalogued as sherd discs. [e.g., #61819, 61820, 61889, 61890, 64387, 64392, 64395]. Four of them are the bottom coils of vessels (three Baytown, one Neeley's). Thirty-nine are pure sherd discs, two only (of Neeley's) having holes [#61820, 61890] and thus being classifiable as spinning weights, for lack of a better name. No guess is possible as to the function of the others[11], all about two or three inches across, and cut out of pots: 26 Neeley's, three Barton U. [Unspecified], two Old Town, two Mulberry, and two Baytown. The last four need not worry us, as the plethora of early sherds on the site must have provided an obvious raw material for this enigmatic, but

thriving industry. There is no need to postulate sherd discs for the Coahoma Phase.

One of the Neeley's discs comes from the rim section of a late (Oliver) everted-rim bowl. This indicates that some at least of the discs were being manufactured in Proto-Historic times. The fact that both of the Barton discs are not of the classic variety supports this; but to say that all the discs were made in late times is unwarranted.

One of the remaining three objects is a miniature (1 inch across) chunkey stone [#64395] done in pottery without visible tempering material. The other two are button-shaped objects of the same size and paste, with nice rounded edges. There is also a small stone (natural?) of identical shape and size. There are in the Peabody Museum bone discs from a northern Algonquian tribe also identical in appearance. The sign says they are dice. I suggest that these objects were gaming pieces of a sort. The chunkey was perhaps a child's plaything.

Miniature Vessels: There are two miniature vessels, each less than 2 inches in any direction. The first is a tiny pot [#61797] of more or less the classic Hushpuckena shape with two little handles. It was found on or near the burnt floor east of the mound on the same level and 12 feet away from a broken Barton, *var. Barton* pot. The other vessel is a tiny shallow bowl [#61809] with the broken-off stubs of absurdly miniscule effigy head and tail. The paste is incongruously coarse for so tiny (1½ inches) a bowl. It is difficult to discover the provenience of this vessel. The catalogue says Trench 12, and on June 21, 1901, in the field notes there is the notation "found little pot." At this point Peabody was digging the top section of Trench 12, above the "critical level," which means it came from either of the top two, or Mississippian, occupation layers. This is obvious from the temper; the question is, which occupation, Hushpuckena or Oliver, does it date from? Peabody at this time was being very careful about burials, as he was finding so few of them. He mentions no bones near this pot, so it probably did not come from a burial. This far east on the mound it could only have come from the tailings of the Oliver level, whereas the eastern edge of the Hushpuckena floor reaches into Trench 12. I shall guess it came from the latter.

There are no pots of this size from Oliver burials. The children's pots in that phase are small, true, but they are at minimum four to six inches across. We have no certain Hushpuckena child burials, and only these pots suggest what was being made then for youthful employ. Perhaps future research will prove miniature pots such as these to be characteristic for the Hushpuckena phase.

Table 3-4. Wallace Incised at Menard and Wallace.

			Menard Cut A			Menard Cut B				Menard Cut C	Total
Mode	**Wallace Surface**	**Menard Surface**	**Level 1**	**Level 2**	**Level 6**	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 1**	
1. On everted rims											
(A) rectilinear on rims	31	43	2			5	4	3	3		91
(1) with notched rims		2									2
(2) horizontal-vertical design		1						1			2
(3) with punctates		1	1			1		1		1	5
(B) curvilinear on body	10	15	1	2			1	4	3	1	37
(1) with brushing		2			1						3
(2) with punctates								1			1
(C) curvilinear on rims		4				1					5
(D) rectilinear on body	3	2					1		1		7
2. On simple bowls; rims, rectilinear, curvilinear								3			3
3. On jars											
(A) rectilinear on body							1				1
(B) rectilinear on rim						1					1
4. Questionable	7	27	2	2		4	1	1	7	3	54
TOTAL	**51**	**97**	**6**	**2**	**1**	**12**	**7**	**14**	**14**	**5**	**212**

D. Mississippian Incised Types

Before we go on to a consideration of Oliver ceramics, a résumé of my conclusions on the incised pottery of both Mississippian phases, for which the existing typology is sadly inadequate, is in order. Two types have already been described: Barton, *var. Barton* and "proto-Wallace." Let us call this latter Barton, *var. unspecified A*. [Varieties] *B, C, D* and *E* remain to be discussed.

These four varieties have been separated out, after considerable classification and reclassification of sherds, on the basis of line. *Variety B* has lines of about the same width as Barton, var. Barton, but much deeper, with a deep U-shape, not a V-shape. They are in general much closer together than Barton lines; most seem to be parts of curvilinear designs. Many of the examples of this variety are distinctly sloppy.

Variety C has neater looking wide lines of a deep U-shape. They are about half the width of Wallace lines, farther apart than *Variety B* lines, but having about the same proportion of line width to space between the lines. Line ends are not square, as in Wallace, but universally round or pointed. Designs are identical to Wallace—short parallel line triangles on the rim and long, free curvilinear designs on the body. My notes are not clear on this point, but I do not believe the two designs occur together.

Variety D is rare, and segregated late in my studies. The lines are very broad, as broad as on Wallace, but do not have the brushy look of Wallace lines. Moreover, they are usually not U-shaped, but rectangular in cross section. Often they are slanted with a long side and short only, as if the rectangular instrument were tipped so only one corner dug into the pot. The few examples from Oliver are on extremely fine paste bowl rims. Two designs are represented: concentric semicircles and a design that looks like the number 3. These sherds could probably be classified as Blanchard Incised [now Leland Incised, *var. Blanchard*] and may well be not native to the site.

Variety E is represented by three sherds and a single vessel at Oliver. The lines have the brushy look of Wallace lines, but average a little thinner, and as often as not, have the profile of type *C* or *D* lines, although some approach Wallace.

The pot with this type of line comes from a very late burial—one of a group on the east side of the mound, many of which, though not this particular one, had historic goods. The shape of the pot conforms exactly to what will be described as the typical Late Oliver Phase norm. This vessel differs from the sherds in that the paste is very thin and the lines show on the inside. Dr. [Philip] Phillips tells me this is characteristic of the tentative new *Stokes Bayou* variety[12], which was first conceived of in the survey (Phillips et al. 1951:149). Most of the sherds of *Variety E* do not have this thinness.

Investigation of surrounding site collections provided enough sherds to stabilize these varieties and gave some hints as to their temporal distribution. *Variety D* may be disposed of by saying it was very rare or absent in the collections from around Oliver and on the Lower Arkansas. Since this was one of those varieties of Barton not represented in the Oliver Phase burials, I suggest this is a southern variant (from around Greenville?) of a fairly early date.

Variety B, so well represented at Oliver, is surprisingly rare on other sites around, which may indicate that the late occupation was weak in the area. On the other hand, it is the most important incised variety at Menard and Wallace, aside from Wallace Incised itself, far outstripping classic Barton. It makes up as much as half of the large "Unclassified Shell-tempered Incised" category.

There is a small sample of good *Variety B* on the Stokes Bayou site near Oliver, but there is a far greater number of extremely interesting sherds which seem intermediate between Barton, *var. Barton* and *var. B.* No longer on this site does the classic Barton design hold full sway. There are line-filled pendant triangles, simple vertical parallel lines, squares of horizontal and vertical lines, and some pendant semicircles. No intense analysis was made of the sherds, but they seem to be reasonably close to the old style. The two lugs in the collection are definitely smaller and skinnier than classic lugs. Designs still in general go up to the rim, but on some sherds there is a line slightly below the rim separating it off, a shocking development unheard of in old Hushpuckena times.

There is, as we shall see, a definite break in culture and probably also in time between the Hushpuckena and Oliver Phases, and it seems reasonable to suppose that some part of the Stokes Bayou occupation fills this gap. An examination of the representatives of the other varieties might throw light on their temporal positions.

The designs on the *Stokes Bayou Varieties C* and *E* are mainly similar to those on *B*, except there are more curvilinear ones. Shapes again seem to be a modified form of the Barton jar, somewhat squatter, with a sharper break between neck and body. Neck and body are differentiated in the design as in our old proto-Wallace (*Variety A*), and in contrast to the *Variety B* on the site.

The *Variety C* on Oliver also has a comparatively early look. One sherd has the bottom of a good effigy

head on it; there are two lugs of a medium size, designs are of the Wallace type: i.e., foreshortened little parallel-line triangles confined to a small rim area. We only have five sherds, and none of them has the curvilinear on body design, but that may well be due to the tiny sample. There are, fortunately, two lugs. They are of a medium style, thinner than Oliver lugs but not as well developed as the Hushpuckena type. The shape is the shortened, definite-necked jar found at Stokes Bayou.

The designs on the three sherds of *Variety E* at Oliver are curvilinear on the body. The one sherd that shows any shape is from a jar reasonably close to the Stokes Bayou style we have postulated. Although from my descriptions there may seem little difference between this and the old *Variety A*, let me assure you that the sharp corners on the lines and the relative thinness plus other indescribable qualities of the paste make the *Variety A* sherds absolutely unconfusable with *Variety E*. The latter however may quite conceivably be a development out of the former.

Variety E comprises 11 sherds at Stokes Bayou (vs. over 100 of Barton, *var. Barton*, and *var. B*). The three sherds in Peabody's collection comprise the only sample of *Variety E* at Oliver, as opposed to nearly 200 sherds of classic Barton and *Variety B*. Even at Stokes it is not common, perhaps in about the same proportion as *Variety A* in the earlier phase.

What we seem to have then is a series of Wallace affine types throughout the Mississippian occupation in the Upper Sunflower, always existing as minority types, paralleling a putative major development over on the Lower Arkansas, of which we really know only the end product. In the Hushpuckena period *Variety A* existed on the Sunflower and there was presumably a very similar type on the Arkansas. In the Stokes Bayou period[13] the Upper Sunflower potters began to ignore the venerable parallel-line triangle design and to use sharper-cornered instruments in their incising. At the end the Sunflower potters had developed as very much a minority type the Classic "Stokes Bayou" (late *Variety E*) thin-paste variant. In paste and shape the late *E* pot is in a native style, so we are not dealing with trade ceramics, but merely a type of lukewarm popularity in a very restricted phase.

While this general style was struggling through the final stages of its feeble life on the Upper Sunflower, the suddenly burgeoning population on the Lower Arkansas endorsed the local version with wholehearted and frank abandon. They grafted an ancient design style with its roots going as far back as Coles Creek (Mazique), and a middle-aged incising technique onto a radically new vessel shape.

This disposes of *Variety E*. We are left with *Variety C*. The rim sherds of this type with their attractive miniature versions of Wallace designs and their parabolic line ends are distinctive enough. But the curvilinear body sherds are not. For instance I found to my great joy a sherd with a curvilinear design in *Variety C* lines with one of Peabody's burial numbers on it. I had short-lived hopes of stratigraphic placement for this type. But upon investigation I found to my chagrin that it came from a peculiarly large *Variety B* pot which had correspondingly wide lines.

Nevertheless a large number of sherds may be assigned to this variety definitely. There are 18 sherds from Oliver, five in Peabody's collection, five in Phillips' surface collection, and eight in the top level of his Cut B. This would argue for a late (Oliver) placement of the variety. Moreover, there are 26 sherds of a comparable but not exactly similar type at the Wallace site, as opposed to 51 true Wallace sherds. This is a considerable proportion. On the other hand, there are 10 or more at Stokes Bayou, which does not seem to have a distinguishable Oliver component. Moreover, there are no good examples in the Oliver burial pottery, but as shall be seen, there are few incised pots of any sort here. I can only suggest that *Variety C* started in late Hushpuckena times and continued with relatively little change into the beginning of the late occupations at Oliver and Wallace and Menard.

Before dropping this topic, a word must be added concerning the Hushpuckena Phase in general. Studies by Dr. [Philip] Phillips have indicated that it extends over a considerable territory in the Upper Sunflower area, components being present on a large number of sites. I looked through surface collections of some ten sites and they all had the Barton, *var. Barton*, and other types of the phase. The population was certainly a lot denser than in the Oliver Phase.

I think we may call the occupation at Stokes Bayou late Hushpuckena rather than early Oliver. There is a reasonably sharp break between Hushpuckena and Oliver which is somewhat blurred by the Stokes Bayou material, but only in the matter of design. Stokes Bayou materials are far closer to Hushpuckena than Oliver.

E. Oliver Phase Pottery

1. Shapes: The shapes of Oliver pottery are a new departure. On the jars, rim and neck areas are sharply distinguished. The neck rises up like a column from an incurved shoulder on a squat body. The rim, an inch or more wide on the larger specimens, flares out at about a 60° angle from the neck. On the decorated types decoration is applied separately to the shoulder,

neck, and rim as zones. Bowls are shallow but not flat bottomed, with a large everted rim taking off sharply from the body, leaving a very definite corner on the inside. The bowl and jar rims are exactly analogous. Some bowls have an even wider rim than usual and have an incised design on the upper side of it. There are also shallow simple bowls, some with effigies a good deal smaller and conventionalized than before. Tails and lugs are much smaller than before, shaped like half wafers. Handles are virtually absent, the one or two examples present being vestigial.

Six bottles are known from the component, all probably from late within it. Two are Nodena Red and-White bottles, one [#57313] from a burial with historic goods, the other [#64293] from a burial without historic goods, but in a historic group (NW side). The shape is similar to the bottles from Menard, etc., illustrated in Moore (1908: Plate 14, Figure 20) except that the body is squatter with a discernible shoulder. They are illustrated in Peabody (1904: Plate 15). The neck has the same outflared rim present in the bowls and jars. The design, it may be seen, is not similar to Moore's Plate 14 (p. 497), which he and *[James]* Ford (personal communication) declare to be most common on the Lower Arkansas. Our bottles, like Moore's from Old River Landing (Fig. 29) have thin white parts of the design and little or none of the buff surface of the vessel showing. The design is thus bichromic, not three-colored, and the difference may be significant temporally. It certainly can't be significant spatially, as Old River Landing and Oliver are the furthest-apart sites possessing such flare-necked bottles. [James] Ford (personal communication) says the Old River Landing example of true bichrome design is the only one known from all Moore's Lower Arkansas collections.

Two other extremely interesting bottles come from the first burial Peabody dug up in his second season. The burial is of an adult (woman?) and child, both bundles, and one of the Late Oliver group on the southeast section of the mound. The two bottles, both of admirable quality, accompany an effigy bowl *[#64261]* which is an abysmal example of the shocking degeneration of the potters art in the last stages of the Oliver occupation. One bottle [#64262] is on Neeley's paste. It has a body much like the others just described, but only a short, wide-mouthed, slightly outflaring neck and no rim section. The other bottle [#64260] is the superb fish effigy illustrated in the bottom right hand corner of Peabody's (1904: Plate 14). The illustration shows that it is a specimen equal to anything Menard potters were producing at the time. One cannot tell from the illustration whether the vessel is plain or red[14], and as this is one of at least five vessels in the collections that cannot be found I can add no more information than the picture provides. I can identify the burial [Skeletons 17/18] it came from only through the fortunate circumstance that it was one of the first two Peabody found in his second season. He seems to have had the grandiose plan of drawing each burial, but tired of it after the second. Be that as it may ,the last pot from this burial is crudely drawn in the field notes and is definitely the one illustrated.

The other two Oliver bottles have no stratigraphic information. One, a small well made oval-bodied vessel with a neck just like that on the Neeley's bottle just discussed, is catalogued under general diggings. The other is another of the lost pots [#64311 is now found; see Figure 3-18] and is known only from the figure found opposite the fish effigy in Peabody (1904: Plate 14). The body is identical to those on the Nodena bottles. The neck is somewhat different, but evidently the same general idea.

Another special form is the teapot. There are three examples, two of which are illustrated in Peabody (1904: Plate 14). The right-hand teapot [#64284] is one of the lost vessels [now found]. The other [#64268; Figure 3-15] is also from the late southeastern group of burials. It is very small and without a red slip. The last [#64391; Figure 3-21] [left-hand one in Peabody 1904: Plate 14] has a red slip and was found eroding out of one of the smaller mounds on the site. The neck is of a peculiar shape found in Phillips' [n.d.] collection of pictures of pots from Menard, but not illustrated in Moore [1908]. The neck goes up, then curves in at 45°, then outflares again. The shape may be visualized by adding the rim section of Moore's (1908: Figure 4) teapot to the top of his Figure 6 teapot on the same page. A reasonable approximation is also offered by his Plate 16.[15]

A word more may be added about effigy bowls, the other major special form. A good example [#64376] is illustrated in Peabody's (1904: Plate 13), upper right-hand corner. This came from one of the earlier Oliver burials. Close inspection reveals that it is a crude version of the very common Lower Arkansas type of effigy, of which a good illustration is Moore (1908: Figure 22).

Perhaps the best Oliver effigy bowl [#64283] is badly illustrated in Peabody's book just below the last pot mentioned. It is an exact twin, except for the fact that on this example suspension holes are fore and aft, of the vessel from Old River Landing figured in Moore (1908: Figure 35). Conceivably the effigy vessel discussed previously at great length (vase "Aleph") [#64309], and illustrated in that same plate of Peabody's, is also of Oliver date. But even if not, it is evident that the special mortuary ceramics at Oliver were almost as fully developed as those at Menard, and also

strikingly similar. Certain forms, perhaps through inadequacy of sample, are lacking, especially the "head vase," and the red and white painted bowls. Indeed painted bowls of any sort seem absent in the Oliver Phase, including the very common Menard type with the strip of red paint around the outer rim. Absent also are effigy heads flat in the lateral dimension and often perforated, as in Moore (1908: Figure 27).

There are, however, a class of excessively crude mortuary vessels at Oliver unrepresented at Menard, or at least in the illustrations of Menard pottery. Indeed Moore would never have even remotely entertained the possibility of illustrating such vessels. I have three in mind, all from late Oliver burials without historic goods. They have features characteristic of late Oliver pottery in general, and these must be summarized.

In late Oliver, probably historic, times, a significant change occurs in vessel shapes. The neck sections on jars become shorter; the rim sections protrude hardly at all from the vessel. On the outside they seem no more than a rolled lip, but on the inside profile a flat outflaring expanse of about a half-inch is still visible. This difficult to describe lack of relation between inner and outer profiles is characteristic of late Oliver pottery, of which a good example is figured in Illustration Number 7. It is especially evident on bowls where the corner between rim and body sections is still present though weaker than before on the insides, but the outside profile presents often a smooth curve with no break at all. Where there is a break on the outside, it is not opposite the corner on the inside. Rim sections become often either disproportionately large and curved up instead of out, or small and vestigial. Lugs and effigy tails are barely distinguishable protuberances on the rims. Two of the effigy heads are mere tiny blobs of clay. The other [#64261], the one from the burial with the fish effigy [#64260], is a featureless column of clay, evidently the degenerate descendant of the "serpent-cat" effigy mentioned previously. This deep bowl has a large upcurving rim section on one side of the vessel (the head side), but the other side has no break at all. The effect is an asymmetrical bulge, as may be seen in the illustration (pot number 4) [#64261] at the end of this paper. Rims are pointed, crudely squared off, or grossly round and thick. Two late vessels have indentations on the outside, possibly produced by slapping the fabric with a corncob. The paste on some has a wholly new dark brown color. It is very coarse with a rough and exfoliated surface.

Such miserable parodies of Mississippian pottery are found in association with some of the fine bottles described. Many of the more utilitarian vessels have still an excellent paste and are typologically late looking only in their tiny lugs and in the shape of their everted rims. The miniature children's vessels continue to be, on the whole, well made.

The total complex of late Oliver pottery may indeed be distinguished in shapes from early Oliver pottery, but it may not be characterized as degenerate. Some of the worst pots are found in or near to burials with the best. My interpretation of the late history of Oliver pottery, based on long study of burial distributions is this. The fine bottles and others were made within a generation or two of the end of the occupation. Probably nothing of the best quality was produced in the last few desperate years before abandonment and the best pots in the latest burials may have been a generation or two old when they were at last consigned to the world of the dead. Almost certainty only the most vestigial effigies were being made at the last, but some fairly good pottery was probably being turned out yet. Separating out the less than ten really awful pots on the basis of burial distribution and depth proved impossible. Degeneration was very swift and some of the perhaps older potters were still turning out decent stuff while their compatriots had abandoned or grossly distorted all the old canons of shape, paste, and decoration.

There is then no degenerate period, per se. Certainly the phenomenon of total cultural collapse in the face of modern European contact is not unknown in the annals of ethnography, but the meager archaeological and historic evidence suggests that Oliver was abandoned before any such wholesale collapse might have come about.

The degeneration of pottery at Oliver seems to be a feature of certain potters, not of all the potters in the village. This abandonment of the old norms by individuals is quite easily and logically explained by two factors historically known to be operant in the region. The first is disease. Epidemics devastating whole villages, reducing whole tribes to mere remnants, are historically documented for all the Lower Valley peoples, especially the Quapaw. That there was disease at Oliver is indirectly substantiated by the archaeological record. There are 140 or more Oliver burials in the big mound alone. Over half of these may be assigned with certainty to Late Oliver. The teapot [#64391; see Figure 3-21] eroding out of a small mound and the five or six recorded (and how many unrecorded) late Oliver burials from the Cemetery Mound attest to the fact that there was no lack of other burials elsewhere on the site. One hundred is a truly conservative number for late Oliver burials on the site.

On the other side of the coin, 50 to 20 or even less warriors are mentioned as being the complement of many villages in the Delta at contact. That Oliver was a small and unimportant village in contact times is

evidenced indirectly by its lack of mention in the historical records. Phillips' cuts indicate with their overwhelming percentages of Hushpuckena sherds that the Oliver occupation was very thin. Oliver, and especially late Oliver, sherds are very rare in the collection and are far outnumbered by mortuary vessels.

Historic goods representing, it seems, a very short period of contact are scattered through the areas of the mound reserved for Late Oliver burials—most or all burials of this subphase, whether they had any of the very rare trade goods or not, were probably made in the Historic Period. In the historical section of this paper I give my reasons for believing occupation at Oliver ended not much after 1700; historic contact started not before 1586 [sic]. A time span of fifty years for the Late Oliver subphase is a liberal estimate indeed.

Over 100 burials representing a complete cross section in age of the population [counts] for not much over a generation in a small village! Smallpox does not to my knowledge leave marks on the bones. However, indirect evidence for epidemic at Oliver seems incontrovertible. One thing, to get back to the pottery, that an epidemic will do is destroy family structure and make orphans of many. Many little Oliver girls could have grown up poorly tutored at best in the arts of their ancestors. The degenerate pots we are concerned with are the product of ignorance and lack of skill.

The other factor that might have contributed to the ceramic degeneration is the known breaking up of tribes and the constant flow of refugees into the surviving villages of their alien neighbors. Many of the pots being considered may have been the product of refugee women poorly conversant with the ceramic peculiarities of their hosts. The presence of not a few Leland and Natchez-like pots, and of unidentified but southern—looking arrow points, at Oliver attests to contact of various sorts with a region which was largely abandoned by 1700. It is interesting that the art of effigy making, of which the southern tribes were totally ignorant, shows the most spectacular degeneration.

There is, with the possible exception of the teapot shape, no evidence of a possible other factor, European ceramic influence. Now let us move on to the pottery types.

2. Neeley's Ferry Plain [now Mississippi Plain, *var. Neeley's Ferry*]**:** There is little to add about this type. Paste on bowls is if anything thicker than before; on jars thinner. On many vessels a sort of slip which tends to flake off is present. Tempering is in general coarser than before. There is a class of vessels, mainly miniature children's bowls and teapots, with a very fine and thin paste, often a thin slip, and a mouse-grey color. Some sherds of the collection, often from little bottles, bowls, or teapots, never jars, are easily separable from the others, in contrast to the situation in Hushpuckena times. This variant, which in my notes I dub "Teapot Bell," may someday warrant distinction on the variety level.

Notches are no longer applied to the rim, but are replaced by slash punctates made with a sharp instrument. Nodes on the necks or shoulders of jars are common—there is even one sherd of all-over "Fortune Noded." Two bowls [#64266, 64276] have the rim pushed down, as if with the thumb, once on each side.

3. Barton Incised: Barton is mainly of the type *B Variety* already described. Designs are of several sorts: parallel-line arcades, "negative arcades"—empty semi-circles with diagonal hatching above and around them—pendant parallel line festoons or semi-circles, pendant triangles with the filling lines vertical, not following the framing lines (as in the Stokes Bayou specimens) and, perhaps most commonly, the guilloche, or Oliver Incised design. In Early Oliver a row of "burred" punctates is often added underneath the outflaring rim. In Late Oliver of course the rims are too small for this. One or two rows of punctates are often added on the shoulder, if the design is on the neck. In Early Oliver the arcade, the pendant triangle, and in one example [#64384] a concentric squares design, are placed on jar necks. The pendant triangle, the Oliver design, and concentric semi-circles are placed on jar shoulders.

The two designs of Old Blanchard, concentric semi-circles and a degenerate version of the aforementioned "3" design (known from two historic bowls, see Peabody 1904: Plate 12) [#64264 left; #64263 right] are placed on large everted bowl rims. The shape, paste, and type of line however are not Blanchard.

In late Oliver certain changes take place. Jar necks and rims have grown too small to hold any designs. Two examples have all-over body designs. One is the Stokes Bayou pot already discussed, and the other is a Rhodes-like pot [#64296] with an expanded version of the Oliver design which covers the whole vessel. This vessel also has vestigial handles; it may be native. No certain examples of normal Oliver design are known for late Oliver, but they might exist.

Late bowl designs are excessively crude. On one [#64303?] the semi-circle design is applied to a simple bowl with no everted rim. On another example [#57310] the pendant triangle design is applied to the outside of a crude everted rim. This bowl is in a burial with historic goods. No new invention is apparent in Oliver designs or shapes. The major development is the relaxation of the old norms of design, design placement, and shape.

4. Parkin Punctated: Heretofore I have mentioned that new types of punctation were introduced both here and at Menard on the Oliver time level. These are crescentic punctates, hemi-conical punctates, slash line punctates, and dot punctates. At Menard is a special type made of ultra-short Wallace lines. All these types may have existed earlier, but they became vastly more popular now. The old burr type still continues to be widely used, however. Another development is the construction of designs from horizontal or vertical bands of four or more rows of punctates. What the designs are I cannot say as they are known only from sherds. Vessels are found with two rows of punctates on the shoulder, perhaps another on the rim, and nothing else [#64295]. This is unheard of in the Hushpuckena phase.

A late Oliver pot [#64297] exists with all-over "burr" punctates, but they are much further apart than on early examples. There seem to be no combinations of punctates to form ridging or corrugation in the Oliver phase.

5. Red Painted Types: The red paint on Oliver vessels is a light reddish-orange color usually quite distinguishable from the Hushpuckena crimson. It occurs on teapots, bottles, and probably bowls of a paste very similar to my "Teapot Bell" variant of Neeley's. In the small collection of red painted sherds from this phase there was no Carson Red-on-Buff, no red, white, and black polychrome. Plain red was of course the most common, with red and white, and red and white and buff also present. When it could be distinguished, the bands of paint on Hushpuckena vessels all seem to parallel the rim. On two Oliver sherds the bands are diagonal, and on the bottles [#57313, 64293] mentioned previously the designs are curvilinear; no conclusions on continuity between Hushpuckena and Oliver painted pottery are possible with the small sample at hand, but some shapes, designs, and the pigment seem to be different.

6. Trade Pottery: There are four certain trade vessels from Late Oliver burials, plus a bowl with a rim strap which may come from the south in an earlier burial. One of the certain trade vessels is a small globular bodied vase [#64291] with a broad plate-like rim at the top. The paste is very fine, and on the rim is a classic Blanchard Incised design in a nice broad dry line, which types the vessel nicely.

Two other vessels may be called Leland U. [Incised, *var. unspecified*]; one [#64379; Figure 3-19] a guilloche design, the other [#64269] has a running looping design something like that made by the seams of a baseball. The pot with the guilloche (Illustration Number 6) has another zone of L-shaped areas filled with "Silver City" hatching. This vessel is quite similar to a vessel in Dr. Phillips' collection from the Glass site (Illustration Number 7). The last vessel [#64267; Figure 3-14], illustrated in Peabody (1904: Plate 14), is a miniature with "Natchez" shape. The major design is a crude form of the "baseball" design of the other vessels; on the stem, invisible in the illustration, is the aforementioned "L" design, this time filled with punctations, not hatching. Despite the Natchez shape, the design similarities indicate that this vessel came from the same general area as the others—the southern Delta, not all the way from Natchez itself. Similar vessels come from as nearby as Neblett Landing (Moore 1911: Figure 19). The same area may have produced the arrowheads found in two Oliver corpses. The southern Delta was being abandoned during the late Oliver Period and refugee groups, hostile or friendly, were evidently descending on Oliver, some perhaps coming with a few pots to stay.

F. Oliver Pottery, Continuity, and the Quapaw Question

A comparison of Oliver and Hushpuckena pottery shows considerable continuity, but also a great deal of change. The old effigy and painted variants continue; paste, general classification of pottery, the roster of old survey types, shows no radical shifts. The old shape categories of bottles, jars, bowls, etc., are still used. But within the broad Mississippian framework there is considerable change. Shapes are no longer smooth and graceful, but sharp and angled. Comparison of Illustrations 2 and 3 shows the radical difference in pot form. The Barton Incised, *var. Barton* design creates the simple effect of a textured area on the upper portion of the pot [#61836]. In the Oliver phase, the pot [#64298] has been divided into design zones and these zones contain definite bands of repeating elements with rows of punctates acting not as mere borders, but texturally contrasting elements. Nodes, lugs, and the few handles are not functional in Oliver; they also serve as repeated decorative elements. Curvilinear designs, like the new noding and types of punctations, have considerably broadened the decorative repertoire. The popular "Oliver" guilloche is long, gently curving, creating the effect of a moving band around the shoulder. The old Barton design is defunct here. Over at Menard it has been severely adapted to new purposes.

But the old Parkin of the Hushpuckena people has a place in this phase as, seemingly, does their painting tradition. Red slipping seems to exist in this area from Marksville times on, red and white painting from Deasonville (pre-Coahoma?). Through many changes of population these attractive forms of decoration persist. The line-filled triangle idea is certainly Hush-

puckena. The Blanchard designs so popular with native Oliver potters were undoubtedly picked up from the Leland people close to the south. All the effigy forms are native, and Hushpuckena motifs are quite recognizable though executed in the, at best, moderately competent style of Oliver.

James Ford [1961], in his forthcoming paper on the Menard site, comes out for continuity on the Lower Arkansas from early Mississippian times to the historic, mainly on the basis of pottery, despite a radical change in the stoneworking tradition.

I am not competent to judge on Menard, but the sequences there and at Oliver are so similar that his conclusion must be dealt with here. Frankly I cannot agree with it! Pottery is a poor indicator of population shifts. Let us look at the situation here. In early Mississippian a widespread, fairly homogeneous culture with Barton Incised, *var. Barton* as a constant feature of its ceramic repertoire spread over the whole northern Lower Valley. By Proto-Historic times it was gone, replaced at Oliver and Menard by a culture with a somewhat related pottery, an unrelated stone working tradition, and at Oliver at least new burial practices and, perhaps, different ideas on mound construction. One would be hard pressed to explain this by some sort of frenzied outbreak of invention after many years of a relatively constant culture.

Let us imagine what would have happened if a new group of people came in. First we must remember that wars between Indians ethnographically are not characterized by the wholesale annihilation of populations. True, villages are destroyed and most of the warriors killed off or dispersed, but women and children were often incorporated into the tribe, if only as slaves. And it is the women often who carry on the pottery tradition. In the male spheres—religious practices, weapon-making, and stone-working, there is a break in continuity. Even in pottery there is a new art style—the shapes and design arrangements have a very different look about them. The continuity is in isolated modes of design and form.

No invasion or migration can be proved unless a homeland with an old culture possessing many or all of the intrusive traits can be found. Whether such a place exists for the Oliver Phase is unknown to me. My only feeling is that the direct and major antecedents of the Oliver people are not to be found in the Upper Sunflower, and probably not in the Lower Valley.

PART V: Phases at Oliver–Non-Ceramic Aspects

A. Coahoma Phase

1. Burials: There were traces of 23 Coahoma [Phase] burials comprising 29 individuals, four of which are recorded as being children. Two of the burials were evidently disturbed and out of place; seven burials (11 individuals) were from the first stage of the burial mound (Stratum A), and 14 burials, including 16 individuals, were from the second stage (Stratum B).

There are two slight differences between burials of the lower and upper groups: (1) the lower group had two double burials and a triple burial out of a total of only seven burials, as against two possible double burials out of 14 in the upper group. (2) There seemed to be no regularity of orientation in the lower group, whereas all the burials of the upper group, except those right next to the square structure, were oriented to the east—the direction of the structure. The burials next to the structure paralleled it, lying south to southeast, or in one case north-west. These burials, although placed outside the major religious structure, evidently retained a distinct relationship to it in their orientation. The meaning of this is impossible to guess at, but it hints that the dead had some place in the religious structure of the society, as reflected in the architectural patterns. The matter of the multiple burials is less easy to explain. Possibly all the burials of the first stage were made at the same time—during the construction of the burial mound. In these conditions a certain clustering of burials is inevitable. The crowded yet unbunched pattern of the second stage, coupled with the fact that all these burials are of equal depth from the *surface* of the mound, suggests that here on the other hand we have intrusive burials made over a long period.

All burials on which there is any information are extended, usually on the back; but, according to Peabody, sometimes on the stomach or even the side. In contrast to the probably contemporary Bayland and Aden Phases to the south, grave goods are not uncommon—there being eight articles with seven burials. None of the grave goods are with children, a situation very different, as we shall see, from that which pertained in Oliver Phase times.

Two of the objects are not pots. One is a stone pendant [#64342] very similar to the larger one illustrated in Moore (1908: Figure 3). This similarity to a pendant from Menard made me feel this particular burial was Mississippian, but subsequent checks proved beyond doubt that it was unquestionably Coahoma in age. Either the Menard pendant came from a "Baytown" burial, or basically the same technique of pendant

making persisted for centuries[16]. The other object is a clay pipe. There are three fragmentary Baytown pipes [#64328, 64329][17] in the collections, all evidently of the same type: the stem is tubular and expands toward the middle, then flattens out to a round-ended platform. Near but not at the end of this platform is the bowl, which has a sort of flowerpot shape. The whole thing is about four inches long.

No difference exists between the pottery from the lower burials and that from the upper, except that the two specimens from the lower level are unquestionably the finest Coahoma [Phase] pots in the collection. One is a superb graceful little Mulberry [Creek Cord-marked] pot [#64279], the other [#64286] is a fine specimen of Division One Alligator [Incised]. The first specimen was enlightening to me; no longer do I feel justified in calling Mulberry [Creek Cord-marked] the ugliest pottery type in the Southeast.

The upper level had three pots, two of which are lost. The other is the pot [#64278] in Illustration 1, a specimen that receives detailed consideration elsewhere.

There are two other Mulberry [Creek Cord-marked] pots which came to light over, but considerably above, the Coahoma burial area, well up in Stratum 5. One [#64271] was a Division Two or Three incised pot, the other a little Baytown [Plain] (Sharbrough) bowl. Both were in extremely fragmentary conditions and associated not with full skeletons, but with single skulls. The impact of these burials first struck me long after I had decided Stratum 5 was certainly Hushpuckena in date, and it was a long and gloomy day before an explanation presented itself. The position of these burials directly above all the others and their fragmentary conditions certainly suggests aboriginal disturbance. We can imagine the Hushpuckena folk turning up two of the really very superficial Coahoma burials in the course of mound construction. Evidently as an act of charity they collected the smashed vessels and the skulls and reburied them. As we shall see skull burial was a perfectly right and reverent mode of inhumation in Hushpuckena times, however, much it might have offended the sensibilities of Coahoma people.

2. Stonework: Skulking among the hundreds of fine Oliver Phase points in the collections are 42 gross and boorish specimens immediately recognizable as pre-Mississippian, evidently Coahoma Phase in date. They are in most cases typical Gary points (Ford and Webb 1956:52-54), a type that is a monument to the lack of lapidary imagination in the Lower Valley. All are about 3 inches in length, of course stemmed, roughly chipped, and made of the old yellow-brown flint standby of the area. Most of the stems are straight or contracting, but four have expanding stems very much like point H, Plate 9, in Collins (1932). These points are somewhat better chipped than the average.

There are also three superbly chipped little Alba points of a fine white flint. These are the only points attributable to this phase that could easily have been arrow points. The flake-work on these specimens is hard to equate with that on the Gary points, but it is barely possible these Albas were made here; they are often found associated with crude spearheads. On the other hand, according to Bell (1958:8), Oliver is way out on the periphery of Alba distribution, and these points might have come from the bows of Coles Creek marauders from the south.

Other chipped stone artifacts attributable to the Coahoma Phase are a few oval knives and one good expanded base drill; two sandstone plummets with grooved top (see illustration in Peabody 1904) are Coahoma in date. There are undoubtedly other artifacts in the collections from this phase, but no study was made of the smaller categories of bone, stone, and shell tools, so no opinions may be offered concerning them.

3. Summary of the Coahoma Phase

As with the other phases, we emerge with a clear picture of ceramics, burials, and religious structures, a dim inkling of stone-working, and no knowledge at all about minor artifacts, domestic architecture, settlement pattern, or extent of relationship with other phases. The Coahoma Phase is evidently one of the later representatives of the family of "Deasonville" peoples. They are the only people still making Mulberry Creek pottery that are proven to have shared in the temple mound tradition. Their compatriots at the Deasonville site (Collins 1932) seem to have had a similar type of religious (?) circular stockade, but evidently here it was not put upon a mound. The evidence for a burial mound-temple mound transition here has been dealt with. The evolution seen in mound structure, stockade type, and burial pattern is logical and straightforward. The old Deasonville pattern probably was (if we may judge from the Deasonville site) a sacred area enclosed by a palisade on flat ground, with probably a little burial mound or two elsewhere on the site. To combine these two features by the simple expedient of raising one's sacred area onto a mound after the fashion of people in the Southern Delta is not a very great cultural jump to take. Actually the more revolutionary change on the site was that of the second stage when the mound was squared up, the stockade changed accordingly, and the burials relegated to a peripheral, but nonetheless integrated, feature of the total plan.

The major difference between this and the Mississippian pattern must be emphasized. In a sense the Coahoma [Phase] mound was not a "temple" mound at all. There was no house, only an enclosed sacred area and an unenclosed but restricted burial area—old Deasonville patterns both. In the Mississippian temple mound the whole top surface of the mound as a unit is of little importance—all is focused on the house erected in the middle. Burials are not restricted, but surround the house in a ring. They are certainly not part of the architectural plan of mound and temple, and in many Mississippian cultures burials are not made in the temple mound at all. Certainly the use of the term "temple mound tradition" for both the Coahoma and Hushpuckena practices, and the use of both that and "burial mound tradition" to describe two features of the same phase is less than instructive.

Whatever its dubious merits as one of the lesser fluorescences of formative culture in the Southeast, the Coahoma Phase seems fraught with implications for the present conceptual models of Southeastern prehistory.

B. The Hushpuckena Phase

1. Burials: There are eight burials assignable to the Hushpuckena Phase by virtue of the grave goods accompanying them, or, in the case of those in the Big Mound, by virtue of their depth and relation to Stratum 6. There are two bundle burials, one unaccompanied, and the other with the fine effigy ("Pot Aleph") [#64309] mentioned elsewhere. This last may be an Oliver Phase burial [Skeleton 156]. There are moreover in the Big Mound two extended burials, one with an uncatalogued arrow point in the skeleton, and one fully flexed burial, or as Peabody terms it, a "sitting burial." It was the only such burial recorded in the excavation.

There are three recorded burials from the Cemetery Mound, which are proven to be Hushpuckena Phase by their associated goods. The first consists of seven skulls [unnumbered burial] laid out together in the form of a "T" within a three-foot-square area. An effigy bowl [#64376] was associated, together with abundant red ochre. The second seemingly consisted of a fireplace surrounded by three skulls with all the other bones heaped in the middle and very charred. At the center of the pile was a small Neeley's cup [#61896]. The third burial was a few inches below the second; it also consisted of the remains of three skeletons. The three skulls were together in a triangle, and stacked to one side on a pile were the bones in this order: hands and feet, arm bones, shin bones, thigh bones, and "trunks," presumably vertebrae, ribs, and pelvis. It is not certain, but a Neeley's bottle may have been associated with this grave.

No generalizations may be made from this small sample. Two types of burial not found in the succeeding phase are the fully flexed and the multiple burial variants. This careful separation of body parts, especially the isolation of the skulls is never found in Oliver [Phase] and may be taken as a good Hushpuckena [Phase] trait. Nothing anywhere near as elaborate can be found in the later phase.

2. Stonework: Since no stonework is placed stratigraphically in the mound, it is impossible to be sure which artifacts are of Hushpuckena derivation. By a process of elimination, one type of arrow point was found to be possibly Hushpuckena: a variety of willow-leaf with the tip pointed, the base round, and the widest part at or near the base. There are two whole or partial specimens at Oliver of this type. Points identical to these, and often called "Nodena" points, are found throughout northeast Arkansas at an Early Mississippian time level. These must be sharply distinguished from another type of point also called "willow-leaf" and "Nodena" which, however, is widest at the middle and has both ends pointed, or one end pointed and the other slightly rounded. These points are very common at the Campbell site (Chapman and Anderson 1955) in southeast Missouri and seem to be typical of the protohistoric period in that area. There are eight certain specimens of this type at Oliver; they must all be considered too late in time to be part of the Hushpuckena Phase.

The number of broad-based willow-leaf points found on this site seems far too small to be the sum total of points for a whole phase. Possibly some of those points assigned to the Oliver [Phase] actually belong here. Further evidence on this problem must come from future digs with better recording of artifact placement.

3. Summary of the Hushpuckena Phase

This phase seems to be a full-fledged member of the group of cultures known as Middle Mississippian. Pottery types and techniques all point to such northern manifestations as the Walls, Pecan Point, and Parkin Phases.

Here as elsewhere in the Lower Valley evidence of the Southern Cult is entirely lacking; however, that the Hushpuckena people had a ceremonial complex fully worthy of the appellation "Mississippian" is beyond doubt. They had a fine large temple mound improved and enlarged once and probably twice. A temple probably adorned the top. Burial rites were elaborate and complex.

The Hushpuckena Phase is of interest because it is the southernmost "pure" Mississippian phase yet

isolated. There are no signs of Coles Creek Culture influence here, in direct contrast to the so-called Mississippian Lake George Phase in the Southern Delta. This is not to say that other pure Mississippian phases further south will not soon be discovered. I have suggested the possibility of such a phase on the Lower Arkansas; there may be another in the Central Delta. Stephen Williams (personal communication) believes he has evidence of an intrusive pure Early Mississippian phase as far south as the Lake George region. The relationship between this phase and Hushpuckena is as yet unknown; one of Williams' pots however bears a close resemblance to the classic Hushpuckena pot form.

The Hushpuckena Phase at Oliver takes on new interest in this light. The evidence pieced together here must be regarded as preliminary data for a new chapter just now unfolding in the annals of the Mississippian peoples.

C. Oliver Phase

1. Burials and Burial Goods: To obtain an adequate sampling of Oliver burials, I have compiled data on all the well-recorded burials in the Big Mound. This leaves out the few burials in the Cemetery Mound, and those burials in the Big Mound recorded only by such notations as "human bones found." My sample includes perhaps 80 percent of all the burials of the two subphases; this was an exceedingly difficult task. It was accomplished by first taking all the pots in burials with historic goods. These burials generally occurred in close-packed groups of the same depth. Analyzing the pots of the other burials in these groups, I found that none of them possess characteristics that distinguished them from the known historic group. It had come to my notice that there was a huge group of burials on the west side of the mound which had no historic goods, and differed in other characteristics to be outlined presently. I then conceived the idea of making a profile map of the mound using the levels of the skeletons as my data, hoping that there would be a sprinkling of historic burials in the western group which would not conform in their depth to the profile map constructed on the basis of the deeper vast majority of the western burials, but would conform to a profile map made with the help of the historic group on the other sides of the mound. The task proved almost impossible because Peabody recorded not the absolute height of the burials, but their depth from the surface of the mound above them, from the surface of the mound at the profile ahead, or inconsistently from other crude reference points. He began by measuring from the profile ahead of him, but this was impossible on the steeply sloping west side of the mound where the burials were often higher than the top of the next profile he was digging up to. Here his scientific method collapsed and he began to record burials in relation to the depth of the floor of the trench behind him, in relation to other burials, etc. I shall not dismay the reader with an account of the labors necessary to unravel this tangle.

Suffice it to say that, even with the data, no sensible profile maps could be constructed, and those that were proved in the end meaningless. Some of the deepest burials had undeniably late pottery, some of the highest, early. The specter of reversed stratigraphy haunted my sleep. Then it occurred to me to separate children from adults and it turned out that the higher burials were usually children, and the pots with them, which I had thought in many cases early, were merely better-made miniature pots. I then reappraised my criteria for early and late, and came to the conclusion expressed in the section on pottery and replotted the burials, arriving at the final map discussed in the stratigraphy section. The whole separation of early and late Oliver rests on a certain circularity of reasoning, but the conclusions presented here present the most economical and reasonable interpretation of the data I could derive.

a. Early Oliver Burials

There are 48 burials assigned to this subphase, comprising 54 individuals, as there are at least six double burials. Some of the single burials are quite close together and may have been in the same pit. Forty-six of the burials are of the bundle type, with skulls either at one end of the pile of long bones or in the middle. There is no consistency in orientation. The other two burials, a child and an adult, are in Peabody's "on the back" or "extended" category. Whether these burials are fully extended or not is questionable. Over at Menard, Ford (n.d.) [see Ford 1961] found no extended burials, but a considerable number of flexed ones. Moore (1908:488) on the other hand, found large numbers of both. Ford illustrates his burials and it is easy to see where there might be confusion. Flexure at Menard is of all possible varieties, ranging from complete flexure to partial flexure to a position in which the knees are bent at 90 degrees, but the hip joint is entirely stretched out. Some burials are seated, other have the lower legs turned completely under the upper. Possibly both Moore's and Peabody's "extended burials" are mainly of the slightly flexed variety.

Seventeen of the burials had grave goods, in all but two cases pots, generally one per burial. The two other artifacts were a point (uncatalogued) lying near (not in) the skull of an adult, and a stone pendant with a child who also had two pots. The pendant is almost

identical to the right-hand one illustrated in Moore (1908: Figure 3). Some of the skeletons seem to have been surrounded with bark, or some organic material.

Only nine out of 38 adult burials contained grave goods, whereas eight out of the 11 children did. Of the three children that did not, one was actually an adolescent and another was buried with an adult, so only one out of nine typical child burials lacked grave goods. Some of the children are given regular adult pots, but many are given small bowls four to six inches across, replicas of adult bowls but in general much better made. It is evident from the amount and quality of the grave goods with children that they held a somewhat special position. Grave goods, since they are absent in the majority of burials, do not seem to be a prerequisite for passage into the afterlife in this culture, and it is hard to conceive of any purely religious motive behind the abundance of goods with children. Nor could they be a symbol of prestige or status. Rather they seem to be a mark of sentimentality or affection. We have no information on the sex of the burials, but perhaps some of the clearly utilitarian bowls were put with the women who made them. Others, such as some of the trade vessels, effigies, and bottles are too large for toys–they may be the child's own food bowl. One bowl with an adult in the Cemetery Mound was full of "charcoal," perhaps once some sort of food.

All types of vessels find their way into graves, but jars are rare, especially the incised types. The jars that are present are smaller than the norm in the sherd collections. Bowls and of course the special shapes are far more common in the cemetery than in the middens.

b. Late Oliver Burials

There are 71 Late Oliver burials in the sample, with 82 individual skeletons, 63 of which are adults, six adolescents (burials with the notations "epiphyses not united" or "wisdom teeth not yet erupted"), and 13 children or babies. Peabody sometimes says "elderly" or "female" in his records, but he is not consistent enough to give figures on these categories. It is apparent, however, that members of both sexes and people of all ages were buried here. The incidence of children, however, is remarkably low compared to their abundance at Mound C on the Lake George site. Perhaps Peabody just missed a great many of the children (though he records many that appear to have been a "mere trace"); perhaps here we have a high "adult mortality rate" because of the epidemics.

Sixty-one of the burials were bundles. The others will be treated separately. There were seven double burials, two triples, and one quadruple. Moreover, all the late burials tended to cluster in groups of five or ten with the bundles, where Peabody supplies information, all oriented in the same direction. Some groups had their orientation east-west, others north-south. The earlier burials formed no such convenient bunches. In two of these groups where there is good information, the burials seem to be laid out in rows. It seems probable that these groups, one of which contains eight bundles in an area little over 5 feet square, are actually mass funerals made at about the same time. The quadruple burial, which comprises a smaller group, is almost certainly this. If this interpretation is correct, epidemic at Oliver seems likely indeed.

There were 16 out of 48 or 33 percent of the Early Oliver burials with pots; there are 25 out of 71 [35.2%] burials with pots here, very nearly the same percentage. Yet here 38 burials out of 71 [53.5%] had grave goods of some sort as opposed to only 17 out of 48 [35.4%] in the earlier phase. The reason for this is a phenomenal rise in non-ceramic goods—21 objects or sets of objects in 18 burials.

Children again are liberally furnished with goods; 11 out of 13 had goods of some sort. Of the two exceptions, one child is probably in a pit with another, and the other is buried with an adult. As in the adult category, a higher percentage of goods are non-ceramic than before, although the children's bowls are still a common feature.

Most of the trade vessels belong to this last subphase. Here they are all (three) [#64267; Figure 3-14] [64269; Figure 3-16] [64291] with children, but on the Cemetery Mound one [#64379; Figure 3-19] is found with an adult. These may actually not be trade vessels per se, but the possessions of refugees coming up from the south.

In the non-ceramic category only three sets of glass beads[18] and two copper bells [#57321, 64370] are true European artifacts.[19] Dr. Williams (personal communication) has ascertained that these artifacts are typical of the early Historic Period around 1700. There are also two sets of beads [#64355, 64356] made out of a rolled tube of copper or brass and a copper point [#57309], found lying near the head of a young adolescent.

There are, moreover, pieces of mica [#64372] found with an adolescent, two bear's teeth [#64367], one at each ear of an adult, a small rectangular shell plaque [#64359] with two perforations found with a child, two bone awls [#57317, 57322], one each with a burial. There is also a set of tiny turquoise beads [#64422] of a type common to the Southwest, together with a tiny turquoise pendant [#64422] of the same shape as the stone pendant in the early Oliver burial. This may be evidence of trade with the Pueblos. A set of quartz beads [#64358], evidently made in imitation of glass,

and six sets of shell beads[20] round out the roster of goods.

Let it be remembered that no jewelry was found with Hushpuckena burials, and only one stone pendant with an Early Oliver burial. It is evident that the jewelry industry received a terrific stimulus from contact. Dr. Williams (personal communication) has remarked that stone points are overwhelmingly more common on historic sites than prehistoric ones in the Lower Valley. Ford (n.d.) [see Ford 1961] states that nearly all the stone points and scrapers at Menard were found on the surface and in the top few inches of midden. The vast number of Oliver Phase points on this site cannot be surely assigned to the later, historic portion of the phase, but it is likely that many or most date from then.

I should like to suggest an explanation. The two industries affected were ones in which the whites offered appealing substitutes to the native forms—metal points and guns on the one hand, and glass beads on the other. A demand was created for which, in the early Historic Period, the supply was totally inadequate. I know nothing of primitive economics, but here seems a strange situation: in two industries where supply and demand had remained at a stable low level for centuries, the sudden introduction of a new supply of high quality goods does not create a glut on the market, does not force the native industries to the wall, but rather creates an explosive new demand which stimulates native industries to unheard of heights of productivity.

Later, when supplies of European goods became more readily available, native industries did become moribund and the Indians became quite dependent on the European trade goods, so much so that the control of the supply of trade goods became the major source of political power over the Indians. Once-free people became slavishly dependent on the European. From a functionalist point of view, the last minute burgeoning of native industry seems a desperate effort by the society to avoid this suicidal dependence. Although of course no Indians at the time could have been aware of the eventual consequences of the introduction of trade goods, there was apparently an element of conscious organization involved in the native industrial expansion. Some of the shell beads are far too large to have been made from the ordinary river clam and possibly were made of sea shells. (Dr. [John] Goggin, personal communication, affirms that some of the beads are from conch columellas.) The turquoise may well have been from as far away as New Mexico. Considerable effort must have gone into securing good sources of supply in the hills for the stone industry. One might formulate a tentative anthropological law: when highly desirable goods are introduced into a society which cannot manufacture them itself, and which has no control over the supply, and in fact may be dictated to by the suppliers, all the resources of native industry and trade will be marshaled to create substitutes that will fill the demand. The eventual consequence of this is, however, an institutionalization of the new demand—large and high-quality stores of weapons will become the norm, jewelry will become a prerequisite for a "decent" burial. When the foreign source of high-quality, more desirable goods becomes adequate to sate the now permanent demand, the substitute native industries will sink rapidly to a moribund state, and eventual cultural collapse, or at least dominance by the culture of higher technology will result. There is only one solution: rigid control over suppliers, dealers, and workers in the new technology and incorporation of these into the society in positions of low power and prestige. This seems to have been accomplished by many Old World societies only marginally capable of supporting an iron technology; the ironworkers are made into an outcast, subservient, and despised element in the social structure. This could not be done with the Europeans in the Southeast.

Aside from the theoretical implications of these finds of jewelry, they may provide an answer to a knotty archaeological problem. Trade goods are notoriously rare on early historic sites in the Southeast. Many sites have been found which archaeologists feel certain are historic, but which have no trade goods and thus must be called "proto-historic." The discovery that all the beads at Oliver were from the historic group of burials, that shell beads in any quantity do not precede glass beads, provides a possible way out. Certainly in a previous study of Fort Walton culture in Florida I found also that large quantities of jewelry were always associated with late sites, trade goods or no. Much more investigation throughout the Southeast will have to be done to support this, but I contend that large quantities of native jewelry on a late site, whether shell beads, "Chickasaw buttons," stone pendants, or whatever, are as reliable an indication of historic occupation as trade goods, and much more common. Likewise the *lack* of large quantities of jewelry or stonework, especially if burials are found, are a sure sign of a prehistoric site. The Lake George site may, for instance, even without burials, be almost unquestionably prehistoric in its entirety.

Before we leave the subject of burials it remains to treat the "extended" burials. Of the ten, for eight we must accept Peabody's word that they are extended, one adolescent is certainly extended: he was the second burial found in the second season and the occasion of one of Peabody's artistic endeavors. One of the other two is an adolescent with a brass bell [#64370]:

he is in the feet-under-the-hips position prevalent at Menard. The other is an unaccompanied adult with his legs bent over at the hips so that the feet are resting on the skull. This burial, considered rightly by Peabody to be an oddity, is illustrated in his report (Peabody 1904: Plate 10).

It is noteworthy that of these ten burials, only two, both adolescents, have grave goods (jewelry). Two others contain the foreign arrow points that presumably killed them. They were evidently transported directly off the battlefield and buried. Bundle burial entails a good deal of waiting around and some work to get the flesh off the bones. The "extended" burials are evidently, then, evidence of some haste in the burial rites in certain cases. Extended burials may represent a special class of burial whose rites differed from the normal. This class evidently included those warriors killed in battle.

At this point I should like to compare briefly the Oliver and Menard burials. Ford found a few skull burials, a type absent[21] both here and in Moore's digs. Ford [n.d.; 1961] only found two pots in 24 burials and advises that many of his burials were most likely the returns of the skillful pot-hunter's probe. Both Moore and Peabody seem to have been digging, on the other hand, in relatively undisturbed deposits. We cannot accept skull burial as a distinguishing feature of Menard mortuary customs.

There remains the high percentage of extended-flexed burials at Menard as opposed to the relatively rare occurrence of the type at Oliver. The repertoire of possible burial positions was the same in the two cultures, the Menard people simply had a higher preference for the more hasty burial alternatives. There is a likely historical explanation for this.

If we accept the postulate that plague was responsible for the majority of burials at Oliver, a horrible situation is revealed. The Oliver people in their unhappy ignorance, if we may extrapolate from nearby ethnographic examples, laboriously placed their plague-ridden dead in charnel houses, perhaps picked their bones, performed complex rites. We may even imagine that as the plague continued to spread the rites were performed with even greater care to please the gods. Little wonder that these hapless people died by the village-full.

Ford (n. d.) [1961] quotes a French missionary who laments over the plague at Menard, saying how the poor people were buried two and three or more to a grave. But the important fact is that here missionaries and traders were present before and during the worst of the plagues. There are no records of it, but surely one of the first things the Europeans would have done is entreat the Indians to inhume the plague-ridden dead with all possible speed, if only for their own safety. This may well explain the prevalence of the hasty varieties of burial at Menard.

2. Chipped Stone: The only stonework from this phase that is stratigraphically placed consists of six arrow points from two burials. These possess a long straight-sided triangular blade, shallow side notches, and a slightly concave base. One burial contained five of these points scattered among the bones. It was extended, as were all Oliver burials with points, and its head was missing. The other burial had only one point and the man had not contributed his head to an enemy's trophy collection, but both can be reasonably supposed to have died in battle.

There are seven other projectile points in the collections very similar to these. In fact they all closely resemble points "t," "u," and "v" on Plate 9 of Collins' (1932) Deasonville report. There are four other stemmed projectile points, one of which is serrated and bears some faint resemblance to those illustrated in Quimby's (1957:129) Bayou Goula paper. All these projectile points are well-chipped, thin, on good flint of various colors, and in general have a late look, but are entirely alien to Oliver.

According to Jennings (1941:182) most or all Chickasaw points are triangular. Triangular points are also typical of Menard, Oliver, and probably of the as yet unpublished [see Williams and Brain 1983] late Lake George Phase of the southern Delta. To the north in northeast Arkansas and southeast Missouri, the points are triangular or "willow-leafed." Stemmed points in this period are a southern trait, being typical of the Natchez and it seems of the late population of Deasonville. It is from this general region, or conceivably from the central Delta, whose point types are unknown, that the stemmed points at Oliver come. Certainly those in the burials and perhaps the unplaced specimens came straight from alien bows and were not manufactured at the site. Atypical points at a site should never be considered trade, and except in the turbulent Historic Period it is unlikely that they were produced by refugee aliens. War is the most logical explanation.

No other alien points are present at Oliver unless some of the "willow-leaf" points, which we have tentatively assigned to the Hushpuckena Phase, are actually from war parties of the late culture of the north at the Campbell site, etc. (Chapman and Anderson 1955). The number of "willow-leaf" points (21) is so small that it is unlikely they were a part of the Oliver stonework complex.

The typical Oliver point is triangular with a base about 1 inch long and length ranging generally between 1 and 2 inches, with a few larger and smaller.

These points are overwhelmingly the most common on the site, and indirect evidence of their true placement is provided by a cryptic statement in Peabody's notes: "Most of the stones near the top to one foot down." A total of 314 points may be classed as of the Oliver type. There are moreover 217 broken bases and 238 tips which probably once belonged to such points. Bases are generally straight, sometimes somewhat convex, but almost never concave. The two or three exceptions may be the result of flaws in the stone. The base was made by chipping a series of small flakes off each side of the base along the whole length, creating a thin edge which approaches a straight line, evidently the norm. The sides, on the other hand, tend to be much more convex. This became very apparent when a study was made of the broken bases and it was found that the basal angles in the majority of cases approached 90 degrees. It was at first thought that these bases must have come from a very long point almost unrepresented in the whole point collections. But a reexamination of the latter proved that there was usually a gentle convex curve which allowed the basal angle to be so wide. Many of the specimens indeed have quite straight sides, curving in only at the top to a blunt point, thus having a shape like a bullet. These points are triangular only in that they have three sides. In fact on some examples the sides actually go out from the base, somewhat like the sides on a Folsom point.

On many of the points a strange flaking pattern was used: one side had diagonal flakes across the whole blade, creating a very flat surface. The other side, however, had flakes going only from the side to the middle, leaving a slight ridge in the center. Here the cross section of the points tends to be somewhat plano-convex, although all-told very thin. The stone used is a good flint: grey, black, yellow-brown, pink, yellow, and jasper colors are represented. Evidently many sources of stone were being employed. Stones of many colors and thin finely-flaked blades characterize all Mississippian-age points in the Lower Valley regardless of shape, in contrast to the thick yellow-brown points of older days.

Another extremely abundant class of stone artifacts is what I have called the triangular scraper, of which there are 281, plus about 100 tips and bases. Actually many of these crude implements may be merely blanks for points, but a majority of specimens have three definite characteristics which set them off from points: first there is no basal side per se with the points' special thinning. Second, the shape is not geometrically a sort of equilateral triangle, but a right triangle. That is, if we assume that the shortest side is the base (one cannot be certain) the point of meeting of the other two sides is not above the center of the base, but above one end of it. The longer side, the "hypotenuse," is generally very convex. Indeed all sides are often so convex that the shape approaches an oval. The third characteristic is a nubbin or hump of stone near or at the center on one side up to which most of the flakes lead. The bump looks as if it were caused by a flaw in the stone, but it is such a constant feature of these "scrapers" that this cannot be the case. Perhaps this feature is related to the slight ridge on one side of the points.

These scrapers are more generally made of the yellow-brown flint, which is ever the utilitarian standby of people in the Lower Valley. They are on the average larger than the points.

The third common type of stone artifact is the "thumbnail" scraper of which there are 226 specimens. These well-known artifacts are quadrangular with two long sides, and a short and a longer "business end." In section they slant up slightly toward the larger end. The bottom is flat, composed of one flake scar, the top has two flake scars with the ridge between them running down the axis of the instrument. The sides and ends are composed of many small steep flakes. Sometimes the flaking on the sides is not steep, but the front end always has a sharp slope. Seventeen atypical specimens, evidently rechipped from other artifacts, have pressure flaking over all the surfaces. These scrapers are, except for three or four specimens, much larger than a thumbnail, ranging from just over an inch long to almost two inches. The colors of stone on these artifacts are just as varied as on the points.

There are a few other smaller classes of objects which might, on the basis of stone colors and fineness of chipping, be assigned to the Oliver Phase. There are 21 knife-like objects, generally two to three times as long as wide, ranging from 1½ to 2½ inches long. The better-chipped specimens are shaped like a long ellipse, with one end slightly larger than the other, like a very much elongated egg. One long side tends to be more convex than the other. These knives are comparatively as thin as the points, much thinner for their size than the scrapers. A few of the thicker, more crude specimens may be blanks.

There are 20 whole or fragmentary pipe drills. They are among the most carefully chipped objects in the collection. The whole specimens are shaped like long, narrow, thick willow-leaf points, in cross section they range from flat lenticular to almost round, never being much more than ¼ inch wide, and averaging 2 inches or so in length. Some of the partial specimens may belong to the expanded base type drill of an earlier phase.

Lastly there are five small boat-shaped objects with a flat and a humped side, a bit less than 2 inches long.

They exhibit no pressure retouching and could be blanks of some sort or even artifacts of the Coahoma Phase.

There are other stone objects such as celts, both wholly and partially polished, worked pebbles, sharpening stones, and hammerstones, analysis of which was omitted for lack of time. Only intensive comparative study could have established their cultural provenience with any certainty. In all probability some of these objects, plus most of the over 100 unidentifiable or waste fragments of flint in the collection originated in the Oliver phase.

There are two reasonably well-documented sites in the Lower Valley whose stone industries bear strong resemblances to that of the Oliver site: the Campbell site in southeastern Missouri (Chapman and Anderson 1955:14-20) and Menard (Ford n. d.) [Ford 1961].

The Campbell site is estimated by Chapman and Anderson to be Late Mississippian in date (Chapman and Anderson 1955:150). Stephen Williams informs me (personal communication) that this site and two others in southeast Missouri are probably just prehistoric in date, say about [AD] 1600. Thus Campbell is contemporaneous with or a little earlier than the early part of the Oliver Phase. Conceivably indirect historic influences from Canada were being felt in southeast Missouri at this time, i. e., the upheavals occasioned by the expansion of the Iroquois. At any rate, the moderate amount of native shell jewelry in the burials and the large quantities of stone on the site foreshadow the general southeastern historic developments.

There are 186 triangular points at Campbell, two-thirds of which have convex sides. The distinction between straight and convex sides seems from the photographs to be a relatively academic one reflecting only degree of curvature of the sides. The points illustrated all fall well within the Oliver range, and the general lack of concave-sided points agrees exactly with the situation there. But here the similarity ends. At least a third of the convex-sided group are said to be reworked willow-leafs, and moreover, there are 147 willow-leaf points evidently, from the photographs, mostly of the bi-pointed variety. It is barely conceivable that some or all of the Oliver points are reworked willow-leafs—I am not sure how one tells; however, the virtual lack of whole willow-leaf specimens at Oliver makes this possibility exceedingly remote. Nevertheless the flaking on Oliver points suggests that the special trimming on the bases to make a straight line was one of the final stages in point manufacture. This trimming makes sense if triangular points in this culture were originally salvaged willow-leafs with the broken base trimmed off to provide an adequate haft. The parallel flaking on one side of Oliver points also suggests a willow-leaf tradition.

Certainly the Oliver and Campbell "triangulars" bear little close resemblance to the classic, often side-notched Cahokia triangular, and a separate origin for the type may reasonably be postulated. Of course a vague attempt at copying the Missouri point may have been involved. Be that as it may, whether Oliver is later than Campbell or not, the Oliver people seem to have fully freed the convex-triangular point from its humble makeshift origins by the time they arrived on the Upper Sunflower.

As for the rest of the flint industry at Campbell, Chapman and Anderson have no triangular scraper category. If such objects do exist they may be included in their "triangular projectile point blanks" category, in which there are 165 specimens. There are 115 snub-nosed or thumbnail scrapers, but 81 of these are of the small type (under 1½ inches) which is very poorly represented at Oliver. Campbell also has pipe drills similar to the Oliver site and a few large flint knives which seem to be more willow-leaf shaped and better worked than the specimens I have placed in that category. (Numerical and form data in this discussion from Chapman and Anderson 1955:15-20).

Despite the differences, Oliver and Campbell stone-working traditions have strong connections and most likely sprang from the same source, a source certainly not in one of the earlier Lower Valley Mississippian cultures. Despite this, the rest of the material culture at Campbell bears little or no resemblance to that at Oliver. Pottery is virtually unrelated in all but the most general characteristics. Conceivably, however, the beveled inner rim mentioned as being characteristic of many of the vessels (Chapman and Anderson 1955:102) may be distantly akin to the Oliver and Menard everted rim, which is indeed in late Oliver pots reduced to a mere interior bevel (see Illustration Number 2). Burials also are different—they are all extended and contain on the average many more pots than were found in Oliver burials.

The pottery at Campbell seems to derive in very large part from the native Walls-Pecan Point traditions (see Chapman and Anderson 1955:100-102). If indeed, as I have postulated, the stone-working tradition is a better indicator of the origin of a culture than is the ceramic tradition, we must admit that the putative invaders at Campbell incorporated a vast number of native people into their village. Certainly the native culture, with minor alterations, became dominant in important spheres of the culture. Mixing of peoples seems a sloppy and unsatisfying interpretation of archaeological data, but here it is an interpre-

tation to reckon with. Amalgamation of tribes was by no means a rare occurrence on the historic level—we need look no further than the Creek Confederacy for a good example. Amalgamation of peoples must generally lead to a certain merging of cultures. (The Natchez, it may be noted, seem a definite exception (cf. Quimby 1952), but they could well be the exception that proves the rule. In their persecution, subsequent diaspora and continued fanatic attachment to their own peculiarities of culture they are, if a parallel may be drawn, the Jews of the Southeast.)

The other stone industry we wish to discuss is that of Menard. My information consists of hasty notes taken on Ford's (n. d.) [Ford 1961] manuscript. Ford first of all remarks that almost all of the stonework was found in the upper six inches of the deposits, an observation remarkably akin to Peabody's comment about Oliver. This fact increases the possibility of there being two as yet undistinguished Mississippian phases at Menard.

Ford's sample is unfortunately small, but he does have 33 triangular points identical to those at Oliver, even down to the characteristic flaking on the base. He divides his scrapers into two categories—19 "oval blades," the more carefully chipped specimens, and nine "oval-scrapers," the more crude. His illustrations show most of these to be not so much oval as sub-triangular, just like the ones at Oliver. Illustrations of his cruder variety show the peculiar small hump so characteristic of the Oliver scrapers. There are also 12 snubnose scrapers, which are similar to the Oliver and Campbell specimens. I noted down no size data, but the one copied drawing in my notebook is of a scraper of the larger, longer variety.

Ford also has a class of 19 crude vaguely rectangular knives, a category poorly represented at Oliver. There are also eight "Nodena willow-leaf" points, four of which, however, were found in a single burial, seemingly as grave goods and not in the body. The large proportion of knives and willow-leafs here may be due to the small size of Ford's sample. Be that as it may, the similarities between the stone industry here and at Oliver are apparent.

Only a brief recapitulation of the other spheres of culture at Menard is needed here. Pottery shapes are virtually identical to Oliver ones, although the everted rim jar is known from only one specimen (number 2401 in Phillips' collection of pictures), due to the local aversion for jars as grave goods. Many of the types present at Menard and not at Oliver are attributable to Caddoan contact, and the major style found only at Oliver, the "pseudo-Blanchard" design on bowls, is attributable to contact with Leland folk. Differences that cannot be so easily explained away are the variant repertoires of incising techniques and designs. These, however, may be attributable to variant native traditions, which had an impact on the products of the putative invaders. Burial types we have seen differ only in proportion. It is uncertain whether Oliver had the tradition of burials around houses on the flat or on small house mounds that appears at Menard.

Suffice it to say that in all spheres of culture on which there is a reasonable amount of data, a strong similarity exists between Menard and Oliver.

3. Archaeological Evidence Pertaining to Ethnographic Identification of the Oliver Phase: I have presented all the available evidence pertaining to the Oliver Phase, and concluded that both it and the last component at Menard are manifestations of the same cultural tradition (diluted as it may be by "native" elements in both areas) and that this tradition is alien to the middle Lower Valley. The Campbell site seems to have been strongly influenced by this same tradition, but whether the major element of population on this site stemmed from the alien source is problematical.

Whether or not Menard was the historic Quapaw village of "Osotouy," to deny that the historic occupation at Menard, Douglas (Moore 1908:524-531), and other sites in the vicinity were Quapaw is to indulge in quibbling. We know that the Quapaw were the tribe of the Lower Arkansas in historic times. But to infer from this that all the Mississippian material that Griffin (1952:237-238) lumps into the Menard Phase is Quapaw is another matter. I personally believe there is an earlier Mississippian phase that is "native" and not Quapaw. I propose that there was an invasion into the Valley, probably from the north, at around [AD] 1500-1600.

Certainly in that period the Quapaw language existed as an entity—languages do not differentiate fast enough to even think that the Quapaw tongue had not separated from its closest relatives at that time. But whether the Quapaw tribe as an entity existed then is doubtful indeed, so one can only suggest that speakers of Quapaw, not the Quapaw tribe were all or part of the invasion. Indeed the Quapaw, before amalgamation in the eighteenth century, seem to have been a group of relatively autonomous villages with little or no tribal or confederational organization, although the relatively consistent village lists obtained by early European explorers indicates that they identified with each other to an extent.

Whether or not the people at Oliver spoke the Quapaw tongue is a question unanswerable from archaeological data. There is, however, one indication that the Oliver Phase was closely associated with the Quapaw, indeed included in whatever pan-Quapaw organization there may have been: the trade goods.

John Goggin (personal communication) has tentatively identified the trade goods at Oliver as late seventeenth to very early eighteenth century in date [see Marvin Smith, in a later volume of this series]. At this time there is only one convenient and likely source for the goods: Arkansas Post, an establishment expressly set up for the Quapaw trade, very near a Quapaw village.

Trade goods are very sparse in the archaeology of the region. Moore found 160 burials at Menard, ten of which had historic goods in them (Moore 1908:490). Ford (n. d.) [1961] found four glass beads in his burials, which is surprising, seeing that the pothunters left him only three pots. At Douglas, Moore found historic goods in 3 out of 32 burials (Moore 1908:525). His two illustrations (41, 42) show that the most common historic artifact was the rolled (presumably by the natives) brass or copper bead. This type of artifact is common at Oliver. It is noteworthy that all the Douglas burials were bundles, closely reflecting the Oliver situation. Eleven out of some 140 burials (80 late Oliver) contained historic goods.

There are three factors which may go to explaining the paucity of historic goods on the Arkansas: (1) Many of Moore's burials especially may date from the prehistoric. (2) Pothunters may have gleaned many of the goodies. (3) Relatively few of these rare objects may have been consigned to the dead. At Oliver we know some 80 of the burials were historic or nearly so, we know pothunting did not leave any visible traces on the Oliver mounds prior to 1901, and probably did not occur to a significant extent. We know also that in the cases of children at least there was little hesitancy to give the dead objects of value. Be all that as it may, even if we double or triple the amounts of historic grave goods at Menard, etc., to compensate for these factors, the proportion of historic goods to total graves at Oliver remains strikingly high. Remember that we are dealing with a small "hick" town in the backswamps that was not occupied for long in the Historic Period. To my mind the relative abundance of historic goods at Oliver can only be explained by some sort of direct access to the coveted stores of goods at the Post. The turquoise also in all likelihood came to Oliver by way of the Lower Arkansas settlements.

This of course does not prove that the Oliver people were card-holding members of some sort of pan-Quapaw trading and Mutual Benefit League, but along with the evident similarities in material cultures, it indicates a close relationship with the Quapaw. Whether they spoke the Quapaw or any other Siouan tongue is impossible to ascertain.

Archaeology then leaves us in the same position as ethnohistory; if we must assign the Oliver Phase to any known historic group, the Quapaw are the most logical choice. But logic and probability are not, hard as it is to admit, proof.

Conclusion

In a sense this whole paper is nothing but conclusions of one sort or another—a compilation of raw data must be that. One cannot summarize the contents of a site or the results of an excavation in a single sentence or a paragraph. Peabody had no set objective in these excavations, so what he got was simply what the site offered: stray bits and pieces of information which when fitted into the framework of Southeastern prehistory fill in little corners of gaps here and there. My job was merely to compile these tidbits and point to the holes where they seemed to fit. Out of this can come no general concepts or all-inclusive syntheses.

Still in all, one salient fact has emerged from all this drudgery and detail, a fact of no consequence to theories of culture change or models of prehistory, but of no small import to the science of archaeology as a whole. The fact is that moldering in the archives and cellars of museums lie untold riches, limitless data to be had with the expenditure of only a little time. There is only one drawback to this data—if you go to it looking for something, seeking to solve any one particular problem, the chances are that you will meet with no success. The conclusions I had hoped to reach—that the Oliver people were Quapaw, that there was cultural continuity in the Northern Delta—proved impossible of proof. But if one goes to the data merely hoping to discover what is there, if one gets to know each page of notes and potsherd like an old acquaintance, undreamed of peekholes into the past will be opened. The most important ideas in this paper, those concerning the burial mound-temple mound transition, the Hushpuckena-Oliver dichotomy, the historic florescence of jewelry and stonework, all came to me unbidden after having digested some new portion of the data.

There is a strange perversity of data, such as this, that will answer only questions of its own choosing. Its value is not lessened thereby in the long run and its fascination is considerably increased. Only by prohibitive effort, as outlined in the introduction, can the answers to modern questions be wrung out of ancient data. The conclusions of this paper are as random and disconnected as the data from which they were derived. It can only be hoped that what veins of significance there were have been laid bare and that what was worthy of rescue from oblivion is contained within these pages.

Endnotes by John M. Connaway

1. Dorr Map 1 shows smaller mounds as well, at the site.

2. According to Phillips et al. (1951) map, the long axis is northwest-southeast, the shorter is northeast-southwest, opposite of what Belmont reports.

3. This is similar to those found at Powell Bayou (22SU516), indicating the use of such "palisades" may have continued into Mississippian times.

4. These reflect their general locations, but are slightly inaccurately placed and oriented with regard to the map scale. See discussion of maps in Connaway's description of the site's destruction.

5. No longer true; see Toth 1988.

6. Phillips (1970:147) lists Sharbrough as a variety of Old Town Red, a shell tempered, red-filmed type. The Sharbrough mentioned here must have been discarded as a Baytown variety, since it is not mentioned by Phillips.

7. Margin note by Stephen Williams: "I have expanded this to 550."

8. Margin note by Stephen Williams: "based on a definition of Coles Creek that included Plaquamine."

9. Margin note by Stephen Williams: "Plausible, but a proved hypothesis."

10. Now known as the Peabody Phase in this area.

11. P. W. Norris (n.d.) found them as bottle tops in the lowermost St. Frances River area.

12. According to Phillips (1970: 942), Stokes Bayou Incised is now Winterville Incised, var. Belzoni. However, in his description of the variety on pp. 173-174 and the introductory statement concerning Winterville Incised on p. 172, he does not mention Belmont's paper or the Oliver site pottery. This is only brought out in his discussion of the Hushpuckena-Oliver phases on pp. 941-942.

13. This is not mentioned in the Chronological Chart just before the Dorr maps.

14. It is plain and now found; see Starr's description in a later volume of this series.

15. Also see Ford (1961: Figures 5, 13, 14, 18, and 20).

16. Identical stone pendants are found on Middle and Late Archaic sites in the Yazoo Basin.

17. Neither is listed in Peabody's catalog as being with a burial. Only two such pipes were recorded in the collection analyzed by Starr (see chapter in later volume of this series). #61824 and #64396 are clay pipe fragments not included in the study collection.

18. Peabody's catalog lists six sets of glass beads found with skeletons.

19. See Marvin Smith's chaper in a later volume in this series.

20. See Alecia Spooner's chaper in a later volume in this series.

21. One was found in the 1991 salvage; see Nancy Ross Stallings's chaper in a later volume in this series.

Chapter 4
Lower Mississippi Survey Investigations: 1940-1941, 1970, and 1988

by Mary Evelyn Starr

This chapter contains excerpts on the Oliver site from three Lower Mississippi Survey (LMS) reports, along with commentary to provide some context for these excerpts. Only passages dealing with the Oliver site are given here, and the reader is referred to the complete original publications for information concerning the wider Central Valley context of the works. The first extract deals with results of a surface survey and test pit excavations at the Oliver site carried out in 1940-1941. The second is an attempt dating from 1970 to integrate results of the whole Central/Lower Valley survey program into a series of temporally and spatially discrete phases. And the final section is a 1988 effort to further develop one of the Marksville period phases defined in 1970.

The Peabody Museum curates Philip Phillips' notebooks and other records from the 1940-1941 Lower Mississippi Survey testing project (LMS accession file 993-23), as described in Phillips et al. (1951:253-260). We reproduce the first section extracts concerning the Oliver site from these records, with the permission of the Peabody Museum, and from the "Stratigraphy" chapter of the 1951 report by Phillips et al. The notes include those of Phillips' assistant, Chester Chard, and a plane table map prepared by E. Mott Davis on March 27, 1941. Chard's notes are minimal, while Davis' map has features and distances labeled that are not reproduced in the site map of the published report (Figure 4-14). Phillips himself produced two sets of notes—a field book and a typed summary that he prepared from the field books, probably during or soon after fieldwork concluded. The two are not identical, but differences are mostly minor points of commentary and phrasing. There are also 15 photographs (six reproduced here).

1940 LMS Survey Revisit

Phillips first recorded the Oliver site (LMS 16-N-6) for the Central Mississippi Survey in November 1940. His site description on the survey form reads as follows:

> Of 15 mounds reported by Peabody, only two remain—others might show up when cotton is off. Mound A is a mere shapeless remnant of the 26 ft. high rectangular mound reported by Peabody. Erosion and cultivation have finished what Peabody doubtless began. Mound B (Peabody's Mound 3) has survived thanks to a family cemetery upon it. Material is very abundant upon and near Md. A, but seems to thin out rapidly as you go out from it. Bulk of the collection was taken from immediate vicinity of the mound on the N[orth]. and E[ast]. Lot of material on the mound itself. A few sherds picked up around Md. B, same predominance of cord-marked, thrown in with the Md. A material (records on file at Peabody Museum).

In the LMS final report, Oliver is described as a "village site with mounds" dating to periods C-F (an error, since C-F signifies Tchula through late Baytown; Phillips et al. 1951:53). The site plan is repeated in simplified form in Figure 61 (Phillips et al. 1951:317) as a typical small ceremonial center. The Edwards Mound is depicted as 10 feet high and the Cemetery Mound as 6 feet high. The plaza is described as 600 feet long, oriented towards the east. Rectangular Mound A is given as 26 feet high (apparently a holdover from Peabody's original measurement); another possible mound is reported, along with "some" daub and "abundant" refuse (Phillips et al. 1951:322, Table 12). Material collected at this time (5,028 sherds) was tabulated under the original LMS typology. These 16-N-6 collection totals, made by Phillips on June 23, 1947, are given in Table 4-1. In my search of records curated at the Peabody Museum, I found no sherd tabulation forms except the summary of June 23, 1947, and so do not know whether the sherd count on Table 4-1 refers to the 1940 collection or to the combined 1940 and 1941 surface collections.

1941 LMS Test Excavation Procedures

Based on the results of Peabody's excavations (Peabody 1904) and the winter 1940 survey revisit, the site was selected for limited stratigraphic test excavation the following spring. Phillips and his assistant, Chester Chard, arrived on March 20, 1941, and, with the permission of the landowner Sam Dulaney (given in

Phillips et al. as "F. C. Duleny"), began their fieldwork with a surface collection and four posthole-digger tests to select areas for excavation. Cultural deposits in the first posthole-digger test, 20 m north of Mound A, ended at 60-70 cmbs. The second, located northeast of the mound toward the house, on a rise that may have been a mound, extended to 90-100 cmbs. The third, immediately south and a little east of Mound A in the outwash of the mound, ended at about 105 cmbs. The fourth, about 40 m to the east in an area with rich surface material including shell, was shallow. This preliminary work led them to select the third area for the first test unit, Section A-I.

The plane table map drawn by E. Mott Davis in March 1941 is the basis for the plan given as Figure 28 [seeFigure 4-14] (Phillips et al. 1951:254). The locations of the three test units (Cuts A to C) are shown indicated by bearings and distances. The height of Mound A (Figure 4-1) is noted as 2.83 m and Mound B (Figure 4-2) as 1.87 m. Other features of the map include the drive, house, and fenced yard from the center of Figure 28 (see Figure 4-14). A privy on the bank of the Sunflower River, behind the fenced yard, was omitted from the finished drawing. The southwest corner of the fenced yard, which served as Davis' benchmark, was 81 m north by 31° east of the top of Mound A, the site of the secondary benchmark.

The first test unit was begun by Chard and Phillips, with a single screen, and they were soon rained out. Wet weather would hamper their work, which lasted through March 26. The next day they hired two men, "Shorty and Walter by name" (Phillips 1941, manuscript notes), and two boys to screen and began a second test unit, with the archaeologists themselves digging. Later two other boys would be added. Besides

Table 4-1. Central Mississippi Valley Archaeological Survey Sherd Counts, Site 16-N-6.

Type	Count	% Total
WOODLAND		
Mulberry Creek Cordmarked	3,440	68.0
Baytown Plain	819	16.3
Larto Red Filmed	105	2.0
Mazique Incised	28	0.6
Oxbow Incised	9	0.2
Unclassified clay tempered incised and punctated	7	0.1
Woodville Red Filmed	5	0.1
Indian Bay Stamped	2	trace
Marksville Stamped	1	trace
Chevalier Stamped	1	trace
MISSISSIPPIAN		
Neeley's Ferry Plain	467	9.3
Unclassified shell tempered incised and punctated	48	1.0
Barton Incised	35	0.7
Old Town Red	16	0.3
Bell Plain	11	0.2
Parkin Punctated	9	0.2
Nodena Red and White	4	0.1
Carson Red on Buff	3	0.1
Rhodes Incised	2	trace
Blanchard Incised	1	trace
Hollywood White Slipped	1	trace
Kent Incised	1	trace
Stokes Bayou Incised	1	trace
Wallace Incised	1	trace

Figure 4-1. Mound A from southwest, 1941.

Figure 4-2. Mound B from southwest, 1941.

table screens (wire mesh size not stated), equipment included trowels, spades, round-bladed shovels, and a carpenter's level attached to a plank. Apparently ceramics were the main, or perhaps only, materials collected. Notes and photographs demonstrate that daub was present, but not saved, even though some examples with split cane impressions were encountered. Apparently, shell was not collected either. There is no reference to any lithic artifacts being encountered.

The 1941 test units measured 2.0 by 2.0 m and were marked with corner stakes and string. In photographs, the test units appear to be well excavated and the stratigraphy is readily discernible in profile views. During testing, units were referred to as Sections A-I, A-VII, and B-I. In the report, as cited below, they are Cuts A, C, and B, respectively. Below the plowzone, arbitrary 10-cm levels were excavated, with ceramics from each level bagged separately. Unfortunately, search of the Peabody Museum collections did not turn up any sign of the excavated materials or square/level tabulation forms. As revealed in the commentary on results of testing (Phillips et al. 1951:190-192), Phillips had reservations about the adequacy of arbitrary levels in making temporal interpretations, particularly when natural stratigraphy (such as occurred in the Oliver "cuts") was evident. Wrestling with this problem led him to an unusual form of summary stratigraphic data, shown in Figures 29-32 (see Figures 4-15 to 4-18). We will return to this problem, and its relationship to the seriation of surface collections.

Unit profiles were prepared, but only those that serve as the basis for his Figure 30 [see Figure 4-16] (Phillips et al. 1951:255) were presented in the report. These profiles and a few supplementary pieces of information can be added to the chapter, as reproduced below. Although several features were encountered, few plans were drawn. Phillips' reference (first paragraph in the cited section below) to "our own immediate purposes" suggests why, at several points in the fieldwork, postmolds and other features were encountered, but extensive efforts were not made to identify other such features, other than the troweling the bases of levels. Due to several rains during testing, the soil was very dark and loose, hindering identification of posthole patterns. As Phillips commented in his manuscript field notes, while digging through a burned structure floor and hearth in Section A-VII (Cut C), "Prob[ably] post-holes on this floor but decided not to hold up crew by troweling. Not what we are after," interjecting "expensive crew" in the typescript.

Stratigraphy and Features

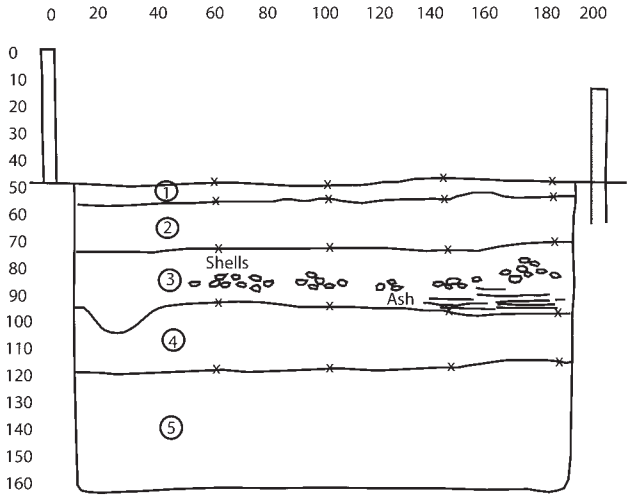
Phillips' discussion of the physical results of the excavated test units is limited and concentrates upon the interpretation of the ceramic sequence obtained. Therefore, a few details concerning the physical context will be provided here.

Section A-I/ Cut A

Phillips, as we will see, found Cut A to have satisfactory and clear separation of Baytown and Mississippian deposits. Unit walls showed consistent horizontal strata (Figures 4-3 through 4-6).

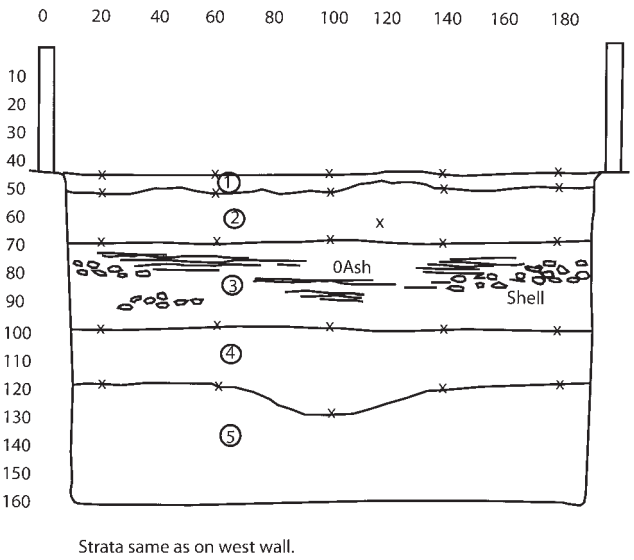
Zone I, the 60-cm plowzone of this 2.0-by-2.0-m unit, consisted of the cotton rows and the first 10 cm below the furrows. The soil was rich, dark, homogeneous midden with fragments of daub and shell. Phillips' summary (typescript notes) of Section A-1 stratigraphy describes this material as compact brown sandy loam with small bits of daub and sparse shell. No features were noted in this level or in Level 2 (60-70 cm), which seemed similar, but with more shell and daub, some with cane impressions. Artifact recovery was "a good sack of sherds" (manuscript notes). Phillips labeled the first intact strata below the mound slope wash (71-96 cmbs) Zone III, which was loose, dark soil with shell and ash that was easily defined in troweling the floor. Level 3 (70-80 cm) revealed a few brown, ashy patches. By 80 cmbs, the shell density increased and the shells were more intact, resembling a shell midden. The soil matrix was dark and loose. In Level 4 (80-90 cm), the amount of ash and charcoal increased, while the amount of shell decreased, so that by ca. 90 cm, where a hard surface or floor in the western portion of the unit was reached, shell had ceased to be found. No features or other disturbances were noted in the excavated shell layer.

Phillips considered the Zone III-IV transition to be critical to interpretation of the test unit. Above was shell and daub, below, little or none. Zone IV (96-119 cm) is described as more compact dark brown soil with less shell and ash. The matrix of Level 5 (80-90 cm) continued to be loose, mixed soil with abundant sherds, daub, and animal bone that screened easily. The deposit continued to be black, artifact-rich soil with little daub or shell through 100 cmbs, when a 15-cm diameter posthole and 40-cm diameter pit were identified along the north wall. The posthole extended to at least 140 cm, making it at least 40 cm deep. The pit was filled with stiff yellow clay containing gravel. This feature was evident to about 130 cmbs, diminishing in diameter until disappearing, and then reappearing in Level 10 (140-150 cm) with a 50-cm diameter and a fill of yellow clay and charcoal. At 150 cm, half of a deer mandible was encountered in the pit. This 40-to 50-cm diameter, 50+ cm deep pit ended in the 150-160 level, along with most other cultural materials. Troweling of the unit floor at 110 cm resulted in the discovery of some additional softer, darker wet spots that *might* have been postmolds, but "no post-



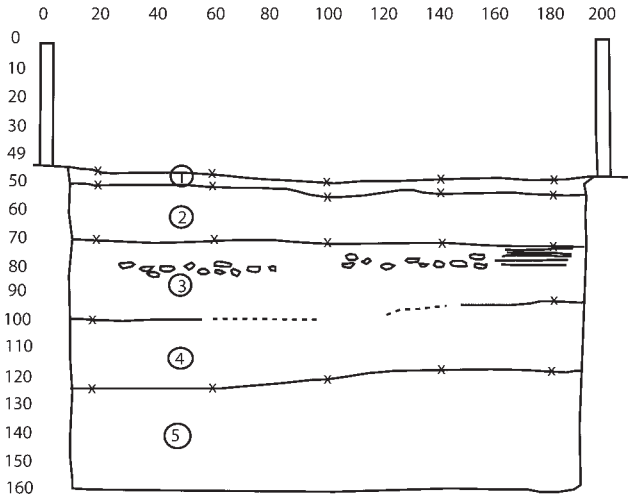
Strata same as for west wall except more shell in 5.

Figure 4-3. Section A-I, south wall profile.



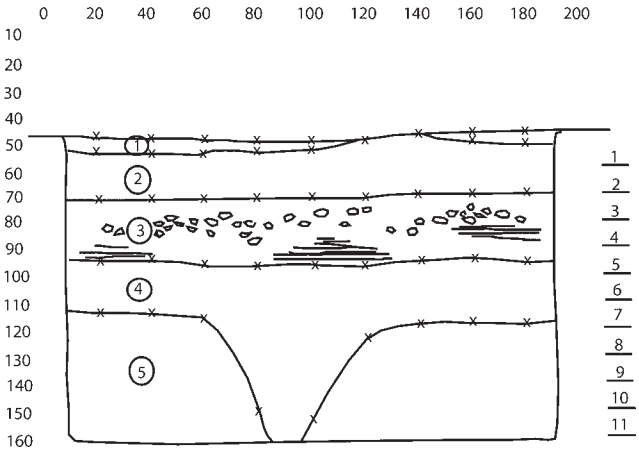
Strata same as on west wall.

Figure 4-4. Section A-I, north wall profile.



1. Plow zone.
2. Same as for west wall.
3. Same as for west wall, but less shell, ash, etc.
4. Separation of 3 and 4 not well marked, especially in center.
5. Same as for west wall, plus some scattered shell.

Figure 4-5. Section A-I, east wall profile.



1. Plow zone.
2. Brown clay loam, compact with scattered lumps of daub.
3. Loose dark midden soil with horizontal lenses of shell, ash and charcoal.
4. Dark brown to black midden zone, more compact and homogeneous than 3, very little shell, no ash nor charcoal.
5. Lighter brown sandy loam merging into olive drab, undisturbed sand.

Figure 4-6. Section A-I, west wall profile.

hole outlines could be made out. Seemed best to let it go" (Phillips' 1941 typescript notes).

Zone V (119-170 cm), the lowest zone excavated, was defined by the lighter, olive color of the homogenous soil. Phillips supposed it to be underlying sandy loam discolored by leaching from the overlying midden, as the base of cultural deposits was very gradual. Level 7 (110-120 cm) had abundant pottery and scattered sparse shell. Level 8 was similar, with sparse shell and charcoal, and the soil began to grow lighter in color. Pottery was still abundant in Level 9 and shell density was increasing, although the lightening of soil color continued. In Level 11 (150-160 cmbs) cultural deposits ended around 150 cm, except for a dark area along the east wall, which was still yielding sherds. Several more fragments of deer jaws were noted in this level. The east half of a final level (Level 12, 160-170 cmbs) was excavated to remove the remaining dark soil, a deep patch of midden. A small, indistinct pit was noted in the west profile, as well (Figure 4-7).

Section A-VII/ Cut C

This 2.0-by-2.0-m unit was located 8 m west and 4 m north of Section A-I, 20 cm further up the slope wash zone, in an attempt to tie the Section A-I stratigraphy with that reported from the mound by Peabody. Work proceeded as in the first test unit, with Chard excavating for several screeners (Figures 4-8 and 4-9).

The base of the first level (plowzone) showed no features, but daub fragments were noted. Level 2 (55-65 cm) was similar, with ceramics not abundant. Level 3 was similar, with abundant daub "more than in any sect[ion, level] in A-I" (typescript notes). Level 4 began to show ash at its base (85 cm), with considerable daub, some with split cane impressions, and sparse ceramics. In Level 6 (95-105 cm), a hard clay floor was defined in the northwest and southeast corners. A "small patch burned bright red" (typescript notes) appeared to be a hearth. The possibility of posts associated with this floor was not followed up on by troweling. This hard floor separating Zones I and II was noted in the west wall at 105 cmbs and appears as a distinct complex of house debris in photos (Figure 4-10). This compact surface extended across the western part of the unit.

The removal of this structure level was defined as the base of Zone II; immediately below, in Zone III, a rich village midden with shell began to be noted, along with clay-tempered pottery. Level 7 produced some shell and ash, as well as grog tempered sherds. In Level 8 (115-125 cm), daub decreased markedly, sherds continued to increase, and the soil was dark, sticky, and hard to screen. Chard supervised the remainder of the unit excavation, but took few notes. Level 10 (135-145 cm) produced two sacks of pottery, Level 12 a very small sack, and Level 13 very few sherds. He described the final level of Section A-III, Level 14 (175-185 cm) as "almost all sterile soil" (typescript notes).

Only the north and east walls were recorded, as the remainder were said to be similar, however, both the north and east walls show details of architectural debris (Figures 4-11 and 4-12).

Figure 4-7. West wall of Section A-I prepared for profiling.

Figure 4-9. Excavation in progress, Section A-VII.

Figure 4-8. Starting Section A-VII.

Figure 4-10. Burned house debris in north wall, Section A-VII.

Section B-1/ Cut B

There are no typescript notes or photographs for Section B-1, although at least two 10-cm levels were excavated below the plowzone. The manuscript notes describe only three levels to 60 cmbs, although the profile of the west wall (Figure 4-13) shows the unit as extending to 100 cmbs.

The plowzone extended to 40 cm, including the height of the cotton rows. Abundant daub was found in this unit from the beginning. Two postholes (22 and 23 cm in diameter) and a pit with dense shell and a soft area with a large mass of embedded charcoal were noted at the base of plowzone. In the second level (40-50 cm) a third posthole, 14 cm in diameter, was noted, as well as the fact that the 23-cm diameter posthole was now distinct and charcoal filled. The 22-cm diameter posthole was filled with soft midden with sherds. Level 3 (50-60 cm) contained abundant large fragments of daub with woven split cane impressions. Soils of Zone II, which extended to 60-70 cmbs, were generally brown sandy loam with scattered daub. Below, Zone III to 100 cmbs was the same soil, slightly darker, and without daub.

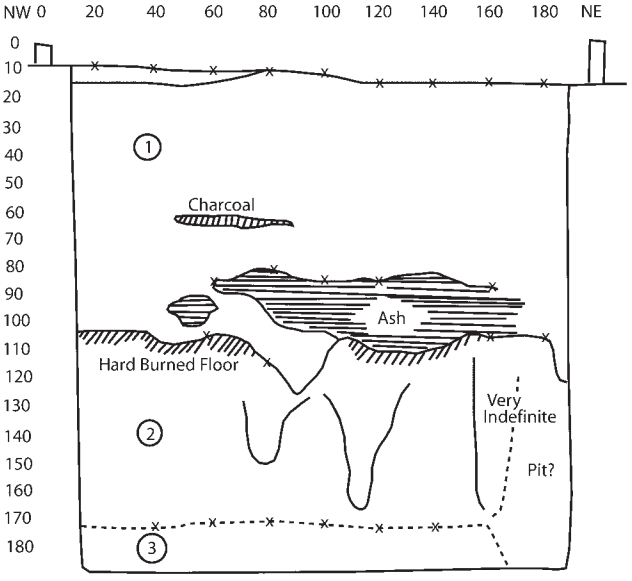
Summary of Stratigraphy

In assessing the test excavations, Phillips considered three problems as they relate to the sites tested. As to stratigraphic results and the periods they shed light on, of the fifteen "successful" cuts, six (including Oliver Cuts B and C) provided information on relationships within the Baytown period. The three Oliver cuts and all but one of the other cuts provided information on the relationship between the Baytown and Mississippi periods (Phillips et al. 1951:290). Phillips concluded from the 1941 testing program,

> in relation to the time and expense involved, these excavations paid off extremely well.... Not only were they individually successful, but the story they tell is completely consistent, so far as it goes (Phillips et al. 1951:290-291).

On Phillips' "metrical" method of stratigraphy (see Phillips et al. 1951: Figures 29-32 [Figures 4-15 through 4-18]):

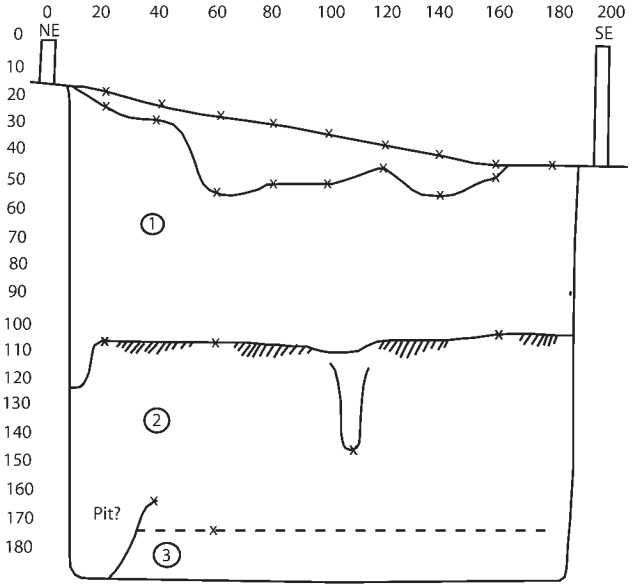
> Most if not all of our difficulties of interpretation might have been avoided if we had been able to "peel" stratified deposits instead of digging them in arbitrary horizontal levels.... Of the seventeen cuts described here, only four (Oliver A, C...) were in deposits that might possibly have been peeled by means of the block [excavation method]....



Plow zone appears only at upper left.

1. Mixed compact brown sandy loam with scattered lumps of daub and potsherds. No shell. Ash lenses as indicated.
2. Same, but darker, looser in texture. some shell, but no daub. Separated from 1 by hard burned clay floor as indicated, upon which is a thick layer of undisturbed ash. depression in floor may have been a small fireplace. Three post-holes shown, difficult to work out upper portions- probably originate on this floor. No other places for them. The one in the center is filled with ashes and burnt earth.
3. Undisturbed olive brown sand. No line of separation between 2 and 3. What may be a small pit in NE corner intrudes into 3, but is very indistinct.

Figure 4-11. Section A-VII, north wall profile.

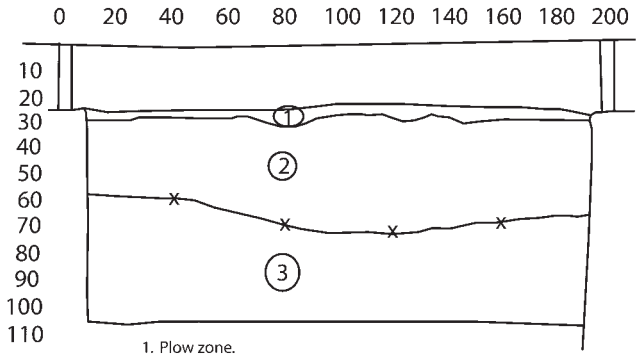


Stratification same as for north wall except for shallow intrusive pit at top. Burned floor is less pronounced than on west wall, and peters out completely at the south corner.

Figure 4-12. Section A-VII, east wall profile.

> ... another detail we learned the hard way is that great care should be taken to eliminate material from pits and post-holes in the course of digging. We were deliberately careless in this regard on the theory that such material would not be in sufficient amount to upset the over-all statistical results. As a matter of fact, it rarely does so, but in questions having to do with continuity or discontinuity of deposits, in other words, the presence or absence of a "transitional" phase, out-of-place material in pits and post-holes may be important if not decisive [Phillips et al. 1951:291].

Finally, Phillips et al. (1951:291-292) addressed the just-alluded issue of the nature of the Baytown-Mississippi transition. He noted that the nature of the transition can be seen only dimly through frequency seriation of surface collections, even when sites with obvious multiple occupations are removed. He pointed to the problem of first assuming that there may be a transitional stage during a Woodland-Mississippian transition, then including collections in the seriation that have mixed Baytown and Mississippian materials, and finally placing them on the graphs in that position. The many multicomponent sites, such as Oliver, take up space on the graphs, reinforcing the impression of continuity and making change seem more gradual than it in fact may have been. Of fifteen cuts showing superimposition, Phillips et al. (1951:292) believed that only one showed evidence in favor of Baytown-Mississippi continuity, two favor the same impression to a lesser degree, three (including Oliver Cut A) show definite evidence of discontinuity, and three other (including Oliver Cuts B and C) less strongly support discontinuity. Six could not be interpreted as supporting or not supporting Baytown-Mississippi continuity. He seemed to find the side of distinct discontinuity supported by the fact that some of the sites that appeared as transitional in the seriation (including Oliver) were among those that provided clear evidence of discontinuity.



1. Plow zone.
2. Brown sandy loam with acattered lumps of daub.
3. Same, without daub, slightly darker. Separation between 2 and 3 can be traced about halfway across the South wall, and there is a small patch of it in the SE corner, where there is a trace of floor at this level and one post hole in it.

Figure 4-13. Section B-I, west wall profile.

The selection from Phillips et al. (1951:253-260) concerning the Oliver site follows.

Oliver Site (16-N-6)

The Oliver site was chosen for testing because the indications of cultural stratification obtained, though not entirely appreciated by Charles Peabody in extensive excavations on the site in 190l-02,[1] were confirmed by our surface collections. It was hoped that a small scale excavation here might enable us to extract more meaningful results from Peabody's published data. This is in no sense a criticism of his work, which was of a high order, considering the time it was done. Such hopes were only partly fulfilled for reasons that will be sufficiently apparent. In respect to our own immediate purposes, however, the three cuts put down on this site by Phillips and Chard in 1941 were eminently satisfactory. Our thanks are due to the owner, Mr. F. C. Duleny, for permission to excavate.

The site, located on the east bank of the Sunflower River about 15 miles below Clarksdale, in Coahoma County, Mississippi, consists of a large but mutilated rectangular platform mound (Peabody's "Edwards Mound") and several smaller mounds of uncertain size and shape (fig. 28) [Figure 4-14]. This portion of the Sunflower River country has seen enormous change since Peabody's time, when it was as yet largely unreclaimed for agriculture. The site is a disheartening example of the ravages that can be wrought by cultivation in a comparatively short time. Peabody's description, therefore, gives a better idea of the original features of the site than we can give at the present time.

Cut A (Figure 29) [Figure 4-15]

Cut A was put down close to Mound A (Peabody's "Edwards Mound"), 10 meters from the foot of the mound slope, on the southeast side (fig. 28) [see Figure 4-14]. Two reasons prompted the choice: (I) the possibility of revealing the relationship of mound and village site, and (2) the hope of avoiding Peabody's extramound excavations, on the theory that he would not have been likely to push these so close to the mound already dug. It was to be

expected that the upper levels of the cut would be affected by outwash from the mound, and such proved to be the case. Below the outwash zone, the cut presented unusually clear and undisturbed stratification:

Zone I. — 45 cm. to 52 cm. Plowed zone.

Zone II. — 52 cm. to 71 cm. Brown sandy loam, homogeneous and compact with little cultural material showing other than small bits of daub scattered throughout. Very little shell. This deposit was thought by the excavators to be largely composed of outwash from the mound.

Zone III. — 71 cm. to ca. 96 cm. Loose dark midden soil with lenses of shell, ash, and charcoal and fragments of daub scattered throughout. Both upper and lower limits of this deposit were unusually level and unaffected by pits and other disturbances as may be seen by the remarkably congruent lines of stratification in the four profiles (fig. 30) [Figure 4-16].

Zone IV. — ca. 96 cm. to ca. 119 cm. Dark brown to black midden soil, more compact and homogeneous than Zone II. Scattered shell, but no lenses as in Zone III. No daub.

Zone V. — 119 cm. to 170 cm. Substantially same as Zone IV, though somewhat lighter in color, gradually fading out to the light olive-brown sandy sub-soil of the region. The separation between Zones IV and V was arbitrarily drawn, based entirely on a slight difference in color. For all practical purposes, these two zones may count as one.

The "critical level" in this cut, to borrow a term from Peabody, is the separation between Zones III and IV. Above this line, in Zone III was what could almost be described as a shell midden, with fragments of daub scattered throughout, below it only scattered individual shells and almost no daub. This striking discontinuity of deposits is of prime importance in the interpretation of the stratigraphy as we shall see (fig. 30) [Figure 4-16].

It is a pleasure, not often experienced, to describe such a clear-cut correlation between pottery stratigraphy and ground stratification.

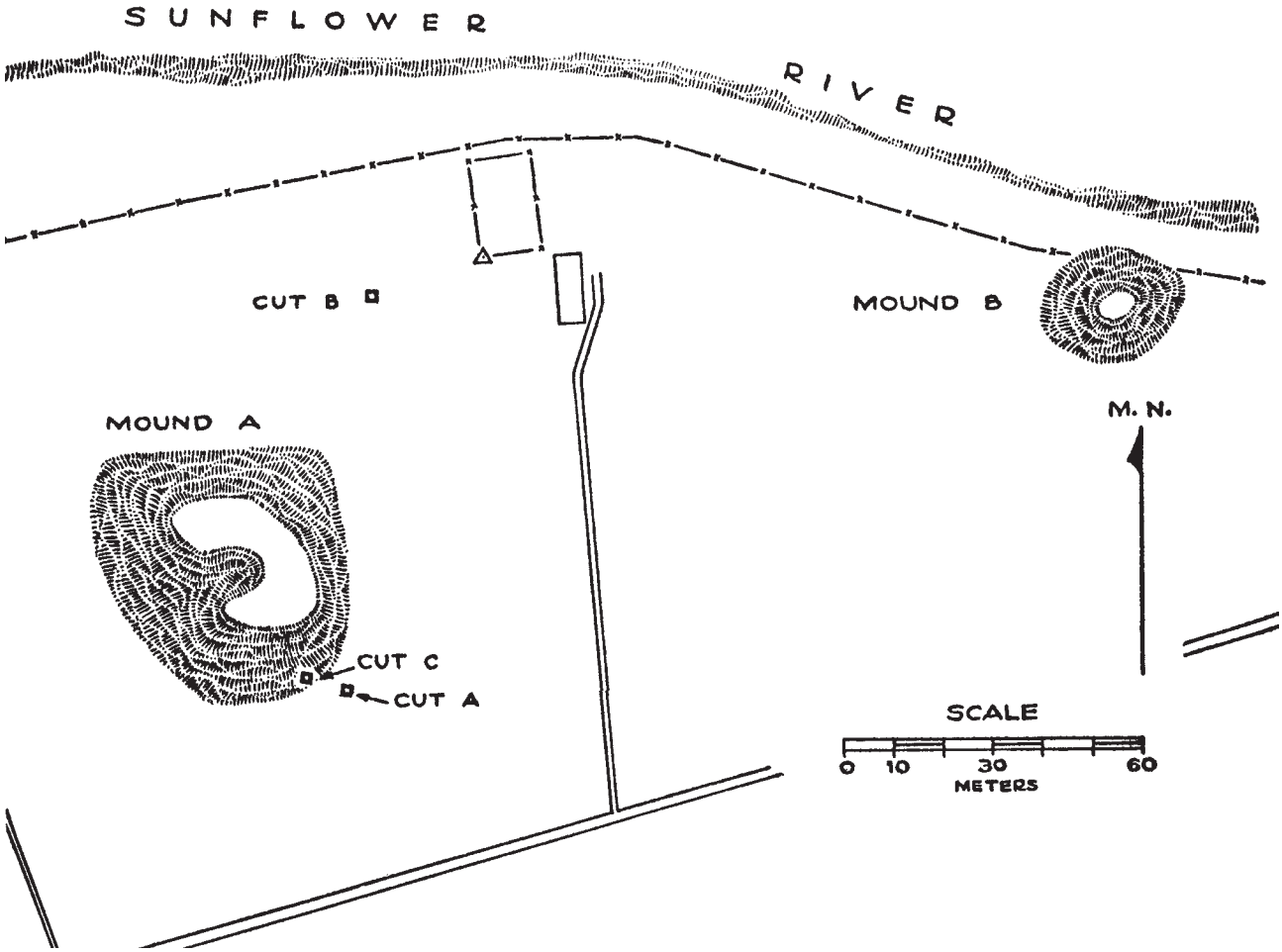


Figure 4-14. Plan of the Oliver site (Phillips et al. 1951: Figure 28).

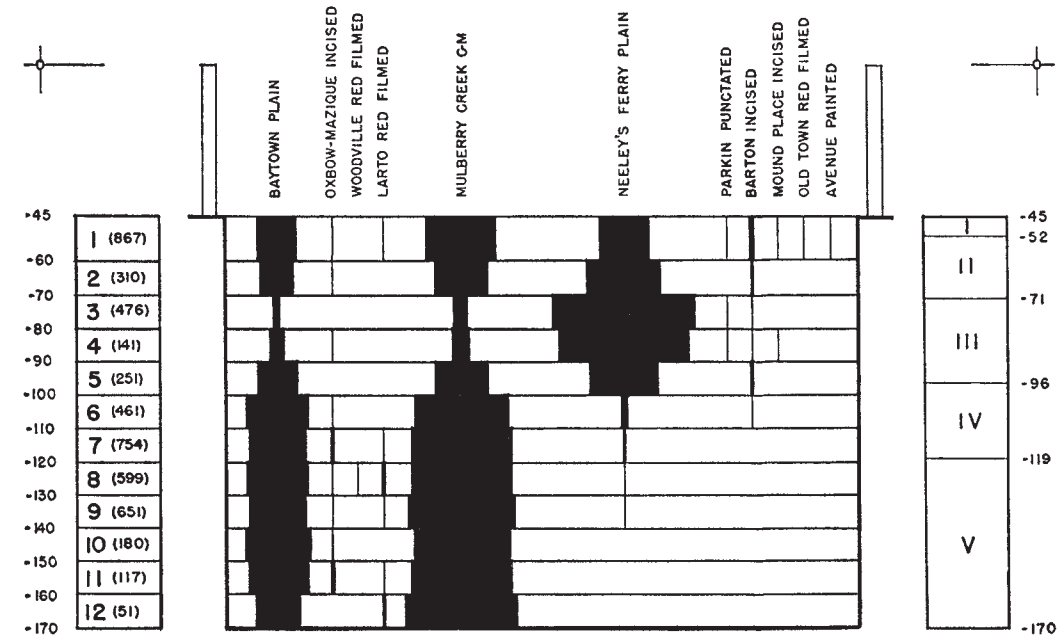


Figure 4-15. Stratigraphic diagram, Cut A, Oliver site (16-N-6; Phillips et al. 1951: Figure 29).

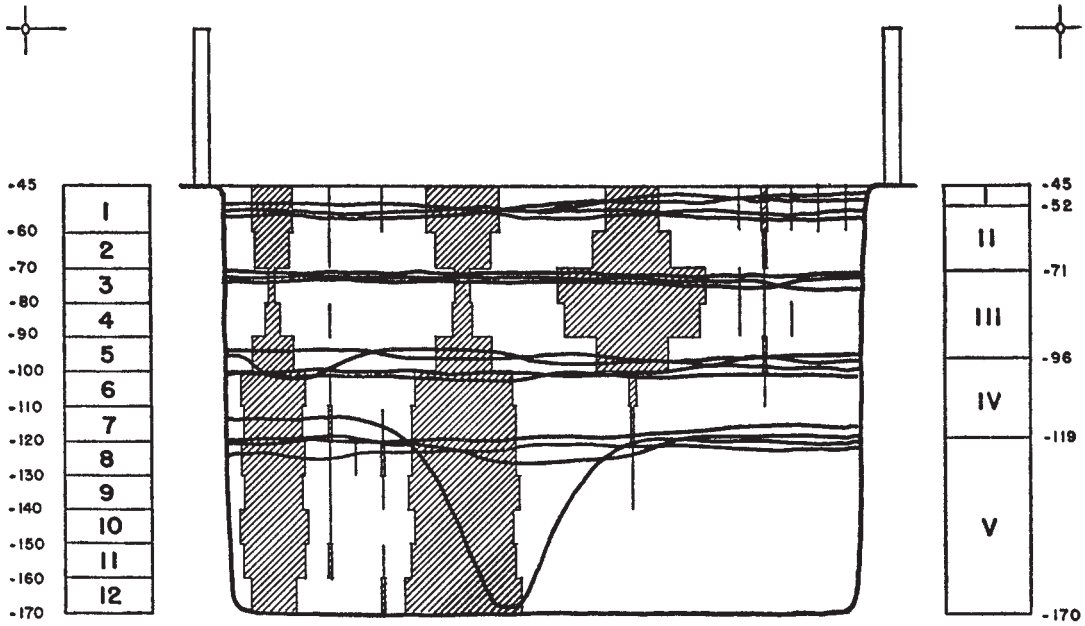


Figure 4-16. Composite profile diagram, Cut A, Oliver site (16-N-6; Phillips et al. 1951: Figure 30).

Levels 1 and 2, corresponding closely to Zones I and II, representing the plowed and outwash zones, contain just that sort of mixture of pottery types we would expect. Levels 3 and 4, corresponding to the upper three-fourths of Zone III, indicate an almost pure Mississippi period occupation. The small percentages of Baytown Plain and Mulberry Creek Cord-marked in these levels might be interpreted as the result of persistence of earlier types into a later period, but the amounts are not greater than could have resulted simply from minor disturbances and "normal" upward migration in the ground, and in view of the mound-building activity nearby, the latter seems the most probable explanation. More substantial amounts of these types in Level 5 are attributable to the fact that this level straddles the critical plane of separation between Zones III and IV. This has the effect of furnishing a spurious transition on the pottery graph between the two zones in question. A truer approximation to actual conditions would be obtained by the omission of Level 5 and the direct comparison of Levels

4 and 6, which would show as sharp a "break" as you can hope to see in a stratigraphic column. From Level 6 on down we are in a pure Baytown horizon corresponding to Zones IV and V in the ground.

The Mississippi deposit is marked by a complete absence of Bell Plain. This can be interpreted in one of two ways: (1) an earlier pre-Bell Mississippi phase or (2) location of the site outside the range of distribution of Bell Plain. Comparison with the gross distribution map of the type (fig. 12) [not reproduced herein] indicates that the latter is the correct explanation.

The Baytown deposit is fairly deep but remarkably stable, in sharp contrast to the situation on the Lake Cormorant Site. Lack of Withers Fabric-impressed and the other early types, on the one hand, rules out the early Baytown Period, while the large and constant percentage of Mulberry Creek Cord-marked, plus the lack of Wheeler Check Stamped and/or Coles Creek Incised, seems to rule out the late Baytown Period on the other. The occupation, therefore, appears to be bracketed within the middle Baytown Period. We must admit, however, that our late Baytown criteria in this area are not well established. Nothing has been said yet about the time position of Mazique Incised. The type reached its maximum in the Lower Alluvial Valley in the late Troyville Period but persisted well on into Coles Creek. This would appear to support our tentative dating of this deposit as middle Baytown, but we are not altogether happy about the type as represented here in the Survey Area. It is poorly defined and covers too wide a range, typologically speaking, to be a good period determinant.

The results of this cut are so satisfactory and of such potential significance as to warrant re-emphasis. It is impossible to escape the conclusion that we have here a stratified situation. A deposit of considerable depth but remarkable homogeneity containing remains of a middle Baytown occupation (corresponding approximately to period E-D in our provisional chronology) is overlain by a thinner but no less pure Mississippi occupation, which in turn is overlain by an outwash deposit from the big mound in which the two complexes are mixed, as might be expected if the mound contained earth scraped up from the earlier village site. There is every reason to believe that the Mississippi occupation corresponds to the period of construction and use of the mound. It is of course not impossible that other portions of the site might show a transition from one type of culture to the other, but the evidence of this cut, taken alone, would support the contrary hypothesis of discontinuous cultural stratification.

It is interesting to note that in seriating the data from this cut, without regard for ground stratification, Ford found it necessary to leave a wide gap corresponding to D-C (late Baytown) on the time scale between Levels 5 and 6 to make the patterning come out right (fig. 19) [not reproduced here]. This is a very satisfactory confirmation of the essential soundness of the seriation method.

We have already referred to what may be called the basic stratigraphic problem in this area, the question whether Mississippi culture evolved out of Baytown in place or "came in" and supplanted it (see p. 233). In the cuts on the Walls Site (13-P-I) there was a faint indication, hardly to be called evidence, in favor of the hypothesis of cultural continuity. On the Lake Cormorant Site (13-P-8) the evidence pointed rather weakly the other way. Here the indications are somewhat stronger. There can be no question, in this cut, that there is a break between Baytown and Mississippi Period deposits. However, it must be pointed out that, according to present interpretations, the Baytown pottery represented here is middle not late Baytown. This may well be a case, where the "transitional" phase, a postulation required by the continuity theory, is missing simply because the site, or this portion of it, was not being occupied at the time.

Cut B (Figure 31) [Figure 4-17]

While the excavation of Cut A was proceeding, Cut B was dug by Chester Chard on another portion of the site northeast of Mound A, beyond the reach of any possible outwash from the mound, figure 28 [Figure 4-14]. The location turned out to be a shallower portion of the site, only seven pottery-bearing levels being obtained, but the stratigraphy was quite satisfactory and generally confirmatory of the results obtained in Cut A. Stratification was simple and well defined, as follows:

Zone I. — 24 cm. to 30 cm. Plowed zone.

Zone II. — 30 cm. to 65 cm. Brown sandy loam with scattered lumps of daub. Appears to correspond in character to Zone II in Cut A, which throws some doubt on our interpre-

tation of that deposit as mainly composed of outwash from the mound. However, we know from Peabody's report that there were other mounds on the site, which have since disappeared, so it is not unlikely that this cut was on or near one of these other mounds.

Zone III. — 65 cm. to 110 cm. Same, slightly darker, and without daub. Clearly corresponds to Zones IV and V in Cut A, though not so thick. The separation between Zones II and III was not well marked but consisted in part of a burned floor. On checking its level with reference to a common datum, however, it was found to correspond precisely to the level of the well-marked separation between Levels III and IV in Cut A.

The separation between the Mississippi and Baytown occupations is not as clear as in Cut A, but with a little "interpretation" the two cuts can be made to tell the same story. The difficulty is that there is no "pure" Mississippi refuse corresponding to Zone III in Cut A. Our Zone II here, which corresponds in position, has an even mixture of pottery types. The chances are that mound-building activity, as already suggested, is responsible for the mixture, but there is, of course, no way to prove it. Peabody's map is not sufficiently accurate for detailed comparison, but his Mound I, which no longer exists, was very close to the location of this cut.[2]

From the general standpoint of stratigraphic method, there is an interesting point here. If we had dug only Cut B and were therefore unaware of the existence of any pure Mississippi refuse on the site, the separation between Zones II and III, which was not particularly distinct anyhow, would doubtless be regarded as nonsignificant. In this case the pottery graph showing a partial and gradual replacement of Baytown by Mississippi types might logically be interpreted as representing a single late Baytown occupation about the time of the first appearance of Mississippi pottery in the area. In other words, this might be the "transitional" period, which we found to be missing in Cut A. With the results of that cut fresh in mind, however, such an interpretation is impossible and we are able to recognize the true importance of the line separating Zones II and III, as the counterpart of the more definite and conspicuous "break" in Cut A to which it corresponded in absolute level. This shows how very careful one must be in making assumptions based on single small stratigraphic excavations.

A detail of importance in this cut is the appearance of Withers Fabric-impressed in the Baytown Period component, particularly in the bottom level. This type, which we know to be early from its position in the Lake Cormorant Site was not present in Cut A on this site nor in Cut C, as we shall see, a circumstance which indicates that this is perhaps an earlier part of the site. It also confirms our tentative dating of the Baytown component as middle rather than late Baytown.

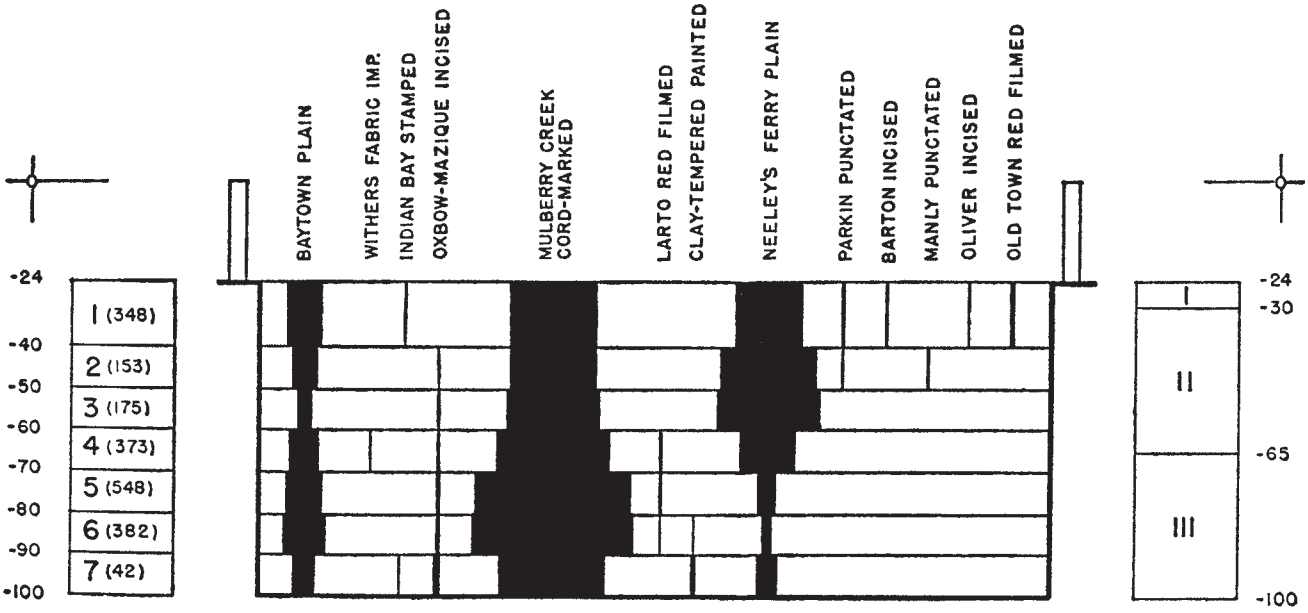


Figure 4-17. Stratigraphic diagram, Cut B, Oliver site (16-N-6; Phillips et al. 1951: Figure 31).

Cut C (Figure 32) [Figure 4-18]

Cut A failed in one of its objects, i.e., to give us any certain information about the relationship of mound and village site, so a third cut, Cut C, was put down 8 meters nearer the mound, in fact, on the lower edge of the mound slope. The stratification was as follows:

Zone I. — 28 cm. to ca. 35 cm. (very uneven). Plowed zone.

Zone II. — 35 cm. to 105 cm. Brown sandy loam, homogeneous and compact with small bits of daub scattered throughout. No shell. Lenses of ash toward the bottom overlay a burned "floor" separating this from Zone III below. The major portion of this deposit was certainly made up of thoroughly disturbed and re-deposited material resulting from long-continued cultivation and erosion of the mound, and therefore corresponds to Zone II in Cut A.

Zone III. — 105 cm. to 175 cm. Dark brown midden soil containing some shell but no daub, corresponding to Zones III and IV in Cut A.

The "floor" separating Zones II and III corresponds morphologically to that separating Zones III and IV in Cut A, but shows more pronounced evidences of occupation in the form of burned areas and post-holes. It is, moreover, at a slightly higher level in the ground[3], probably due to its position higher up the mound slope. It may be that at the time this surface was being lived upon, mound-building, inadvertent or deliberate, had already taken place, or that the occupiers were taking advantage of a natural rise. It is very interesting that this occupational surface corresponds very closely with Peabody's "critical level" in the mound. It cannot be correlated with mathematical precision, owing to the fact that his levels and ours are not tied into a common datum, but the two are at approximately the same depth relative to the ground surface.

Before embarking on an interpretation of the stratigraphy of this cut, there are one or two things about the diagram that require explanation. The strange look at the top is due to the side-hill location of the cut, which necessitated a deep first level in order to get a horizontal bottom. This is also the reason for the large sherd sample. Sixteen hundred and forty-one is the total sherd count in the top level, not the date—though it might not be far off at that. This deep level got considerably below the plowed zone, in the upmound portion of the cut, but corresponds very closely with the first level in Cut A, nonetheless.

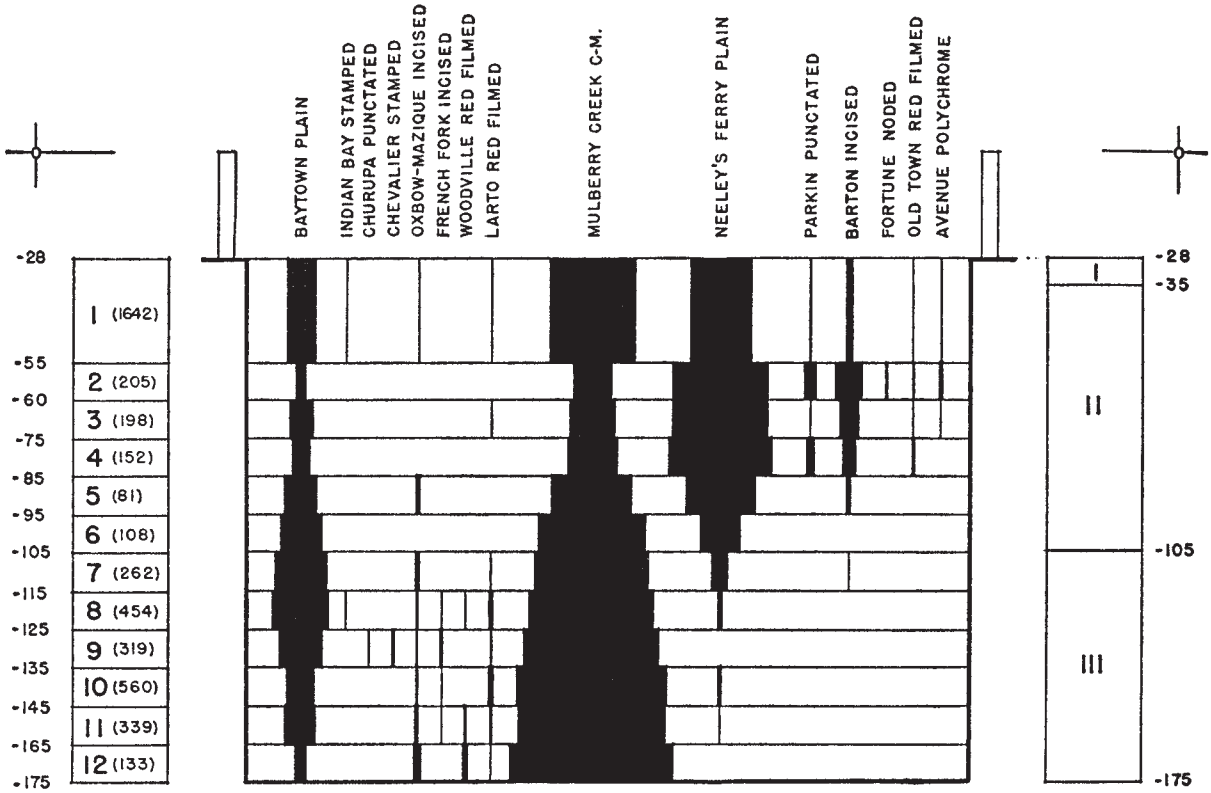


Figure 4-18. Stratigraphic diagram, Cut C, Oliver site (16-N-6; Phillips et al. 1951: Figure 32).

In general, the stratification of Cut C, as might be expected, lends itself to the same general interpretations as that of Cut A nearby, but there are certain differences, particularly in Zone II that are not easily explained. For example, there is no "pure" Mississippi refuse comparable to that of Zone III in Cut A. The lack of anything corresponding to the separation between them might be attributable to the location of Cut C up on the mound slope where the accumulation of undisturbed refuse is hardly to be expected. Unfortunately for this simple explanation, the pottery does not agree. In Cut A the "pure" Mississippi deposit lay directly above the "critical level," which we are now able to characterize as a "floor," whereas in Cut C the levels occupying the same relative position (Levels 5 and 6) are heavily charged with Baytown types. There does not seem to be any satisfactory explanation of the disagreement, but it is almost certain that mound-building had something to do with it. Parenthetically, it may be pointed out that the ordinary difficulties of stratigraphic interpretation are enormously increased by mound-building activities involving the transfer of masses of soil from one part of a site to another, not to mention the subsequent erosion of mounds and consequent redistribution of cultural material.

Below the "floor," Levels 7 through 12, we have in Zone III the same relatively pure and undisturbed Baytown deposit as in both Cuts A and B, the only difference being that, although not quite so thick, it seems to reach back into a slightly earlier period, as evidenced by the larger percentages of Mulberry Creek Cord-marked.

This cut is more important for its bearing on our general problem of stratigraphic interpretation, already alluded to several times under the heading of continuity versus stratification. A simple bar graph of pottery distribution in this cut without reference to ground conditions would present an ideal picture of the gradual replacement of one series of types by another. It would hardly require smoothing. Yet, in Cut A only 8 meters distant, we have the same two series sharply stratified, and, in fairness to the continuity hypothesis, have concluded that the sharp break is probably due to the fact that the late Baytown Period (where the transition must be if there was a transition) was missing on this site. Therefore, logically, the appearance of smooth transition in the pottery distribution of Cut C cannot be a reality because the transitional material is not here. The only conclusion left is that disturbance, in this case probably redistribution of material as a result of mound-building and/or mound erosion, can and does produce a spurious gradation of type distributions that is apt to be misleading.

Correlation with Peabody's Excavations

It was hoped that our very limited excavations might be tied in with Peabody's work in such a way as to make some use of his far more abundant material. Unfortunately, owing to the manner of presentation of archaeological reports of the time, this cannot be done without a thorough reworking of his field notes, which are available in the files of the Peabody Museum. It would probably be worth doing, for there is a good chance that what he called the "critical level" in the mound corresponds to the occupation surface or "floor" which separated the Baytown and Mississippi deposits in our excavations. There is a possibility, therefore, that his extended burials, generally without pottery, below this level, are associated with the Baytown component, while the "bundle" burials with pottery belong to the Mississippi Period.[4]

Conclusions on the Oliver Site

The evidence of the three cuts on this site, while raising all sorts of interesting questions in regard to stratigraphic interpretation generally, shows a satisfactory degree of internal consistency. The site is definitely stratified in the sense of having two distinct occupations or components with no evidence of transition between them. The earlier component appears to relate specifically to the middle Baytown Period, while the later component is in the Mississippi Period, but we are not yet able to place it definitely within that period. The absence of Bell Plain and its associates would indicate an early Mississippi position were it not for the fact that the site is in an area in which Bell Plain seldom appears. Arguing against an early Mississippi date is the fact that Peabody found turquoise and glass beads with burials in the upper level of the mound. These may, of course, have been intrusive burials dating from a still later Mississippi Period. We may as well admit that we do not yet have satisfactory criteria for dating within the Mississippi Period in the Sunflower area.

> But whether early Mississippi or late, the superposition of this culture over one of the Baytown Period does not signify conclusively in the argument between the hypothesis of continuity and that of cultural stratification, because the transitional phase is missing anyhow. That elusive Baytown-Mississippi transition, if it took place, took place elsewhere. There are no traces of it so far discovered in the Oliver site. [Phillips et al. 1951:253-260]

Phillips' 1970 Summary of LMS Survey and Testing

The next set of selections comes from the series of phases for the ceramic period that was, along with a compendium of new ceramic varieties, the ultimate result of Phillips' analysis of ceramics from the Lower Mississippi Survey. Here, I briefly summarize the context in which these phases were developed. In a future volume, Richard Walling discusses how these phases have been used in the regional literature since their introduction and the work done in the area to refine Phillips' (1970) phases.

Oliver and the nearby Alligator site, which the LMS also mapped and tested, anchored LMS interpretations of surface collections from this part of the Central Valley. The Peabody excavations, coupled with LMS surface collections and test units and Belmont's subsequent thesis (Chapter 3, this volume), formed the basis for three sequential ceramic phases located in the upper Sunflower River basin: the Baytown period Coahoma phase, the Coles Creek period Peabody phase, and the Mississippi period Hushpuckena-Oliver phase. Despite the evidence of two distinct Mississippian components and the precedent of separating them set by Belmont, Phillips could not make the original LMS ceramic typology separate the two components, so he combined middle-to-late and very late-to-protohistoric Mississippi phases. Other nearby sites were attributed to these phases based on their degree of ceramic similarity to the Oliver site.

The names of the Dorr (Phillips 1970: Figure 444 [Figure 4-19], Tiers 15-17), Coahoma (Phillips 1970: Figure 445 [Figure 4-20], Tiers 14-18), Peabody (Phillips 1970: Figure 446 [Figure 4-21], Tiers 15-17), Hushpuckena, and Oliver phases (Phillips 1970: Figure 447 [Figure 4-22], Tiers 16-19) have continued in use in the northern Yazoo Basin to this day. With few subsequent excavations, but many large- and small-scale cultural resource surveys, the phase concepts have become deeply entrenched in the literature of the Central Mississippi Valley, despite Phillips' many cautions concerning the need to test the internal and cross-phase homogeneity of the sites' material culture.

The Baytown period is noted as a time of widespread cultural homogeneity in the Central Mississippi Valley. The Coahoma phase must be viewed in the regional context of the southerly Deasonville complexes, the ill-defined Baytown phase between Crowley's Ridge and the lower White River basin, and the complexes of the Missouri bootheel and northeast Arkansas to the north.

To our 1970 investigators, led by Ford, the Late Woodland Coles Creek period was dominated by the northward-radiating influence of true Coles Creek culture in the Lower Valley upon vaguely defined cultures that might better be called "terminal Baytown" in the southern Central Valley and "emergent Mississippian" in the northern Central Valley. East of the Peabody phase, Phillips' very weak Toltec phase has been extensively developed, redefined, and integrated since 1970 into the regional sequence as the Plum Bayou Culture (Rolingson 1982, 1998). Walnut Bend phase to the north, recognized by Phillips (1970:914-916) by its Wheeler Check-stamped pottery, has seen very little investigation. To the south, later LMS excavations significantly developed the chronology, material culture, and other attributes of the northernmost "real" Coles Creek cultures, the Aden and Kings Crossing phases.

With the Mississippi period, the phases' territorial extents diminish markedly while the number of phases proliferates. Hushpuckena phase, however, retains a large territory along the modern Mississippi channel and along the Sunflower River. Phillips' descriptions of the mostly late Mississippi phases as a whole rely on subtle ceramic type frequency variations, constructs in which Phillips himself had little faith. As vague as the Hushpuckena-Oliver phase description is, it is stronger than those of several of the surrounding phases. Quitman phase to the east and Old Town phase to the northwest are quite dubious (Starr 1984, 1997a). The Parchman phase has acquired some substance as a result of the Mississippi Department of Archives and History Archaeology Division's many salvage excavations in the area around their Clarksdale field office (Connaway 1981, 1984). The Quapaw phase to the west, now better known as the Menard complex, is a protohistoric and early contact entity contemporary with the Oliver phase (Hoffman 1990; House 1991; House et al. 1999). To the south, the Wasp Lake and Deer Creek phases have seen limited additional research, generally in conjunction with the 1949-1955 testing and subsequent projects at Winterville (Brain 1989) and Lake George (Williams and Brain 1983).

We do not yet have a good Mississippian sequence for the Upper Sunflower subregion, particularly in the context of the Hushpuckena and Oliver phases (see

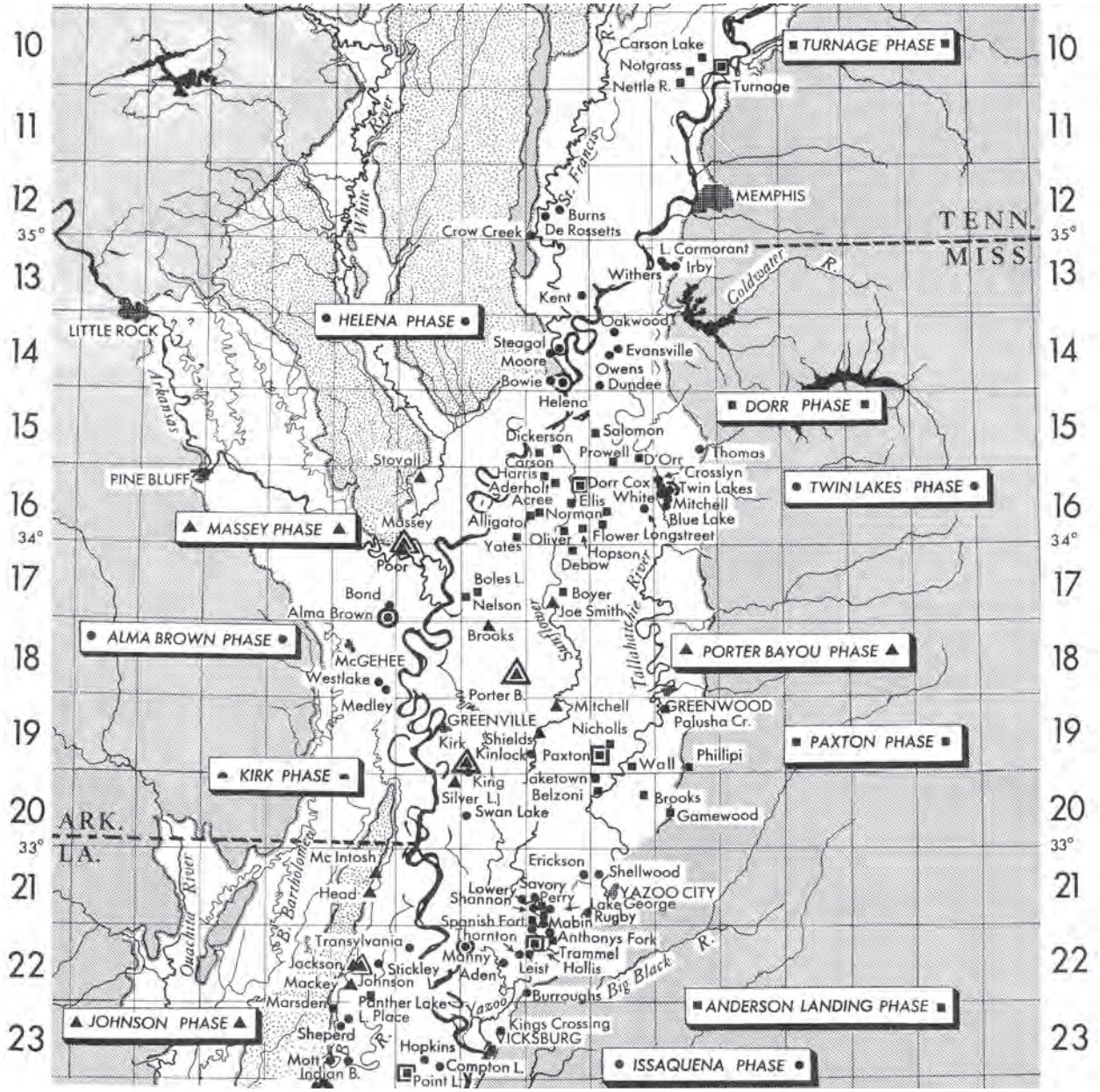


Figure 4-19. Distribution of components and phases in the Marksville period, Tiers 11-22. (Phillips 1970: Figure 444).

Connaway and Sims 1997, Starr 1997c for radiocarbon dates). There is a lack of dated contexts, and few sites in the area Phillips (1970) ascribed to the Hushpuckena phase have been excavated or even revisited for surface collections, with the exception of small collections made in the course of cultural resource surveys of the bankline of the Sunflower River and its main tributaries, the Bogue Phalia and Quiver River, as required by the Vicksburg District, US Army Corps of Engineers (Walling 1994; Walling and Roemer 1993; Chapman et al. 1994a, 1994b; Chapman and Walling 1995). I have collected a small amount of additional evidence from one small "Hushpuckena phase" mound group, Powell Bayou (22SU516; Starr 1991, 1997b). Sadly little additional information has accumulated about the latest Mississippian cultures ("Oliver phase") anywhere in the Central Valley, although more sites are now attributable to the late protohistoric (see Lawrence 1997 for one example).

The following are Phillips' (1970) commentaries on the three major phases he related to the Oliver site occupations: Coahoma (pp. 904-907), Peabody (pp. 917-918), and Hushpuckena-Oliver (pp. 941-942), as well as comments on Belmont's Oliver phase with relation to the Quapaw phase in Arkansas (pp. 943-944).

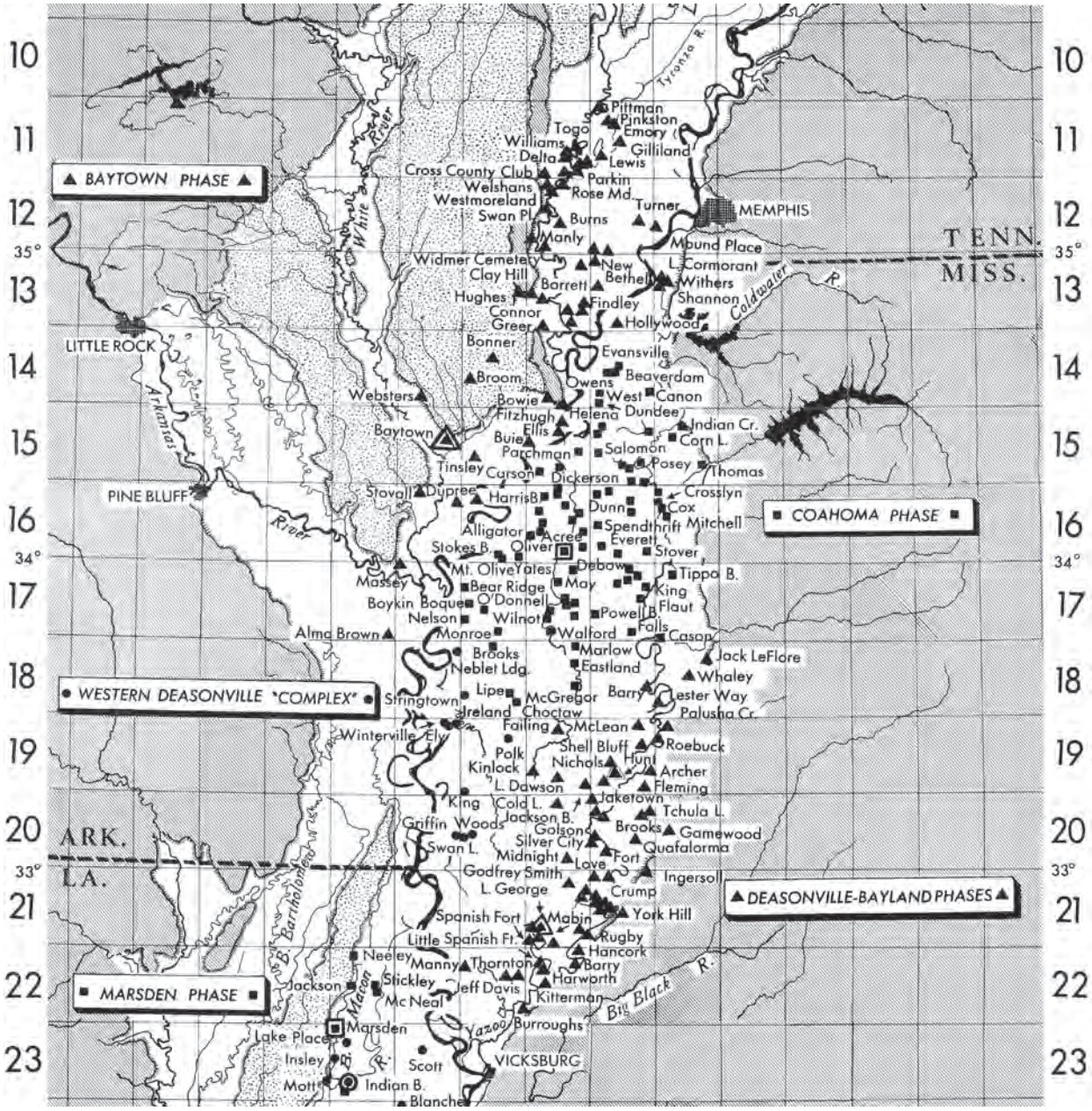


Figure 4-20. Distribution of components and phases in the Baytown period, Tiers 11-22. (Phillips 1970: Figure 445).

Coahoma Phase

The name "Coahoma" first appeared in archaeological print in Stephen Williams' Lower Mississippi settlement pattern paper as one of the sample phases in his "Early Baytown-Marksville" period (1956, fig. 2). This was followed by an Oliver phase in his "Late Baytown-Coles Creek" period. For reasons I now am unable to recall, we revised this terminology very drastically. By the time Belmont was setting up his sequence for the Upper Sunflower region, based on his re-interpretation of the stratigraphy at the Dorr (16-N-22) and Oliver (16-N-6) sites, the earlier terminology was ignored as if it had never been. Williams' Coahoma became the Dorr phase and his Oliver phase became Coahoma. To make matters worse, Belmont used Oliver to designate his latest protohistoric Mississippian phase at the top of the sequence. These rude displacements must have had Williams' and my approval, since we were advisors in the project. To compound the confusion, if such be possible, I am following Belmont's nomenclature, but my definition of Coahoma is not quite the same as his.

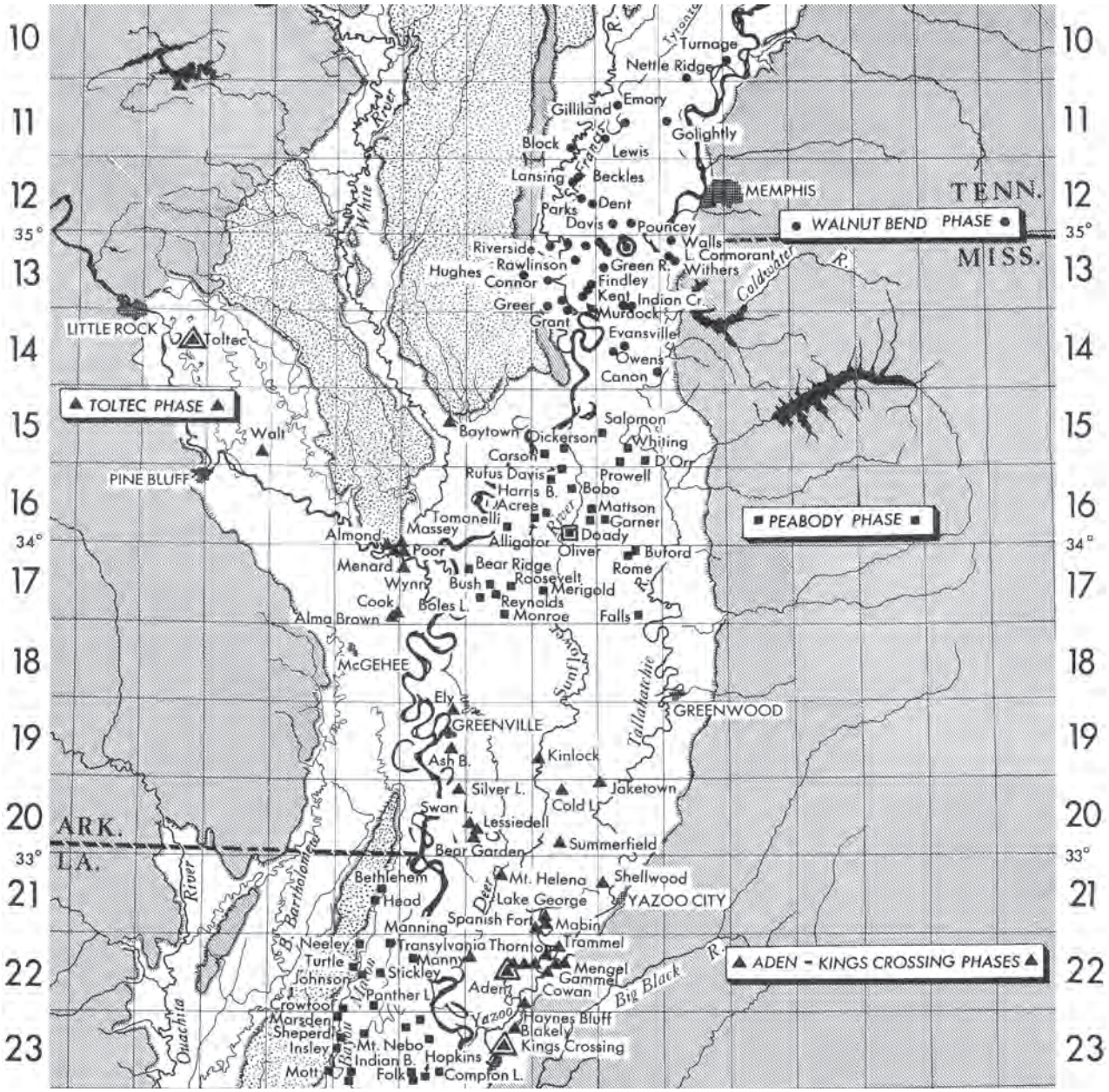


Figure 4-21. Distribution of components and phases in the Coles Creek period, Tiers 11-22. (Phillips 1970: Figure 446).

Belmont's admirable monograph has not been published [Chapter 3, this volume]. I shall have to quote some of the relevant passages (1961, p. 88). Comments in brackets are my own.

"The Coahoma Phase may date anywhere from the time that Marksville-type ceramics died out in the Valley (about AD 300) to the time of introduction of Mississippian ceramics, perhaps as early as AD 1000. Maybe Coahoma ceramics were made throughout this period in the Upper Sunflower…."

"In the southern Delta [Yazoo Basin] the only phase with considerable amounts of cord-marked pottery is Deasonville, dating about AD 300-500…. After that the Coles Creek culture comes in and continues in some form or another until about 1300. [This is based on a definition of Coles Creek culture that included Plaquemine. We are now considering Plaquemine as a separate culture.] This culture certainly had some influence on the northern Delta, but never was present there as an entity. Through most of this period a Deasonville-derived ceramic tradition held sway." [Deasonville-like, but the question of derivation remains to be settled.]

This passage is followed by supporting arguments we need not follow here. It adds up to a strong case for the proposition that the Co-

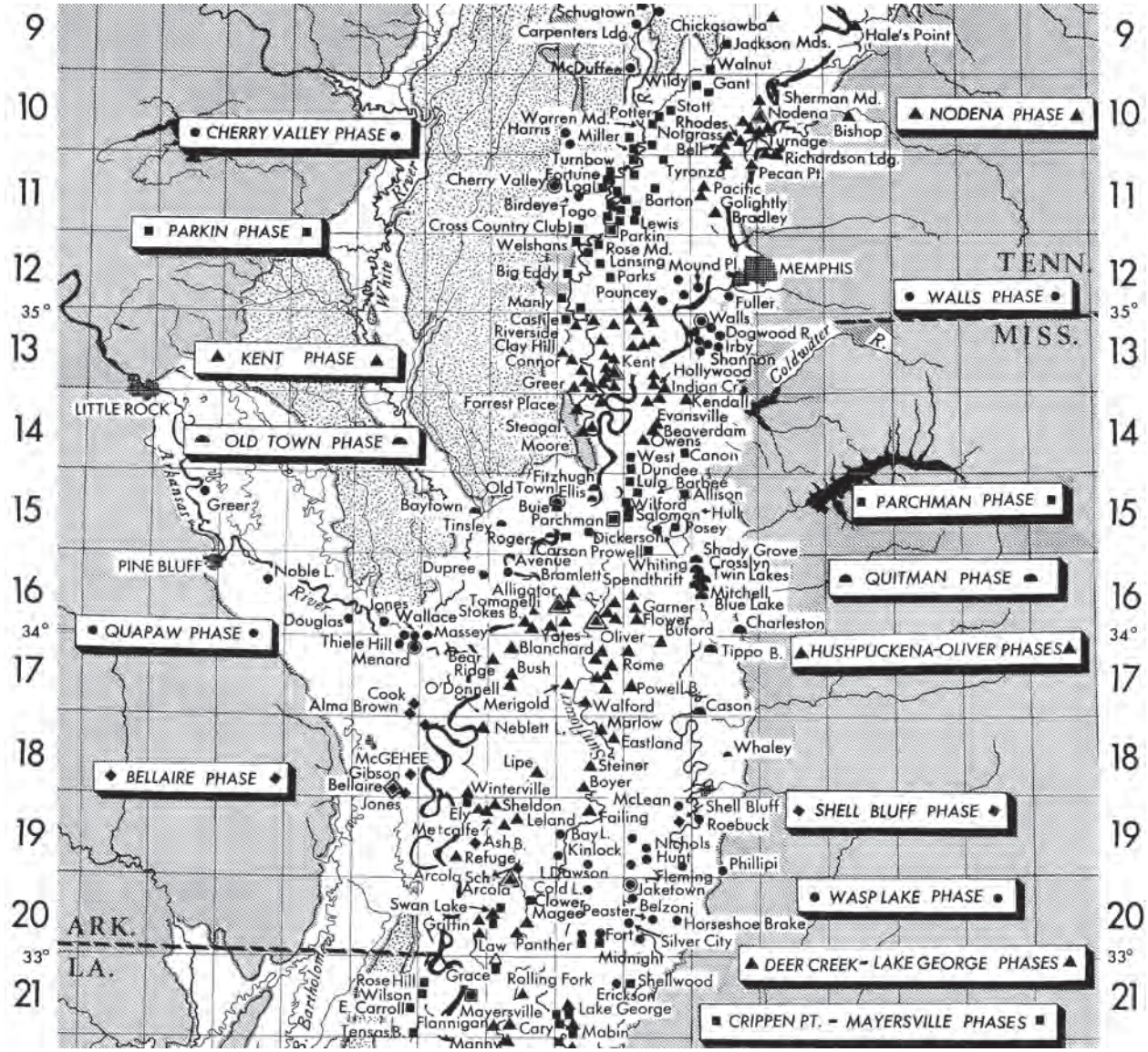


Figure 4-22. Distribution of components and phases in the Mississippi period, Tiers 10-20. Phillips 1970: Figure 447).

ahoma occupation at Oliver was equivalent to Deasonville in the lower Yazoo but lasted well into the Coles Creek period.

My concern is not with the Oliver component, but with the problem of defining a Coahoma phase for the region. There are scores of sites in the Upper Sunflower region with pottery assemblages generally similar to Coahoma at Oliver but lacking the Coles Creek elements that give special interest to that site. If we extend the Oliver dating to the phase as a whole it leaves a gap between Dorr and Coahoma. Dorr is by definition an early Marksville phase equivalent to Anderson Landing in the Yazoo sequence. What was happening then in the Upper Sunflower in the interval represented in the Yazoo by the Issaquena phase? The answer I think, for the present at least, has to be "Coahoma."

It would be fine if we could establish criteria for another phase to put in this gap. This I have found impossible with the means at hand – the simple typology of the earlier LMS counts. It has proved more economical to extend Coahoma back to fill the gap and shorten it on the other end. Thanks to Coles Creek elements that can be identified in the earlier counts, plus some other features I shall refer to later, it is possible to excise out of the great Coahoma lump some of the later components as a basis for a new phase. This is the Peabody phase described below (pp. 917-918) in connection with the Coles Creek period. I still remain firmly convinced that the main occu-

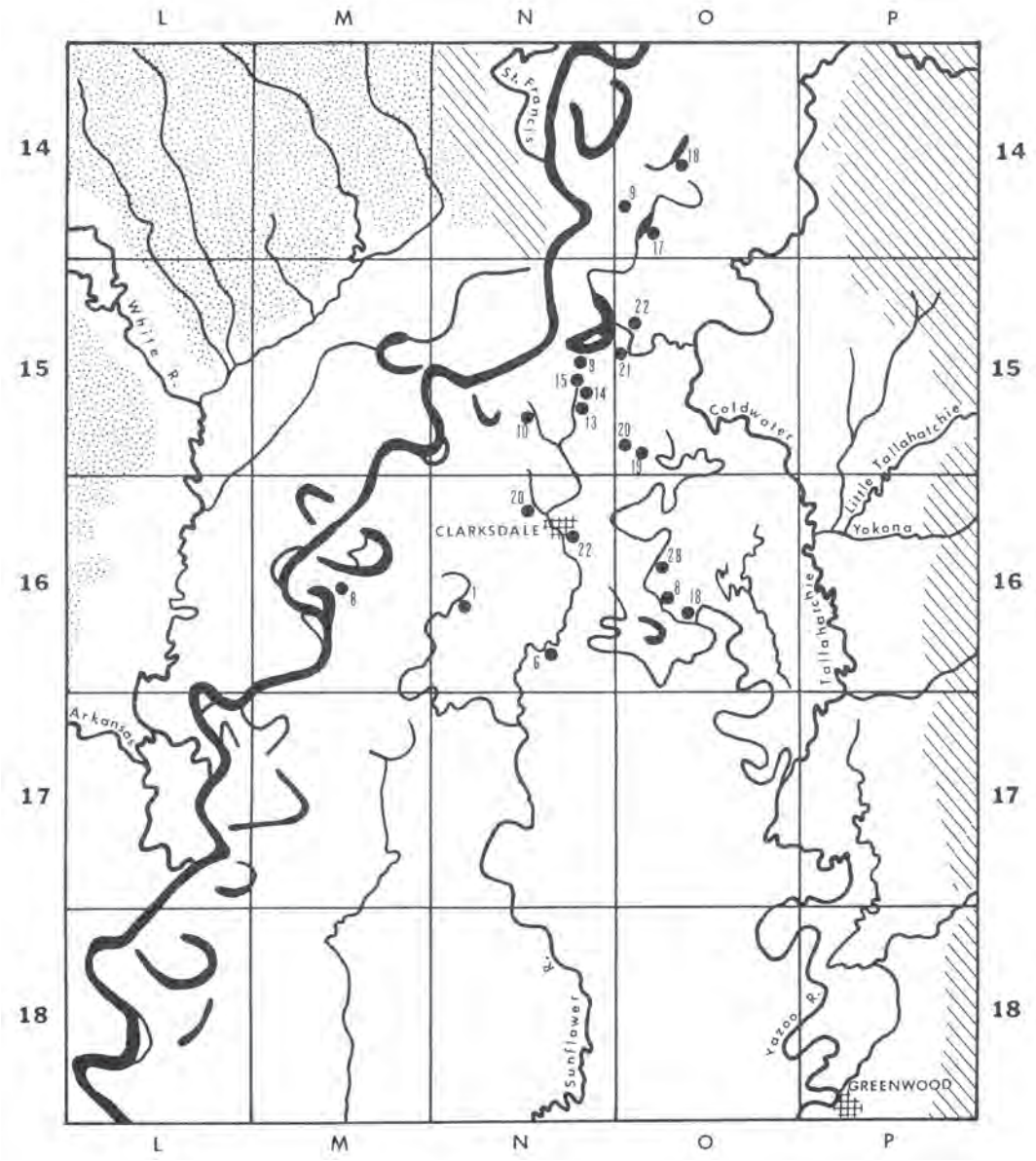


Figure 4-23. Dorr phase distribution (Toth 1988: Figure 7).

pation at Oliver is in the Coahoma phase, even in this shortened version, but it certainly lasted long enough to overlap with this later Peabody phase.

Coahoma is accordingly defined here as the main representative of Baytown culture in the Upper Sunflower region, beginning sometime before the end of the Marksville period and carrying on through the entire Baytown period. It was followed, with no sign of a sharp cultural break, by a later phase of Baytown culture, here called Peabody, occupying the fore part if not all of the Coles Creek period. I trust it is not too disturbing to have to reckon with the prolongation of a Baytown culture into the Coles Creek period. It is a phenomenon that appears to be general for the northern half of the Lower Mississippi Valley.

Consistent minority types in the Coahoma complex are, in order of occurrences regardless of frequencies and size of samples: Withers Fabric Marked, Larto Red, Oxbow Incised (Alligator Incised, *var. Oxbow*), Mazique Incised (Alligator Incised, *var. Alligator* and Salomon Brushed), Indian Bay Stamped, French Fork Incised, Woodville Zoned Red, Chevalier Stamped, and Yates Net Impressed are extreme minorities, hardly worth mentioning. To give an idea of what is meant by "consistent occurrence," in a total of 83 sites to which I have assigned Coahoma components, Withers is present in 38, Larto and Oxbow in 28, and on

down to Indian Bay in 19. The minor rôle of French Fork, Woodville, Chevalier, and Yates is measured by occurrence in the order of 4, 4, 4, and 3 respectively. (These figures are given at the risk of destroying whatever confidence the reader may still have in my assignments of components to the several phases.)

The close typological relationships of the Baytown and Coahoma complexes have been commented upon. In terms of the simple classification of the available counts they are essentially the same complex. The only outstanding and consistent difference is that in Coahoma the proportions of Baytown to Mulberry Creek are exactly reversed. In this respect Coahoma is more like the Hoecake and Dunklin phases in the Southeast Missouri region. The preponderance of Mulberry Creek over Baytown is particularly marked in the northern portions of Coahoma's area of distribution. Of 32 components represented by adequate samples in Tiers 14-16, the plurality of Mulberry Creek is just short of three to one. In Tiers 17-18 this drops perceptibly to less than two to one. In a few sites in these southern tiers, otherwise no different, there is a slight preponderance of Baytown over Mulberry Creek. This is a reflection of the general weakening of the Woodland tradition of cord and fabric marking as we approach the southern portions of the Lower Mississippi area.

Frequencies of the minority types are of course another matter. Generally speaking they are highly erratic from site to site. It may be noted that the highest figures are shown by Larto, Oxbow, and Withers in that order. What order of frequency we are dealing with may be illustrated by the figures on Larto, which incidentally is the least erratic of the types in question. In 8 sites that show unusually high frequencies of this type, all based on very large samples, the average is 2.3%, range 1.7 to 5, the last most exceptional. Percentages are calculated against the total of all types that can be safely attributed to the Coahoma component in the site. Apart from the above-mentioned three types, other minorities are in very small quantities, in the order of one to three sherds per site even where samples are more than adequate.

The incidence of Withers Fabric Marked and Indian Bay Stamped is worth a passing comment. It is my belief, already mentioned several times, that these types belong essentially in the Marksville period and their occurrence in later complexes must be viewed with suspicion. In this connection it is interesting that 23 of the 38 sites that had Withers had no earlier components from which the sherds in question might have derived. With all due allowance for deficiencies of sample, sorting errors, etc., this figure seems to indicate that Withers was still being made in Coahoma times, though in greatly reduced quantities. The case of Indian Bay is not so clear. In all cases where this type appears in relatively significant quantities there are earlier components of the Dorr phase that might have been responsible for them. Only four of the total of 19 sites that had Indian Bay lacked Dorr components, hardly sufficient to indicate that this was a viable type in Coahoma times.

Nothing has been said about the sandy-textured varieties of Baytown and Mulberry Creek as minority elements in the Coahoma complex. They are apt to turn up in small numbers in any large sample of Coahoma pottery, but become really significant in the eastern portions of its distribution. Sites on the Tallahatchie often show approximately even proportions between "clay" and sandy-textured varieties. Undoubtedly up the Tallahatchie and into the hills the latter dominate entirely, as in the Womack site (Koehler 1966). The same trend is undoubtedly to be seen in earlier, and probably also in later, periods. It may be asked why we do not have a Baytown period phase in this part of the area, comparable to the Twin Lakes phase of the Marksville period. The difference is that in Twin Lakes there are other elements that serve to distinguish the complex from other complexes of the period. In the present case there is nothing but the sandy-textured pottery. This might be sufficient if the pottery were all sandy-textured. Actually there are few sites that show an actual predominance of sandy texture over "clay." Nevertheless I should not like to rule out the possibility of a separate Baytown period phase in the region.

The association of conical burial mounds with the Coahoma phase is not as clearly evidenced as in the Baytown. Our field notes make frequent references to small mounds of indeterminate shape, but in only four cases (out of 83 sites) are they specified as conical: Barbee (15-O-2); Boykin Bayou (17-M-14); Buford (17-O-1); and Marlowe Cemetery (18-N-2). Fortunately three of these sites are pure Coahoma and the fourth, Buford, has no earlier component. With due regard to the hazards

of associating unexcavated mounds with surface collections of pottery, this still looks like a pretty good case for a positive association. In regard to rectangular platform mounds, in all Coahoma sites where they are present, there are later components to which they can be more plausibly ascribed [Phillips 1970:904-907].

Peabody Phase

The reasoning which called this makeshift formulation into being has already been given in connection with the Coahoma phase of the Baytown period (pp. 905-907). The name appropriately commemorates the first scientific archaeological investigation in the Lower Mississippi Valley by Charles Peabody of the Peabody Museum (no relation) of Harvard who dug mounds at the Dorr (16-N-22) and Oliver (16-N-6) sites in 1901-1902 (Peabody 1904). It might have been well to call this phase "Coahoma II," but it is after all no less an entity than many others described in these pages. If I allow myself to admit that some of the phases described here are not worthy of a name…?

This phase, however, is *particularly* open to question. The limited criteria for the complex are: preponderance of Baytown Plain over Mulberry Creek Cord Marked; weak showing of Larto Red; minorities classified (1951) as Coles Creek Incised, French Fork Incised and Chevalier Stamped; Baytown Plain with one or more incised lines on a broad insloping lip; and the negative features of no Withers Fabric Marked or Indian Bay Stamped. The difficulty lies mainly with the first of these criteria. Of the 28 components plotted in fig. 446, only eight are in sites that lack a preceding Coahoma occupation. In the twenty having both Coahoma and Peabody components, it is naturally impossible to allocate the Baytown and Mulberry counts between them, hence impossible to say anything on the subject of Baytown-Mulberry relationships. In only two sites of the eight having Peabody but no Coahoma components are the samples even approaching numerical adequacy. These are Bush (17-M-11) and Roosevelt (17-M-18). The predominance is clear enough but, it must be noted, these sites lie very close to the zone in which (going south) Mulberry frequencies regardless of period fall off sharply (PFG, 1951, fig. 7). In short, the northern Yazoo Basin, the region of greatest concentration of Mulberry Creek Cord Marked in the Baytown period, is one in which the general reduction of this type in the Coles Creek period, apparently valid for other regions, remains to be verified. This leaves us without our most useful marker for the period and makes the Peabody phase particularly vulnerable.

This puts more strain on the Coles Creek types as criteria than they are able to bear. These units were typed with wide latitude in the 1951 report and we have long known that in certain varieties they were already present in Baytown period contexts farther south. Relegation to a later period here is based on the theory that they took longer to get this far north, a perfectly gratuitous assumption.

There remains the question of rectangular mounds. Evidence will be summarized later that would place the earliest appearance of rectangular platform mounds in the Lower Mississippi Valley in the Coles Creek period, but so far as the Peabody phase is concerned I cannot bring any supporting evidence. Only nine sites (including Oliver) to which I have assigned Peabody components have rectangular mounds and in all cases these have post-Coles creek components to which, to equal or greater plausibility, the said mounds could be ascribed.

By this time it may appear to the reader that no great honor has been done to the memory of Charles Peabody in the naming of this phase [Phillips 1970:917-918].

Hushpuckena-Oliver Phase

In attempting to define this hyphenated formulation I am confronted by a difficulty different from those that have become all too familiar in this section. In this case I have better data than I can use. Both Hushpuckena and Oliver phases are based on John Belmont's reanalysis of Peabody's data from the Oliver site (16-N-6) (Belmont 1961). Belmont not only demonstrated a clear typological separation between the two phases but also established the stratigraphic priority of Hushpuckena over Oliver. My problem is that I have to combine them not because of any distrust of Belmont's reconstruction of what happened at Oliver but because our 1941 counts and their simple typology afford no possibility of using his more sensitive criteria.

Belmont's monograph, though eminently worthy of it, has not yet achieved publication [situation corrected herein]. I can only sum-

marize briefly what he has to say about the "astounding" differences between the burial pottery in the big mound (Oliver) and the sherds recovered in our 1941 cuts (Hushpuckena). On this initial differentiation he was able subsequently to identify certain burials and their accompanying artifacts as Hushpuckena, as he did sherds from Peabody's "general diggings." Significant Hushpuckena features are: gently profiled jar forms; handles tending to be more loop than strap; "fat lugs;" plate-like bowls; lack of Bell Plain; bottle form with gentle curvature; wine-bottle base; well-modeled rim adornos including the "serpent-cat" effigy (an outstanding feature of the Walls complex); Barton Incised, *var. Barton*, the commonest decorated type, the *Togo* variety (punctates on body), rare but present, another unnamed variety not unlike Wallace Incised fairly common (Belmont refers to it as "proto-Wallace"), Parkin Punctated, including both "corrugated" and linear modes; redware of deeper color than in Oliver complex; Carson Red on Buff fairly common, and some Nodena Red and White; occasional Leland Incised-like sherds; miniature vessels (vessels with Oliver child burials are small but not true miniatures).

Oliver features include: new shapes, such as jars with short vertical collar and sharply flaring rim, bowls with large everted rim, bottles and teapots like those of the Quapaw complex with outflared "hour-glass" rim; handles virtually absent or vestigial, lugs smaller than in Hushpuckena; rim adornos a good deal smaller, in many cases "miserable parodies of well-known Mississippian forms; plainware (Mississippi Plain, *var. unspecified*) coarser with flaking surface layer, but certain vessel forms have a Bell-like paste ("teapot-Bell"); Barton Incised very different from the Barton, *var. Barton* of Hushpuckena, with deeper U-shaped lines and a far more varied repertory of designs, including curvilinear motifs, such as arcades and the guilloche — the older line-filled triangle motif seems to be defunct (obviously a new variety is needed here); Parkin Punctated also shows marked variation from older norms, crescentic, hemiconical, slash, and dot punctates; pigment used in Old Town and painted wares of a light reddish-orange color "quite distinguishable from the Hushpuckena crimson."

Before paraphrasing Belmont further, I should call attention to the fact that the more crucial of the criteria in these two lists could not be identified in the counts of our 1941 collections. As Belmont puts it, from Hushpuckena to Oliver, "the roster of old Survey Types shows no radical shifts" (Belmont 1961:130). No further excuse for combining these two phases for present purposes is needed. Having done so and compared the counts of ten more than adequate samples: Oliver (16-N-6) surface, Cut A (1941), Levels 1-2, Cut C, all levels; Alligator (16-N-2); Tomanelli (16-M-2); Yates Bayou (16-M-3); Mount Olive (16-M-5); Stokes Bayou (16-M-6); Spendthrift (16-O-2); and Myer (16-N-10); how featureless is the resulting definition: overwhelming predominance of Mississippi Plain over Bell Plain—as much as a hundred to one on some sites; predominance of Barton Incised over Parkin Punctated about eight to one, same as in Parchman complex, but the *Kent* variety is very rare; Old Town Red and painted wares well represented with frequencies comparable to those of the Kent and Parchman phases, except Avenue Polychrome, which runs higher; Walls Engraved, both *Walls* and *Hull* varieties rare—latter only in Myer (16-N-10), which is atypical in other respects; fair number of sherds classified as Rhodes Incised, but may have been examples of the type known as Winterville, *var. Winterville*; other "southern" types: Owens Punctated; Leland Incised, *vars. Leland* and *Blanchard*; Winterville Incised, *var. Belzoni* (called "Stokes Bayou Incised" in the 1951 report) well represented in most collections; likewise Wallace Incised. The outstanding "feature," if so it may be called, is the resistance of some of these collections to classification. Frequencies of "unclassified shell-tempered incised and punctated" average about 18%, wildly fluctuating from 4% to over 50% (calculated against rim and decorated totals). It is a safe guess that the explanation lies not merely in the breakdown of our simple typology, but rather in the presence in some sites, but not in all, of Belmont's Oliver complex.[5] It may in fact reflect a breakdown of the Mississippian ceramic tradition. On the basis of European trade materials with scattered burials throughout the Oliver site, Belmont finds it possible to recognize ceramically a late Oliver sub-phase covering the last 50 years or so of the site's occupation and ending not long after AD 1700 (Belmont 1961:123-124). He sees in this late degenerative complex signs of "the known breaking up of tribes and the constant flow of refugees into the surviving villages" and the resulting confusion of styles.

This would be the kind of pottery that would give trouble to a typology based on Mississippian ceramic complexes in a pre-contact state of "normal" integrity.

The distribution of Hushpuckena-Oliver components shown in fig. 447 [Fig. 4-19] goes considerably beyond that of the ten sites referred to above, particularly in the south. I am fairly comfortable about sites farther down the Sunflower River, i.e., below Oliver. Sites in 17-N, 17-O, and 18-N conform rather well to the pattern, insofar as it can be called one. Some show an increase in "southern" features but not enough to call the assignments into question. This takes us down as far as Failing (19-N-5), which is admittedly a borderline case. In Section II (p. 443) the assemblage at Failing is declared to be "close to, if not beyond, the typological limits of either the Deer Creek or Wasp Lake complexes." It goes by default into the Hushpuckena-Oliver phase.

A group of sites in quadrangle 17-M, southwest of the main Hushpuckena-Oliver center, look as if they were on the Mississippi meander belt ridge but are actually on Bogue Phalia, a tributary of the Sunflower. Three of them, Bear Ridge (17-M-1), Blanchard (17-M-2), and Bush (17-M-11), have reasonably good Hushpuckena-Oliver components. A fourth, O'Donnell (17-M-12), is probably all right but the sample is inadequate. These sites might possibly constitute a separate geographical phase or sub-phase. Although Bogue Phalia does enter the Sunflower River eventually, the confluence is forty miles below these sites, well outside the distribution of the Hushpuckena-Oliver phase.

This leaves Neblett Landing (18-L-1), one of C. B. Moore's sites on the Mississippi (1911:391-400), a very tentative assignment. The Mississippian assemblage in our 1941 sample of barely adequate size conforms reasonably well with the Hushpuckena-Oliver complex but it is difficult to fit Moore's finds into the picture. They show closer relationships to Natchezan phases far to the south. Moore's burials, however, may have been intrusive. And it is not impossible that in 1941 we misidentified the site.

If I seem to have found too much to say about a formulation that is unsound from the start, or at least over-inclusive in the chronological dimension, the excuse is that it covers a lot of archaeology in one of the less-known regions of the Lower Mississippi area. Not the least important of the problems connected with this phase is the possibility of identification of its terminal episode—Belmont's Oliver phase—with known ethnographic groups. I shall refer to this again in connection with the Quapaw phase next to be considered. [Phillips 1970:941-942]

Phillips (1970:943-944) discusses the Quapaw phase essentially with regard to the Lower Arkansas River area. However, he goes beyond Ford's earlier (1961) reference to it as the "Menard or Wallace complex," related to historic Quapaw, and defines its features, along with comments on its distribution with regard to Belmont's Oliver phase, excerpted as follows.

> …the salient features of the complex can be listed briefly: overwhelming predominance of Mississippi Plain, var. Nady, over Bell Plain (the latter counted only at Menard and probably misidentified); low frequencies of Parkin Punctated; Wallace Incised, var. Wallace the outstanding decorated type; Old Town Red (if it be considered as a decorated type) a close second; Nodena Red and White (presumably var. Dumond) a consistent minority—if we may use the term in reference to three collections. There are other minorities in the Wallace and Menard samples, particularly the latter, which probably reflect the intrusive elements seen in the burial pottery. This leaves Dupree as the one site that may have been "pure" Quapaw. This is borne out by collections subsequently made (McGimsey 1965: Table 1) and recent limited salvage excavations (Moselage 1965). It only increases our regret that this fine site no longer exists [as is now the case with Oliver] [Phillips 1970:943].
>
> Another problem of Quapaw distribution, already alluded to, is involved in the question of the tribal identity of Belmont's Oliver phase. At many points in his (1961) description of late Oliver ceramics, Belmont draws attention to specific parallels with Quapaw material from Menard and related sites. He offers two, not mutually exclusive hypotheses to account for these parallels: (1) that the Oliver phase represents a sharp break from the preceding Hushpuckena phase thus reflecting the arrival of a new people that may have been a branch of the same movement that brought the Quapaw into the Arkansas River lowlands; (2) that European trade goods with Oliver burials, tentatively identified by Goggin (per-

> sonal communication) as late 17th to early 18th century, could only have come from Arkansas Post, the establishment "expressly set up for the Quapaw trade" (Belmont 1961:169). "This of course," he concludes, "does not prove that the Oliver people were card-holding members of some sort of Pan-Quapaw Trading and Mutual Benefit League, but along with the evident similarities in material cultures, it indicates a close relationship with the Quapaw. Whether they spoke the Quapaw or any other Siouan tongue is impossible too ascertain" (Belmont 1961:171)[6].
>
> It is not my purpose here to assess the strength of Belmont's hypothesis, but merely to point out that the distribution of the Quapaw phase east of the Mississippi is open-ended. We know that at the time of the first French penetrations (1673-1700) one of four Quapaw towns was on the east side of the Mississippi. There may have been more [Phillips 1970:944].[7]

Toth's 1988 Re-evaluation of the Marksville Period Dorr Phase

Alan Toth's published 1988 volume, based on his 1977 Harvard University PhD dissertation, re-evaluated the Marksville period phases defined by Phillips, attempted to give them greater chronological significance, and refined their material culture content in terms of the type variety system. Following his discussion of the Dorr phase and relevant site distribution (Figure 4-23) in the Upper Yazoo Basin (Toth 1988:89-91), he offered the following discussion primarily relating to the Dorr site, which Belmont dealt with in the first part of his 1961 thesis (see Chapter 3), and secondarily to the Oliver site with its alleged minor Dorr phase component.

Dorr (16-N-22) and Oliver (16-N-6)

> The early Marksville phase with the most extensive known distribution takes its name from the Dorr Plantation, which was situated on the outskirts of Clarksdale, Mississippi, in the spring of 1901 when the Peabody Museum launched one of the first major mound explorations in the Lower Mississippi Valley, following the pioneer work of Cyrus Thomas. There were four small mounds on the Dorr Plantation and a large conical one which was about 400 yards from the Sunflower River. The mounds are gone now, as the town of Clarksdale has expanded greatly, but their probable location is recorded under the site name Clark in the first report of the Lower Mississippi Survey (Phillips, Ford, and Griffin 1951:53).

The large conical mound on the Dorr Plantation was leveled long before the onset of urban expansion. Fortunately, the destruction was accomplished by archaeologists, Charles Peabody and W. C. Farabee, whose method was fair for the day. The 1901 excavations in the large Dorr Mound, which took only a week to complete, are mentioned in a brief report by Peabody (1904) [see Chapter 2] and reviewed more fully by Belmont (1961) [see Chapter 3]. The internal details of the Dorr Mound, as they can be pieced together from rough field notes, are summarized in the previous chapter in the discussion of Marksville burial mounds. All that remains is to look quickly at the artifacts that came from the mound.

A small sample of early Marksville potsherds is recorded as coming from the "general diggings" in the Dorr Mound. Although small, the sample is diagnostic. There is a cross-hatched Marksville rim (Plate VIIIa) [Figure 4-24a] combined with a weathered zoned decoration that seems to consist of cord-wrapped stick impressions. The other sherds, all Marksville Incised, *var. Sunflower*, are from two or more vessels. The broad-billed bird motif can be identified on two of the sherds (Plate VIIIb, c) [Figure 4-24c], and the front edges of two rims are notched (Plate VIIId, h) [Figure 4-24h]. The ceramic sample from Dorr can be assigned comfortably to the early Marksville period.

Nonceramic artifacts from the Dorr Mound are scanty. Two corner-notched points [not pictured by Toth] were recovered, one encased in red ocher and associated with a burial having two skulls, and the other at ground level near the base of the mound (Belmont 1961:28-29). The points are evenly thin with fine secondary flaking across each face. Although the corner notches are somewhat wider than the norm, the Dorr points are generally similar to the Snyders type. In fact, they constitute the closest thing to a Snyders point that has been reported from the Lower Valley [others have since been found in the northern Yazoo Basin area]. The only other objects of interest that were found in the Dorr Mound are four lumps of galena (Plate VIIIi-l) [Figure 4-24i-l]. One piece has been worked into a large drilled cube (Plate VIIIj) [Figure 4-24j]. The galena was recovered near the surface of the Dorr Mound and, with some reservation, can be associated with the Dorr phase.

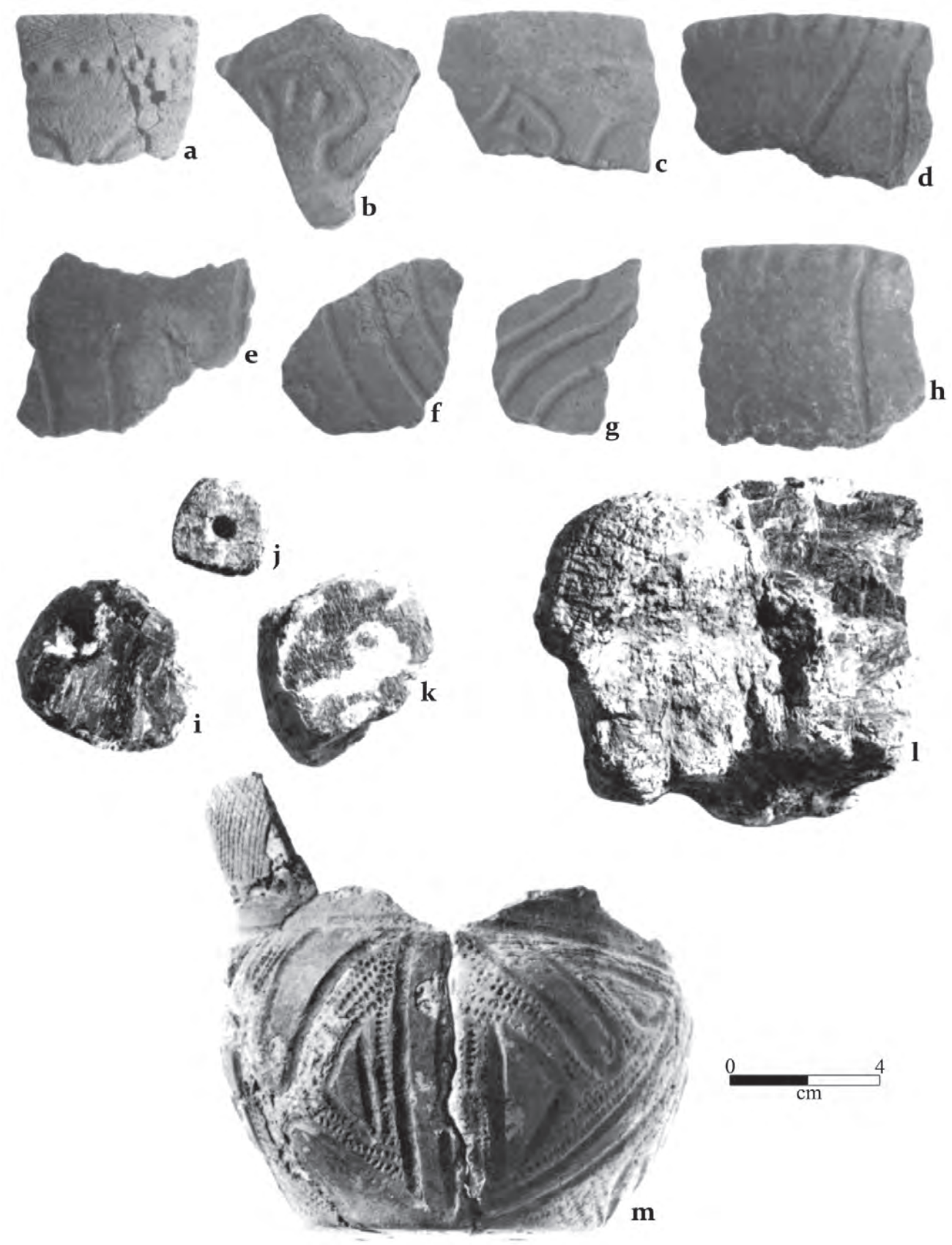


Figure 4-24. Dorr and Oliver artifacts (Toth 1988: Plate VIII).

> Stored in the Dorr collections is a small tubby pot (Plate VIIIm) [Figure 4-24m] that is recorded as coming from the "Neighborhood of Edwards Plantation." The Oliver site (16-N-6), also investigated by Peabody and Farabee, was on the Edwards Plantation. Lacking precise provenience for the distinctive pot, it must suffice to identify an early Marksville component at Oliver, with the understanding that the vessel in question was not from the Edwards Mound reported by Peabody (1904) [see Chapter 2]. Most likely it came from a small conical mound, on or near Edwards Plantation, similar to the Dorr Mound and a great many more in the Clarksdale region.
>
> Wherever the small pot is from, it is assuredly of early Marksville manufacture. The vessel combines a cross-hatched rim with a vertically bisected circle motif that is emphasized by cord-wrapped stick background roughening. The body decoration is a fine example of Mabin Stamped, *var. Mabin*. The vessel is made of soft early Marksville paste that is tempered with coarse clay fragments. A wash applied to the surface has flaked off in many places. In all, the Oliver vessel embodies the Hopewellian inspired crosshatched rim and bisected circle motif, but is locally—and somewhat crudely—made. It is very diagnostic of the Dorr phase. [Toth 1988:91, 93]

This is essentially all that can be gleaned regarding the Oliver site from notes and reports of the Lower Mississippi Survey and related publications. With regard to Toth's comments above, it is interesting to note that there were once a number of small mounds at Oliver, never investigated, but which, judging from their general size and presumed conical shape, could have been Marksville burial mounds and the source of the Mabin vessel he described.

Endnotes

1. Peabody 1904.
2. Peabody 1904, pl. 7.
3. It should be pointed out that in the primative excavation methods used, levels in each cut were taken from its own datum, and subsequently tied to a "permanent" bench mark. Comparison of levels from one cut to another, therefore, requires additional data not shown on the diagrams.
4. Peabody 1904, pp. 51-52.
5. As a matter of possible interest to future investigators, these sites having prodigious unclassified residues are: Oliver, Alligator, Tornanelli, and Myer.
6. In his Winnebago paper (1960, p.852) J. B. Griffin says there might be found somewhere near the mouth of the Arkansas River a complex similar to late Menard (Quapaw) which would be remains of the Ofo. He produces no evidence so far as I can see closely relating the Quapaw to the Ofo—linguists refer Ofo to languages other than the Degiha group to which the Quapaw are usually assigned. However, it is possible that Oliver would fill the bill.
7. That the last word has not been said about the distribution of the Quapaw Phase is further indicated by the recently reported Judsonia site, near Searcy, White County, Arkansas, which had a "classic" Quapaw assemblage (personal communication from Charles R. McGimsey, Sept. 30, 1966). I shall have to leave the interpretation of this surprising discovery to students onversant with the archaeology of that region.

Appendix A
Transcribed Catalog of Materials Collected by Charles Peabody at the Oliver Site, 1901-1902

Access. No.	Cat. No.	Description	Provenience
01-33-10	57300	Vase	Coahoma Co.; presented by Mrs. E. L. Dorr
01-33-10	57300	Vase	Coahoma Co.
01-33-10	57301	smooth stone celt	Oliver
01-33-10	57302	Vase 1 or bowl, pottery	under skull of Skeleton 1
01-33-10	57303	Vase 2, broken, pottery	under skull of Skeleton 2
01-33-10	57304	glass beads, in 2 strings, one of 8 beads	under chin of Skeleton 4
01-33-10	57305	charcoal	with Skeleton 4
01-33-10	57306	charred bird bone	with Skeleton 4
01-33-10	57307	glass beads	under skull of Skeleton 5
01-33-10	57308	shells, helix	under skull of Skeleton 5
01-33-10	57309	brass point	under skull of Skeleton 5
01-33-10	57310	Vase 3, pottery	above skull of Skeleton 5
01-33-10	57311	Vase 4, pottery	above skull of Skeleton 6
01-33-10	57312	11 glass beads	in a bunch, with Skeleton 7
01-33-10	57313	Vase 5, pottery, rich white decoration	to N. of Skeleton 7
01-33-10	57314	glass bead	with Skeleton 8
01-33-10	57315	Vase 9, pottery	with Skeleton 8, NE. of skull
01-33-10	57316	Vase 6, pottery	with Skeleton 9, E. of skull
01-33-10	57317	bone perforator	with Skeleton 10, with skull
01-33-10	57318	Vase 11, pottery	with Skeleton 10, N. of skull
01-33-10	57319	8 shell beads	by arm bone, thigh bone, and neck of Skeleton 12
01-33-10	57320	wood	with Skeleton 13, part of wrapping?
01-33-10	57321	brass bell	near or in contact with skull of Skeleton 14
01-33-10	57322	bone awl	with end of fibula of Skeleton 15
01-33-10	57323	Vase Ju, pottery	with Skeleton 15; 24.1 inches
01-33-10	57324	chipped stone nodules	general diggings
01-33-10	57325	perforated stone, natural	general diggings
01-33-N	57806 [1]	skull and long bones	Skeleton 1; [Vase 1 (57302) under skull]
01-33-N	57807 [2]	skull and leg bones	Skeleton 2 [Vase 2 (57303) under skull]
01-33-N	57808 [3]	skull and long bones	
01-33-N	57809 [4]	skull and long bones	Skeleton 4 [glass beads (57304) under chin and charcoal]
01-33-N	57810 [5]	skull fragments	Skeleton 5 [glass beads (57307), shells (57308), brass point (57309), Vase 3 (57310) with skull]
01-33-N	57811-A	cranium fragments	
01-33-N	57811 [6]	long bone fragments	Skeleton 6 [Vase 4 (57311) above skull
01-33-N	57812 [7]	long bones and skull fragments	Skeleton 7 [Vase 5 (57313), glass beads (57312) w. skeleton]
01-33-N	57813 [8]	skull and long bones	Skeleton 8 [Vase 9 (57315), glass beads (57314) w. skeleton]
01-33-N	57814-A	cranium fragments	
01-33-N	57814 [9]	skeleton fragments	Skeleton 9 [Vase 6 (57316) with skeleton]
01-33-N	57815 [10]	skeleton fragments	Skeleton 10 [Vase 11 (57318), bone perforator (57317) with skeleton]
01-33-N	57816 [12]	skeleton fragments	Skeleton 12 [shell beads (57319) with skeleton]
01-33-N	57817 [13]	broken femur, fragments	Skeleton 13 [wood (57320) with skeleton]

Access. No.	Cat. No.	Description	Provenience
01-33-N	57818 [14]	skeleton fragments	Skeleton 14 [brass bell (57321) with skeleton]
01-33-N	57819 [15]	skeleton fragments	Skeleton 15 [bone awl (57322, Vase Ju (57323) with skeleton
01-33-N	57820 [16]	skeleton fragments	
01-33-N	57821 [17]	skeleton fragments	Cemetery Mound, dug by Miss Edwards
01-33-N	57822	charred human bones	Cemetery Mound
01-33-N	57823	animal bones	Edwards Mound
02-19-N	57826 [23]	long bones	
02-19-N	57827 [24]	sacrum and femur	
02-19-N	57828 [28]	lower jaw	8 blue glass beads with skeleton
02-19-N	57829 [29]	long bones	
02-19-N	57830 [30]	skull and long bones	
02-19-N	57831 [33]	lower jaw and long bones	double Burial 33 and 34
02-19-N	57832 [51]	long bones	
02-19-N	57833 [58]	calvarium, perforated sternum, long bones	
02-19-N	57834 [80]	skull and long bones	
02-19-N	57835 [127]	skull, long bones, and sacrum	
02-19-N	57836 [129]	broken, recovered, tibia and fibula	
02-19-N	57837 [122]	skull	Skeleton 60 [Vase O w. skeleton]
02-19-N	57838 [133]	perforated sternum	
02-19-N	57839 [134]	skeleton	
02-19-N	57840	calvarium	Garden Mound, dug by Mrs Edwards
02-19-N	61510	calva and R. temporal bone	Edwards Mound
01-33-10	61751	broken stone	general diggings
01-33-10	61752	2 hammerstones, circular	general diggings
01-33-10	61753	2 hammerstones	general diggings
01-33-10	61754	polishing stone, used as hammerstone also	general diggings
01-33-10	61755	circular polishing stone fragment	general diggings
01-33-10	61756	grinding stone	Edwards Mnd., general diggings
01-33-10	61757	2 iron oxide	Edwards Mnd., general diggings
01-33-10	61758	1 crinoid	Edwards Mnd., general diggings
01-33-10	61759	3 chipped stone celts, show battering	Edwards Mnd., general diggings
01-33-10	61760	1 chipped stone celt, shows battering	Edwards Mnd., Trench 5
01-33-10	61761	1 chipped stone celt	Edwards Mnd., general diggings
01-33-10	61762	2 chipped stone celt fragments	Edwards Mnd., general diggings
01-33-10	61763	2 celts or knives frags.	Edwards Mnd., general diggings
01-33-10	61764	1 polished stone celt	Trench 9, 7 ft. 6 in. down
01-33-10	61765	1 polished stone celt fragment	Edwards Mnd., general diggings
01-33-10	61766	1 polished stone celt	Edwards Mnd., general diggings
01-33-10	61767	1 cannel coal	Edwards Mnd., 2 ft. 3 in. down
01-33-10	61769	ashes, mixed w. clay and shell	Edwards Mnd.; wood hole, Trench 12
01-33-10	61770	ashes	Edwards Mnd., Trench 13, pit 2
01-33-10	61771	gar fish scales	Edwards Mnd., general diggings
01-33-10	61772	15 shells	Edwards Mnd., general diggings
01-33-10	61773	4 perforated shells	Edwards Mnd., general diggings
01-33-10	61774	burnt shells and ashes	Edwards Mnd., Trench 3
01-33-10	61775	2 ashes, sand, and shell	Edwards Mnd., ash pit bottom
01-33-10	61776	2 parts of gar fish	Edwards Mnd., Trench 5
01-33-10	61777	shell bead	general diggings

Access. No.	Cat. No.	Description	Provenience
01-33-10	61778	pigment	Trench 7, 8 ft. down
01-33-10	61779	pigment	Trench 10, 8 ft. or 9 ft. down
01-33-10	61780	wood from post	see section at Stake 8
01-33-10	61781	acorn, charred	general diggings
01-33-N	61782	antler, unworked	general diggings
01-33-N	61783	deer bones, fragments, some charred	general diggings
01-33-10	61784	bone, worked	general diggings
01-33-N	61785	tortoise? bone	general diggings
01-33-N	61786	part of turtle plate?	general diggings
01-33-10	61787	3 bone arrow points, broken or unfinished	general diggings
01-33-10	61788	antler tips, worked, unfinished	general diggings
01-33-10	61789	19 bone perforators	general diggings
01-33-10	61790	bone perforators, polished frag.	general diggings
01-33-10	61791	bone perforator	1 ft. down
01-33-10	61792	reject	general diggings
01-33-10	61793	3 projectile points, fragments	general diggings
01-33-10	61794	projectile point	Trench 4
01-33-10	61795	projectile point, triangular	general diggings
01-33-10	61796	15 knives or projectile points	general diggings
01-33-10	61797	Vase 8, pottery	Trench 8, Stake A, 3 ft. 9 in. down
01-33-10	61798	Vase 10, pottery bowl	Trench 4, 1 ft. N. of Stake M, 4 ft. down
01-33-10	61799	Vase 7, pottery, fragments	Trench 3, near Stake N, 3 ft. 9 in. down
01-33-10	61800	Vase 12, pottery, fragments	Trench 5
01-33-10	61801	vase, pottery, fragments	Trench 11
01-33-10	61802	fragments of vase	Trench 9
01-33-10	61803	pottery rim fragments	general diggings
01-33-10	61804	pottery urn fragments	general diggings
01-33-10	61805	fragments of pottery ears-closed	general diggings
01-33-10	61806	pottery fragments, curved decoration	general diggings
01-33-10	61807	pottery fragments, show indentations of netting near surface	Trench 10
01-33-10	61808	pottery fragments, red slip	Trench 10, 9 ft. down
01-33-10	61809	miniature pottery bowl	Trench 12
01-33-10	61810	pottery fragments, with more unusual decorations	general diggings
01-33-10	61811	pottery fragments, perforated	general diggings
01-33-10	61812	pottery fragments, with red slip	general diggings
01-33-10	61813	pottery fragments, with knobs	general diggings
01-33-10	61814	pottery fragments, with knob and red slip	general diggings
01-33-10	61815	pottery fragments, with slip and finer decoration	general diggings
01-33-10	61816	pottery fragments, red slip, interior decoration	general diggings
01-33-10	61817	pottery fragments, red slip	Trench 11
01-33-10	61818	pottery fragments, red slip, unusual decoration	Trench 10
01-33-10	61819	pottery discs	general diggings
01-33-10	61820	3 perforated disc fragments	from hole
01-33-10	61821	pottery fragments	
01-33-10	61822	bird's head, pottery frag.	general diggings

Access. No.	Cat. No.	Description	Provenience
01-33-10	61823	clay pipe	general diggings
01-33-10	61824	clay pipe, fragment	Trench 5
01-33-10	61825	burnt clay ball	general diggings
01-33-10	61826	burnt clay mass	general diggings
01-33-10	61827	pottery fragments, red and white slip	general diggings
01-33-10	61828	pottery fragment, red and white slip, interior decoration	general diggings
01-33-10	61829	pottery fragment, red and white slip, interior decoration	general diggings
01-33-10	61830	pottery fragment, red slip, stamped interior decoration	general diggings
01-33-10	61831	pottery fragments, red slip rims	general diggings
01-33-10	61832	pottery fragments, red slip rims, indented	general diggings
01-33-10	61833	pottery fragments, red slip	general diggings
01-33-10	61834	pottery fragments, quadrangular bases	general diggings
01-33-10	61835	foot of vase	general diggings
01-33-10	61836	pottery fragments, rough	general diggings
01-33-10	61837	corn, parched	post hole, Trench 8, 2 ft. 6 in. S., 2 ft. E. of Stake O
01-33-10	61838	burnt clay	fire place, Trench 1, NE. of Stake 3, 1 ft. 3 in. down
01-33-10	61839	burnt clay, for plastering, marks of reeds, etc.	Oliver
01-33-10	61840	celt, polished stone	surface near Oliver; bought from Strickland
01-33-10	61841	celt, polished stone	surface near Oliver; presented by Mrs. Ohlswahl
01-33-10	61842	6 celts, polished	surface, near vicinity of Edwards Mound
01-33-10	61843	3 celts, polished stone, broken	
01-33-10	61844	6 celt fragments	bank of Sunflower River
01-33-10	61845	5 chipped celts	
01-33-10	61846	pointed celt	
01-33-10	61847	2 hammer stones or mauls	
01-33-10	61848	polishing stone	
01-33-10	61849	2 discoidal stones	
01-33-10	61850	trough-shaped stone	
01-33-10	61851	pottery stone ?	
01-33-10	61852	stone perforator, unfinished	
01-33-10	61853	stone implement	
01-33-10	61854	stone pendant	
01-33-10	61855	stone tube	presented by Mrs. P. M. Edwards
01-33-10	61856	polishing stone	
01-33-10	61857	clay mass used for polishing	
01-33-10	61858	3 crinoids	presented by Mrs. Edwards
01-33-10	61859	fossils	
01-33-10	61860	3 chipped hoe fragments	
01-33-10	61861	2 shell beads	
01-33-10	61862	4 glass beads	
01-33-10	61863	3 cannel coal ornament fragments	Sunflower River bank
01-33-10	61864	cannel coal	Sunflower River bank
01-33-10	61865	lead bullet	
01-33-10	61866	triangular points	
01-33-10	61867	rejects and chipped points, more slender	

Access. No.	Cat. No.	Description	Provenience
01-33-10	61868	points or knives, more or less leaf-shaped	
01-33-10	61869	point	
01-33-10	61870	knife	near Sunflower River
01-33-10	61871	points	surface, vicinity of Edwards Mnd.
01-33-10	61872	perforator	
01-33-10	61873	slender points	
01-33-10	61874	scraper, flat type	
01-33-10	61875	scraper, one or two scraping edges	
01-33-10	61876	scrapers, three chipped edges	
01-33-10	61877	2 scrapers, made from knives	
01-33-10	61878	7 knives or projectile points	
01-33-10	61879	chipped fragments	
01-33-10	61880	25 triangular arrow points	
01-33-10	61881	iron point	
01-33-N	61882	beaver tooth	
01-33-10	61883	bone perforator	
01-33-10	61884	2 antler arrow points	
01-33-10	61885	atlatl fragment, antler	
01-33-10	61886	pottery bowl or dipper	
01-33-10	61887	vase fragment, pottery	
01-33-10	61888	pottery fragments	
01-33-10	61889	pottery discs	
01-33-10	61890	pottery disc, perforated	
01-33-10	61891	stone disc	
01-33-10	61892	vase and fragments	neighborhood of Edwards Plantation
01-33-10	61893	brass bottle top ?	surface, Edwards Plantation
01-33-10	61894	knife	modern cemetery, Edwards Plantation
01-33-10	61895	vase, pottery	Cemetery Mound
01-33-10	61896	pottery vase fragments	Cemetery Mound, from fire place
01-33-10	61897	stone [N/A]	Brandywine, E. Quarry, Claiborne Co., Miss.
01-33-10	61898	stone “cement” [N/A]	from between stones, same as above
02-19-10	64253	5 shell beads	surface
02-19-10	64254	glass bead	
02-19-10	64255	crinoid	
02-19-10	64256	perforated shell	
02-19-10	64257	petrified wood	
02-19-10	64258	volcanic formations, broken probably for coloring matter	
02-19-10	64259	bone awl	
02-19-10	64260	Vase A, pottery	NE. of Skeleton 17/18, adult & child, Trench 15/16, not deep, with Vases B and C
02-19-10	64261	Vase B, pottery	with Skeleton 17/18, adult & child, Trench 15/16, not deep, with Vases A and C
02-19-10	64262	Vase C, pottery	with Skeleton 17/18, adult and child, Trench 15/16, not deep, with Vases A and B
02-19-10	64263	Vase E, pottery	E. of Skeleton 21, young person, Trench 17/18, 1 ft. down, with Vase F
02-19-10	64264	Vase F, pottery	E. of Skeleton 21, young person, Trench 17/18, 1 ft. down, with Vase E

Access. No.	Cat. No.	Description	Provenience
02-19-10	64265	Vase G, pottery	above child's skeleton of fragmentary skeletons, Trench 17, 8 ft. down
02-19-10	64266	Vase H ?, pottery bowl	with a skeleton
02-19-10	64267	Vase I, pottery	N. of skull of Skeleton 25, child, Trench 16, 2 ft. down
02-19-10	64268	Vase J, pottery, tea-pot shape	Trench 19, 3 ft. down
02-19-10	64269	Vase K, pottery, broken	with Skeleton 36, child, Trench 17, 1 ft. 8 in. down
02-19-10	64270	Vase L, pottery, partial, red slip	without skeleton apparently, Trench 19, 6 ft. down
02-19-10	64271	Vase M, pottery	with a skull, Trench 21, 2 ft. 3 in. down
02-19-10	64272	Vase N, pottery, fragments	N. of adult skull, Trench 22, 9 ft. down
02-19-10	64273	Vase O, pottery, fragments	NE. of Skeleton 60, adult, Trench 23, not deep, with Vase P
02-19-10	64274	Vase P, pottery, fragments	N. of Skeleton 63, adult, Trench 23, not deep, with Vase O
02-19-10	64275	Vase Q, pottery	with Skeleton 58, etc., SE. of skull of eastern skeleton, Trench 19, 15 ft. 2 in. down
02-19-10	64276	Vase R, pottery	with traces of skeleton of child, Trench 24, 1 ft. down
02-19-10	64277	Vase S, pottery	with traces of small child, Trench 22, 2 ft. 2 in. down
02-19-10	64278	Vase T, pottery, fragments	SE. of skull of skeleton, adult, Trench 22, 2 ft. 3 in. down
02-19-10	64279	Vase U, pottery	W. of pelvis of Skeleton 78, Trench 22, 7 ft. 6 in. down
02-19-10	64280	Vase V, pottery	over skull of Skeleton 81, Trench 23, 11 ft. down
02-19-10	64281	Vase W, pottery	NE. of skull of child's skeleton, Trench 22, 1 ft. 1 in. down
02-19-10	64282	Vase X, pottery	with Skeletons 94-5-6, Trench 23, 2 ft. 6 in. down
02-19-10	64283	Vase Y, pottery	with Vase Z and bones, Trench 24, 1 ft. 11 in. down
02-19-10	64284	Vase Z, pottery	with Vase Y and bones, Trench 24, 1 ft. 11 in. down
02-19-10	64285	Vase Α (Alpha), pottery	E. of Skeleton 112, Trench 24, 2 ft. 5 in. down
02-19-10	64286	Vase Β (Beta), pottery	W. of skull fragments, Trench 23, 11 ft. down
02-19-10	64287	Vase Γ (Gamma), pottery	NE. of Skeleton 115, Trench 24, 2 ft. 5 in. down
02-19-10	64288	Vase Δ (Delta), pottery	S. of Skeleton 119, Trench 25, 2 ft. 8 in. down
02-19-10	64289	Vase Ε (Epsilon), pottery, fragments	Trench 25, 1 ft. 8 in. down
02-19-10	64290	Vase Ζ (Zeta), pottery	with traces of child's skull, Trench 25, 2 ft. down
02-19-10	64291	Vase Η (Eta), pottery	with traces of a skeleton, Trench 25, 2 ft. down
02-19-10	64292	Vase Θ (Theta), pottery	SE. of skull of Skeleton 122, Trench 24, 3 ft. down
02-19-10	64293	Vase Ι (Iota), pottery, red and white	(Cf. No. 57313), Trench 25, 2 ft. down
02-19-10	64294	Vase Κ (Kappa), pottery	Trench 25, 2 ft. 9 in. down
02-19-10	64295	Vase Λ (Lamda), pottery	N. of child's skull, Trench 25, 3 ft. 10 in. down
02-19-10	64296	Vase Μ (Mu), pottery	S. of skull of Skeleton 126, Trench 25, 1 ft. 7 in. down
02-19-10	64297	Vase Ν (Nu), pottery	E. of Skeleton 130, Trench 26, 1 ft. 3 in. down
02-19-10	64298	Vase Ξ (Ksi), pottery, fragments	E. of skull of Skeleton 130 (bu), Trench 25, 1 ft. 6 in. down
02-19-10	64299	Vase Ο (Omikron), pottery	S. of skull of Skeleton 132, Trench 26, 2 ft. 8 in. down
02-19-10	64300	Vase Π (Pi), pottery	Trench 25, 2 ft. 11 in. down
02-19-10	64301	Vase Ρ (Rho), pottery	N. of skull of Skeleton 132, Trench 26, 2 ft. 8 in. down
02-19-10	64302	Vase Σ (Sigma), pottery	W. of skull of Skeleton 145, Trench 26, 1 ft. 10 in. down
02-19-10	64303	Vase Τ (Tau), pottery	E. of a skeleton, Trench 26, 2 ft. 4 in. down
02-19-10	64304	Vase Υ (Upsilon), pottery, fragments	E. of skull of Skeleton 146, Trench 27, 8 ft. down
02-19-10	64305	Vase Φ (Phi), pottery	with Vase Chi, Trench 27, 10 in. down
02-19-10	64306	Vase Χ (Chi), pottery	with Vase Phi, Trench 27, 10 in. down
02-19-10	64307	Vase Ψ (Psi), pottery	E. of skull fragment, Trench 27, 8 in. down
02-19-10	64308	Vase Ω (Omega), pottery	at the end of Skeletons 152-3, Trench 28, 1 ft. down
02-19-10	64309	Vase Aleph, pottery	E. of skull of Skeleton 156, Trench 19, 1 ft. 2 in. down
02-19-10	64310	Vase Beth, pottery	E. of skull of Skeleton 155, Trench 18, 2 ft. down
02-19-10	64311	Vase Gunel, pottery	E. of skull of Skeleton 157, 11 in. down

Access. No.	Cat. No.	Description	Provenience
02-19-10	64312	vase fragments, pottery	Trench 18, near surface
02-19-10	64313	vase fragments, pottery	Trench 19, 6 in. down
02-19-10	64314	vase fragments, pottery	Trench 26
02-19-10	64315	vase fragments, pottery	general diggings
02-19-10	64316	pottery fragments	Trench 23
02-19-10	64317	pottery fragments	general diggings
02-19-10	64318	pottery fragments, with red slip	general diggings
02-19-10	64319	clay dipper	Trench 17, 3 ft. 2 in. down
02-19-10	64320	clay dipper, fragments	S. of Skeleton 67, Trench 24, 1 ft. down
02-19-10	64321	vase fragments, red slip	Trench 25
02-19-10	64322	2 large clay discs	Trench 20, 4 to 6 in. down
02-19-10	64323	clay disc	Trench 24, 2 ft. down
02-19-10	64324	pottery fragment	Trench 18
02-19-10	64325	pottery fragment	Trench 19
02-19-10	64326	pottery figure and fragment from a vase	Trench 26
02-19-10	64327	small bowl, pottery	general diggings
02-19-10	64328	clay pipe bowl	Trench 25, 2 ft. 4 in. down
02-19-10	64329	clay pipe fragments	Trench 21, 8 ft. 3 in. down
02-19-10	64330	2 large chipped points or knives	Trench 22, 7 ft. 10 in. down
02-19-10	64331	larger chipped projectile points or knives, without stem	general diggings
02-19-10	64332	projectile points or knives with stem	general diggings
02-19-10	64333	2 projectile points or small knives, 1 incomplete	general diggings
02-19-10	64334	smaller projectile points or knives with stem	general diggings
02-19-10	64335	5 small projectile points	with Skeleton 35
02-19-10	64336	projectile point	from under left clavicle of Skeleton 56
02-19-10	64337	chipped stone celts and celt-shaped forms	general diggings
02-19-10	64338	3 forms of chipped stone with polish near cutting edge	general diggings
02-19-10	64339	5 celts and celt-shaped forms, more or less polished stone	general diggings
02-19-10	64340	2 polished stone celts, 1 broken	under or in “Critical Stratum”
02-19-10	64341	3 hammer stones	general diggings
02-19-10	64342	perforated stone pendant	general diggings, Trench 22, under jaw of Skeleton 77
02-19-10	64343	stone plummet, broken	general diggings
02-19-10	64344	stone for rubbing purposes	general diggings
02-19-10	64345	2 massive shell beads	probably with Skeleton 36
02-19-10	64346	2 massive shell beads	with Skeleton 36
02-19-10	64347	shell bead	under left ear of Skeleton 25, with 2 quartz beads [64358] and brass bell [64370]
02-19-10	64348	2 shell beads	near neck of Skeleton 34
02-19-10	64349	2 shell beads	with Skeleton 19, 1 near chin
02-19-10	64350	4 discoidal shell beads	in line, near left wrist of Skeleton 32
02-19-10	64351	2 shell beads and fragments	with Skelton 138
02-19-10	64352	8 shell beads	near neck of Skeleton 32
02-19-10	64353	glass beads	under left humerus of Skeleton 28
02-19-10	64354	glass beads	with Skeleton 31
02-19-10	64355	2 glass beads	with Vase Gimel & Skeleton 157
02-19-10	64356	long brass beads	inside occiput of Skeleton 151

Access. No.	Cat. No.	Description	Provenience
02-19-10	64357	jasper bead	Trench 15
02-19-10	64358	2 quartz beads	with Skeleton 25, 2 ft. down
02-19-10	64359	shell tablet, 2 perforations	with skeleton
02-19-10	64360	bone awl, 2 pieces	Trench 16, 8 ft. 6 in. down
02-19-10	64361	bone awl	Trench 17
02-19-10	64362	bone awl	general diggings
02-19-10	64363	bone or antler awl ?	Trench 18
02-19-10	64364	antler point, unfinished	general diggings
02-19-10	64365	bone point or awl	with Skeleton 32
02-19-N	64366	fish spine	11 in. down
02-19-N	64367	2 bear teeth	from near ears of Skeleton 55
02-19-N	64368	bear teeth	general diggings
02-19-N	64369	antler fragment	general diggings
02-19-10	64370	brass bell	under left ear of Skeleton 25
02-19-10	64371	cannel coal	Trench 19, 12 in. down
02-19-10	64372	mica	with Skeleton 139
02-19-10	64373	wood or bark	see Section at Stake 8, general diggings
02-19-10	64374	Vase Cem. A, pottery	Cemetery Mound, general diggings
02-19-10	64375	Vase Cem. B, pottery, fragments	Cemetery Mound, with skeleton of woman and child
02-19-10	64376	Vase Cem. C, pottery	Cemetery Mound, with yellow or red ochre, with 6 skeletons
02-19-10	64377	Vase Cem. D, pottery	Cemetery Mound, at E. end of double burial, with Vase Cem. E
02-19-10	64378	Vase Ce. E, pottery, fragments	Cemetery Mound, at E. end of double burial, with Vase Cem. D
02-19-10	64379	Vase Cem. F, pottery	Cemetery Mound, E. of bundle of bones, SW. slope
02-19-10	64380	Vase Cem. G, pottery	Cemetery Mound, general diggings
02-19-10	64381	Vase Cem. H, pottery	Cemetery Mound, N. of a skeleton, 1 ft. down
02-19-10	64382	Vase Cem. I, pottery	Cemetery Mound, E. of bundle burial
02-19-10	64383	Vase Cem. J, pottery	Cemetery Mound, S. of skull of bundle burial
02-19-10	64384	Vase Cem. K, pottery	Cemetery Mound, E. of skull (E. of bundle of bones), SE. slope
02-19-10	64385	fragments of vase with red slip	found, presented by Mrs. P. M. Edwards
02-19-10	64386	pottery vase in 3 parts	general diggings
02-19-10	64387	clay disc	general diggings
02-19-10	64388	chipped projectile point or knife	general diggings
02-19-10	64389	shell bead	under a skull
02-19-10	64390	pieces of brass	under a skull
02-19-10	64391	Vase D, pottery, red slip, tea-pot shape	surface
02-19-10	64392	18 clay discs	see No. 61889
02-19-10	64393	3 clay figures	probably vase handles, see No. 61822
02-19-10	64394	pottery fragments	see No. 61836
02-19-10	64395	clay disc, concave side	
02-19-10	64396	clay pipe fragment	
02-19-10	64397	chipped points or knives, Division 1, leaf-shaped	
02-19-10	64398	chipped points or knives, Division 2, triangular	
02-19-10	64399	chipped points or knives, Division 3, with stem	
02-19-10	64400	chipped points or knives, Division 4, irregular	
02-19-10	64401	chipped scrapers, Class 1, flat	

Access. No.	Cat. No.	Description	Provenience
02-19-10	64402	chipped scrapers, Class 2, with 1 or 2 scraping edges	
02-19-10	64403	chipped scrapers, Class 3, with 3 chipped edges	
02-19-10	64404	chipped scrapers, Class 4, unusual	
02-19-10	64405	large chipped points or knives, without stem	
02-19-10	64406	large chipped points or knives, with stem	
02-19-10	64407	celt fragment	
02-19-10	64408	chipped points or knives, rough, incomplete or fragmentary	
02-19-10	64409	point or knife fragment	
02-19-10	64410	perforated stone and allied objects	
02-19-10	64411	fragmentary small points or knives	see No. 61879
02-19-10	64412	4 celts and celt-shaped forms, chipped stone	
02-19-10	64413	15 celt-shaped forms, polished stone	
02-19-10	64414	cewlt-shaped form, polished near cutting edge	
02-19-10	64415	3 hammer stones	
02-19-10	64416	2 hammer stones	other specimens: see Nos. 57251-57325, 61751-61898
02-19-10	64417	stone plummet	
02-19-10	64418	3 stone discs	
02-19-10	64419	3 stones for sharpening or smoothing purposes	
02-19-10	64420	2 stone pendants	other surface perforated objects: see No. 64253
02-19-10	64421	various pottery fragments	
02-19-10	64422	turquoise pendant and beads	with skeleton of child, Skeleton 137, not deep
	N191	femur fragment w. linea aspira-rheumatic swelling	

Appendix B
Catalog of Artifacts from the 1990-1991 Salvage

Catalog Number	Description/Location
1	Mississippi Plain bowl w. 2 lip tabs; whole; next to B-7 skull
2	Mississippi Plain, wide-mouth jar w. 2 loop handles; whole; on F-267, hearth, S. of B-12, W. of B-9-11 cluster on mound, 10 yds. W. of Pole 2 to B-12 line, ½ way between B-9 & B-15; ash & charcoal: ^{14}C sample #5
3	Bell Plain small hooded effigy bottle; whole; by B-14 right shoulder, lying at angle toward burial, top of head cut off by leveler
4	Bell Plain teapot spout frag.; just off SE corner of Cemetery Mound fence
5	Baytown Plain, Mulberry Creek Cordmarked, Larto Red Filmed, Alligator Incised, Salomon Brushed, 10 sherds; around B-4, probably pit fill
6	Mississippi Plain, 3 body sherds; with B-19
7	Mulberry Creek Cordmarked, large sherd; F-268, pit off NE edge of Edwards Mound remnant
8	Mississippi Plain part vessel: 13 jar sherds; from Edwards Mound remnant
9	Shell-tempered unspecified incised/pinched sherd; in roadside ditch pit, ca. 53 yds. W. of Pole #1
10	Mulberry Creek Cordmarked part vessel: 19 sherds; no provenience
11	Mulberry Creek Cordmarked part vessel: 2 sherds; outside House 1, between B-17 and B-13
12	Mississippi Plain jar base; from Edwards Mound remnant
13	Mississippi Plain partial shallow bowl, full of ashes; next to hearth on mound remnant; ashes: ^{14}C sample #1
14	Mississippi Plain large jar or helmet bowl; vessel #1 from F-269, hearth
15	Mississippi Plain strap handle jar; vessel #2 from F-269, hearth, on black soil on W. side of hearth
16	Mississippi Plain jar or helmet bowl; vessel #3 from F-269, hearth
17	Mississippi Plain large part jar: 11 sherds; vessel #4 from F-269 hearth; charcoal nearby: ^{14}C sample #2
18	Mississippi Plain large vessel base; vessel #5 from F-269, hearth
19	Mississippi Plain large vessel base; from SE corner of big burned house, no provenience
20	Mississippi Plain large jar sherd; pit, no provenience
21	Bell Plain bottle base, 1 Barton Incised, *var. Estill* sherd, 6 Mississippi Plain sherds, 1 unspecified incised sherd; pit, no provenience
22	Mississippi Plain large jar rim sherd; no provenience
23	Baytown Plain part vessel: 6 sherds, large, deep bowl/basin; pit, no provenience
24	Mississippi Plain part large jar: 8 sherds; by hearth on mound remnant
25	Mississippi Plain part large jar; on hearth, E. side of mound remnant along center
26	Mississippi Plain part shallow, large, flaring & scalloped rim bowl; in hearth, no provenience
27	Mississippi Plain jar rim sherd; vessel #1 by F-270, hearth on Edwards Mound remnant
28	Bell Plain bottle base and 11 sherds; vessel #2 by F-270, hearth
29	Mississippi Plain large jar rim sherd; fill on top of mound remnant
30	Mississippi Plain large flaring rim bowl and 32 sherds; vessel #3 by F-270, hearth
31	Mississippi Plain part jar/bowl: 9 sherds; vessel #4 by F-270, hearth edge
32	Bell Plain bottle base; vessel #5 by F-270, hearth
33	Mississippi Plain large, shallow, flaring rim bowl and 3 sherds; vessel #6 by F-270, hearth
34	Mississippi Plain part vessel: 9 sherds; from burial area, no provenience
35	Mississippi Plain short-neck jar or bottle rim, upside down; next to burned area (probably house floor), no provenience
36	Mississippi Plain part large jar: 2 sherds; on a hearth, no provenience
37	Mississippi Plain half large simple bowl; near hearth, no provenience; ^{14}C sample #3, all ashes
38	Mississippi Plain jar: 16 sherds; Mulberry Creek Cordmarked sherds, possible bowl and jar; no provenience
39	Mississippi Plain part vessel: 9 sherds; Winterville Incised sherd; 1 unspecified sherd; no provenience
40	Mississippi Plain part vessel: 5 sherds; no provenience
41	Bell Plain neck and spout of teapot; no provenience

Catalog Number	Description/Location
42	Mississippi Plain part large jar: 7 sherds; no provenience
43	Mississippi Plain small jar rim upside down; next to hearth area, no provenience
44	Mulberry Creek Cordmarked sherds, Baytown Plain sherds, 2 biface flakes, 1 human molar; F-271, pit in Edwards Mound remnant
45	corn cob and hickory nut shell fragments; F-272, small double-fist sized hole in Edwards Mound remnant; ^{14}C sample #6
46	Mulberry Creek Cordmarked, Baytown Plain, and Larto Red Filmed sherds; F-273, pit on Edwards Mound remnant
47	corn cob fragments, charcoal; F-274, small pit on Edwards Mound remnant; ^{14}C sample #7
48	Mississippi Plain, Barton Incised, Baytown Plain sherds; F-275, pit, no provenience
49	deer bones, etc.; F-276, pit, no provenience
50	Mulberry Creek Cordmarked, Baytown Plain, Mazique Incised, misc. sherds, biface flake, shells; F-277, pit, no provenience
51	shells; F-278, pit, no provenience
52	Mississippi Plain *var. Neeley's Ferry* sherd, shells; F-279, pit, no provenience
53	shells, bones, seeds, hickory nut shells; no provenience
54	Bell Plain *var. Bell* sherds, shells; F-283, pit on Edwards Mound remnant
55	Mulberry Creek Cordmarked, Baytown Plain, Larto Red Filmed sherds, pit fill for water-screen; F-28 inside House 1
56	Mulberry Creek Cordmarked, Baytown Plain sherds, pit fill for water-screen; F-35 inside House 1
57	Mulberry Creek Cordmarked, Baytown Plain, misc. sherds, pit fill for water-screen; F-55 inside House 1
58	Mulberry Creek Cordmarked, Baytown Plain, Larto Red Filmed, misc. sherds, pit fill for water-screen; F-72 inside House 1
59	Mulberry Creek Cordmarked, Larto Red Filmed sherds, pit fill for water-screen; F-101 inside House 1
60	Mulberry Creek Cordmarked, Baytown Plain, Larto Red Filmed, misc. sherds, pit fill for water-screen; F-104 inside House 1
61	Mulberry Creek Cordmarked, Baytown Plain, misc. sherds, pit fill for water-screen; F-215 outside House 1 to SE
62	Mulberry Creek Cordmarked, Baytown Plain, misc. sherds, pit fill for water-screen; F-218 outside House 1 to SE
63	Mulberry Creek Cordmarked, Baytown Plain sherds, pit fill for water-screen; F-245 outside House 1 to SE
64	Mulberry Creek Cordmarked, Baytown Plain sherds, pit fill for water-screen; F-247 outside House 1 to SE
65	Mulberry Creek Cordmarked, Baytown Plain, Larto Red Filmed, misc. sherds, pit fill for water-screen; F-248 outside House 1 to SE
66	Mulberry Creek Cordmarked, Baytown Plain, Larto Red Filmed, misc. sherds, pit fill for water-screen, B-22 skull & 3 vertebrae; F-252 outside House 1 to SE
67	Mississippi Plain sherds, antler point, pit fill for water-screen; FG-280, pit on Edwards Mound remnant
68	Old Town Red, *var. Beaverdam* bowl; with B-18, E. side Cemetery Mound
69	Mississippi Plain, *var. Neeley's Ferry* scalloped rim bowl; with B-21, next to skull and infant bundle
70	Mississippi Plain, *var. Neeley's Ferry* helmet bowl; with B-24, E. side Cemetery Mound
71	#1 disarticulated human femur; in pit, no provenience
72	#2 disarticulated human bones; in pit, no provenience
73	#3 disarticulated human bones; in pit, no provenience
74	isolated skull; 7 yds. W. of B-9
75	skull (infant?); from pit on Edwards Mound remnant
76	isolated human femur; 7 ft. E. of B-15
77	skull parts; in mound fill N. and W. of B-15
78	misc. human bones and teeth; surface scatter
79	charred timbers from structure; on Edwards Mound remnant with F-269 hearth, burned area, and 5 vessels (#14-18); ^{14}C sample #8
80	charred thatch and wood; top of Edwards Mound remnant; ^{14}C sample #9
81	charred thatch and wood; top of Edwards Mound remnant; ^{14}C sample #10
82	charred cane, some wood, ash, and soil; Edwards Mound area; ^{14}C sample #11
83	Mulberry Creek Cordmarked; fill around B-24 in E. edge of Cemetery Mound
84	Mulberry Creek Cordmarked, *var. Edwards*; Baytown Plain; Bell Plain; Winterville Incised, *vars. Belzoni, Blum,* and *Winterville*; Mississippi Plain, *var. Neeley's Ferry* sherds; bones; daub; lithics; F-303 pit fill, ca. 2½ m E. of B-14
85	corn cob frags. and charcoal; F-300, post mold ca. 4 m SE of B-14; ^{14}C sample #4
86	Mulberry Creek Cordmarked, Baytown Plain, Yates Net Impressed, Larto Red Filmed, Mississippi Plain, Winterville Incised, Barton Incised sherds; north side of midden, no provenience

Catalog Number	Description/Location
87	Mulberry Creek Cordmarked, Baytown Plain, Larto Red Filmed, Mississippi Plain, Barton Incised, misc. sherds; surface, mound fill
88	Mulberry Creek Cordmarked, Baytown Plain, Larto Red Filmed, Mississippi Plain, misc. sherds; surface, around Cemetery Mound base
89	Mulberry Creek Cordmarked, Addis Plain, Baytown Plain sherds; midden or pit near north edge scraped area, no provenience
90	Mississippi Plain; Winterville Incised, *var. Belzoni* sherds; surface, no provenience
91	bear skull, mussel shells, small bones, hickory nut shell, corn grain, 1 small shell-tempered sherd; water-screened pit fill, Feature 281, SE side Edwards Mound remnant
92	dog "Oliver"; Feature 282, pit between B-12 and B-13, NNE of mound remnant, in House 1 area
93	dog "Dragon"; either in association with feet of B-4 or in separate pit not recognizable in midden
94	misc. daub, chert flakes, antler frags., fish vertebra, hickorynut shell, Mississippi Plain *var. Neeley's Ferry* and unidentified cord-impressed sherds; surface, trash pit area, NE side of mound remnant
95	Mulberry Creek Cordmarked; Baytown Plain; Larto Red Filmed; Mississippi Plain, *var. Neeley's Ferry*; Bell Plain *var. Bell*; misc. sherds; surface of Edwards Mound remnant scraped in 1982
96	Late Archaic points, Gary point, Madison points and preforms, point distal ends, uniface end scraper, Baytown choppers and frags., bifaces and frags., boatstone, grooved plummets, hammerstones, celt frags., cores, shatter, fire-cracked rocks, unutilized and unutilized flakes, worked sandstone, misc. pebbles, daub, shell hoe frags, cut deer astragalus, long bones, and misc. frags., turtle plastron, sherds from 17 types of pottery and misc. unidentified; general surface
97	Dulaney collection: 2 large triangular Madison points, 1 biconical grooved plummet; surface
98	Jay Mitchell collection: Mississippi Plain, *var. Neeley's Ferry*; Barton Incised, *var. Barton*; Larto Red Filmed; Mulberry Creek Cordmarked, *var. Edwards*; Twin Lake Punctated, *var. Crowder* sherds; nut stone; hammerstone; misc. bones: deer, otter, bear, raccoon, human, bird; general surface
99	chert flakes, worked pebbles, sandstone abrader and frags., fire-cracked rocks, crockery, iron; general surface
100	misc. animal bones, 1 persimmon seed; general surface (midden)
101	misc. animal bones, charred wood timber frags.; general surface
102	56 daub frags.; general surface
103	15 daub frags.; mound fill, surface
104	4 brass bangles, 6 glass beads; Burial 13
105	2 rolled copper wire coils, one around a cane; Burial 14
106	2 clay pipe stems, 1 rounded, 1 flattened; general surface
107	2 clay lumps and 2 sherds, unidentified; general surface
108	1 handle-shaped iron object, probably modern; mound fill, surface
109	2 large snail shells, mussel shells; general surface
110	12 deer bones, 2 raccoon mandibles, 1 persimmon seed; midden, N. side Edwards Mound remnant
111	bone tools; general surface
112	large number of sherds; Feature 301, pit, 1 m E. of stockade (F-284), 4 m SE of B-14
113	misc. sherds; Feature 302, pit, 13 m NE of B-13, 13 m NW of B-14
114	Feature 284, stockade posts; ca. 2 m E of B-14, running N-S

Note: see discussions, descriptions, and tables in Chapters 7-16, 19, 21-23, for further details

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