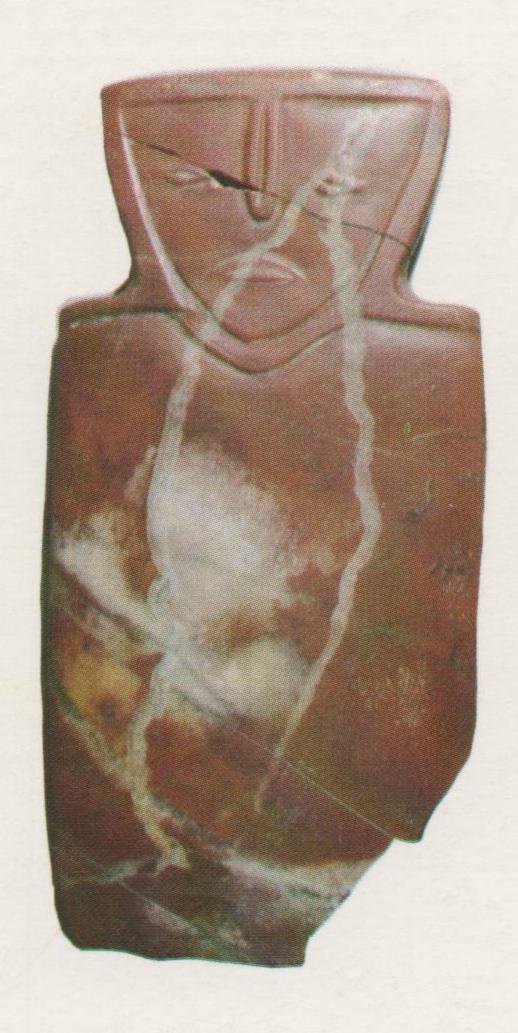
THE JAKETOWN SITE SURFACE COLLECTIONS FROM A POVERTY POINT REGIONAL CENTER IN THE YAZOO BASIN, MISSISSIPPI

Geoffrey R. Lehmann



MISSISSIPPI DEPARTMENT OF ARCHIVES AND HISTORY
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FIGURES, PLATES, TABLES	ii
ABSTRACT	iii
PREFACE	iv
ACKNOWLEDGEMENTS	v
I.INTRODUCTION	3
II.THE JAKETOWN SITEA. Description of SiteB. History of InvestigationsC. Date of the Poverty Point Occupation at Jaketown	5 6 9
III.RAW MATERIALS A. Chert B. Other Stone	11 12 15
IV.CHIPPED STONE ARTIFACTS A. Projectile Points B. Chipped Bifacial Tools C. Microlith Industry	18 18 31 32
V.GROUND STONE ARTIFACTS A. Roughly Ground Tools B. Ground and Polished Tools C. Miscellaneous Ground and Polished Stone Objects D. Stone Vessels	33 33 34 38 41
VI.LAPIDARY INDUSTRY	41
VII.OBJECTS OF FIRED CLAY A. Poverty Point Objects B. Clay Tubular Pipes C. Ceramics D. Other Clay Objects	44 46 47
VIII.SUMMARY AND CONCLUSIONS	48
REFERENCES CITED	52

FIGURES

1.	Location of the Jaketown site
2.	The Jaketown site, with selected contour lines in feet4
3	Plummet decorations
4.	Gorget decorations 39
	PLATES
Proj	ectile Point Types
	ontchartrain19 8. Macon24
2. K	ent
3. G	ary
	otley20 11. Marshall27
	pps
	elhi
7. C	arrollton24 14. Hale29
0.1	
Othe	r Artifacts Pumice Celt
	Pumice Celt
	Gorgets
	Tubular Beads and Pendants40
	Quartz Objects
	Jasper Effigy Tablet42
	Rectangular Tablets with Narrow Ends
	Clay Tubular Pipes
•	01a) 1abata1 11pe0111111111111111111111111111111111
	TABLES
1.	Raw material usage at Jaketown10
2.	Projectile points by raw material
	A. Pontchartrain, Kent, Gray, Motley, Epps, Delhi22
	B. Carrollton, Macon, Ellis, Shumla, Marshall, Elam28
•	C. Marcos, Hale, Palmillas, Fragments, Total30
3.	Microlith industry at Jaketown
4.	Plummets from Jaketown
5.	Type frequencies of Poverty Point objects at Jaketown45

ABSTRACT

The Jaketown Project recorded a number of private collections from the Jaketown site, a multi-component site in the Yazoo Basin, Mississippi, noted primarily for its Poverty Point component. The collections represent a large, generalized surface collection and on an average contained about ninety percent Poverty Point-related materials. The collections are described according to artifact class and type and an emphasis is placed on the representation of non-local materials within the various categories. The frequencies both of artifact types and of the materials within each type are noted and compared to other Poverty Point sites. The appearance of nonlocal materials in the preliminary stages of the lithic reduction sequence and in plummet manufacture suggest procurement of unaltered raw materials, which implies that Jaketown had direct access to source areas.

PREFACE

The Jaketown Project is a product of a grass-roots historic preservation movement. The Humphreys County Historical Society and other interested citizens encouraged their state representatives, Senator Ollie Mohamed and Representative David M. Halbrook, to introduce legislation sponsoring research at the Jaketown site, a well-known prehistoric archaeological site outside of Belzoni, Mississippi. Their intentions were aimed at the eventual establishment of the Jaketown site as an attraction that would draw in visitors and would hopefully include museum facilities. Funds are in no greater supply in Mississippi than elsewhere, so the development of the Jaketown site would necessarily have to proceed in gradual steps. The initial funding of the project was authorized at \$25,000, though later reduced by the Commission of Budget and Accounting to \$12,500, to be administered by the Mississippi Department of Archives and History. The application of these funds was considered by the Department director Elbert R. Hilliard, Division of Historic Preservation director Robert J. Bailey, and Chief Archaeologist Samuel O. McGahey. They determined that the funds might best be spent in attempting to locate and record as many private collections taken from the site as possible.

Recording private collections from archaeological sites is an important source of data, particularly because collectors tend to concentrate upon diagnostic tools. Recording private collections from the Jaketown site is especially important because the site is located in an easily accessible cotton field, is a well-known (and marked) site, and contains literally thousands of artifacts made of unusual materials. The fact that many of the collectors are older people who have made no provision for long-term curation of their artifacts or who rely on their memories for the locations from which they were obtained, argues strongly for research designed to record as much of this data as possible before the collections are lost, traded, sold, or simply become "grand-daddy's old rock collection." Although general surface collections do not provide sufficient context on which to base many important interpretations, recording private collections provides a basic data set and can be done at a relatively low cost.

The Jaketown Project, then, was designed as a year-long project aimed primarily at recording as many private collections from the site as possible. Field work ran through three quarters of the year, with report preparation in the final quarter. Although most archaeological research would allot the time for field work and write-up in proportions exactly opposite to this, all basic artifact analyses must occur in the field in this type of project. The result of this project is the following report, though the fieldwork also generated a large number of color slides of the collections, and several donations have provided a limited comparative collection available for future research.

ACKNOWLEDGEMENTS

Acknowledgements for cooperation and input into the Jaketown Project are due to a host of organizations and individuals. Humphreys County Historical Society, State Senator Ollie Mohamed and Representative David M. Halbrook, and the Mississippi Legislature are to be thanked for conceiving and funding the project. The Mississippi Department of Archives and History, its director Elbert R. Hilliard, Division of Historic Preservation director Robert J. Bailey, and Chief Archaeologist Samuel O. McGahey provided support and encouragement. Danny Harrelson, of the Mississippi Bureau of Geology, provided a lot of help in identifying many different materials encountered in the collections. Dr. Marvin Jeter, of the Arkansas Archeological Survey, provided information on the distribution of Tallahatta quartzite in southeast Arkansas. Very special gratitude is due to Mrs. J. O. Fowler, secretary of the Humphreys County Chamber of Commerce, who not only provided office space but warm conversation and refuge from days on the road. Thanks are also due to a number of Delta citizens who, out of no other reason than hospitality, made my research easier and more pleasant. Finally, and most important of all, I extend my gratitude to all of the collectors who shared their collections, time, and interest, for without them I would have nothing to report. These individuals and institutions are listed below by community and in alphabetical order:

Belzoni: Mr. Bobby Evans, Mr. Tommy Johnson, Mrs. June Lea,

Mr. Bobby Lilly

Greenwood: Mr. and Mrs. Frank McCormick, Jr.

Cottonlandia Museum: Collections of Mrs. Carrie Avent Jones and Mr. L. B. Jones, Mr. Chris Bryan, Mr. Travis

Clarke, Mrs. Sally Humphreys Gwin, Mr. Frank McCormick, Jr., Mr. James Sibley, Dr. Sam Sugg

Indianola: Mr. J. D. Allen, Mr. George Chatham, Mrs. Jessie Lee,

Mr. Opie Little, Jr., Mr. Bobby Prysock, Mr. Jerry

Stevens

Inverness: Mrs. J. S. Bell, Mr. Stanley Fitzgerald

Isola: Dr. Sam Sugg

Jackson: Mr. and Mrs. Jack Dempsey, Mr. Tommy Lilly

Sunflower: Mr. and Mrs. Jack Lancaster

Ownership of the objects photographed for this report is indicated in the plate captions.

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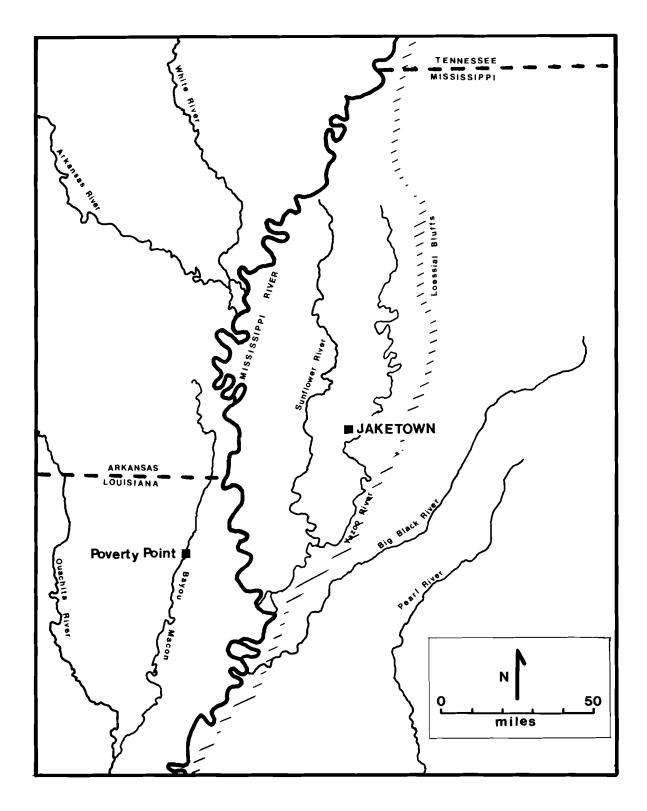


Figure 1. Location of the Jaketown site in the Yazoo Basin, Mississippi.

INTRODUCTION

The Jaketown Project has been a year-long study primarily aimed at recording private collections from the Jaketown site, a large prehistoric site about three miles north of Belzoni in Humphreys County, Mississippi (Figure 1). Although every cultural period from Poverty Point through Mississippian is represented at Jaketown, the Poverty Point occupation is the most extensive. This component on this site is generally recognized as representing a regional center of the Poverty Point culture in the Yazoo Basin.

The Yazoo Basin is an extremely fertile area within the Lower Mississippi Valley. Several pertinent facts about prehistoric sites in this area should be mentioned. First, a large percentage of the land is under cultivation, making recognition of sites very easy. Second, the Yazoo Basin is extremely flat; consequently artificial mounds and local high elevations conducive to habitation are very conspicuous. Third, stone in this alluvial valley is extremely rare except where deposited in the streams themselves. These three facts, plus the relatively easy access to all parts of the basin via improved and unimproved roads, help to explain why the Jaketown site has been a magnet for collectors for many years. The site is in a large cottonfield, has mounds and a low ridge, has literally thousands of artifacts made of unusual materials, and is crossed by a paved highway and a gravel road. A Mississippi Department of Archives and History marker serves to alert those not enticed by the above noted conditions.

The private collections reported below constitute an enormous general surface collection. Although general surface collections have limitations on their utility, they do represent basic data sets and all too often represent the only data set available from many sites. Hopefully, the collections reported upon here will advance our knowledge of the Jaketown site and the Poverty Point culture.

I must admit a heavy personal bias toward the Poverty Point component at Jaketown relative to the later cultural periods represented there. Fortunately for my status as an objective observer, the private collections I recorded ran about 85 to 100 percent Poverty Point related materials. Although this is partially the result of collector bias against potsherds, a general average of 90 percent dominance by materials diagnostic of the Poverty Point culture among the private collections clearly is indicative of the extent of that component as well as of the wealth of that culture in non-perishable materials. This imbalance is not so much because the later components are so small, but is rather a result of cultural differences. The fact that an occupation which may have lasted 1500 years accumulated non-perishable materials at a rate of 9:1 over later occupations cumulatively representing another 2000 years is staggering in its implications.

This report is basically a descriptive account of the artifacts recorded from the private collections. Emphasis is placed on basic artifact classification and especially upon the raw materials from which the lithic items were manufactured. The nature of the collections lends



Figure 2. The Jaketown site, with selected contour lines in feet (adapted from Ford, Phillips, and Haag 1955; printed courtesy of the American Museum of Natural History).

itself well to rampant speculation, but hopefully such speculation has been clearly indicated as such and does not reach objectionable proportions.

THE JAKETOWN SITE

Description of the Site

The Jaketown site occupies over 200 acres (80 ha) on the west bank of Wasp Lake about three miles north of Belzoni in Humphreys County, Mississippi (Figure 2). Six mounds are near the bank of the lake: two are large, relatively well-preserved Mississippian Period mounds; the other four are badly damaged as a result of railroad and highway construction. Ford, Phillips, and Haag (1955:25) note "eight or more" small mounds along a low ridge on the southern part of the site; Webb (1977:19) mentions only seven. These mounds, whatever their original number, are all thought to be of Poverty Point origin and are barely visible today as a result of continuous plowing.

Although components representing the Poverty Point through Mississippian Periods are present at Jaketown, the Poverty Point component comprises the most extensive occupation at the site. Haag identified an extensive area of the site, a low ridge running along the southern border, where surface collections suggested Poverty Point period occupation without materials from later periods (Haag and Webb 1953). A lengthy Poverty Point occupation is suggested by the depth of the deposits, and a horizontal occupation more extensive than any of the later components is indicated by the unmixed surface collections from large areas.

Ford, Phillips, and Haag (1955:15-29) presented a detailed interpretation of the geomorphology of the Jaketown site, concluding that there was an association between the Poverty Point occupation and a Cl course of the Ohio River. Their reconstruction was based on the work of Dr. Harold N. Fisk (1944), who pioneered a detailed geological history of the Mississippi alluvial valley. Saucier (1974, 1981), working with more recent data, has proposed a new interpretation of the valley history in which separate Ohio and Mississippi River channels are unlikely to have occurred much below Cairo, Illinois during the last 9000 years. Instead, the abandonment of the Stage 3 Mississippi River Meander Belt witnessed a diversion of the channel into the Stage 4 meander along the eastern border of the Yazoo River, receiving approximately 40-60% of the discharge, with the remainder of the flow following the present channel to a point between Greenville and Vicksburg and then southwest along the Walnut Bayou Meander Belt. This Stage 4 meander was occupied from abut 4800 to 2600 years B.P. (Saucier 1981:16) and represents what Fisk (1944) and Ford, Phillips, and Haag (1955) referred to as the Cl channel of the Ohio River.

Other than the corrected channel identification, the reconstruction of the site formation by Ford, Phillips, and Haag (1955) is essentially correct. Prior to occupation at the site, the Stage 4 river system formed a meander whose natural levee deposits formed the low ridge now evident along the southern border of the site. This meander was cut off and the river course lay to the east. The river again meandered to the west, cutting into the previously abandoned meander and leaving a small sand-bar island between the two meander positions. The initial (Poverty Point) occupation occurred at this time, with settlements on the island and along the earlier natural levee. The early meander was filled with a clay plug and the entire meander belt (Stage 4) was eventually abandoned.

Today the site is almost entirely under cultivation, with the exception of Mound B, the summit of Mound C, and an area between Highway 7 and Wasp Lake. These two mounds are the only ones clearly evident; the others have suffered considerable reduction from construction and plowing. The State of Mississippi owns 4.718 acres (1.88 ha) of the site between the highway and the lake. The Jaketown site is listed on the National Register of Historic Places.

History of Investigations

The Jaketown site was first described by Moore (1908:581-82), who found six mounds immediately adjacent to Wasp Lake "and a number of smaller mounds some distance away." Although Moore could not obtain permission to excavate the mounds, he examined the site and noted that one mound had been damaged by a road and two more by a railroad. Human bone, shell, and pottery were found in abundance on the surface of the site. Moore (1908:581) recorded the site as "Mounds near Wasp Lake, Washington County," since his discovery predated the formation of Humphreys County, within whose boundaries the Jaketown site is now located.

James B. Griffin relocated the site in 1941 during the Lower Mississippi Valley Archaeological Survey (Phillips, Ford, and Griffin 1951). His surface collection indicated an occupation throughout the ceramic-producing cultural periods, so in 1946 Phil Phillips and Paul Gebhard returned and tested the site with a post-hole auger and by two stratigraphic cuts. Their work for the most part confirmed the lengthy ceramic history at the site and revealed an unexpected preceramic component. They apparently recognized only the six mounds near Wasp Lake as well as one of the smaller mounds some 500 meters (1640 ft.) to the southwest of Mound B; at least they do not mention the smaller mounds known to have existed in an arc along the south and southwest border of the site.

Phillips and Gebhard's excavations yielded important information (Phillips, Ford, and Griffin 1951:273-81). Although the cultural deposits were found to be over two meters (6.5 ft.) in depth, soil stratification was not in evidence (with the exception

of the basal deposits in cut B, which included lenses of Poverty Point occupation levels separated by thin lenses of alluvium). The suspected Tchula through Mississippian ceramic sequence was confirmed. The Tchula Period designation tended to be confirmed by a break in the vertical distribution of Tchula and Baytown Period ceramics, though fiber-tempered pottery appeared higher in the profile than had been anticipated. The principal problem left unresolved as far as the ceramic sequence was concerned was that of the Late Baytown-Early Mississippian relationship.

A further problem was the demonstration of the temporal priority of Poverty Point objects over ceramics. Although in both test units the vertical distribution of the two classes of artifacts strongly suggested that Poverty Point objects predated ceramics, neither afforded evidence considered absolute. In cut A the bulk of the Poverty Point objects appeared in soil that lacked midden staining and so, except for these artifacts, appeared sterile. Notwithstanding the fact that Poverty Point object fragments alone were found in the lowest excavated level, the inability to distinguish the zone in which they occurred as an occupation level distinct from the ceramic-bearing midden above cautioned against recognizing a preceramic component. In cut B an occupation level dominated by the appearance of Poverty Point objects yet producing a total of nine sherds was clearly set off from the main ceramic-producing midden by a sterile Although Phillips, Ford, and Griffin (1951:280-81) suggested that the sherds were not manufactured at the time of the lower occupation and cited two possible means for their introduction into the lower levels, they refrained from categorically affirming the presence of a preceramic occupation and instead indicated "that there is at least a very strong presumption that such is the case."

In 1950 the Mississippi Highway Department relocated Highway 7 onto the abandoned railroad cut, further damaging some of the mounds, and excavated a two acre (.8 ha) borrow pit near the bank of Wasp Lake (Ford, Phillips, and Haag 1955:14). William Haag examined the profiles of the borrow pit and concluded that the preceramic occupation suggested by Phillips, Ford and Griffin (1951) definitely existed. He also located an area along the southern border of the site where thousands of microliths were found, which he described in an article with Clarence Webb (Haag and Webb 1953). Haag considered that the abundance of microliths along the low ridge, where several low mounds were located, together with the near absence of Poverty Point objects in this area, suggested a temporal difference between microliths and Poverty Point objects, since in other areas of the site a full range of Poverty Point materials were found without microliths. Webb, however, noting the association of Poverty Point objects and microliths on smaller sites and the localized abundance of the separate artifact classes in several areas on the Poverty Point site, postulated that the differential distribution of these artifacts was the result of activity areas rather than the result of temporal differences in usage.

Ford, Phillips, and Haag collaborated on the report of excavations conducted at Jaketown in 1951, and their monograph stands as the definitive work regarding the site (1955). Rather than summarizing in full their published results, the highlights of their findings will be enumerated here and specific details will be brought out in the text where appropriate.

Although the 1951 Jaketown excavation program was primarily oriented toward the investigation of the preceramic component, the report dealt more fully with the ceramic types than did Phillips, Ford, and Griffin (1951). Ford, Phillips, and Haag (1955:62) state that pottery was not in use at the Jaketown site during the Poverty Point Period. Fiber-tempered wares, few in number, were associated with the Tchula Period deposits, though the apparent break between these deposits leaves open the possibility of a pre-Tchula period origin for fiber-tempered ceramics in the area. An unusual discovery was the presence of a large number of baked clay tetrahedrons in mound A with a postulated Tchula period origin (Ford, Phillips, and Haag 1951:111-15).

The lack of discernible stratigraphy within the midden at Jaketown ruled out the best means of answering the question of whether or not a ceramic continuity existed between the Tchula and Baytown Periods. Although a discontinuity is suggested by a rather abrupt drop in the proportion of decorated to plainwares from Tchula to Baytown, Ford, Phillips, and Haag considered a gradual change within the ceramic tradition as the more tenable hypothesis at that time (1955:116). The apparent difficulty in sorting Late Baytown and Early Mississippian Period ceramics brought out by Phillips, Ford, and Griffin (1951) was solved, at least for the Jaketown site, by the recognition that the Mississippian material was late and that therefore a break between the Baytown and Mississippian occupations was almost certain (Ford, Phillips, and Haag 1955:117).

The preceramic component at the Jaketown site was the focus of attention during the 1951 excavation and received the most thorough treatment within the report (Ford, Phillips, and Haag 1955). Poverty Point objects were fully described, and stratigraphic relationships indicated that the principal types—biconical, cross—grooved, and cylindrical with lateral grooves—all appeared early, with the cylindrical type persisting in greatest popularity and with small, fine biconicals representing the latest form, though presumably not so much within the Poverty Point Period as in later periods throughout the Lower Mississippi Valley. Though not arriving at any firm conclusions regarding their function, Ford, Phillips, and Haag (1951:55-57) stressed their probable use as artificial cooking stones intended for roasting rather than boiling food.

The microlith industry, though described previously elsewhere (Haag 1951; Haag and Webb 1953; Webb 1948), was thoroughly explored, particularly in the relationships between the Poverty Point Period industry and examples from other areas throughout the world and in different time periods. The rest of the chipped stone artifacts were

described as well, though classification of the projectile point types was done without benefit of the numerous types now recognized and is accordingly of somewhat limited use. In addition, the origin of many of the materials employed in stone tool manufacture was not recognized, their source being attributed to the hills flanking either side of the Mississippi Valley. A more remote source for a number of these materials in now generally accepted.

Phillips (1970) discusses the Jaketown site in terms of its association with the Poverty Point site, the dating of the Poverty Point Period component, the origin of fiber-tempered pottery, and the distribution of Poverty Point Period sites in the Yazoo Basin. He considers the Poverty Point and Jaketown sites to be best explained as centers of two separate phases rather than as sites belonging to a unitary phenomenon and expresses some doubt as to the accuracy of Ford, Phillips, and Haag's (1955) geomorphological reconstruction of the Jaketown site and its channel association, though without drawing firm conclusions. Phillips suggests that a fiber-tempered pottery horizon is unlikely to be associated with a separate cultural period between Poverty Point and Tchula, but instead occurs in "an interval of uncertain duration straddling the late Poverty Point and early Tchula periods" and "is widely but extraordinarily thinly distributed" (1970:532). Finally, Phillips suggests that the distribution of known Poverty Point Period sites in the Yazoo Basin, apparently clustered into four groups, may be sociologically significant (1970:871). Further survey work has since filled the gaps between these clusters, though a possible division between the Sunflower and Yazoo River meander belts may prove important.

Recent work with Jaketown material has centered largely on the microlith industry (Johnson 1980a; Webb and Gibson 1981). Johnson (1980b) has also examined material from several Poverty Point sites in the Yazoo Basin in testing four hypotheses derived from a model of chiefdom-level sociopolitical organization in order to determine whether or not the Jaketown Phase operated at that level. His preliminary results suggest that a chiefdom level was not attained, but Lauro and Lehmann (1982:21-23) have questioned the adequacy of those tests.

Date of the Poverty Point Occupation at Jaketown

A number of means are available for placing the Poverty Point occupation at Jaketown within a chronological framework. First, the geomorphological reconstruction of the formation of the Jaketown site by Ford, Phillips, and Haag (1955) established that the initial (Poverty Point) occupation occurred while Wasp Lake was occupied by an active river channel. Using Saucier's (1974, 1981) recent reconstruction of Lower Valley history, the Stage 4 Mississippi River system occupied that general meander belt from approximately 2800 to 600 B.C., placing the initial occupation of the Jaketown site sometime during that interval.

Dover Chert Fort Payne Chert Gray Chert Local Chert Pickwick Chert Kosciusko Quartzite White Chert Black Chert Tallahatta Quartzite Novaculite Cores Shatter \vdash œ Prim. Decort. Flk. Sec. Decort. Flk. .04 w ω Tertiary Flk. G Biface Thn. Flk. ω w Biface Frag. ယ Oval Biface Triang. Biface Rect. Biface Circular Biface Preform Proj. Points տ Bifacial Tools Microliths TOTAL

Table 1. Raw material usage at Jaketown.

Second, a series of absolute dates are available from Jaketown. Ford, Phillips, and Haag (1955:154) present a radiocarbon date based on charcoal fragments from the lower levels of the Poverty Point midden. Two analyses of that specimen yielded dates of 2400+150 and 2300+150, for an average calendar date of 399 B.C. Ford and Webb (1956:121) listed additional dates for Jaketown of 2150+110, 2560+110 and 2830+300, or 200, 610, and 880 B.C., respectively. Weber (1970:100) provides a thermoluminescent date of Poverty Point objects from Jaketown, 1080 B.C. +250 years. These absolute dates provide a range from 1080 to 200 B.C. for the Poverty Point occupation at Jaketown. Ford (1969), however, rejects the 200 B.C. date as too recent.

Summarizing almost 60 radiocarbon and thermoluminescent dates from Poverty Point cultural contexts, Gibson (1973:51) found that "the ages bracket a time interval from 2186 B.C. to 295 A.D., with nearly 95 percent falling between 1700 B.C. and 500 B.C., almost 85 percent between 1500 B.C. and 600 B.C., and approximately 70 percent between 1200 B.C. and 800 B.C." In general, an interval from 1500 B.C. to 600 B.C. is widely accepted as the Poverty Point Period.

Bearing on the problem of dating the Poverty Point occupation at Jaketown is Gibson's (1973:72-87) proposed developmental sequence at the Poverty Point site. Though it is tentative and its applicability to other regions of Poverty Point culture remains untested, as a general model it is useful in examining the potential growth and development of the Poverty Point occupation at Jaketown. The Nascent phase (1500-1200 B.C.) was characterized by an Archaic seasonal round, limited importation of exotic materials primarily from the Ouachitas and the Tennessee River valley, and no mound construction. The Developmental phase (1200-1000 B.C.) witnessed an increased dependence on Poverty Point objects and the microlith industry but again lacked mound construction. The Florescent phase (1000-800 B.C.) was the apogee of the Poverty Point culture: mounds were built, new source areas in the midwest were extensively utilized, non-utilitarian items of exotic materials proliferated, and the sheer number and variety of artifacts expanded considerably. The Post-Florescent phase (800-600 B.C.) saw the decline of the population, a lessened dependence on foreign materials, a reduced number and variety of artifacts, and the final dissolution of the culture. Again, evidence to substantiate this proposed scheme fully is not yet available, particularly outside the area of the Poverty Point site itself.

Raw Materials

Raw materials employed by the Poverty Point culture have long been thought to derive from a number of diverse source areas throughout much of the central United States (Ford and Webb 1956). As part of this project, I had originally planned to include a section on the identification of source areas for non-chert materials in cooperation

with the Mississippi Bureau of Geology, but personnel changes have indefinitely postponed pursuit of that goal. Unfortunately, therefore, I will have to rely upon a less rigid macroscopic identification of materials and assumed source areas. The materials will be discussed under two broad headings: "chert" (including novaculite and various quartzites) and "other stone."

Chert

Under this heading will be discussed those lithic materials generally used in the manufacture of chipped stone artifacts. To examine the use of these materials, the manufacturing sequence of stone tools will be considered, so the following categories of artifacts will be described to explain the production sequence thought operable.

Cores are generally fairly large chert masses which may have only a few flakes removed or may have been flaked extensively. Cores may have been the nucleus from which a single tool was to be produced or from which flakes were struck for use.

Shatter refers to angular, blocky "chunks" or flakes.

Primary decortication flakes are covered on the dorsal surface with cortex. Cortex must cover at least 90% of the dorsal surface.

Secondary decortication flakes are covered by cortex on between 10% and 90% of the dorsal surface.

Tertiary flakes have less than 10% of the dorsal surface covered by cortex.

Biface thinning flakes have a "lip" at the striking platform indicating that they were struck from the edge of a bifacially flaked artifact. These may have been struck from a biface in the process of reduction or from a finished tool in the process of resharpening.

Bifaces of oval, triangular, rectangular, and circular shape were recorded, as were biface fragments. Bifaces are generally regarded as unfinished tools and often show a concentration of hinge fractures suggesting failure of efforts to thin the piece. Though bifaces may have adequately served as such tools as adzes, the probability that they represent unfinished tools is strengthened by the over-representation of bifaces from local chert relative to the frequency of that material in chipped stone categories excluding microliths (Table 1). Local chert represents 55% of the total chipped stone (excluding microliths), yet local chert bifaces constitute 66% of the combined biface categories. Local chert is generally less suitable for flaking than the better quality exotic materials and a higher ratio of thinning failure may account for the difference in frequencies.

<u>Preforms</u> are relatively well-thinned bifaces that have been worked to the point where the intended finished product (projectile points) may be discerned.

Local cherts were derived from Pleistocene gravel beds and may have been available very close to the Jaketown site within the Stage 4 Mississippi River channel. Extensive gravel beds are located within the present Mississippi River system and are also mined commercially in the bluffs east of the Yazoo Basin. These gravels are generally brown, tan, and sometimes red, though a great deal of variation exists. They are easily identified when a portion of the waterworn cortex remains on an artifact. Because the variability of gravel colors is recognized, a number of exoticlooking cherts were included within this category if they were not clearly within the range of other categories and always if any evidence of waterworn pebble cortex existed.

Table 1 summarizes the appearance of local cherts within various artifact categories. Because local cherts constitute almost 98% of the microlith industry, this material dominates the chipped stone items with 70%. Eliminating microliths, however, reduces this percentage to 55%.

Grey chert as a category probably includes a number of materials variously identified as Harrison County Indiana flint, Zaleski chert, "ball" flints, and Cobden Flint (Ford and Webb 1956; Conn 1976). I have used the general category of grey chert because of my uncertain ability to discriminate accurately between these types and also for the purpose of consolidating these materials on the basis of their probable origin within the Ohio Valley (Ford and Webb 1956; Webb, Ford, and Gagliano n.d.; Conn 1976). None of the chert assigned to this category had any waterworn pebble cortex; cortex, when present, consisted of a soft, chalky limestone and was especially evident on 3 large nodules, one nearly the size of a grapefruit. Grey chert cores are also reported from the Claiborne site (Gagliano and Webb 1970). Although the majority of the grey chert was in the form of projectile points, this material is represented in all stages of the reduction process (Table 1) and may have commonly been introduced into the Jaketown site in unworked form, especially considering that the collectors with whose samples I am dealing did not commonly pick up debitage, a fact that should be borne in mind when referring to other materials, as well. Grey chert constitutes 7.8% of all chipped stone items and 12% when microliths are removed from consideration.

Fort Payne chert derives from a formation that extends throughout much of Tennessee and into several surrounding states and has a rather wide range of variability in appearance. Typically grey, Fort Payne chert is also brown and dark grey to black and is usually lightly mottled. Small bluish speckles can appear, as can concentric rings. Outcrops of Fort Payne chert also occur in northeast Mississippi and in northern Alabama. Probably some Fort Payne chert was classified as grey chert. Fort Payne chert represents 1.6% of all chipped stone and 2.5% excluding

microliths (Table 1). This material is not well represented in the reduction sequence.

Dover chert is apparently a specific variety of chert from the Fort Payne formation characterized by a dark striped patterning against a grey background (Webb, Ford, and Gagliano n.d.; Conn 1976). Only one core and six projectile points of this material were recognized (Table 1).

Black chert is probably mostly Pitkin chert from northern Arkansas; this category may also include Bigfork black chert from Oklahoma (Webb, Ford, and Gagliano n.d.; Conn 1976), and an ordovician black flint from Tennessee (Conn 1976), though the latter is characterized by fossil inclusions that were not noted in any of the black cherts from Jaketown. Black chert comprises only 0.6% of the total chipped stone assemblage and 0.9% of the collections excluding microliths (Table 1). Black chert is overwhelmingly restricted to projectile points (90% of black chert) and probably was not imported in raw form but in blanks or possibly as finished points.

White chert as a category includes a white-to-cream fossiliferous chert recognized by Ford and Webb (1956) and Conn (1976) at the Poverty Point site. Both sources suggest a possible derivation from northern Arkansas (the Boone formation), though Conn says that several informants suggest that the quality of white chert is generally poor in that area (1976:43-44). Conn (1976:44) mentions another source area in southeastern Missouri, the Crescent Hills quarries, from which general area hematite, magnetite, and possibly fluorite (Danny Harrelson, pers. comm. 1982) as well as galena (Walthall et al. 1982) are known to derive. The availability of several materials utilized by the Poverty Point culture in this area strengthens the probability that the white chert was also obtained from this source area.

White chert is well represented in the reduction sequence (Table 1) and comprises 11.6% of all chipped stone and 17% excluding microliths. White chert was the most frequently utilized material in the microlith industry other than local chert, though constituting only 1.6%. A large amount of white chert (203 specimens) at Jaketown is in the form of angular, blocky shatter, a condition noted by Ford and Webb (1956:114) at the Poverty Point site, also.

Novaculite occurs in the Ouachita Mountains of west Central Arkansas. I have personally seen aboriginal quarries in the area near Hot Springs, and several grades of novaculite are mined there commercially for whetstones. Novaculite is well represented in the reduction sequence (Table 1) and represents 4.8% of all chipped stone and 7.3% excluding microliths. Forty-five percent of all novaculite occurs in the form of Gary projectile points.

Tallahatta Quartzite derives from the Tallahatta Formation, which forms an arc from north central to east central Mississippi and extends over to east Alabama, where it finally runs out. Tallahatta quartzite

weathers from a well-consolidated, often translucent quartzite into a whitish sandstone (Dunning 1964). This material was widely used for chipped stone artifacts in the area of its source and has been found on sites in southeastern Arkansas (Dr. Marvin Jeter, pers. comm. 1982) as well as on other Poverty Point sites (Conn 1976), and is apparently what Gagliano and Webb referred to as orthoquartzite from Alabama (1970:63). Tallahatta quartzite makes up 1.9% of all chipped stone and 4.5% excluding microliths (Table 1). This material is well represented in the reduction sequence and 15% of it is in the form of Gary projectile points.

In addition to the Tallahatta quartzite, carnelian is associated with this formation (Dunning 1964:57). A single flake of this reddish amber-colored material was recorded at Jaketown. A similar flake was also recorded at Teoc Creek (Connaway et al. 1977:59).

Kosciusko quartzite derives from the Kosciusko formation, which lies parallel to and adjacent to the Tallahatta formation. This material is generally greyish brown and is quite hard. Sam McGahey (pers. comm. 1982) reports that Kosciusko quartzite is common only to Early Archaic and transitional Woodland-Mississippian sites in Mississippi. This is borne out by the minimal representation of this material at Jaketown, where only 13 specimens were recorded (Table 1).

Pickwick chert is characterized by bands of red, yellow, and black. The apparent source for this material is in the Tennessee River area now inundated by the Pickwick Reservoir at the convergence of Mississippi, Alabama, and Tennessee (Conn 1976:49). Pickwick chert is poorly represented at Jaketown, with only 16 specimens recognized (Table 1).

Other chipped stone materials include a unique specimen of maroon chert with light-colored striations, from which a Hale projectile point had been fashioned, and a black, grainy quartzite, from which one Kent and one Ellis projectile point had been made. This quartzite differs from the fine-grained grey to blackish quartzite discussed below. The origin of these materials is unknown. Three Gary points were made from an unusual composite material of several colors, the derivation of which is also unknown.

Other Stone

A variety of materials employed in the manufacture of ground and polished artifacts, as well as some for which the use is unknown, were recorded. Like chert, however, positive identification of source areas for the majority of these materials has not been determined. These materials will be presented in groups according to proposed general source areas.

Local sources include stream deposits within the Yazoo Basin as well as the bluffs and hills of Mississippi to the east and south.

Ferruginous sandstone and limonite commonly occur in the bluffs and hills, though some selection would be necessary to locate areas where large masses of high quality material could be obtained. Whitish sandstone occurs in the Catahoula Formation of lower central and west-central Mississippi. Petrified wood and such fossils as crinoid stems wash from the bluffs. Jasper pebbles can be found on gravel bars of the present Mississippi River and may have been so available in former meander belts.

Ouachita Mountains, Arkansas were the source for a number of materials including quartz and quartz crystals, volcanic tuff, nepheline syenite, and possibly a dense grey to blackish quartzite (Danny Harrelson, pers. comm. 1982). The quartzite and volcanic tuff were employed in the manufacture of celts; nepheline syenite served an unknown purpose, as only two chunks were recorded. Since publication of the report on the Slate site (Lauro and Lehmann 1982), a grooved block of nepheline syenite prepared for bead production has been recorded in a private collection from that site. A single chunk of bauxite, likely from central Arkansas, was recorded from Jaketown. This material was used to produce beads at the Slate site (Lauro and Lehmann 1982). Another material derived from the Ouachitas and in abundance at the Slate site, principally green but also maroon and grey slate, was not found in any of the Jaketown collections. The Ouachitas, as noted above, were also the source of novaculite. Magnetite and hematite are reported from the Magnet Cove area in Arkansas (Webb 1977) and may have served as the source for these materials, but another possible derivation for these materials will be considered below.

Southeast Missouri seems to have been a particularly important source area for galena. In a recent analysis of galena, Walthall et al. (1982) identified two primary source areas for the galena which occurs on Poverty Point sites. One of these areas, in the Upper Mississippi Valley, was the source of two samples from the Norman site in the Yazoo Basin and is considered to be a relatively early source. The second source area, in southeastern Missouri, provided the bulk of the galena at the Poverty Point site as well as a specimen from the Falls site in the Yazoo Basin. This source is thought to have been more extensively exploited than others once it had been discovered, due to its closer proximity to Poverty Point sites. Walthall et al. (1982:140) points out that southeastern Missouri is a source area for a number of other materials, including hematite and chert (see discussion of white chert above). Harrelson (pers.comm. 1982) has said that hematite and magnetite exist in better qualities and are more easily obtained in southeast Missouri than in the Magnet Cove area of Arkansas, and that southeast Missouri is also a likely source of fluorite, of which one specimen each of yellow and purple color were recorded from Jaketown, as was a yellow fluorite miniature plummet.

Tennessee River is not so much a source area in itself, but instead links several areas along a possible trade route. Steatite from the Poverty Point site has been determined to have derived from northeastern Alabama and northwestern Georgia (Webb 1977:35).

Phyllite and possibly the grey to blackish quartzite discussed above may also have northeastern Alabama as their source area (Danny Harrelson, pers. comm. 1982). Fort Payne and Pickwick chert are available along the Tennessee River as well.

Western sources may have been responsible for two minerals. Although pumice has been attributed to local beaches at the coastal Claiborne site (Gagliano and Webb 1970:66), Harrelson considers such rafting unlikely, especially for pieces large enough to fabricate the celt described below (16 x 6.5 cm), and has postulated a western derivation for both this material and for hornblende basalt porphyry, possibly within the drainages of the extreme upper Arkansas River (pers. comm. 1982). A single chunk of hornblende basalt porphyry was recorded at Jaketown, though this material occurred in moderate frequencies at the Slate site (Lauro and Lehmann 1982).

Unknown derivation is assigned to the following materials: a single lump of iron pyrites; two specimens of a soft, speckled stone, one red and one green; numerous pieces of grey and banded slate unlike that thought to derive from the Ouachitas (discussed above); and several specimens of cannel coal. Ford and Webb (1956:126) suggest that banded slate may have originated in the Ohio Valley, however.

In a recent thesis, Bass (1981) compared samples of artifacts from the Poverty Point site with specimens of local gravels obtained from commercial quarries at distances up to 88 km from the site. Her research was an effort to

support the hypothesis that the prehistoric Poverty Point population used Pleistocene gravels proximic to the site as the raw materials for tool manufacture rather than stone obtained from great distances as previously proposed (Bass 1981:4-5).

Although Bass' research was well-designed, her results are flawed by the fact that her comparative collection of artifacts from the Poverty Point site consisted primarily of microliths (1981:49). The preference for local gravel in the microlith industry has been noted for some time (Haag and Webb 1953:247) and is borne out by this study as well, where local gravels constituted 97.7% of the microlith industry. It is hardly surprising, therefore, that Bass concluded that "most of the stone...used by the Poverty Point people for tool manufacture came from local gravel deposits" (1981:88).

The above identification of potential source areas which yield more than just chert assumes greater importance in view of the suggestion that local gravel beds were the major source of stone materials. Harrelson (pers. comm. 1982) examined samples of a number of non-chert materials from both Jaketown and the Slate site and considered it unlikely that such items could have survived in the condition in which they now exist after being tumbled down a river the many miles from source outcrops to gravel beds in the Yazoo Basin. Walthall et al. (1982) point out the same objection to a gravel bed derivation for

galena. If, then, some materials were being secured from their original outcrop and if quality cherts were also available in the same general vicinity, it seems likely that the available cherts would have been obtained by preference in quarried form rather than from gravel beds, where their size and quality would have suffered by being water-borne. A further note may be made that earlier and later Yazoo Basin cultures, presumably with access to gravel beds containing the same variety of cherts available to the Poverty Point Period inhabitants, rarely utilized cherts of the high quality and apparent exotic origin so common in Poverty Point assemblages.

CHIPPED STONE ARTIFACTS

Projectile Points

A total of 4,158 projectile points was recorded. Of this total, 1,515 points were broken in such a way as to prevent identification, leaving 2,643 points that were typed, 2,380 of which are associated with the Poverty Point component. In working with the collections, primary emphasis was placed on identifying projectile points commonly associated with the Poverty Point culture. Although this emphasis introduced a bias in placing marginally identified points into type categories where they might not properly belong, the limitation when working with private collections of not having continued access to the artifacts for reanalysis necessitated some degree of "forcing" points into types. In addition, projectile points having no similarity to well-established types are not dealt with here, as is also the case with most of the points from Jaketown's post-Poverty Point occupation, with only a couple of exceptions introduced primarily to indicate stone type usage. The percentages of later points are, however, very small in comparison to the enormous number of points produced during the Poverty Point occupation.

Pontchartrain (Ford and Webb 1956): 545 specimens. Pontchartrain points are the most numerous type at Jaketown, and Webb (1977:37) found them dominant in most Poverty Point sites east of the Mississippi River (Plate 1). As indicated in Table 2A, Pontchartrain points are overwhelmingly manufactured from local chert. These points are sharpened by parallel ripple flaking, often have median ridges, and are infrequently asymmetrical or twisted. Stems are generally rectangular, though not necessarily squared. Pebble cortex on stem bases is common. One specimen was fully completed, including ripple flaking, yet the distal end was not chipped and retained pebble cortex, possibly indicating a general use of this point type as a cutting as well as a piercing tool. Pontchartrain points are a common late Archaic form in western Mississippi and are similar to the Flint Creek point in northeast Mississippi and northwest Alabama (Cambron and Hulse 1975).

Kent (Suhm and Krieger 1954): 493 specimens. Kent points are similar to Pontchartrains, but are less well made and lack fine ripple flaking (Plate 2). Like Pontchartrains, Kents are primarily manufactured from local chert (Table 2A). Connaway et al. (1977) point out the

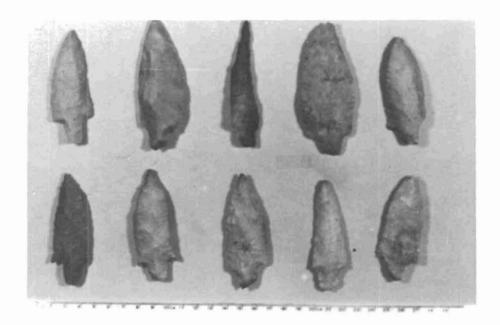


Plate 1. Pontchartrain Points: Collection of Mr. and Mrs. Jack Lancaster.

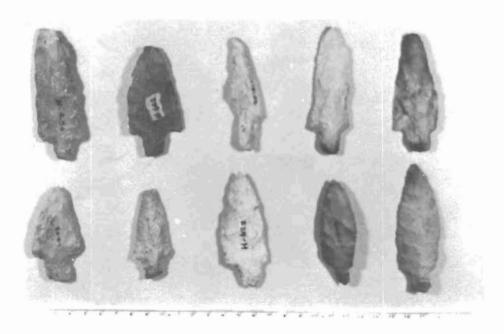


Plate 2. Kent Points: Collection of Mr. and Mrs. Jack Lancaster.

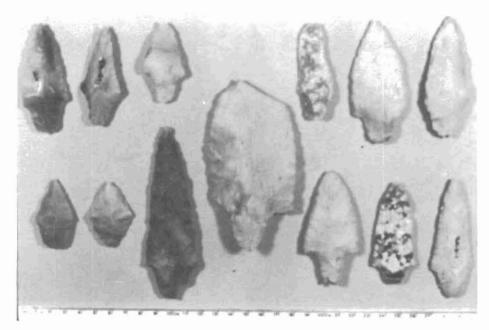


Plate 3. Gary Points: Collection of Mr. and Mrs. Jack Lancaster.

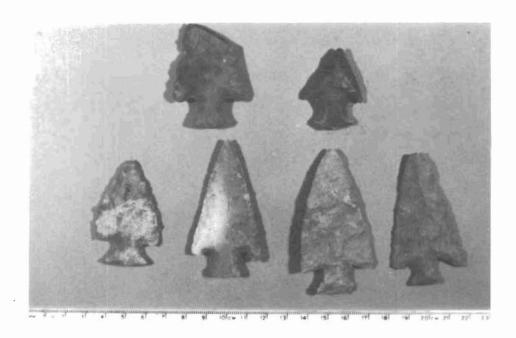


Plate 4. Motley Points: Collection of Mr. George Chatham.

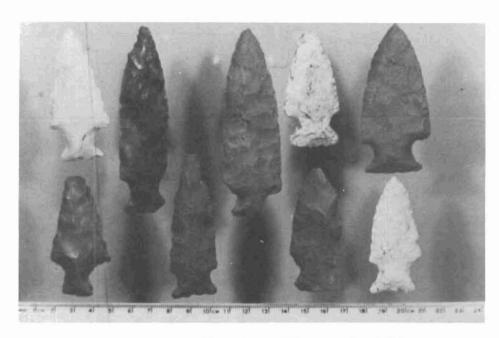


Plate 5. Epps Points: Collection of Mr. Bobby Lilly.

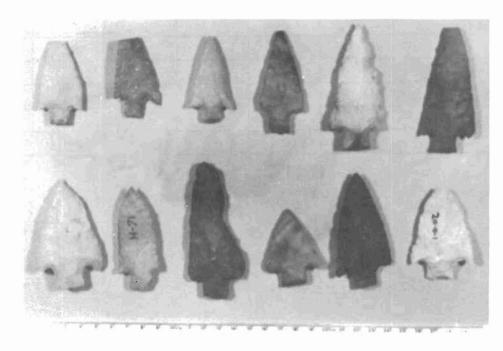


Plate 6. Delhi Points: Collection of Mr. and Mrs. Jack Lancaster.

					<u> </u>	
Material	Pontchartrain	Kent	Gary	Motley	Epps	Delhi
Local Chert	491-90%	452-92%	105-26%	50-26%	68-37%	80-45%
Grey Chert	19- 3%	12- 2%	19- 5%	114-60%	40-22%	67-38%
Fort Payne Chert	9- 2%	6- 1%	6- 1%	11- 6%	2- 1%	18-10%
Dover Chert				3- 2%	1	
Black Chert		5- 1%	5- 1%	2- 1%	15- 8%	1
White Chert	5- 1%		11- 2%	11- 6%	51-28%	7- 4%
Novaculite	5- 1%	9- 2%	212-52%		5- 3%	2- 1%
Tallahatta Quartzite	163%	8- 2%	43-11%		1	
Kosciusko Quartzite						2- 1%
Black Quartzite		1				
Quartz			1			
Composite Chert			3- 1%			
Maroon Chert						
Pickwick Chert						
TOTAL	545	493	405	191	183	177

Table 2A. Projectile points by raw material.

possibility that Kent points are unfinished Pontchartrains, but consider it more likely that Pontchartrains are a more carefully made variant of Kents.

Gary (Suhm and Krieger 1954): 405 specimens. Gary points have been subdivided into many variants but are classified together here as points exhibiting slight shoulders, tapered stems, and relatively broad blades (Plate 3). Over half of these points are manufactured from novaculite and a fourth from local chert, with Tallahatta quartzite constituting a sizeable minority (Table 2A). Gary points made of novaculite and Tallahatta quartzite are relatively common on late Archaic sites in the Yazoo Basin, with Tallahatta quartzite increasing in popularity in the hills of Mississippi further east toward the source of this material. This point predominates at the Poverty Point site and on other related sites west of the Mississippi River (Webb 1977).

Motley (Ford, Phillips, and Haag 1955): 191 specimens. Motley points are fourth in frequency at Jaketown and are characteristically fashioned from grey chert (Table 2A; Plate 4). This point type has a triangular blade, is corner-notched with a thin stem and expanding base, and is generally well-made. The nearly constant association of grey chert with this point type at the Poverty Point site, along with its limited spatial distribution at that site, has led Gibson (1973) to propose the possibility that this point was a status symbol for an elite group of hunters or warriors.

Epps (Ford and Webb 1956): 183 specimens. This side-notched point is similar to Motley but lacks barbs and is not so often made of grey chert (Plate 5; Table 2A). Epps points have a higher percentage of their number manufactured from white chert than any other type. Although relatively common at Jaketown, Epps points have not been recorded at other Yazoo Basin sites and do not enjoy a wide distribution east of the Mississippi (Webb 1977).

<u>Delhi</u> (Ford and Webb 1956): 177 specimens. This type was set up to remove from the Motley category those points with squared rather than expanding stems (Plate 6). Although at Jaketown the highest percentage of these points is manufactured from local chert (45%), combining just the grey and Fort Payne chert (48%) indicates the preference for non-local materials in the making of Delhi points (Table 2A).

Carrollton (Suhm and Krieger 1954): 91 specimens. These small points have triangular blades and squared stems (Plate 7). Like those from the Poverty Point site (Ford and Webb 1956), the edges of these specimens are not ground as is the case with those for which the type was originally set up (Suhm and Krieger 1954). The majority of Carrollton points at Jaketown are made of local cherts, though several other materials are well-represented (Table 2B).

Macon (Ford and Webb 1956): 87 specimens. Macon points have triangular blades, square shoulders and stems, and are usually fairly

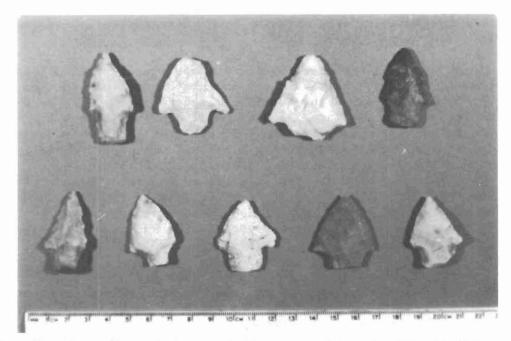


Plate 7. Carrollton Points: Collection of Mr. George Chatham.

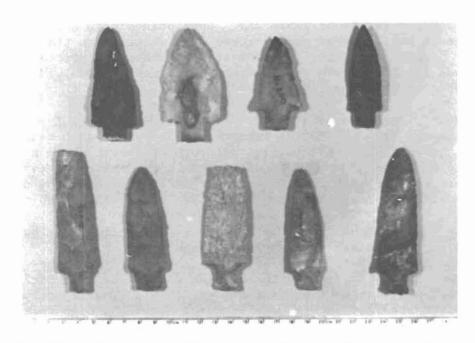


Plate 8. Macon Points: Collection of Mr. and Mrs. Jack Lancaster.

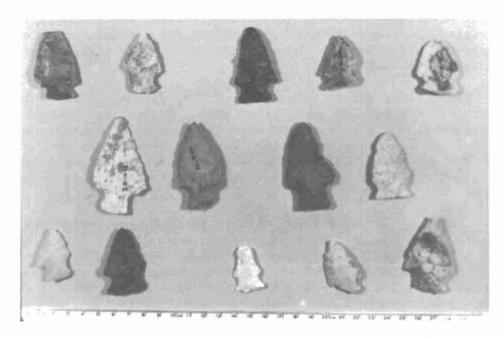


Plate 9. Ellis Points: Collection of Mr. and Mrs. Jack Lancaster.

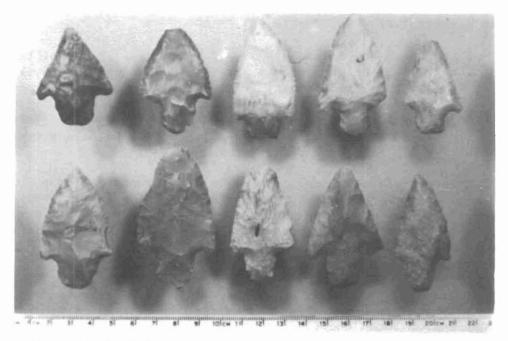


Plate 10. Shumla Points: Collection of Mr. Bobby Lilly.

long (Plate 8). Although local chert as a single type predominates, exotic materials including grey and Fort Payne chert and Tallahatta quartzite are common to this type (Table 2B). Points of this form were apparently widespread in the east during the Late Archaic Period (Ford and Webb 1956; Webb 1977).

Ellis (Suhm and Krieger 1954): 77 specimens. Ellis points are short, crudely made corner-notched points (Plate 9). Though third in frequency at the Poverty Point site (Webb, Ford, and Gagliano n.d.), Ellis is a minority type at other Poverty Point sites, and this holds true for Jaketown. Half of the Jaketown examples are made from local chert, with a number of other materials employed in small amounts (Table 2B).

Shumla (Suhm and Krieger 1954): 37 specimens. Although not reported from Poverty Point sites other than Claiborne (Gagliano and Webb 1970:59) and Slate (Lauro and Lehmann 1982:27), Shumla points are present in limited numbers at Jaketown. Shumlas are small points having triangular blades with barbs of varying size with generally squared stems, and may have finely serrated blades (Plate 10). At Jaketown these points are fashioned almost exclusively from local chert; two are made from Tallahatta quartzite (Table 2B). A Middle to Late Archaic association is indicated (Connaway 1977).

Marshall (Suhm and Krieger 1954): 35 specimens. These points are characterized by large oval to triangular blades, basal notching that produces strong barbs, and generally straight stems, though stems may expand mildly (Plate 11). At the Poverty Point site over half of Marshall points are made from grey chert; at Jaketown the percentage is less but still frequent (Table 2B).

Elam (Crook and Harris 1952): 17 specimens. Elam points are small, thick, and crude. Blades are short, shoulders are weak, and stems are generally rectangular (Plate 12). These points are not common on Poverty Point sites (Webb, Ford, and Gagliano n.d.), and, like those at Jaketown, are commonly fabricated from local chert, with minorities of novaculite, Tallahatta quartzite, and grey chert (Table 2B).

<u>Marcos</u> (Suhm and Krieger 1954): 15 specimens. Marcos points are <u>similar</u> to Marshall, but have corner-notching and expanding stems rather than basal-notching and straight stems (Plate 13). Also like Marshall, Marcos points are commonly manufactured from exotic materials (Table 2C).

Hale (Ford and Webb 1956): 14 specimens. Hale points have very large blades and relatively small stems (Plate 14). Shoulders are generally square, though they may be lightly barbed. Primarily manufactured from local chert, other materials are represented, including a unique maroon chert with light-colored striations of unknown origin (Table 2C).

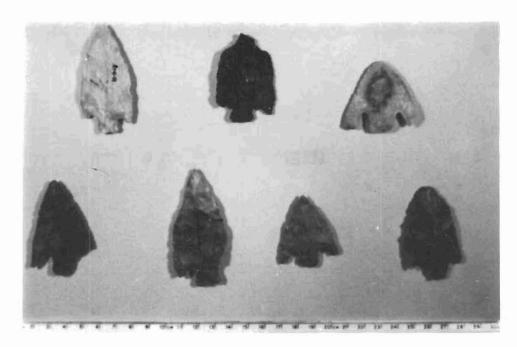


Plate 11. Marshall Points: Collection of Mr. and Mrs. Jack Lancaster.

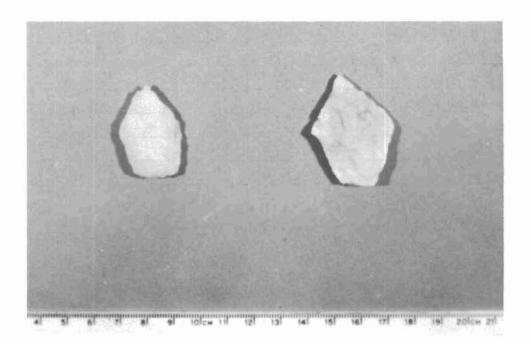


Plate 12. Elam Points: Collection of Mr. George Chatham.

Material	Carrollton	Macon	Ellis	Shumla	Marshall	Elam
Local Chert	57-63%	38-44%	38-49%	35-95%	18-51%	8-47%
Grey Chert	14-15%	21-24%	14-18%		13-37%	1- 6%
Fort Payne Chert	1	13-15%	3- 4%		3- 9%	
Dover Chert						
Black Chert	1	2- 2%	7- 9%			
White Chert	5- 5%	_1	6- 8%			
Novaculite	6- 6%	3- 3%	4- 5%		1- 3%	3-18%
Tallahatta Quartzite	7 8%	9-10%	3- 4%	2- 5%_		5-29%
Kosciusko Quartzite			1			
Black Quartzite			1			
Quartz						
Composite Chert						
Maroon Chert						
Pickwick Chert						
TOTAL	91	87	77	37	35	17

Table 2B. Projectile points by raw material.

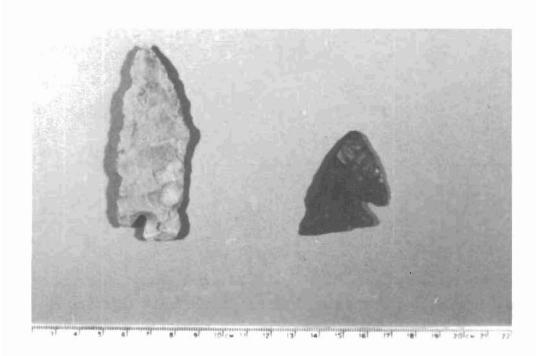


Plate 13. Marcos Points: Collection of Mr. George Chatham.

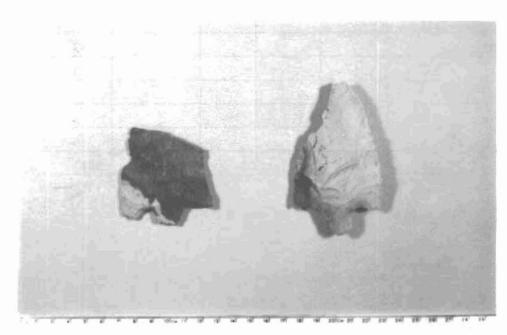


Plate 14. Hale Points: Collection of Mr. and Mrs. Jack Lancaster.

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Material	Marcos	Hale	Palmíllas	Fragments	TOTAL
Local Chert	6-40%	9-64%	9-69%	828-55%	2292-59%
Grey Chert	6-40%	2-14%	1-69%	285-19%	628-16%
Fort Wayne Chert			1- 8%	38- 3%	111- 3%
Dover Chert				1	51%
Black Chert	1-13%		1- 8%	12- 1%	52- 1%
White Chert	2-13%		1- 8%	166-11%	267- 7%
Novaculite				81- 6%	331- 9%
Tallahatta Quartzite		1- 7%		95- 6%	190- 5%
Kosciusko Quartzite				2	51%
Black Quartzite					2
Quartz				2	3
Composite Chert					3
Maroon Chert		1			1
Pickwick Chert				5	51%
TOTAL	15	14	13	1 <u>515</u>	3893

Table 2C. Projectile points by raw material.

<u>Palmillas</u> (Suhm and Krieger 1954): 13 specimens. Palmillas points are characterized by a bulbous stem. Jaketown specimens have triangular, barbed blades and are predominantly manufactured from local chert, though a range of other material is represented (Table 2C).

Other points include a few Early and Middle Archaic-like points, including a Lost Lake made from Tallahatta quartzite. Arrow point types Madison and Collins, numbering 138 and 124 respectively, were overwhelmingly manufactured from local chert, some of which had been thermally altered, but occasional specimens made from novaculite, white, black, and grey chert, quartz, and Tallahatta quartzite (27 of 262 specimens, or 10%) testify to the extent to which materials imported during an earlier occupation were scavenged for reuse. Of course the raw materials requirements for Madison and Collins points, relatively diminutive points as they are, could easily motivate such reuse, since flakes or biface fragments would suffice as stock supplies. Post-Poverty Point but pre-bow and arrow knappers would have experienced greater difficulty in scavenging suitable raw materials, though such efforts may have produced greater rewards in the reclamation of usable points.

Chipped Bifacial Tools

Choppers. Choppers are relatively crudely fashioned, massive bifaces which exhibit considerable battering along one or more portions of the bifacially flaked edges. Seven of these tools are fashioned from large cobbles of local chert and one is made from white chert. Ford, Phillips, and Haag (1955:119) recovered 29 choppers from the surface at Jaketown, nine from the ceramic-producing midden, and seven from the Poverty Point component.

Adzes. Adzes are fairly well-made rectangular or ovate bifaces with asymmetrically placed bits. All 18 adzes recorded during this project were manufactured from local chert and eight of them showed considerable polish along the bit, presumably resulting from use. Gregory, Davis, and Hunter (1970) report experiments with large ovate bifaces similar to those recovered from Terral Lewis, a small Louisiana Poverty Point site, in which facial sheen was quickly duplicated by using the artifacts to till soil, suggesting that they may have functioned as hoes despite their morphological resemblance to "adzes." Ford, Phillips, and Haag (1955) report only roughly ground rather than chipped adzes and assign these to the Poverty Point component.

Chipped, polished celts. Thirteen celts were recorded which were chipped from local chert and polished primarily along the bit though to a degree across the entire surface. Ford, Phillips, and Haag (1955:119) also recorded three of these pebble celts and reliably relate them to the Mississippian occupation at Jaketown.

<u>Drills</u>. A total of 21 drills or drill fragments were recorded. Seventeen of these are of local chert, two of grey chert, and one each of Fort Payne chert and novaculite. The majority of these are simply

the bit ends; the few basal portions are of the expanding or hafted variety. Ford, Phillips, and Haag (1955) recorded few drills at Jaketown and noted that this was in sharp contrast to other southeastern Archaic sites.

Scrapers. Scrapers have at least one steep edge. Three are made from local chert and four are made from white chert. In addition to these bifacially chipped scrapers, two unifacial "thumbnail" scrapers were recorded, one manufactured from Fort Payne chert and one from white chert. None of these thumbnail scrapers are reported in the 1955 report, and they are usually considered to predate the Poverty Point Period, though they also occur in very late prehistoric and even historic contexts ir this area.

Microlith Industry

The microlith industry at Jaketown and other Poverty Point sites has received considerable attention from a number of researchers (Haag and Webb 1953; Ford, Phillips, and Haag 1955; Ford and Webb 1956; Webb 1968, 1977; Johnson 1980; Webb and Gibson 1981). Ford, Phillips, and Haag (1955) established the basic analytical categories of cores, unmodified and notched blades, end— and sidescrapers, Jaketown and blunt perforators, and needles. Ford and Webb (1956) questioned the functional implications of the "perforators" and through replicative experiments concluded that those artifacts represented exhausted blades used for cutting and scraping. Recent analyses (Johnson 1980; Webb and Gibson 1981) have focused on the production sequence of the microlith industry and described new components of the industry.

Patterning of the horizontal distribution of the elements of the microlith industry is not thought to be random at either Jaketown or Poverty Point (Haag and Webb 1953; Ford, Phillips, and Haag 1955; Webb and Gibson 1981). At Jaketown the bulk of the microliths were concentrated along a ridge on the southern border of the site. The concentration of those items along with the relative absence in that locality of Poverty Point objects led Haag to propose a time differential in the use of the two artifact classes, though Webb postulated differential use areas to account for the distribution (Haag and Webb 1953). Analysis of the intra-site distribution of the various elements of the microlith industry at the Poverty Point site led Webb and Gibson to propose that:

a special segment(s) of Poverty Point society was primarily responsible for the production of bladelets (and bladelet tools) and another was responsible for the manufacture of flakes and flake tools. Those commodities were made available to other, presumably distinct, groups at the site who pressed them into service in areas apart from the production locales (1981:100).

As one possible explanation of the technological differences between the microlith assemblages at Jaketown and Paxton Brake, a small Poverty

Point site about 10 km north of Jaketown, Johnson (1980) has suggested a similar mechanism whereby blades produced at Paxton Brake may have been utilized at the Jaketown site. Although elements of the microlith industry are present at numerous other Poverty Point-related sites, none of them begin to approach the Poverty Point and Jaketown sites in terms of sheer quantities of these items.

A total of 3,623 artifacts relating to the microlith industry was recorded during this project. These are presented alongside those reported by Ford, Phillips, and Haag (1955) in Table 3. Unfortunately, I was not aware of the re-analysis of the microlith industry by Johnson (1980) and Webb and Gibson (1981) until well into the field season and so have utilized the original classification scheme developed in the 1955 Jaketown report. The percentages of the various elements are in good agreement with the earlier study (Table 3), though endscrapers and notched blades are poorly represented. Ford and Webb (1956:76-82) classified only two end-scrapers from the Poverty Point site and suggested that battering produced by blade removal from cores could produce an effect similar to blade use as an endscraper. They also felt that the notches on "notched blades" were produced through use and may simply represent an early stage in wear derived from ordinary cutting and scraping operations.

The microlith industry at Jaketown utilized local cherts over-whelmingly (97.7%). Among the non-local materials used, white chert was employed to the greatest extent, at 1.6%. Several other lithic materials comprise the remaining 0.7% (see Table 3).

	1955	1982	TOTAL
Cores	374	220	594
Unmodified Blades	1410	1023	2433
Endscrapers	106	5	111
Sidescrapers	671	227	898
Jaketown Perforators	2547	2006	4553
Blunt Perforators	92	14	106
Needles	175	118	293
Notched Blades	230	10	240
TOTAL	5605	3623	9228

Table 3. Microlith industry at Jaketown

GROUND STONE ARTIFACTS

Roughly Ground Tools

Hammerstones. Hammerstones are roughly circular or oval cobbles which show evidence of battering in one or more places. Twenty-five quartzite hammerstones, 24 of local chert, three of sandstone, four of novaculite, and one of a relatively soft red speckled material were recorded for a total of 57. Hammerstones may have been employed in

food-processing or manufacturing activities and may relate to any of the cultural occupations at the site.

Pitted Stones. Pitted stones, sometimes referred to as "nutting stones," have small circular depressions, presumably the result of repeated blows to an object centered on the stone. These stones may have served as anvils for bipolar flaking or for food processing. One quartaite and five sandstone specimens were recorded. Webb (1968) lists pitted stones as a tertiary level diagnostic trait of the Poverty Point culture, but these are recognized from earlier and later cultural contexts as well.

Whetstones and Grooved Abraders. Whetstones are generally tabular pieces with evidence of repeated grinding on one or more sides. Eleven sandstone and four quartzite whetstones were recorded. Grooved abraders are similar to whetstones but have narrow grooves probably the result of sharpening wood or bone. One petrified wood, one pumice, and eight sandstone grooved abraders were recorded. Four whetstones were recovered from the preceramic midden at Jaketown by Ford, Phillips, and Haag, one from the ceramic-bearing levels, and 19 from the surface (1955:120).

<u>Saws</u>. One quartzite and seven sandstone saws were recorded. These artifacts are thin slabs with wear along both sides of one edge suggesting use with a sawing motion. Although Ford, Phillips, and Haag (1955) found no evidence that these items were a part of the Poverty Point complex, Webb (1968) has since considered them as a secondary level diagnostic trait of that culture.

Manos and Metates. Three quartzite manos were recorded, loaf shaped cobbles flattened on one side from grinding and slightly convex on the opposite side. One sandstone metate was recorded with a well-formed trough. Though known to occur in Poverty Point culture contexts (Webb 1977), these artifacts also derive from earlier and later cultural periods.

Ground and Polished Tools

Celts. One hundred and eighty polished celts were recorded during this project, the majority of which were only fragments. These range in size from small celts some 7 x 4 cm to large ones up to 20 x 10 cm. Materials vary as well, with 131 quartzite specimens, two of petrified wood, seven of sandstone, seven of grey slate, five of siltstone, one of phyllite, and 27 of unidentified materials, possibly including argillite and various granite-like stones. Assignment of these specimens to a particular cultural period is not yet feasible, though excavations might help pinpoint changing preferences in materials. Ford, Phillips, and Haag (1955:122) did not at that time consider the smaller celts to derive from pre-Marksville origins, though Webb (1977) has since established their presence within the Poverty Point Period.

Other celts at Jaketown did not receive the fine polish of the specimens above. These included seven sandstone celts, two soft green

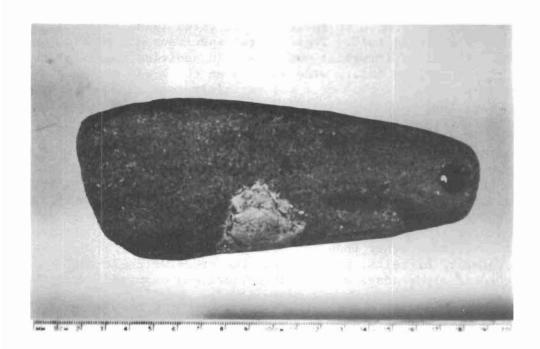


Plate 15. Pumice Celt: Collection of Dr. Sam Sugg.

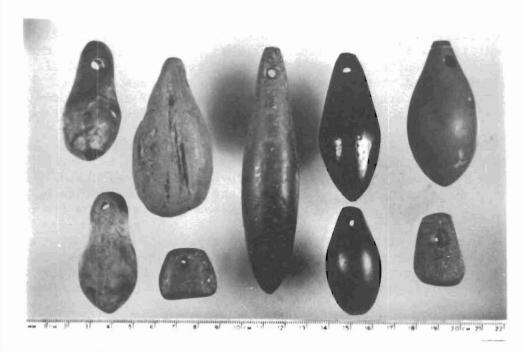


Plate 16. Plummets: Collection of Mr. Bobby Lilly.

celts of a type common to Poverty Point sites (Webb 1977:45), and eleven made from volcanic tuff. These latter specimens are particularly crude, often with rather irregular outlines. In addition, a perforated pumice celt 16 cm long by 6.5 cm wide and 3.3 cm thick was recorded. Possibly used as an abrader, this celt was certainly incapable of functioning as a cutting tool, and is classified as a celt purely on morphological characteristics (Plate 15).

Adzes. Ford, Phillips, and Haag (1955:112) describe a class of roughly ground adzes as "one of the most characteristic artifacts from the Poverty Point assemblage from Jaketown." They recorded 26 specimens of this type of adze. Although some of the previously described celt fragments may belong to this category, no crudely ground adzes were recorded during this project, though several chipped adzes were recorded. Other than the possible inclusion of crude adzes within the category of celts, particularly the crude volcanic tuff celts, the absence of crude adzes within the collections examined cannot be explained.

Plummets. Plummets are generally believed to be weights for bolas used in catching waterfowl as proposed by Ford and Webb (1956). Plummets from Poverty Point cultural contexts are usually manufactured from hematite and magnetite and are more often perforated than grooved. Later cultures in the Lower Mississippi Valley employed small numbers of grooved plummets made from local materials (Webb 1977). Table 4 summarizes the use of magnetite, hematite, and other stone in the plummet industry at Jaketown. Magnetite comprises 75% of the items, hematite 23%, and other stone 2%. At the Poverty Point site the percentages of hematite and magnetite are almost exactly reversed, at 78% and 22%, respectively (Webb 1977:46). Although Ford and Webb (1956:93) point out the difficulty in distinguishing between the two materials, the differences in frequencies at the two sites is striking. This difference may be attributed to preference, different source areas, or both. Ford and Webb (1956:93) correct the 1955 identification of all Jaketown specimens as hematite to include magnetite, but in unspecified percentages.

The materials from which the "other stone" plummets are manufactured include limonite, sandstone, local chert, quartz, steatite, and unidentified hard stone. As noted above, this represents only 1% of the total plummet manufacturing industry and includes a perforated quartz plummet not likely to have been considered utilitarian by its owner.

The shapes of Jaketown plummets are varied but fall within the range of those at the Poverty Point site described by Webb (1977:46) as "teardrop, pear shaped, egg shaped, torpedo shaped, and constricted end ovoids." Decorations include 21 perforated magnetite plummets with multiple grooves incised around the neck. Other decorations (Figure 3; Plate 16) include a slight sunburst design; an etched cross-hatched design on a plummet fragment, three spiked tails with cross-hatching; oval grooves; and engraved triangles with cross-hatching on a plummet reported by Ford, Phillips, and Haag (1955).

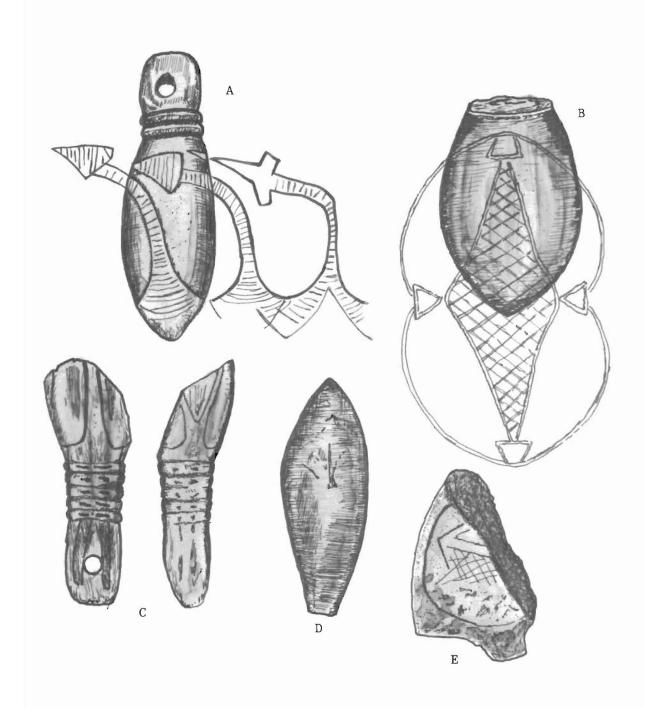


Figure 3. Plummet Decorations. A: Mr. Tommy Lilly; B: Ford, Phillips, and Haag 1955; C, D: Mr. George Chatham; E: Mr. and Mrs. Jack Lancaster.

Class	Magnetite	Hematite	Other Stone	Total
Chunks	200	47	0	247
Roughly Shaped Plummets	108	63	3	174
Plain Body Fragments	75	26	5	106
Perforated Plummets	141	24	5	170
Grooved Plummets	11	2	5	18
Total	535	162	18	715

Table 4. Plummets from Jaketown.

Bannerstones. There are few bannerstones at Jaketown, and Webb (1977:47) reports that they are also infrequent at the Poverty Point site. Ford, Phillips, and Haag (1955:124-25) describe a broken fine-grained specimen from Jaketown which may have been part of a winged bannerstone. Two fragments of sandstone hourglass-shaped bannerstones were recorded during this project as well as three other bannerstones described in the section on the lapidary industry.

Gorgets. Fourteen probable gorget fragments were reported from Jaketown by Ford, Phillips, and Haag (1955:123-24). Materials include sandstone, shale, and limestone. The suggested function of these artifacts is atlat1 weights, with which interpretation Webb (1977:47) agrees. The 1955 report concludes that gorgets derive principally from the Poverty Point occupation.

Twenty-nine gorgets and gorget fragments were recorded during this project (examples in Plate 17). Materials include hematite (3), sandstone (1), slate (14), and limonite (11). Like those from the Poverty Point site, Jaketown gorgets are generally "ovoid, with pointed, rounded, or squared ends" (Webb 1977:47). Decorations are occasional and include edge notching, cross-hatching, and incised grooves (Figure 4). Most fragments are broken transversely through the perforations.

Miscellaneous Ground and Polished Stone Objects

A number of small polished items were recorded whose functions are unknown. These artifacts are complete specimens in that they show no sign of having been broken, and may exhibit smooth facets or curves. Twenty-five of those objects are of hematite and three are of magnetite; possibly the hematite objects were ground for pigment.

Other ground artifacts include a triangle fashioned from sandstone, a limonite cylinder, a tubular piece of hematite, and several discoidal fragments made from limonite (3) and quartzite (3). A variety of fragments of ground stone was also recorded whose original form could not be determined. Materials include sandstone, quartzite, limonite, slate, and quartz.

Stone Vessels

Twenty-two steatite sherds and nine sandstone sherds were reported

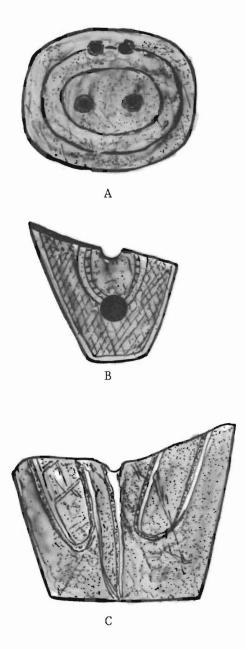


Figure 4. Gorget Decorations. A: Mrs. Sally Humphreys Gwin; B: Mr. Bobby Lilly; C: Mr. and Mrs. Jack Lancaster.

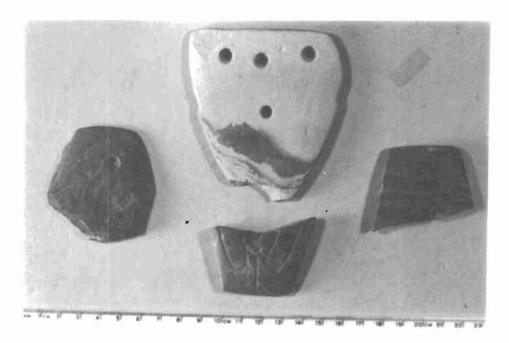


Plate 17. Gorgets: Collection of Mr. and Mrs. Jack Lancaster.

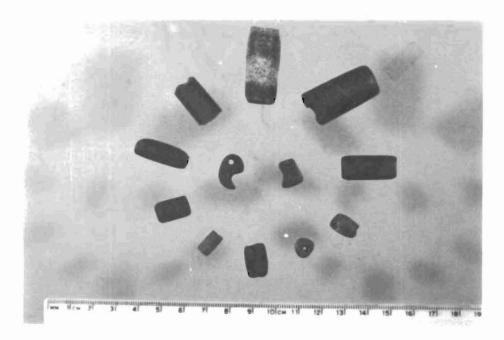


Plate 18. Tubular Beads and Pendants: Collection of Mr. and Mrs. Jack Lancaster.

by Ford, Phillips, and Haag (1955:126). No vessel forms could be identified, and the sherds were attributed to the Poverty Point component. Webb (1944) has described a number of stone vessels found in a cache at the Poverty Point site. Another cache of steatite vessels was discovered at the Claiborne site at the mouth of the Pearl River (Gagliano and Webb 1970).

Eighty steatite vessel body fragments, three basal fragments, and 13 rim fragments (three of which are decorated with simple incising) were recorded during this project. Again, no vessel forms could be determined. Only three sandstone vessel fragments were recorded. Sandstone in its natural form can assume sherd-like shapes, so only sandstone pieces showing gouge marks were recorded as vessel fragments.

LAPIDARY INDUSTRY

The lapidary industry now recognized as an outstanding development within the Poverty Point culture (Webb 1968, 1977) was only minimally represented in the 1955 Jaketown report (Ford, Phillips, and Haag 1955). Two drilled stone beads were reported at that time. This project has recorded numerous further examples of the lapidary industry at Jaketown.

Tubular beads are the most common lapidary item at Jaketown. Forty-three jasper beads, six of other hard stone, and one each of banded slate, novaculite, crinoid stem, and quartzite were recorded. Sixteen jasper tubular bead blanks and one blank each of quartzite and steatite were also recorded (Plate 18). Less common are disc beads, five of which are fashioned from jasper and one each from quartz, magnetite, local chert, and cannel coal.

Pendants include two flat river pebbles drilled for attachment, one bird effigy, three claw effigies, and one steatite disk (Plate 18). Seven quartz crystals were polished and grooved for suspension. A miniature plummet fashioned from yellow fluorite may have functioned as a pendant, also.

Quartz or quartz crystals were used in fabricating a number of items (Plate 19). Six crystals had been completely ground and polished into cylinders; two other crystals had been polished to the extent of rounding off facet ridges. Eight additional quartz fragments had been polished to varying degrees, some of which were obviously fragments of larger, finished pieces. Three outstanding quartz artifacts are a miniature butterfly bannerstone, a full-size perforated plummet, and an ovate bannerstone. These latter two items presumably were for show only, considering the difficulty in working quartz. Another butterfly bannerstone, full-size, was constructed from a beautiful conglomerate material and may not have been intended for utilitarian purposes.

Perhaps the most well-known lapidary item from the Jaketown site is the jasper tablet with a human face first illustrated by Webb (1968). The large body portion of this tablet was recovered by Mr. Frank McCormick, Jr., of Greenwood, Mississippi nearly 20 years ago. The heretofore missing head portion was discovered in the collection of Mr.

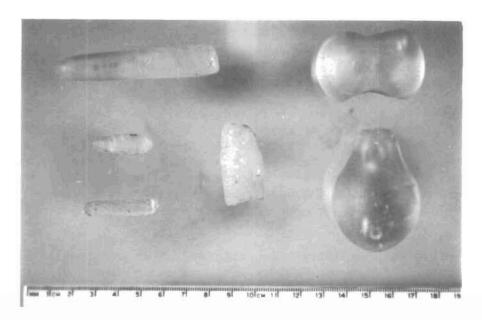
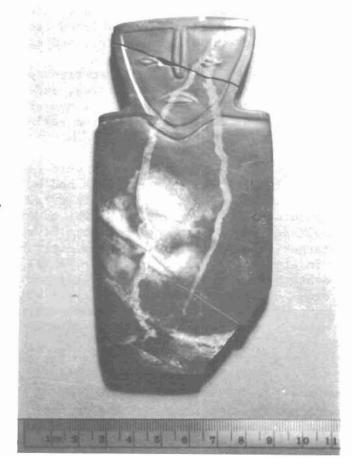


Plate 19. Quartz Objects: Bannerstone, collection of Mr. James Sibley;
plummet, collection of Dr. Sam Sugg; remaining
objects from Cottonlandia Museum, collections
of Mrs. Carrie Avent Jones and Mr. L.B. Jones,
and Mr. Chris Bryant.

Plate 20. Jasper Effigy Tablet: Upper portion, collection of Mr. Bobby Lilly; lower portion, collection of Mr. and Mrs. Frank McCormick, Jr.



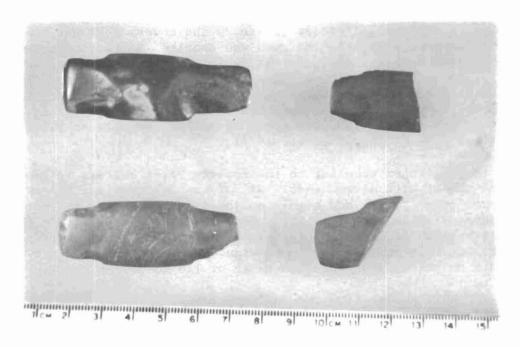


Plate 21. Rectangular Tablets with Narrow Ends: Collection of Mr. Bobby Lilly.

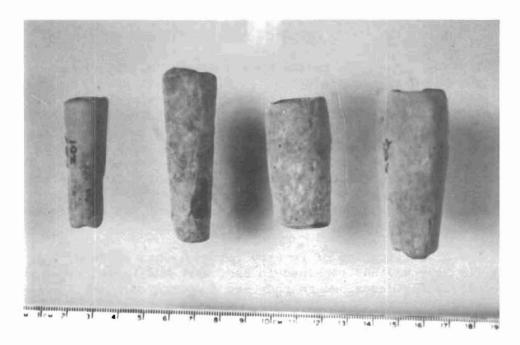


Plate 22. Clay Tubular Pipes: Collections of Mrs. Sally Humphreys Gwin, Mrs. Carrie Avent Jones, and Mr. L.B. Jones at Cottonlandia Museum.

Bobby Lilly of Belzoni, Mississippi, who made his find about three years ago. The reassembled tablet (Plate 20 and cover) does not bear the resemblance to Olmec figures that was ascribed to the incomplete tablet (Webb pers. comm. 1982). Another tablet of similar outline but without facial features has been recorded and is manufactured from siltstone. Although fragmented, it closely resembles a spatulate shaped tablet from Neimeyer-Dare in Louisiana illustrated by Webb (1977:49). An engraved slate fragment from Teoc Creek may be another example of this general artifact type (Connaway et al. 1977).

Another item peculiar to the Poverty Point culture is the rectangular tablet with narrow ends. All of the Jaketown specimens (9) are chipped from jasper and highly polished, removing for the most part all evidence of flaking (Plate 21). These specimens fall within the range cited by Webb (1977:47-48) for similar artifacts from Poverty Point, 6.3 to 8.3 cm long and 3.2 to 5.0 cm wide, though six of them are from 0.6 to 0.9 cm thick, less than his range of 1.0 to 1.5 cm thick.

Notably absent from the lapidary industry at Jaketown are any items manufactured from the green, maroon, and grey slate encountered in such abundance at the Slate site, a Poverty Point lapidary industry approximately 20 miles due south of Jaketown (Lauro and Lehmann 1982). Although quartz crystals are relatively plentiful at Jaketown (157), over 500 have been recorded at Slate, far more than the Poverty Point site (395) Apparently the Slate site occupants enjoyed access to certain materials not generally available elsewhere in the Jaketown Phase.

OBJECTS OF FIRED CLAY

Poverty Point Objects

Poverty Point objects are hand-modeled clay objects subjected to firing under oxidizing conditions. These artifacts are generally accepted as objects used in a cooking process wherein they are heated and placed in a pit with the food that is to be baked or roasted. Other possible uses, including fetishes, net weights, and slingshot missiles, have been proposed (Webb, Ford, and Gagliano n.d.), and even Ford, Phillips, and Haag (1955) and Ford and Webb (1956) did not dispose of the possible use of these items as substitutes for hot-rock boiling. The regular association of Poverty Point objects in shallow pits in a number of different Poverty Point cultural contexts has removed all reasonable doubt as to their general function.

The classification of Poverty Point objects by Ford, Phillips and Haag (1955:39-43) has remained in use, with additional types of minor frequency being described as they are encountered. Jaketown specimens are fairly uniform in consistency, having a fine sandy paste, and are predominantly buff in color. Collectors report that these objects appear only infrequently at the site now, at least in relatively complete form: apparently the long years of plowing and exposure to the weather has reduced them to fragments. The collections examined during this project had a wide range in numbers of Poverty Point objects: some collectors had only a few whole specimens; others collected all frag-

TYPE	1955	1982	TOTAL
Biconical, all varieties	485	102*	587
Biconical, plain	403	61	61
Biconical, extruded end		29	29
Biconical, punched		6	6
Biconical, grooved		6	6
Cylindrical, laterally grooved	1411	706	2117
Cylindrical, plain	2	11	13
Cross-grooved	413	155	568
Biscuit-shaped		7	7
Biscuit-shaped, grooved		1	1
Biscuit-shaped, punched		1	1
Spheroidal, plain	29	17	46
Spheroidal, punched		1	1
Melon-shaped, grooved		11	<u>1</u> 1
Melon-shaped, decorated		1	1
Melon-shaped, twisted		1	1
Unclassified	9226		9226
TOTAL	11566	1014	12580

*Not recounted in 1982 totals or grand totals.

Table 5. Type frequencies of Poverty Point objects at Jaketown.

ments encountered. The Poverty Point objects recorded during this project are tabulated alongside those listed by Ford, Phillips, and Haag (1955:39-43) in Table 5.

The excavations reported by Ford, Phillips, and Haag provided enough data to establish a preliminary chronological ordering of Poverty Point object types at Jaketown, though the excavators expressed some concern that the apparent relationships they discovered may have been the result of intra-site patterning rather than preferences through time. Biconical and cross-grooved objects may have been the earliest types or at least may have declined in popularity before cylindrical, laterally grooved types did, with some indication that biconical types declined first. Cylindrical laterally grooved types are the most common Poverty Point objects at Jaketown, even allowing for the fact that fragmentary specimens of this type are more easily recognized than are broken examples of other types (acknowledged by Ford, Phillips, and Haag [1955] and during this project) The small, fine biconical plain type is the latest of all, persisting into post-Poverty Point periods.

Though unsubstantiated by tests, I would like to venture a further explanation as to the function of Poverty Point objects. Large population aggregates occupying relatively permanent sites require, among other things, large quantities of firewood (See Plog 1982). Poverty Point objects may have served as a fuel conservation measure if they could be heated relatively quickly, especially with low grades of firewood (such as cottonwood, willow, or sweetgum), and yet store enough heat to cook foods which would otherwise require large amounts of quality, charcoal-producing fuel (such as oak). This proposal has a number of implications. Concerning smaller sites, Poverty Point object cooking methods may have been an option based upon duration of occupation, availability of suitable wood as opposed to suitable clay, or seasonality of occupation (this cooking method might have been primarily intended for foods limited to specific seasons), all of which suggests that the presence of Poverty Point objects may not be expected in all Poverty Point components. Crucial to the acceptance of this proposal is the demonstration of the efficiency with which Poverty Point objects can capture heat for later release, a fact which awaits verification. Hunter's (1975) experiments with Poverty Point objects do not address this aspect sufficiently to draw such conclusions.

Clay Tubular Pipes

One hundred and thirty-four fragments of clay tubular pipes were recorded (Plate 22). Ford, Phillips, and Haag reported 20 fragments and one complete specimen they considered as likely to be typical, whose measurements are:

110 mm long, 26 mm and 8 mm in diameter at the bowl and stem ends, respectively. Bore diameters are 15 mm and 5 mm. The bowl portion constitutes about 30 mm of the total length, and an interior constriction marks the beginning of the stem portion (1955:102).

Clay tubular pipes have the same fine sandy paste as do the Poverty Point objects, and are a light orange color with a blackened bore. The majority of the pipes reported by Ford, Phillips, and Haag were excavated from the Poverty Point midden, and they conclude that there was a clear association between these objects and the Poverty Point culture, though they note the appearance elsewhere of more elaborate forms in Tchula Period contexts.

Ceramics

Discussion of ceramics recorded during this project is extremely limited for two good reasons. First, very few collectors bother to pick up sherds and, second, I doubt that even with a large sample I could contribute additional insights to the results of earlier investigations (Phillips, Ford, and Griffin 1951; Ford, Phillips, and Haag 1955; and Phillips 1970). That I mention ceramics at all is because I collected two Wheeler Plain body sherds from the surface of the base of Mound C, which increases the total of fiber-tempered ceramics collected from the site by a third (two Wheeler Plain, one Wheeler Simple Stamped, and three Wheeler Punctated recorded by Ford, Phillips, and Haag 1955:66). The 1955 report clearly assigns fiber-tempered ceramics to the Tchula Period and emphatically states that ceramics were not in use during the Poverty Point Period. Fiber-, sand-, clay-, and untempered sherds are reported from a number of other Poverty Point cultural contexts, however (Webb 1977:31-33).

Other Clay Objects

The tetrahedrons found massed in Mound A (Ford, Phillips, and Haag 1955) were very scantily represented in the collections recorded during this project, and not surprisingly so, considering that the Mound A sub-surface deposit was apparently the only location in which these objects were found. Nine tetrahedrons were recorded from the private collections. These objects conform in every way to those typical forms described in the 1955 report: four-sided baked clay objects, ashy grey in color, apparently fired under reducing conditions. These objects date to the Tchula Period. Unable to substantiate Moore's (1913) theory that similar objects from a site in Louisiana may have functioned as pot supports, Ford, Phillips, and Haag (1955:60) nonetheless emphasize that there are "significant differences between tetrahedrons and Poverty Point objects, whether a result of differences in fabrication or use or both."

Other fired clay objects from Jaketown include a grooved pottery plummet and a pottery bead reported in the 1955 report. Two hundred and seventy-eight pieces of fired/clay daub were recorded during this project. Conspicuously absent from the Jaketown fired clay inventory are the solid clay figurines reported from the Poverty Point, Claiborne, Tackett, Norman, and Aaron sites (Webb 1977). The majority of these figurines are from the Poverty Point site and represent seated human females. Webb (1977) and Ford (1969) see in these figurines strong evidence for Mesoamerican contact.

SUMMARY AND CONCLUSIONS

This report has described a large, generalized surface collection made by a number of local collectors from the Jaketown site. The vast majority of the collections are believed to derive from the Poverty Point occupation at that site, dated to approximately 1500 to 600 B.C., though radiocarbon samples from that component have also yielded dates as recent as 200 B.C. Later derivations for some artifact classes have been noted where applicable. The initial Poverty Point occupation occurred while a partial flow of the Mississippi River occupied a channel within and subsequently adjacent to the site while in its Stage 4 meander belt.

Raw materials employed by the Poverty Point culture at Jaketown are thought to derive from five principal generalized source areas. Local sources (including the bluffs and hills of Mississippi), the Ouachita Mountains, southeastern Missouri, the Ohio Valley, and the Tennessee River constitute the principal source areas. Other sources include a possible western area within the headwaters of the Arkansas River and the Tallahatta Formation which extends from Mississippi into Alabama. The frequencies of artifact classes representing the reduction sequence of chipped stone from cores to finished products suggest that a number of lithic materials were obtained in unaltered form.

Projectile point styles are in general accordance with those from other Poverty Point sites, differing, however, in frequencies from those sites west of the Mississippi. Pontchartrain is the dominant point type at Jaketown and Gary is most frequent west of the river. Differing from other Yazoo Basin sites, Jaketown has a relatively common occurrence of Epps points. Ellis points, third in popularity at the Poverty Point site, are a decided minority at Jaketown. The association between certain point types and non-local material is evident.

Other artifact classes at Jaketown are well-represented at other Poverty Point sites and in the general southeastern Late Archaic. Differences include the virtually reversed percentages between hematite and magnetite in the plummet industry for Jaketown and the Poverty Point site and the overwhelming preference for Poverty Point objects of the cylindrical with lateral grooves type at the former location. Unique items in the Jaketown lapidary industry include the jasper tablet with a carved human representation and the quartz plummet and bannerstone. A unique large perforated celt made from pumice was also recorded. Though a number of ceramics have been recovered at the Poverty Point site and other sites of this culture, the Poverty Point occupation at Jaketown was apparently entirely without ceramics. No clay figurines have been recorded at Jaketown and rough green hoes or celts are few.

In sum, the surface collections from Jaketown give every indication of a lively participation in the Poverty Point culture, though differences between it and other sites are apparent and should, of course, be expected. The Jaketown site is the premier expression of this culture in the Yazoo Basin and is generally referred to as a regional center. Whether or not Jaketown is part of a community which should properly be

considered a phase of Poverty Point culture separate from that represented in other regions, as I have implied in several instances above and as first suggested by Phillips (1970:525), can best be answered when better information is available on other Poverty Point sites in the Yazoo Basin. Based on the differences between the Jaketown and other assemblages noted above, however, the possibility that Jaketown is an expression of a subphase should be considered. Willey and Phillips (1958:24) state that classification as a subphase "seems appropriate in cases where differences apply only to a few specific items of content or where such differences are expressible only in variations in frequency." But because the differences between the Poverty Point culture expressed at Jaketown and at sites in other regions include more than the simple differences in artifact classes and frequencies mentioned above, I will let the matter drop and defer to later researchers with a larger body of data at hand.

The remainder of my comments will be directed toward a general discussion of exchange within the Poverty Point culture and will depart from the solid ground of type frequencies into a more speculative discourse. Problem-oriented research based on a generalized surface collection from a single site is a rather difficult task, so I hope that observations and speculation based on these collections can provide avenues for future research.

Traffic in non-local materials did not originate in the Poverty Point Period but certainly intensified to an extent far greater than the level of trade that preceded it. Middle Archaic and pre-Poverty Point Late Archaic populations in Mississippi used novaculite from the Ouachitas and Fort Payne chert from Tennessee or the surrounding area in manufacturing utilitarian chipped stone tools as well as in the making of very fine, possibly ceremonial blades and points (Sam McGahey pers. comm. 1982). Some of the materials employed in the lapidary industry at the Middle Archaic Denton site in the Yazoo Basin may also have been imported (Connaway 1977:75).

The emphasis on materials exchanged within the Poverty Point trade network apparently shifted from relatively utilitarian items to materials primarily useful as status validating equipment (Gibson 1973:389). The initial trade network focused on lithic materials of a higher quality than that of the local gravels. Local gravels could, and, as evidenced by their continued usage in large quantities throughout the Poverty Point Period, did serve admirably for the manufacture of stone tools. The importation of novaculite, Fort Payne chert, and other cherts evidently grew from a preference for this better quality material, although as noted above for the Middle Archaic these materials may have had some role in a ceremonial system. The origin of the trade network is of some importance, particularly as this contrasts with the situation described by Rathje (1971) in the lowland Maya area where the desire for essential non-local materials may have been responsible for stimulating an extensive exchange network which fostered an increasingly complex sociopolitical organization. The origin of the trade network is, however, of less importance than the role of the materials in the culture and especially the role of the exchange patterns in servicing and unifying the separate regions.

Upham et al. (1981:825) have suggested that large central settlements may have served as trade centers where local subsistence products could be exchanged for non-local subsistence products or exotic mater-In this fashion the currency of exotic materials allows the conversion of consumable products into storage wealth which could later be converted back to subsistence products in periods of low local productivity. Freidel (1979:51) considers "a systematic change in the role of non-local materials...shifting the commodities used in displays of power and wealth from primarily local and consumable ones to non-local and non-consumable ones" an important step in the development of long-distance exchange networks, providing a mechanism for rapid dissemination of social innovations necessary for the evolution of complex society. Both of these models envision the role of non-local materials in a culture as more than a high-quality substitute for locally available raw The apparent shift in the focus of the Poverty Point exchange network from "an initial state in which exotic raw materials were predominantly used for technomic or 'useful' equipment to a late and final phase which concentrated on the restricted distribution of rank and status validating raw material" (Gibson 1974a:88) is particularly important in the light of the above suggestions. Freidel (1979:51) especially considers the emphasis on non-local materials in the "prestige and authority symbol systems" crucial in the development of complex societies.

Gibson (1980) has characterized the broad scale Poverty Point interaction network as a system of commodity exchange which functioned by the funneling of materials into and out of the Poverty Point site. The Poverty Point site acted as a gateway community which linked dispersed settlements into a system of exchange. The area north of Poverty Point acted primarily as a source area, whereas the Poverty Point regions south of the main site were principally consumers of this material exchange. Gibson (1979) has illustrated this process using the example of the ratios of preliminary and advanced stages of manufacture of exotic stone tools at the Beau Rivage site in south central Louisiana, suggesting that the Poverty Point site provided this southern neighbor with prefabricated blanks or preforms of exotic materials. That the northern regions, including Jaketown, may have been instrumental in providing the Poverty Point site with various materials is indicated by the presence at Jaketown of such raw materials as hematite, magnetite, Tallahatta quartzite, novaculite, and grey and white chert. The appearance of novaculite in unaltered form at Jaketown and of a variety of Ouachita-derived materials at the Slate site (Lauro and Lehmann 1982), especially during the Florescent Phase when the apparent emphasis at the Poverty Point site was upon midwestern materials (Gibson 1974b:15), further suggests that Jaketown was not always dependent upon the Poverty Point site for a link with the Ouachitas. As Altschul (1979:22) has suggested, Jaketown "was in a position to usurp the trade routes from the Tennessee Valley." This fact, coupled with the likelihood of Jaketown's influence over materials from the upper Mississippi and Ohio Valley (Brasher 1973) and its apparent autonomy with respect to access to the Ouachitas, is indicative of the potential competition which may have developed among the Poverty Point regional centers over trade routes and supplies. If the development of the Poverty Point

culture began with the linkage of groups via trade routes, and if its elaboration was based on regulated exchange and the possible emergence of a unifying cult, then its dissolution could be the result of fragmentation based on exchange competition and conflict. Webb (1977:61) has pointed out a further possible disruptive factor, "the antipathy of strong, cohesive cultural groups that were developing in the Upper Valley."

That the Jaketown site is the premier location among Poverty Point sites in the Yazoo Basin has not been disputed. How this site articulated with the other sites remains unknown, however. It is probable that the various regional centers exercised greater control as central places within their respective regions than did the Poverty Point site for all regions. As an example of how Jaketown may have serviced its surrounding communities, a large amount of hematite and magnetite was recorded from this site in the form of chunks and roughly shaped plummets. Many collectors reported that finding other than finished plummets is rare on other Yazoo Basin Poverty Point sites. Perhaps Jaketown not only imported the raw material but normally fashioned plummets as well before distributing hematite and magnetite to outlying sites. Jaketown's function in this capacity could be further determined by controlled collections from the outlying sites to verify the amount of unprocessed hematite and magnetite as well as the representation in their assemblages of the production sequence for exotic chipped stone. The possibility that Jaketown was serviced in some ways by specialized activities performed at other sites is suggested by the unusual microlith industry at Paxton Brake and by the extensive lapidary industry at the Slate site. However, the failure to discover any of the slate common to the Slate site in the Jaketown collections may indicate that the Slate site occupants performed services of some intangible nature, the performance of which necessitated access to otherwise restricted materials, or for which they were rewarded by such access.

This report has provided a record of part of the Jaketown surface assemblage recorded in categories more consistent with current usage than those employed in the original report of Ford, Phillips, and Haag (1955), particularly in regard to the recognition of different types of materials utilized during the Poverty Point occupation. It is hoped that future analyses of the Poverty Point culture may benefit by comparison with the material presented herein.

REFERENCES CITED

Altschul, Jeffrey H.

1979 Review of archaeological investigations. In The Peripheries of Poverty Point, by P. M. Thomas, Jr. and L. J. Campbell, New World Research Report of Investigations 12, 5-23.

Bass, Sandy

A closer examination of local lithic sources for tool manufacture at the Poverty Point site. Unpublished M.A. thesis, Department of Geography and Anthropology, Louisiana State University.

Brasher, Ted J.

1983 An investigation of some central functions at Poverty Point.
Unpublished M.A. thesis. Northwestern State University,
Natchitoches.

Cambron, James W. and David C. Hulse

Handbook of Alabama Archaeology, Part 1: point types, edited by D. L. De Jarnette. Archaeological Research Association of Alabama, Inc., Moundville, Alabama.

Conn, Thomas L.

1976 The utilization of chert at the Poverty Point site.
Unpublished M.A. thesis, Department of Geography and
Anthropology, Louisiana State University.

Connaway, John M.

The Denton site, a middle Archaic occupation of the northern Yazoo Basin. Mississippi Department of Archives and History Archaeological Report 4.

Connaway, John M., Samuel O. McGahey, and Clarence H. Webb
1977 Teoc Creek, a Poverty Point site in Carroll County,
Mississippi. Mississippi Department of Archives and History
Archaeological Report 3.

Crook, Wilson W., Jr. and R. K. Harris

Trinity aspect of the Archaic horizon: the Carrollton and Elam foci. <u>Texas Archeological and Paleontological Society Bulletin</u> 23:7-8.

Dunning, Arthur B.

The Tallahatta Formation in Clarke County, Alabama. <u>Journal</u> of Alabama Archaeology 10(2):50-60.

Fisk, H. N.

Geological investigation of the alluvial valley of the lower Mississippi River. Mississippi River Commission, Vicksburg.

- Ford, James A.
 - 1969 A comparison of Formative cultures in the Americas: diffusion or the psychic unity of mankind. Smithsonian Contributions to Knowledge 11.
- Ford, James A., Philip Phillips, and W. G. Haag

 1955 The Jaketown site in west-central Mississippi. American
 Museum of Natural History Anthropological Papers 45.
- Ford, James A. and Clarence H. Webb
 1956 Poverty Point, a Late Archaic site in Louisiana. American
 Museum of Natural History Anthropological Papers 46.
- Freidel, David A.
 - 1979 Culture areas and interaction spheres: contrasting approaches to the emergence of civilization in the Maya lowlands.

 <u>American Antiquity</u> 44:36-54.
- Gagliano, Sherwood M. and Clarence H. Webb 1970 Archaic-Poverty Point transition at the Pearl River mouth. Southeastern Archaeological Conference Bulletin 12:47-72.
- Gibson, Jon L.
 - 1973 Social systems at Poverty Point, an analysis of intersite and intrasite variability. Unpublished Ph.D. dissertation, Department of Anthropology, Southern Methodist University.
 - The Tchefuncte culture in the Bayou Vermilion basin, south central Louisiana: a developmental case study. <u>Bulletin</u> of the Texas Archaeological Society 45:67-95.
 - 1974b The rise and decline of Poverty Point. Louisiana Archaeology 1:8-36.
 - 1979 Poverty Point trade in south central Louisiana: an illustration from Beau Rivage. Louisiana Archaeology Number 4 for 1977:91-116.
 - Speculations on the origins and development of Poverty Point culture. In Caddoan and Poverty Point Archaeology: Essays in honor of Clarence Hungerford Webb, edited by J. L. Gibson. Louisiana Archaeology Number 6 for 1979:326-55.
- Gregory, Hiram F., Jr., Lester C. Davis, Jr. and Donald G. Hunter
 1970 The Terral Lewis site, a Poverty Point facies in Madison
 Parish, Louisiana. Southeastern Archaeological Conference
 Bulletin 12:35-46.
- Haag, William G.
 - The Jaketown flint industry. Southeastern Archaeological Conference Newsletter 3:7-9.

Haag, William G. and Clarence H. Webb

1953 Microblades at Poverty Point sites. American Antiquity 18:245-48.

Hunter, Donald G.

1975 Functional analysis of Poverty Point clay objects. Florida Anthropologist 28(1):57-71.

Johnson, Jay K.

1980a Poverty Point blade technology in the Yazoo Basin, Mississippi. Paper presented at the 37th Annual Southeastern Archaeological Conference, New Orleans, Louisiana.

1980b Poverty Point period social organization in the Yazoo Basin, Mississippi: a preliminary examination. In Poverty Point and Caddoan archaeology, essays in honor of Clarence Hungerford Webb, edited by J. L. Gibson. Louisiana Archaeology Number 6 for 1979:251-81.

Lauro, James and Geoffrey R. Lehmann

The Slate site, a Poverty Point lapidary industry in the southern Yazoo Basin, Mississippi. Mississippi Department of Archives and History Archaeological Report 7.

Moore, Clarence B.

1908 Certain mounds of Arkansas and Mississippi. <u>Journal of</u> the Academy of Natural Sciences of Philadelphia series 2, volume 13, part 4.

Some aboriginal sites in Louisiana and Arkansas. <u>Journal</u> of the Academy of Natural Sciences of Philadelphia 16:7-99.

Phillips, Philip

1970 Archaeological Survey in the lower Yazoo Basin, Mississippi, 1949-1955. <u>Peabody Museum Papers</u> 60.

Phillips, Philip, James A. Ford and James B. Griffin

Archaeological survey in the lower Mississippi alluvial valley, 1940-1947. Peabody Museum Papers 25.

Plog, Fred

1982 The original energy crisis. Early Man 4(1):26-27.

Rathje, William L.

1971 The origin and development of lowland Classic Maya civilization. American Antiquity 36:275-85.

Saucier, Roger T.

1974 Quaternary geology of the Lower Mississippi Valley. Arkansas Archaeological Survey Research Series 6.

- Saucier, Roger T.
 - 1981 Current thinking on riverine processes and geologic history as related to human settlement in the southeast. Geoscience and Man 22:7-18.
- Suhm, Dee Ann and Alex D. Krieger
 - An introductory handbook of Texas archaeology. <u>Texas</u>
 <u>Archaeological Society Bulletin 25.</u>
- Upham, Steadman, Kent G. Lightfoot, and Gary M. Feinman
 - Explaining socially determined ceramic distributions in the prehistoric Plateau Southwest. <u>American Antiquity</u> 46:822-33.
- Walthall, John A., Clarence H. Webb, Stephen H. Stow, and Sharon I. Goad
 1982 Galena analysis and Poverty Point trade. Midcontinental
 Journal of Archaeology F(1):133-48.
- Webb, Clarence H.
 - Evidences of prepottery cultures in Louisiana. American Antiquity 13:227-32.
 - Extent and content of Poverty Point culture. <u>American</u>
 <u>Antiquity</u> 33:297-331.
 - 1977 The Poverty Point culture. Geoscience and Man 18.
- Webb, Clarence H., James A. Ford and Sherwood M. Gagliano
 - n.d. Poverty Point culture and the American Formative. Unpublished manuscript.
- Webb, Clarence H. and Jon L. Gibson
 - 1981 Studies of the microflint industry at Poverty Point site. Geoscience and Man 22:85-103.
- Weber, J. Cynthia
 - Thermoluminescent dating Poverty Point objects. Southeastern Archaeological Conference Bulletin 12:99-101.
- Willey, Gordon R. and Phillips
 - Method and theory in American Archaeology. The University of Chicago Press, Chicago.