

CHAPTER IV

FITZHUGH PHASE

Introduction

Definition of the Fitzhugh phase is based upon large excavated pottery collections from Fitzhugh (23-L-1), Transylvania (22-L-3), and Canebrake (24-J-9) sites, and a large surface collection from Somerset site (24-L-2). The phase is represented by more components than any other phase described in this report and is found throughout the Survey Area. The following sites, located within the Survey Area, have produced ceramic collections identifiable as Fitzhugh phase:

22-K-14	Welch	24-J-29	Chelly Landing
22-K-20	Panther Lake	24-J-30	Ulmer
22-L-3	Transylvania	24-K-6	Blanche
23-J-1	Mott	24-K-19	Frisbie
23-K-1	Fuller	24-L-2	Somerset
23-K-3	Indian Bayou	24-L-12	New Ground
23-L-1	Fitzhugh	24-L-13	Elk Ridge
23-L-10	Hopkins	25-J-7	Alphenia
23-L-17	Willow Bayou	25-K-9	Sundown
Tier 23	Swift	25-K-21	New China Grove
24-J-8	Turkey Point Landing		
24-J-9	Canebrake		

The following types constitute the Fitzhugh phase pottery complex:

Barton Incised, var. Atherton
var. Stowers

Ceramic counts for the Fitzhugh components at the type site, Transylvania, and Somerset are presented in Table 34. Ceramic counts for the Fitzhugh components at other sites in the Survey Area are found in Chapter II and Appendix I.

The Fitzhugh ceramic complex is a direct development out of the preceding Routh phase. There are no dramatic changes which characterize the shift from Routh to Fitzhugh. Most decorated types appearing in the former are also characteristic of the latter. Ceramic change is greatest in the vessel shape modes characteristic of Baytown Plain, var. Addis.

In the northernmost tiers of the Survey Area, Fitzhugh is replaced by Transylvania phase in late prehistoric times. The available evidence indicates that Fitzhugh phase lasted longer in the remainder of the Basin, and that it eventually evolves into historic Taensa. Transylvania and Fitzhugh phases, therefore, are partially contemporaneous. As one would expect, some pottery types characteristic of Transylvania phase also occur in late Fitzhugh components. Such is the case with the types, Barton Incised, vars. Arcola, Atherton, and Stowers, and Winterville Incised, var. Winterville. Since these are more characteristic of Transylvania phase, detailed descriptions of them are deferred to Chapter V.

CERAMIC COUNTS FOR FITZHUGH COMPONENTS AT FITZHUGH,
TRANSYLVANIA AND SOMERSET SITES

	Fitzhugh (Cuts 1-3)	Transylvania (Analysis Unit) C-D	Somerset (Surface)
Barton Incised, <u>var. unspecified</u>	1		
Baytown Plain, <u>var. Addis</u>	1184	346	538
"interior strap" bowl rim	13	4	9
"interior beveled" bowl rim	2		
"Delta City" bowl	21	1	
"Preston" bowl	5		2
"Walnut Bayou" bowl	113	99	21
"early Tunica" rim	22	26	5
"late Tunica" rim	9	4	3
"thickened-beveled" rim	1	1	
"Yazoo" bowl		3	1
"Haynes Bluff" rim	2		1
small carinated bowl	4	1	3
bottles	14	9	2
Bell Plain, <u>var. Holly Bluff</u>		27	
<u>var. Addis/shell</u>	11 ¹	132 ²	
Evansville Punctated, <u>var. Sharkey</u>	13	11	11
Hollyknowe Ridge Pinched, <u>var. Patmos</u>	7	1	5
L'Eau Noire Incised, <u>var. L'Eau Noire</u>	5		5
<u>var. Anna</u>	6		12
<u>var. Carter</u>	1		
<u>var. unspecified</u>	1		1
Leland Incised, <u>var. Leland</u>	4	8	6
Maddox Engraved, <u>var. Emerald</u>	3		2
<u>var. Silver City</u>	1		
Mazique Incised, <u>var. Manchac</u>	50	28	24
<u>var. Preston</u>	2		
Mississippi Plain, <u>var. Pocahontas</u>	45 ¹	772 ³	13 ¹
Parkin Punctated, <u>var. Hollandale</u>	1	9	
<u>var. Transylvania</u>		8	
<u>var. unspecified</u>	2		
Plaquemine Brushed, <u>var. Plaquemine</u>	185	22	43
<u>var. Grace</u>	1	4	
Pouncey Ridge Pinched, <u>var. Pouncey</u>	5		1
Winterville Incised, <u>var. Belzoni</u>	4	106	1
<u>var. Coleman</u>	2	1	8

¹ Includes no vessel shape or rim modes.

² A number of vessel shape and rim modes are included in this sample.

³ This figure undoubtedly includes some Transylvania phase sherds derived from Analysis Unit A-B. A number of vessel shape and rim modes are included in this sample.

The large number of types and varieties included in the Fitzhugh ceramic complex is the result of at least two factors: the duration of the phase from approximately A.D. 1350 to A.D. 1650 during which time new types and varieties are added--e.g., Barton Incised, vars. Atherton and Stowers, and L'Eau Noire Incised, var. Paine; and the addition of shell tempering to established types resulting in the need to recognize separate types or varieties for shell-tempered and clay-tempered specimens--e.g., Plaque-mine Brushed, var. Grace, Pouncey Ridge Pinched, var. Pouncey, and Parkin Punctated, var. Hollandale.

There is actually more ceramic change within Fitzhugh phase than there is between Routh and Fitzhugh phases. No phase distinctions have been made within Fitzhugh, however, because to do so with the available data would be impractical. Changes during Fitzhugh phase take place only gradually over a period of some three hundred years, and are due, for the most part, to influences spreading through the Survey Area from north to south. As a result, new pottery features occur at different times in different parts of the Survey Area. The Fitzhugh components at Transylvania and Fitzhugh sites share almost identical ceramic assemblages, except that the Transylvania component is characterized by several features--abundant Mississippi Plain and Winterville Incised, var. Belzoni,

for example--not found at the type site. Transylvania is probably slightly later than the type site, and some of its distinctiveness can be attributed to this factor. Probably more important, however, is its location well to the north of Fitzhugh. New Ground (24-L-12), located south of Fitzhugh, is later than Transylvania, but has a ceramic assemblage more similar to that of the type site.

Because ceramic change during Fitzhugh phase is not synchronous throughout the Upper Tensas Basin, it has seemed best to describe it as occurring within a single cultural unit rather than attempt to split the post-1350 A.D. period into several short term, narrowly distributed phases. Perhaps with more and larger collections from additional sites it may become practical and useful to distinguish additional phases.

The Ceramic Complex

Description

Barton Incised, var. Atherton (Plate VIII, g-1)

This variety was first recognized in excavated collections from Transylvania site. At that site, it is represented by a total of 77 sherds of which 61 occur in definite Transylvania phase complex and 7 occur in definite Fitzhugh phase context. Based on this evidence, Atherton is quite certainly a Transylvania phase type.

The occurrence of 7 sherds in levels of the earlier component can be explained as due to mixture. One Atherton vessel, however, is known from Turkey Point landing site, and sherds from another were obtained in excavations at Canebrake site. The type then is quite late, but is not restricted to Transylvania phase. A full type description is presented in Chapter V.

Barton Incised, var. Stowers (Plate VIII, b-f)

This new variety is described in Chapter V.

Within the Survey Area, Stowers is most commonly found in the Transylvania and historic Taensa phases. It also occurs in historic contexts at the Angola Farm site near the mouth of the Red River. Stowers first appears, however, in late Fitzhugh phase contexts. Within the Survey Area, examples are known from Ulmer, Canebrake, and Swift sites, while beyond the Basin it is represented at Anna (26-K-1), Emerald (26-L-1), and Ring (24-M-5) sites.

Baytown Plain, var. Addis

All clay-tempered plain and decorated pottery in Fitzhugh phase collections belongs to the variety, Addis. Paste characteristics described in Chapter III remain unchanged with one exception: a minority of sherds contain scattered and minute flecks of shell. This phenomenon is quite common at Transylvania, but is found at Fitzhugh

and Canebrake sites also. Vessel shape modes described below are similar whether shell occurs in the paste or not. Brain (1969:158-160) encountered a similar use of shell in the Winterville and Crippen Point components at Winterville site. Pottery with Addis-like paste to which small amounts of shell have been added is given the designation, 'Greenville Series', by that author. In the present report such ware is referred to as Addis with shell (Addis/shell). Since comparisons have not been made with Brain's material, and he includes pottery from Crippen Point phase within the series, it seems best not to use the name, Greenville, in the Upper Tensas Basin at this time. Furthermore, since there is evidently complete identity in vessel shape modes between the plain pottery with and without shell, no terminological distinction beyond that of Addis or Addis/shell is justified.

The practice of adding small amounts of shell to Addis paste is by no means restricted to plain pottery. At Transylvania at least one or two sherds of most Plaque-mine decorated types have shell present in their paste. The importance of this phenomenon for interpreting the appearance of "Mississippian" culture in the Upper Tensas Basin can not be overemphasized.

At Fitzhugh site 80 per cent of the pottery is undecorated and has Addis or Addis/shell paste. In the Fitzhugh component at Transylvania, only 41 per cent of all the pottery, plain as well as decorated, has these characteristics; the difference is due to the increased frequency of Mississippi Plain and Winterville Incised pottery at the latter site.

The majority of vessel shape modes described for Routh phase carry over into Fitzhugh phase. There are, however, important differences between the two phases.

1) Simple bowl. In Fitzhugh phase, the simple bowl is replaced by the "Walnut Bayou" bowl as the dominant undecorated vessel form (Table 35). Plain rims predominate, but the "interior strap" bowl rim and a new mode, "interior beveled" bowl rim, also occur. The "interior strap" bowl rim is somewhat different than its Routh phase antecedent.

TABLE 35

FREQUENCY OF ADDIS AND ADDIS/SHELL VESSEL SHAPES
AT SELECTED FITZHUGH PHASE SITES

	Fitzhugh	Somerset	Canebrake	Transylvania (Analysis Unit C-D)
Simple bowl	68	33	7	69
"Delta City" bowl	21		2	1
"Walnut Bayou" bowl	113	21	10	99
small cari- nated bowl	4	3	2	1
"Yazoo" bowl		1	1	3

The interior thickened area is narrower and thinner, and in some cases is recognizable only by the presence of an incised line that defines its lower border. In these cases, the rim is not formed by the addition of a strip of clay. In the Fitzhugh phase collections from Transylvania, the mode occurs on Addis, Addis/shell, and Pocahontas paste.

The "interior beveled" bowl rim is characterized by a flaring rim that is beveled on its interior side so as to produce a broad, flat, horizontal surface (Fig. 61, a). This rim is usually well made. It is very infrequent in Fitzhugh phase, however, with only two examples occurring at the type site and two shell-tempered examples occurring at Transylvania in the correct stratigraphic context.

2) "Delta City" bowl. As defined on pg. 351, the "Delta City" bowl is a part of the Fitzhugh Phase Ceramic complex. The mode occurs in abundance, however, only at the type site (see Table 35). There the great majority of specimens look more like a simple bowl with an interior rim strap that is grooved on its exterior surface than a carinated bowl (Fig. 59, g). Some few examples, however, resemble the form as it occurs in Routh phase.

As noted in the description of cultural stratigraphy at Fitzhugh site, there is some evidence of an

Fig. 61.--Addis and Pocahontas vessel shape and rim modes

- A. "interior-beveled" bowl rim.
- B. "Walnut Bayou" bowl with "early Tunica" rim.
- C. "Walnut Bayou" bowl with "late Tunica" rim.
- D. "Walnut Bayou" bowl.
- E. "early Tunica" rim.
- F. "thickened-beveled" rim.
- G-H. "Yazoo" bowl with "Haynes Bluff" rim.
- I-J. small carinated bowl.
- K-L. Leland Incised bottle forms.
- M. Addis bottle, Transylvania, Cut 14, Level C.

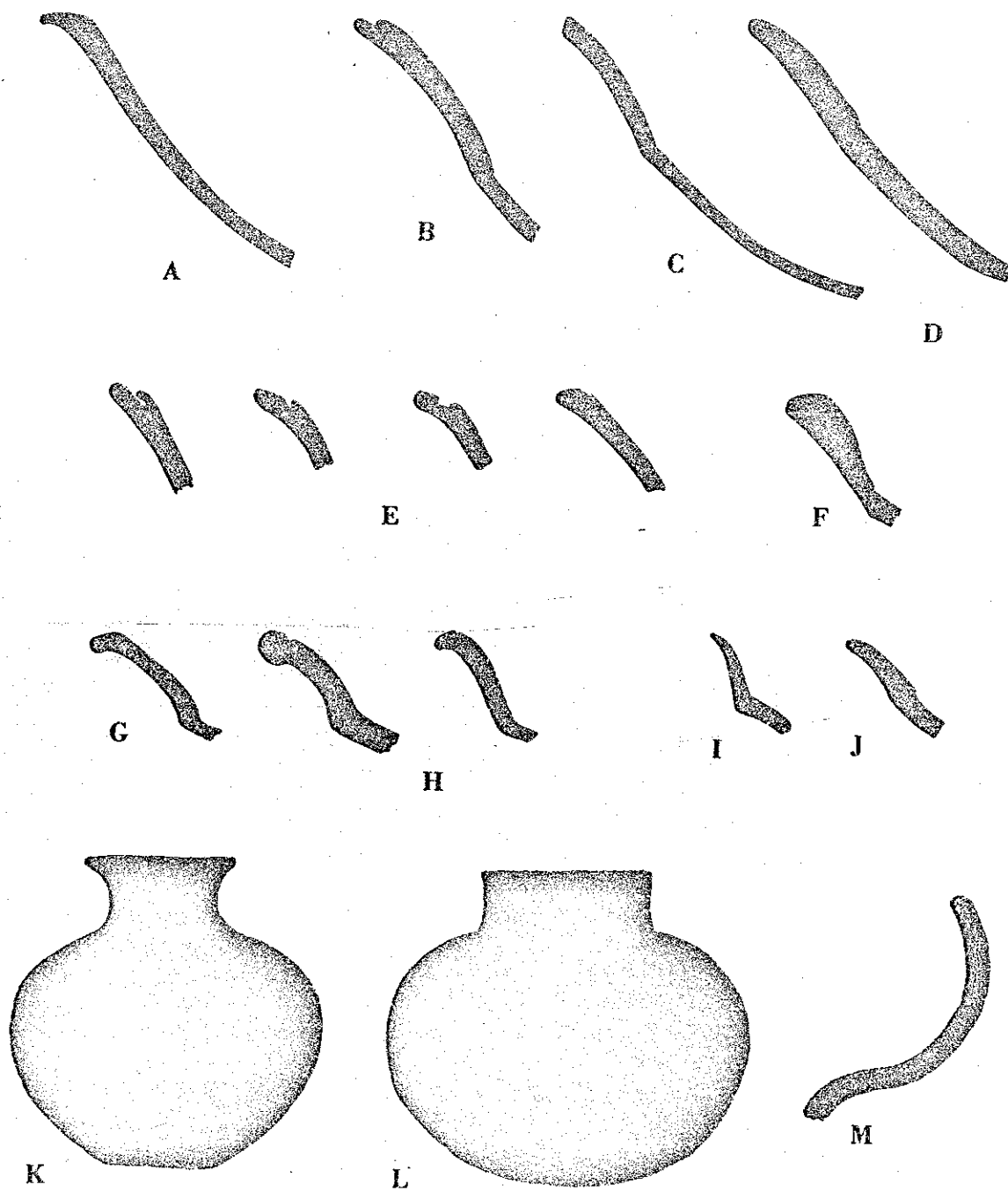


Fig. 61.--Addis and Pocahontas vessel shape and rim modes

earlier component which might be the source of the "Delta City" bowl sherds found on the site. The mode is so abundant in the upper levels of Cuts 1-4, however, that we must conclude, until there is evidence to the contrary, that it is part of the Fitzhugh phase ceramic complex.

A total of three "Delta City" bowl sherds occur in the Canebrake collections. Of these, one is late and two are early in appearance. All may belong to the Routh phase component. The single sherd from Transylvania identified as a "Delta City" bowl fragment is somewhat divergent. Irregardless of how this sherd is classified, the fact remains that the "Delta City" bowl is essentially absent at Transylvania. This may be due to the fact that the Fitzhugh component there is slightly later than the type site, or it may be the result of an earlier loss of popularity in the northern part of the Basin. Both factors are probably responsible. Of all the surface collected sites in the Upper Tensas Basin, only one Fitzhugh phase site, Elk Ridge (24-L-13), has yielded "Delta City" bowl fragments. Two sherds have been so identified in the Elk Ridge collection, although they are really too small and incomplete for positive identification.

It appears then that the "Delta City" bowl is not in general characteristic of Fitzhugh phase. Its infrequent occurrence in components of that phase indicate

that the mode is dying out, and its abundance at Fitzhugh may be taken as evidence of the early date of that component within the phase.

3) "Preston" bowl. There are a few examples of the "Preston" bowl in indisputable Fitzhugh phase context at both the type site and Somerset. Fitzhugh and Somerset sites may both be early within the Fitzhugh phase. It is quite probable that the "Preston" and "Walnut Bayou" bowls are developmentally related, and we can, therefore, expect a few carinated bowls classifiable as "Preston" bowls to occur at Fitzhugh sites.

4) "Walnut Bayou" bowl (Fig. 61, b-d; Plate III, f). Subsequent to the Routh, Mayersville and Winterville phases, the carinated bowl develops into two different forms. One, the "Walnut Bayou" bowl is characteristic of the Upper Tensas Basin, adjacent portions of the Lower Yazoo Basin, and the Alluvial Valley as far south as Baton Rouge. The second form, the "Yazoo" bowl, occurs primarily in the Lower Yazoo Basin, although specimens are found in Upper Tensas Basin collections as well.

The "Walnut Bayou" bowl is characterized by a very low angle of carination. The side wall is only slightly concave outward and may even be straight or convex, while the bottom wall may be rounded or straight. The side wall is commonly thicker at its base than the bottom wall, and the junction of the two is marked on the

interior by an incised line or by the difference in thickness. In its better executed form, the bowl has concave side walls and a slight angle at the point of carination. In the cruder examples, the side walls may be slightly convex and blend in with the bottom wall to produce an unbroken exterior profile. The point of carination in this case is marked only by an incised or finger-impressed line on the vessel interior.

The "Walnut Bayou" bowl occurs typically on Addis paste, but in the Fitzhugh component at Transylvania, it is found also on Pocahontas paste and on Addis/shell paste. There are a few Pocahontas examples in the Canebrake collections. Vessel size is large, with rim diameter ranging between 27 cm. and 34 cm. and side wall width ranging between 4 cm. and 7 cm.

The "Walnut Bayou" bowl is the most common plain ware vessel shape in the Fitzhugh phase (Table 35). As noted in Chapter III, it does appear in the preceding Routh phase, but only as a minority type.

Several rim forms occur with the "Walnut Bayou" bowl (Table 36). Plain rims are most common, while the "Tunica" rim is second in frequency.

TABLE 36

FREQUENCIES OF ADDIS AND ADDIS/SHELL CARINATED BOWL
RIM MODES AT SELECTED FITZHUGH PHASE SITES

	Fitzhugh	Transylvania (Analysis Unit C-D)	Somerset	Canebrake
Plain rim	45	40	13	8
"thickened- beveled" rim	1	1		1
"Haynes Bluff" rim	2		1	
"early Tunica" rim	22	26	5	
"late Tunica" rim	9	4	3	1

In defining his Tunica Complex, Ford (1936:105-7) recognized a series of rims, occurring on plain, carinated bowls that were thickened, out-flaring and either notched on the exterior, incised with a single line on the interior or both incised and notched.¹ Phillips (1970) assigns these forms to two modes, the "Haynes Bluff" rim and the "Tunica" rim, but does not, as far as the author can discover, describe the difference between them. In discussing the type, Bell Plain, var. Holly Bluff, he does state that thickened rims with incised lines are "Haynes Bluff" rims (ibid.:60) and illustrations of Holly Bluff rims in Figs. 14, 99, 201, and 214, lead one to conclude that "Haynes Bluff" rims are thickened and possess an

¹In Ford's terminology, these variations are respectively, type 82;52, type 82;20, and type 82;52/20.

incised line on the interior and narrow notches on the exterior of the lip. Rims with broad, cut-out notches are apparently excluded from the mode (*ibid.*:Fig. 99). The "Tunica" rim, on the other hand, is apparently relatively unthickened and lacks notches.

The author's work with rim sherd collections from Fitzhugh and Transylvania phase sites in the Upper Tensas Basin and comparative studies of rim modes from the Lower Yazoo Basin have led him to modify Phillip's classification slightly. In the present report, both modes have notches, broad as well as narrow, and incised lines. The major diagnostic of the two modes is the presence or absence of rim thickening. The "Haynes Bluff" rim is either bulbous or "L" shaped in cross-section (Fig. 61, g, h), while the "Tunica" rim is unthickened (Fig. 61, b, c, e). Intermediate forms do occur, and it is largely an arbitrary decision whether to assign them to one category or the other, but the distinction does seem to have significance as far as spatial and cultural distributions are concerned. As defined here, the "Tunica" rim is characteristic of the Upper Tensas Basin and the Deer Creek and present Mississippi River meander belts in the Lower Yazoo Basin. Deer Creek phase sites have rims usually conforming to the "Tunica" standard (Phillips 1970:Fig. 201, d, g, i-k; Fig. 214, b, d-j).

Lake George and presumably other sites in the eastern portion of the Lower Yazoo Basin are characterized by the "Haynes Bluff" rim (Phillips 1970:Fig. 99, a, b, i, j).¹ Examples of the opposite mode do, however, occur in each area.

The basic form of the "Tunica" rim is that of a slightly out flaring unthickened rim with a heavy line incised near the interior lip edge. Notches of various kinds are often found on the exterior lip edge, but are by no means always present. Attempts to utilize the "Tunica" rim as a marker type linking contemporaneous sites in the Lower Yazoo and Upper Tensas Basin has made it apparent that there is considerable variation on this basic form. The greater part of this variation can be subsumed within two categories designated here, "early Tunica" rim and "late Tunica" rim.

The "early Tunica" rim is beveled on the interior and possesses a heavy incised line near the interior lip edge. The process of manufacture began probably with a slightly beveled rim which was incised with a deep line, subsequently further beveled and finally smoothed. Depending upon the kind of stylus used (pointed or blunt) the

¹Phillips (ibid.:564) also notes the association of "Tunica" rim with Deer Creek phase, and "Haynes Bluff" rim with Lake George phase.

angle at which it was held, (parallel or perpendicular to the direction of the out flaring rim), and the amount of subsequent beveling and smoothing, the resulting rim would appear as in Fig. 61, b and e). Beveling and smoothing as a final step are most readily evident from the frequently compressed nature of the incision. The exterior lip edge frequently possesses notches of various forms: carefully executed, broad, cut-out notches; cruder, narrow notches; or long notches cut diagonally across the lip.

This form of "Tunica" rim is characteristic of Fitzhugh phase sites in the Upper Tensas Basin and Natchez area and of Deer Creek phase sites in the Lower Yazoo Basin. In the Natchez, Mississippi area, it is well represented in collections from Anna, Emerald, Gordon, and Fatherland sites. Specimens from the Peter Hill (31-K-2) and Rosedale (31-K-1) sites show that the mode occurs as far south as Baton Rouge.

The "late Tunica" rim (Fig. 61, c) is distinctive in that there are no modifications of the rim beyond that of notching and incising; there is no beveling. Incision occurs approximately 50 mm. below the lip and is accomplished by holding the stylus perpendicular to the interior rim surface. The great majority of rims have narrow and shallow "V"-shaped incised lines. Notching

is much less common on the "late Tunica" rim than it is on the earlier form.

The "late Tunica" rim is the only form present in the Transylvania phase component at the type site. Here it occurs exclusively on Mississippi Plain paste. This mode, however, also occurs on Addis paste in Fitzhugh phase contexts at the Transylvania, Canebrake, and Fitzhugh sites. It is represented in Deer Creek phase collections in the Lower Yazoo Basin, and, farther south the form is frequent at the Bayou Goula site, where it apparently is associated with the historic component. Study of the sherd material from Neitzel's Cuts 51 and 75, at Fatherland site indicate that the "late Tunica" rim occurs there with a frequency about twice that of the earlier form.

In addition to plain rims and "Tunica" rims, a third mode, the "thickened-beveled" rim can be recognized as occurring with the "Walnut Bayou" bowl. As the name implies, this rim is thickened and beveled so as to produce a wide, flat horizontal lip surface. The exterior lip edge is frequently embellished with both broad and narrow notches. The specimen illustrated, Fig. 61, f), is somewhat thicker than most examples. This mode is not very common in Fitzhugh phase and is not represented in the Transylvania phase type collection.

5) "Yazoo" bowl (Fig. 61, g, h). The second line of development in carinated bowls subsequent to Routh, Mayersville, and Winterville phases leads to the "Yazoo" bowl. This vessel shape mode, first distinguished by Phillips (1970:60) in the Lower Yazoo Basin, differs from the "Walnut Bayou" bowl in having a higher angle between side and bottom walls at the point of carination and a greater outward curvature in the side walls. It is commonly accompanied by the "Haynes Bluff" rim (Phillips 1970:60).

The "Yazoo" bowl is very common at Lake George site, but infrequent in the Deer Creek phase sites in the western portion of the Lower Yazoo Basin. It is not a common feature of either Fitzhugh or Transylvania phases. There is 1 sherd representative of the mode in the collection from Somerset, 5 sherds in the collection from Canebrake, and 1 sherd in the surface collection from New China Grove. All of these have Addis paste. At Transylvania, 3 sherds with Addis paste were recovered in Analysis Unit C-D, while 3 specimens with Holly Bluff paste, and one specimen with Pocahontas paste, came from Analysis Unit A-B.

The "Haynes Bluff" rim appears to be a common feature of the Lake George phase, but is relatively uncommon in Deer Creek phase collections. Most carinated

bowl rims Phillips illustrates from the Deer Creek sites, Winterville and Arcola (1970:Figs. 201, 214), are "Tunica" rims, and the present author himself has observed a preponderance of the "Tunica" mode over the "Haynes Bluff" mode in LMS collections from these two sites. The "Haynes Bluff" rim is also uncommon during Fitzhugh phase in the Upper Tensas Basin. A total of 11 specimens can be identified with Fitzhugh components: 1 sherd in the Somerset collection; 5 sherds in all cuts at Transylvania; and 5 sherds in surface and excavated collections from Fitzhugh. All have Addis or Addis/shell paste. No shell-tempered specimens were recovered from definite Fitzhugh phase stratigraphic contexts at Transylvania.

6) Small carinated vessels. Carinated vessels discussed to this point all have one feature in common--their large size. The average maximum diameter of the "Walnut Bayou" bowl is 34 cm., while width of side wall averages 6 cm. The existence of a distinct class of small sized carinated vessels is indicated by four whole vessels and 27 sherds from the general area of the Tensas Basin. Maximum diameter and side wall width for the measurable specimens are presented in Table 37. Vessel shape varies from that of the "Walnut Bayou" bowl (Fig. 61, j; Cotter 1952:Fig. 60, 6) to something not unlike the "Preston" bowl (Fig. 61, i). Only plain rims are known to occur with such vessels.

TABLE 37

DIMENSIONS OF SMALL CARINATED BOWLS

	Rim Diameter	Side Wall Width
Burthe ¹	17 cm.	3.7 cm.
Gordon ²	22 cm.	4.0 cm.
Pritchard Landing ³	17 cm.	2.5 cm.
Church Hill ⁴	18 cm.	2.5 cm.
Transylvania (Cut 7)	22 cm.	3.0 cm.

Of the 20 sherds from Transylvania site that can be attributed to small carinated bowls, 13 have Holly Bluff paste, 5 have Pocahontas paste, and 2 have Addis paste. Stratigraphic context is inadequate for component identification, but the existence of 2 Addis specimens does indicate the form is present in the Fitzhugh occupation. With these and the 7 Addis specimens in the Fitzhugh and Somerset site collections, it is safe to conclude that small carinated vessels are being manufactured during Fitzhugh phase. Two of the whole vessels, however, are from late sites indicating that the form is

¹McPherson collection, North Museum, Franklin and Marshall College, Lancaster, Pennsylvania.

²Cotter, 1952:Fig. 60, 6.

³Moore collection, Heye Foundation, New York.

⁴Moore collection, Heye Foundation, New York, see Moore, 1911:377-8.

around for some time. Pritchard Landing is of Glendora phase affiliation, while Burthe is an historic cemetery.

All four whole specimens were obtained from burials, and it is possible that their use as grave offerings accounts for their small size. The sherd specimens, however, come from village areas and the flanks of mounds.

7) Beakers. As in Routh phase, the beaker is probably the most common vessel shape for the majority of Plaquemine decorated types. No undecorated examples are known but it is probable that they occur. With one exception--the practice of adding exterior rim straps in the Natchez area and further south--this vessel shape appears to have undergone little or no change since Routh phase.

8) Jars. The sub-globular jar with rounded base, slightly constricted neck and out-flaring rim seems to be only slightly more common in Fitzhugh phase than in Routh. There are a few instances of the types Evansville Punctated, var. Sharkey, and Hollyknowe Ridge Pinched, var. Patmos, occurring on jars. In addition, Winterville Incised, var. Belzoni, the numerically dominant type in the Fitzhugh component at Transylvania, occurs exclusively with this vessel shape.

9) Bottles (Fig. 61, k-m). During Fitzhugh phase, bottles are common only with the type, Leland

Incised. Plain bottles are relatively uncommon, being represented at Transylvania, Fitzhugh, Canebrake, and Somerset by a total of 42 identifiable sherds. While there are whole, undecorated bottles known to the author from the general area of the Upper Tensas Basin, the best information on this vessel shape is to be derived from the more numerous specimens classifiable as Leland Incised.

The bottle typical of Leland Incised is characterized by a globular body with rounded or flat base and relatively short neck. Most variation is to be found in the rim-neck area or in the basal area. Two variations of the rim and neck can be distinguished. In one, the neck is relatively narrow and tall and has a concave profile with an out-flaring rim (Fig. 61, k). In the other, the neck is wide, short and vertical with no outward flare (Fig. 61, l). There is a tendency for bottles with flat bases to be pedestaled. This can be seen in an incipient form in two bottles from Anna site illustrated by Cotter (1952:Fig. 21, 2, Fig. 22, lb). Normally vessels with a well developed pedestal base have flattened-globular bodies, and wide, short necks (see for instance Neitzel 1965:Fig. 20, a-c).

Addis sherds in Fitzhugh contexts that can be identified as bottles are exclusively from the rim and

neck area of such vessels (Fig. 61, m). These in general, conform to the Leland Incised forms described above. No pedestaled bases have been identified.

Bottle shapes represented in the type, Leland Incised, have their closest parallels to bottles found along the eastern side of the Mississippi River as far north as Memphis. Walls phase bottles, for example, compare quite well with those from the Survey Area (see Phillips et. al. 1951:158; Fig. 104; Brown 1926:Fig. 283). Bottle forms in the Lower Ouachita and Lower Arkansas River Basins, on the other hand, differ markedly from Tensas Basin forms. Most distinctive is the treatment of the rim and neck area. In general the mouth of the vessel is rather small, and necks are restricted at the base of the rim, and bulging or expanding throughout their length below. Neck height is quite variable and rims are markedly out-flaring (see for example, Ford 1961:Fig. 16, a,b,d-1; and Moore 1909:Figs. 129-140). Bottles with straight, tall, narrow necks and unmodified rims are characteristic of the Lower Arkansas River Basin (Ford 1961:Fig. 16, j). The author has seen numerous examples of this neck form in a collection from the Tillar site (17-J-1) belonging to the Thomas Gilcrease Institute, Tulsa, Oklahoma.

It is tempting to characterize the difference in bottle shape existing between the Upper Tensas and Yazoo

Basins on the one hand and the Lower Ouachita and Lower Arkansas Basins on the other hand as reflecting the fundamental difference between Caddoan and Mississippian cultures. The situation is more complex than this, however, as Fitzhugh phase is not a Mississippian manifestation.

Bell Plain var. Holly Bluff

Undecorated pottery with fine textured paste and finely pulverized shell tempering occurs in Fitzhugh phase contexts at only one site, Transylvania. Here, in Cuts 8-14, 27 out of a total of 108 sherds with these Holly Bluff characteristics occur in Analysis Unit C-D. Given the amount of mixture between Analysis Units A-B and C-D evidenced by other pottery types, this proportion seems too high to account for it solely on the grounds of mixture. It is possible that Holly Bluff is present in the early component. That the only known occurrence of this type in Fitzhugh phase contexts should be at Transylvania is not surprising given the evidence for greater Mississippian influences here than elsewhere in the Survey Area at this time.

Cowhide Stamped

Eight sherds from Canebrake and 14 sherds in the Transylvania phase type collection have been identified as

Cowhide Stamped. The type is described in detail in Chapter V.

Evansville Punctated, var. Sharkey (Plate V, a, b)

Sharkey is a minor, but consistent member of the Fitzhugh ceramic complex. With the small sample of sherds available, little can be said to characterize the type. Only punctations, made with fingernails, or by pinching between thumb and finger, are represented. These are invariably arranged in vertical, horizontal, or diagonal lines, with the total design, where identifiable, being line-filled triangles.

Identifiable vessel shape is predominantly the straight sided beaker with slightly out-flaring rim, but a number of sherds do suggest that a jar form with constricted neck also occurs.

A small number of shell-tempered sherds with fingernail punctations have been found at the Transylvania and Fitzhugh sites. These are classified as Parkin Punctated, var. Hollandale, but except for temper, they are similar to the sherds classified as Sharkey. One specimen from Transylvania, in fact, occurs on Addis/shell paste.

Hollyknowe Ridge Pinched, var. Patmos

As with Sharkey, this type is a minor, though consistent member of Fitzhugh phase ceramic collections.

PLATE V.--Fitzhugh phase pottery types

- A. Evansville Punctated, var. Sharkey, Transylvania site, Cut 14, Level D.
- B. Evansville Punctated, var. Sharkey, Somerset site.
- C. Hollyknowe Ridge Pinched, var. Patmos, Somerset site.
- D. Hollyknowe Ridge Pinched, var. Patmos, Fitzhugh site, Cut 1, Level D.
- E. Hollyknowe Ridge Pinched, var. Patmos, Transylvania site, Cut 12, Level D.
- F. L'Eau Noire Incised, var. L'Eau Noire, Fitzhugh site, Cut 1, Level E.
- G. L'Eau Noire Incised, var. L'Eau Noire, DuRosset site, Cut 2, Level A.
- H. L'Eau Noire Incised, var. Anna, Fitzhugh site, Cut 1, Level F.
- I. Leland Incised, var. Leland, Transylvania site, Cut 13, Level D.
- J. Leland Incised, var. unspecified, Transylvania site, Cut 14, Level D.
- K. Leland Incised, var. Leland, Somerset site.
- L. Maddox Engraved, var. Silver City, Fitzhugh site, Cut 1, Level C.
- M. Maddox Engraved, var. Baptiste, Transylvania site, Cut 7, Level D².
- N. Mazique Incised, var. Manchac, Fitzhugh site, Cut 2, Level C.
- O. Mazique Incised, var. Manchac, Transylvania site, Cut 9, Level C.
- P. Mazique Incised, var. Manchac, Fitzhugh site, surface.
- Q. Mazique Incised, var. Manchac, Fitzhugh site, Cut 1, Level D.
- R. Mazique Incised, var. Manchac, Transylvania site, Cut 9, Level C.
- S. Mazique Incised, var. Manchac, Transylvania site, Cut 12, Level C.

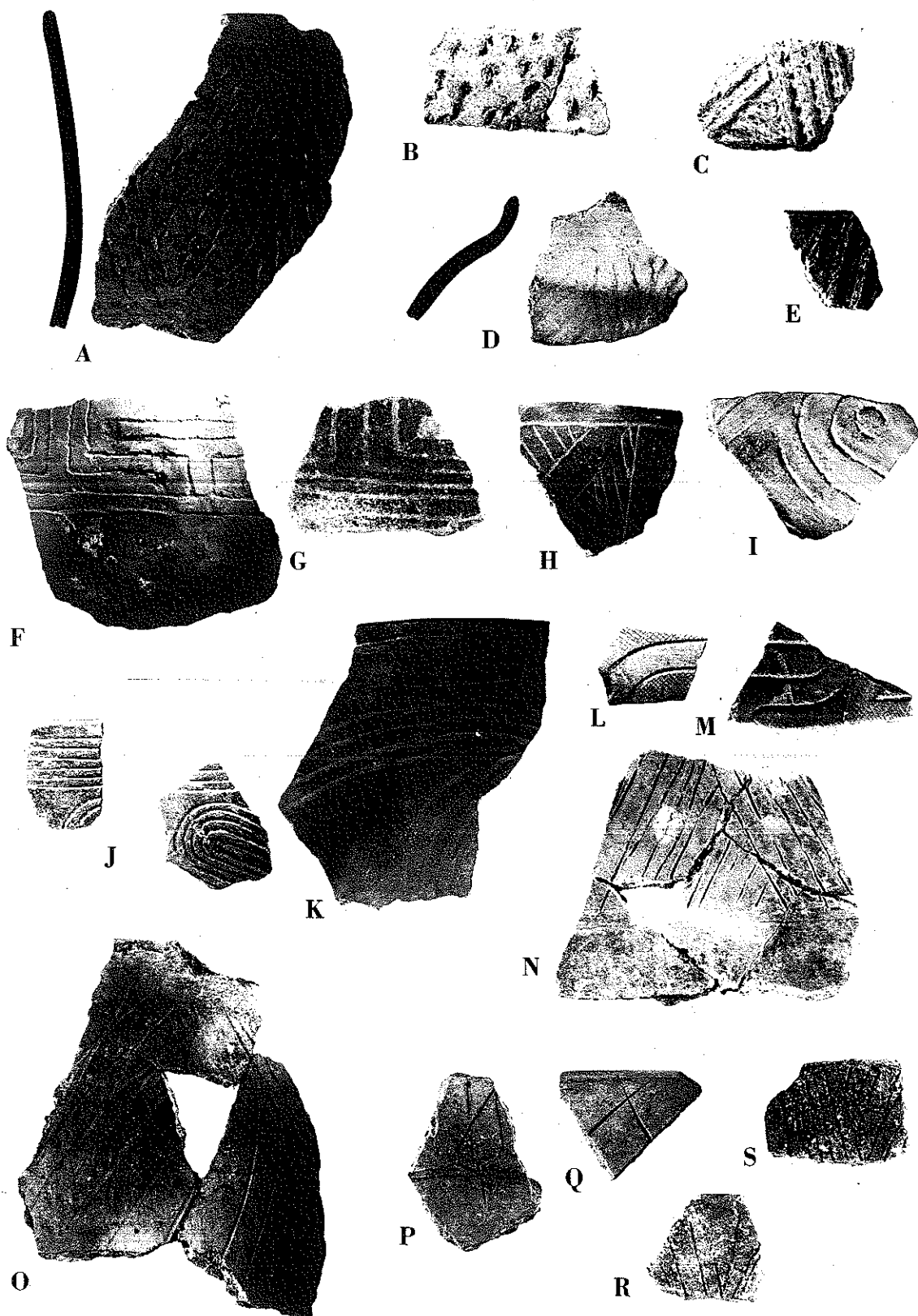


PLATE V.--Fitzhugh phase pottery types (1/2 scale)

In the small sherd sample available from the Survey Area, only rectilinear designs, identifiable as line-filled triangles in some cases, are represented. A concentric circle motif, however, has been noted on sherds from Anna¹ and on one vessel of Routh or Fitzhugh phase age from the Lower Ouachita River site of Sycamore Landing (22-H-4).²

The beaker is apparently the typical vessel form. Decoration in this case extends up to the rim. The jar form with globular body and constricted neck is represented by one sherd from Fitzhugh site (Plate V, d). Decoration in this instance is confined to the shoulder area.

Shell-tempered sherds with ridge-pinching are known from two Fitzhugh phase sites, the type site and Somerset. These are indistinguishable from Patmos; the beaker vessel form is apparently represented and decoration is rectilinear and extends up to the rim. These have been classified as Pouncey Ridge Pinched, but the author agrees with Phillips (1970:155) that the

¹Moorehead collection, Robert S. Peabody Museum, Andover Academy, Andover, Massachusetts.

²Moore collection, Peabody Museum of American Archaeology and Ethnology, Cambridge, Massachusetts.

Pouncey-Hollyknowe distinction based on paste differences alone may be misleading.

L'Eau Noire Incised, var. L'Eau Noire (Plate V, f, g)

L'Eau Noire continues into the Fitzhugh phase but, in no instance occurs with the frequency it attains in some Routh phase collections. The variety is most abundant at Somerset where it accounts for 4 per cent of the decorated pottery.

There are no fundamental differences in the type as it occurs in the two Plaquemine phases. At most, it may be noted that all known Fitzhugh phase specimens are heavily and relatively crudely incised, while execution can be rather fine in Routh phase.

There is evidence that L'Eau Noire drops out of use sometime during the latter part of Fitzhugh phase. Five sites--Emerald, Ulmer, New Ground, Canebrake, and Elk Ridge--appear to be late within Fitzhugh phase; and among these L'Eau Noire is represented only in collections from the latter two.¹ Neither Transylvania nor historic Taensa phases, nor the historic component at Bayou Goula site have L'Eau Noire. Specimens do occur in collections

¹The L'Eau Noire sherds at Canebrake can not be assigned to either Routh or Fitzhugh component with certainty.

from the historic Fatherland (Table 41; Neitzel 1965: Table 1) and Angola Farm (LSU collections) sites, but these sites also have prehistoric Fitzhugh components with which the type could be associated. Presumably L'Eau Noire is not part of the Deer Creek or Lake George ceramic complexes (Phillips 1970), and since it also is not represented in the Fitzhugh component at Transylvania, we may conclude that it disappears earlier in the Lower Yazoo Basin and northern portion of the Upper Tensas Basin.

L'Eau Noire Incised, var. Anna (Plate V, h)

The evidence now available indicates that Anna undergoes no major change during Routh and Fitzhugh phases. Rim straps may be less frequent in the later phase, but sherd samples are too small to allow definite conclusions.

There is some evidence that Anna, like L'Eau Noire, is decreasing in popularity during Fitzhugh phase. In the Routh components at Preston, Routh, Rose Hill, and Anna sites, Anna accounts for between 5 and 46 per cent of the decorated pottery. The variety is not represented at Transylvania in the Fitzhugh component and accounts for only 2 per cent of the decorated pottery at Fitzhugh site. Its highest frequency, 10 percent, occurs in the Somerset collection.¹

¹Anna occurs at Canebrake site, but can not be definitely associated with either Balmoral or Fitzhugh components.

The variety apparently disappears in late pre-historic and historic times. It is not represented in Transylvania phase, historic Taensa or in the historic component at Bayou Goula. Neitzel (1965:Table 1) found sherds of Anna in the fill of most mound stages at Fatherland, but there is no direct association of the variety with the historic occupation. Anna is found in the late Fitzhugh phase components at Elk Ridge and Emerald. Its absence in Transylvania, Lake George, and Deer Creek phases (Phillips 1970), and the Fitzhugh component at Transylvania suggest that the variety disappears at an earlier date in the northern part of the Survey Area.

L'Eau Noire Incised, var. Carter

This variety continues to be made into the Fitzhugh phase, but is very poorly represented in collections from the Survey Area. One sherd from Fitzhugh site has been definitely identified as Carter, and two sherds from Panther Lake have been tentatively so identified. In addition, there is a single Carter vessel in the collection from the Swift site.¹

Across the Mississippi River, below Vicksburg, a large collection obtained from the historic Burthe cemetery (24-M-6) contains two Carter vessels, one clay-tempered

¹Swift collection, U. S. National Museum, Washington, D. C.

and the other shell-tempered.¹ Cotter (1951:Fig. 21, 5) obtained a single vessel from the upper (Fitzhugh phase) levels of Mound 5 at Anna.

Carter is not represented in either the Fitzhugh or Transylvania components at Transylvania site, nor in the Lake George and Deer Creek phases of the Lower Yazoo Basin (Phillips 1970). As with L'Eau Noire and Anna, this variety apparently disappears earlier in the north.

L'Eau Noire Incised, var. Paine (Fig. 62)

Definition of this new variety is based on approximately thirty-five vessels from sites in and around the Upper Tensas Basin. Paine is the name of the owner of the Burthe site in 1932, the year that two amateurs, Carl Clausen and John MacPherson, excavated there and obtained a large collection of whole pots, including several examples of the pottery under consideration here. Paine is classified as a variety of L'Eau Noire Incised primarily because of its decoration and typical vessel shape, both of which are related to the L'Eau Noire, Bayou Bourbe, and Shell Bluff varieties. A formal type description is herein presented.

¹MacPherson collection, North Museum, Franklin and Marshall College, Lancaster, Pennsylvania.

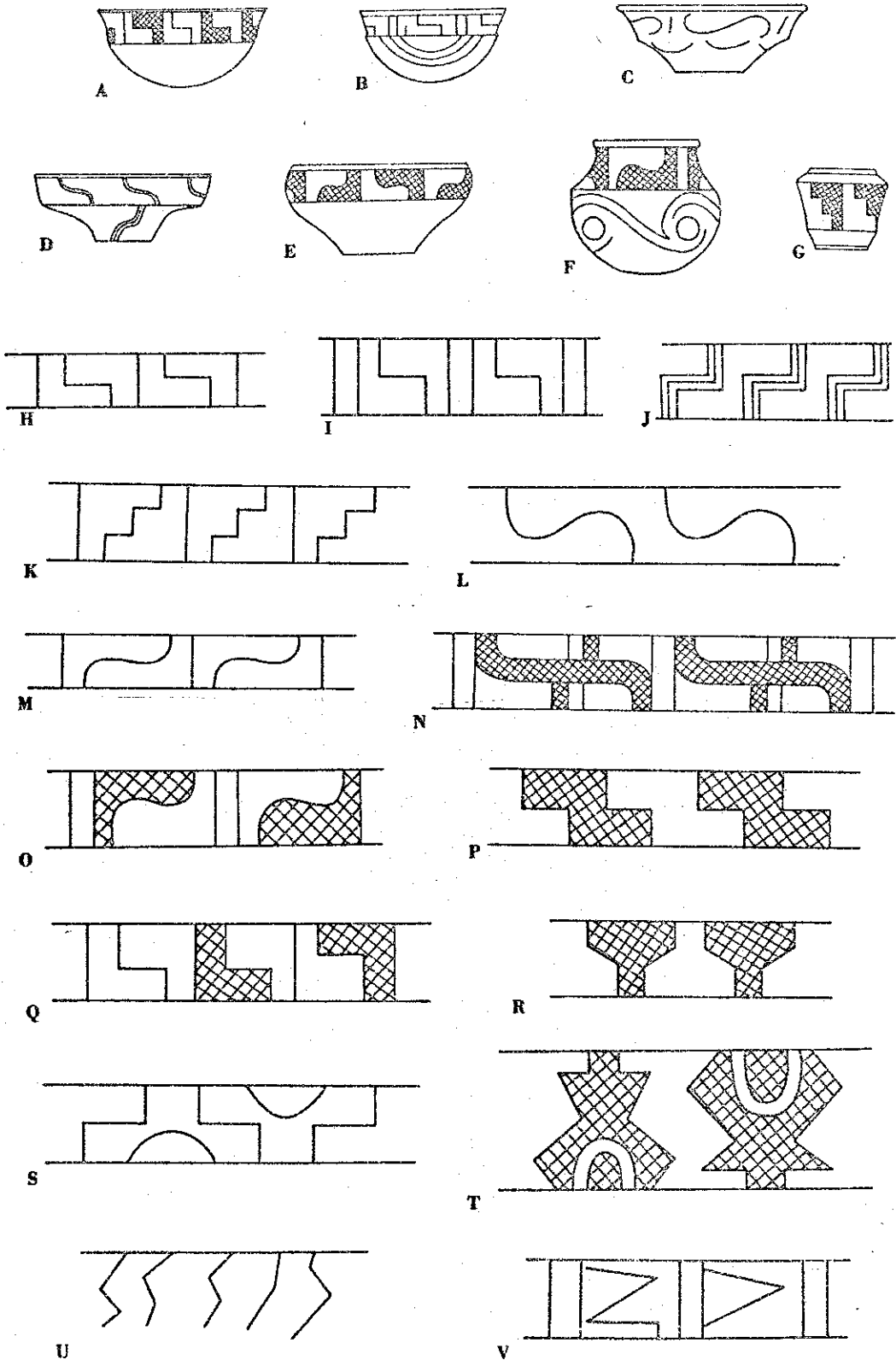


Fig. 62.--L'Eau Noire Incised, var. Paine. Vessel shapes and decorative designs.

Temper: Temper may be shell or clay. As with other pottery types of the general Fitzhugh phase time level, temper seems to be a function of latitude as well as age. Examples from Emerald are clay-tempered, while most of those from Burthe are shell-tempered.

Vessel Shape: Vessel shape is quite variable, ranging from constricted neck jars (Fig. 62, f) to low pedestaled bowls (Fig. 62, c-e). The numerically predominant form, however, is the carinated bowl (Fig. 62, a-b). A composite silhouette jar is also represented by two specimens from Glendora site (Fig. 62, g; Moore 1913).

Decoration: Designs are incised; the nature of incision varying from deep and narrow to light and dry. There is no use of excision, but cross-hatching is occasionally used to contrast adjacent elements in the design.

Decoration is restricted to the side walls of carinated bowls. In four specimens, where vessel shape is that of a jar, decoration is placed on the neck in three instances and on the globular body in the fourth. In the former, the globular body may be decorated with an incised scroll design (Fig. 62, f). The bottom wall of carinated and pedestaled bowls is decorated occasionally with simple incised designs (Fig. 62, b-d).

Design: The unity of this variety lies primarily in the uniformity of its decorative designs. The basic design consists of a single step element located within a panel defined at both ends by one or two vertical lines (Fig. 62, h, i). Usually the step element is rectilinear; but a curvilinear, "S"-shaped element also occurs (Fig. 62, m). Cross-hatching is frequently used to contrast areas within each panel (Fig. 62, n-r, t). Occasionally the vertical, panel-defining lines are absent (Fig. 62, j, l, p).

With few exceptions, the step element runs in the same direction (from top to bottom) in all panels on a vessel, thus producing a total design that resembles Design B as described for Bayou Bourbe and Shell Bluff in Chapter III. Presumably this similarity in design reflects the fact that Paine has developed from these earlier varieties. As noted in Chapter III, however, Design B has been found by the author only in collections from Davis, Baptiste, Manny, and Shell Bluff. In all cases, except possibly Baptiste, cultural affiliation of the specimens is with late Coles Creek phases. There is no definite evidence for this design in Routh phase or in early Fitzhugh phase collections.

Three of the known Paine vessels bear designs in which the step element runs in opposite directions in

alternate panels (Fig. 62, r-t). When two adjacent panels are viewed together, the result is a symmetrical design resembling Design A of Bayou Bourbe, L'Eau Noire, and Shell Bluff.

Distribution: Paine occurs in abundance at the Lower Ouachita Basin sites, Keno and Glendora, and in the Lower Mississippi Valley from as far north as Oliver site (16-N-6) to Natchez in the south. It is poorly represented in collections from the Survey Area, but this may be due to chance factors such as small sherd size. Two sherds are present in the Transylvania component at the type site, and one sherd was obtained in a surface collection at Canebrake. The former are shell-tempered, and the latter is clay-tempered.

Temporal Position: Paine is definitely a late type, occurring in late Fitzhugh phase contexts at Canebrake and Emerald sites, in the Transylvania phase and in historic components at Keno (Moore 1913), Glendora, (ibid.), Fatherland (Neitzel 1965:Plate 10, v), Oak Bend Landing, (Moore 1911) and Burthe.

Cultural Significance: There can be no doubt that Paine represents a valid pottery type. Less certain is its relationship to the type L'Eau Noire Incised. Similarities in decorative design and vessel shape to

several L'Eau Noire Incised varieties would seem to be sufficient reason for inclusion of Paine in the type.

Paine is the last variety of L'Eau Noire Incised to develop prior to European contact.

Leland Incised (Plate III, a, b:Plate V, i-k)

Five varieties of Leland Incised, Leland, Blanchard, Dabney, Fatherland, and Ferris, are represented in Fitzhugh phase collections from the Survey Area. Leland variety alone occurs with some frequency; the others each being represented at only one site. Even Leland, however, is of minor importance numerically. Maximum frequency of the variety occurs at Somerset where it accounts for 5 per cent of the decorated pottery. The largest collection of Leland, 11 sherds, comes from Transylvania site. This is also one of the few collections in which some sherds have paste resembling Holly Bluff variety of Bell Plain. Five of the 43 Leland sherds of Fitzhugh phase affiliation in the Survey Area have Holly Bluff paste; the remainder have Addis paste.

Recognizable designs on Leland pottery from Fitzhugh phase sites are as follows:

Design A, - Stage 1	(Burroughs site, 1 vessel)
Design B, - Stage 1	(Swift site, 1 vessel)
Design A or B, - Stage 2	(Somerset site, Plate V, k)
Design C, - Early	(Transylvania site, Plate V, i)

The Blanchard variety of Leland Incised is represented by one sherd in the collection from Swift site. Ferris is represented by two vessels from Swift (Plate III, a, b). Both bear decoration of Design A, Stage 1. One vessel has Addis paste, the other, Addis/shell. Two Leland Incised sherds with coarse shell-tempered paste and somewhat crude incised decoration occur in the collection from New Ground and are classified as Dabney. Designs can not be recognized. Two vessels illustrated by Moore (1913: Figs. 20 and 23) from Canebrake site conform to the variety Fatherland. Both bear decoration of Design B type, the vessel in Fig. 20 being Stage 1, the vessel in Fig. 23 being Stage 2.

Of the sherds classified as Leland Incised, var. unspecified, two from Analysis Unit C-D at Transylvania are of interest (Plate V, j). Both are from a single vessel, a bowl, with six parallel lines encircling the rim, and Design E decoration below carried out with four meandering lines and a single border line above and below. Incision is with a square-ended stylus. In regard to vessel shape, incision technique and the placement of parallel lines below the rim, these sherds resemble pottery found by Cotter (1951:Fig. 16, 5, 6) at Emerald and by Neitzel (1965:Plate 11, m, q) at Fatherland. The Fatherland pottery, so far as known, bears only the parallel

line motif below the rim. Some of it is red filmed and may belong to the historic occupation of the site. The Emerald sherds are from a vessel bearing Design C. They presumably are late within Fitzhugh phase. The two sherds from Transylvania may, therefore, be intrusive from Analysis Unit A-B, and belong with the Transylvania phase component.

The most striking fact concerning Leland Incised in Fitzhugh phase is its low frequency of occurrence in all collections. This holds for Routh and Transylvania phases as well. Elsewhere and at other times, the type is quite important numerically. In Deer Creek and Lake George phases, the type accounts for at least 20 per cent of all decorated pottery (Phillips 1970:563). In the historic phases of the region, it is also important. At Beasley, a Taensa site, 30 per cent of all decorated pottery is Leland Incised, while at Fatherland, according to the author's own counts, 40 per cent of the pottery in Strata Cut 75 is Leland Incised. Even the late Fitzhugh phase, Emerald site has produced ceramic collections with upwards of 20-30 per cent Leland Incised sherds (Cotter 1951:22). Finally it may be noted that the great majority of whole vessels utilized in the Leland Incised design analysis (Appendix II) are from sites in Mississippi.

It is possible to account for this difference in popularity of Leland Incised from the two sides of the

Mississippi River as due to a functional association of the type with burials and temple mounds. A large number of cemeteries and mounds have been investigated on the east side of the river--Burthe (24-M-6), Anna (26-K-1), Emerald (26-L-1), Gordon (26-L-2), Glass (24-M-2), Ring (24-M-5), Lake George (21-N-1), Fatherland (26-H-2), to name a few--while in Louisiana, only two cemeteries, Canebrake and Turkey Point Landing, are known and there has been little excavation in mounds. On the other hand, there are many sites with abundant Leland Incised pottery that are known only through surface collections, Beasley and Arcola (20-M-1) being two. Furthermore, excavations at Transylvania (Cuts 1, 2, 5, 8-14), Routh (Cuts 1, 2, 3, 5), and Canebrake (Cuts 1 and 5), were located on top of or on the flank of mounds and yet yielded little Leland Incised pottery. It seems likely then that Leland Incised just simply does not become as popular in the Upper Tensas Basin as it does across the river until historic times. Considering the extent of ceramic similarity between Fitzhugh phase sites in the Tensas Basin and components at Anna, Emerald, and Gordon sites, this difference is difficult to explain.

Maddox Engraved (Plate V, 1, m)

Only nine sherds of Maddox Engraved have been found in definite Fitzhugh phase context in the Survey Area.

All three varieties--Baptiste, Emerald, and Silver City-- recognized by Phillips (1970) are represented. In defining Maddox Engraved, Phillips (ibid.:108) has relied heavily upon a single feature, zoned cross-hatching, as the defining criteria. Little is known about vessel shape and decorative design, with the result that these play no part in the type definition.

The author's own work with sherd collections and whole vessels from sites in the Lower Mississippi Valley has led him to conclude that the only distinctive feature of Maddox Engraved is the use of cross-hatching to contrast adjacent areas of incised designs. Zoned cross-hatching is found with at least three different pottery types indigenous to the Alluvial Valley: Leland Incised; L'Eau Noire Incised, var. Paine; and L'Eau Noire Incised, var. Carter. This being the case, it would seem logical to handle cross-hatching as a mode rather than using it as the primary diagnostic of a distinct pottery type.

All Leland Incised designs defined in Appendix II, except Designs A and G, are known to occasionally occur with cross-hatching (see Table 38). There is only one Maddox Engraved vessel from the Alluvial Valley known to the author that bears a design that is not characteristic of another pottery type. This vessel is illustrated by Cotter (1951:Fig. 21, 2) and came from Mound 5, Anna site.

TABLE 38

OCCURRENCE OF CROSS-HATCHING WITH LELAND INCISED DESIGNS

Design B

- 1 vessel - no provenience, Dickeson collection, University Museum, University of Pennsylvania, Cat. 56-24.
- 1 vessel - no provenience, Moore collection, Louisiana State Museum, no catalogue number.

Design C

- 1 vessel - Emerald, Moorehead, 1932:Fig. 101, 2.
- 1 vessel - Ratcliffe Mound, Moorehead, 1932:Fig. 101, a.
- 1 vessel - Keno or Glendora, Moore collection, Peabody Museum, Cambridge, no catalogue number.
- 1 sherd - Gordon, Mound B, Feature 4, Cotter collection, Ocmulgee National Monument.

Design D

- 1 vessel - Ward Place, Moore, 1908:Figs. 164, 165.

Design E

- 1 vessel - Sanson, Webb collection, Shreveport, Louisiana.
- 2 vessels- Cotter collection, Ocmulgee National Monument.

Design F

- 1 vessel - Emerald, Moorehead collection, Peabody Museum, Andover, Cat. no. 259641.
- 1 vessel - Emerald, Cotter collection, Ocmulgee National Monument.
- 2 vessels- Burthe, MacPherson collection, North Museum, Franklin and Marshal College, vessel nos. 75, 109.
- 1 vessel - Sanson, collection at Louisiana State University, Baton Rouge.
- 1 vessel - Keno, Moore collection, Heye Foundation, Cat. no. 17/3242.
- 1 sherd - Transylvania, Plate V, m.

Mazique Incised, var. Manchac (Plate V, n-r)

The sample of Manchac sherds from Fitzhugh phase is larger than that from Routh phase, and it is, therefore, possible to describe the variety in greater detail as it occurs during the later phase. Manchac, as found in Fitzhugh phase, is typically decorated with heavy, "U"-shaped lines that have considerable burr. Lines are usually widely spaced. The predominant decorative design in the Survey Area consists of a single row of line-filled triangles. Punctate-filled triangles do not occur, but incised diamonds (Plate V, p-q) are represented in the collections from Fitzhugh and Panther Lake.¹ The decorative zone is invariably defined below by one or two horizontal lines, while above, decoration extends up to the lip, or ends just below it. The upper border is seldom defined by a horizontal line.

In most respects, Manchac remains unchanged from Routh through Fitzhugh phase. Decoration is still almost exclusively the simple, line-filled triangle, and vessel shape remains basically the tall, straight-sided beaker

¹These sherds would be classified as Harrison Bayou Incised if they occurred in a Balmoral phase context. Stylistically and quantitatively, Harrison Bayou Incised seems to be dying out in Routh phase; and it is more likely that the 9 sherds in question represent a design variant of Manchac rather than a continuation of the earlier type.

with flat base, little or no neck constriction and straight out-flaring rim. There is evidence, however, mainly from beyond the Survey Area, that modifications in this vessel shape are developing at this time.

Manchac rims in collections from Emerald site possess an exterior rim strap that is rectangular in cross section and 1 to 1.5 cm. in width. One whole Manchac vessel with such a rim is included in the Burthe site burial collection, and 3 additional whole vessels are present in the Dickeson collection from sites in the Natchez area. Total vessel shape in these four instances is that of the beaker. At least one sherd with this rim form has been seen by the author in collections from Fatherland, Anna, Baptiste, Peter Hill, and Rosedale Mound.¹ No examples have been found in the late occupation sites of the Survey Area. Apparently, this rim mode is centered to the south of the Survey Area and is relatively late in the time span covered by Fitzhugh phase.

A second rim form consists of a shapely out-flaring plain rim that measures 1 cm. to 2 cm. in width. This rim may be thickened; in all likelihood, there is continuous variation between this and the previously

¹The author has not seen any Manchac pottery from the historic component at Bayou Goula.

described rim. A number of sherd specimens have been seen in Emerald site collections. There is one partial vessel in the Dickeson collection from the Natchez, Mississippi area, and whole specimens are known from Fatherland (Neitzel 1965:Fig. 21, c) and Keno (Peabody Museum cat. no. 74753).

Finally there is the variation which has been given typological recognition by the author as Stowers variety of Barton Incised. Stowers is characterized by a more globular body with rounded base, constricted neck and tall out-flaring rim. Decoration is found only on vessel body below the point of maximum constriction. Several whole vessels are known from Fitzhugh phase sites within and beyond the Survey Area; and it is possible to see this material as only a slight variation on the typical Manchac theme. A large sample of sherds with these characteristics in the Transylvania phase type collection, however, indicate that it is a standardized feature in that phase and should be given typological status. Historical precedent in the Lower Mississippi Valley calls for it to be assigned to the type Barton Incised.

Manchac paste is typically Addis, but in the Fitzhugh phase collection from Transylvania, there are two Manchac vessels represented that have paste equivalent

to Mississippi Plain, var. Pocahontas (Plate V, r, s). A similar situation exists at the Grace site in the Lower Yazoo Basin. Phillips (1970:512) has classified shell-tempered pottery with line-filled decoration from this site as Barton Incised, vars. Barton, Arcola, Estil, and unspecified. Examination of these sherds by the present author indicates that a substantial number of the Estil and unspecified sherds closely resemble Manchac in all characteristics except paste. With the technique of shell tempering spreading to Plaquemine phases in the Lower Mississippi Valley, there is bound to be some instances where shell-tempered Manchac vessels are produced.

In Fitzhugh phase collections, Manchac is second in popularity only to Plaquemine Brushed (and Winterville Incised, var. Belzoni at Transylvania) with a frequency ranging between 10 and 25 per cent of the decorated pottery.

Mississippi Plain, var. Pocahontas

Coarse shell-tempered plain pottery has been present in the Upper Tensas Basin since Routh phase times. In Fitzhugh phase, it occurs at a large number of sites, but with one exception is still a numerically minor ware. This one exception is Transylvania where there is a greater amount of shell-tempered plain pottery than Addis

in the early component. Table 39 compares frequencies of shell and clay-tempered plain pottery for a number of Fitzhugh phase sites in the Survey Area.

TABLE 39

FREQUENCY OF SHELL-TEMPERED AND CLAY-TEMPERED POTTERY IN SELECTED FITZHUGH PHASE SITES

	<u>Addis and</u> <u>Addis/shell</u>	<u>Pocahontas</u>	Relative Frequency of <u>Pocahontas</u>
Fitzhugh (Cuts 1-3)	1397	42	3%
Transylvania (Cuts 8-14)	631	768	51%
Somerset	584	13	2%
Elk Ridge	538	5	1%
Chelly Landing	274	0	0%
Ulmer	21	14	50%

A number of plain ware modes characteristic of Addis variety of Baytown Plain also occur with coarse, shell-tempered paste in Fitzhugh phase contexts. These are "interior strap" bowl rim, "interior-beveled" bowl rim, "Walnut Bayou" bowl and "early Tunica" rim. Other than paste, there are no observable differences between these modes as they are found with both types of temper.

According to Phillips' (1970) classification of the coarse, shell-tempered plain ware, Mississippi Plain, the variety, Yazoo, is found in the Lower Yazoo Basin while Pocahontas variety is distributed in the Lower Mississippi Valley from Natchez south to below Baton Rouge. Since neither variety is described in detail by

Phillips, it is difficult to place the Fitzhugh phase, shell-tempered pottery in his classification. Pocahontas is Quimby's (1942:266) type, "Pocahontas Plain", reduced to the status of a variety. Quimby originally described that type as "similar to Addis Plain." Since Addis and Mississippi Plain pottery in Fitzhugh phase share a number of modes, the latter, following Quimby's lead, should be classified as Pocahontas.

There are at least two reasons why Mississippi Plain pottery in the Survey Area should not be classified as variety Yazoo. Fitzhugh and Deer Creek phases share a number of plain ware modes, but Fitzhugh and Lake George phases differ in respect to the carinated bowl forms and associated rim modes characteristic of each. Furthermore, in the Lower Yazoo Basin the "Yazoo" bowl, "Haynes Bluff" rim, and "Tunica" rim are normally found with fine shell-tempered pottery of the type, Bell Plain (Phillips *ibid.*:60), and not Mississippi Plain, as is the case in the Upper Tensas Basin.

Mound Place Incised, var. unspecified

Mound Place Incised is poorly represented in Fitzhugh phase. Three sherds occur at the type site, and one sherd can be identified at both Welch and Indian Bayou sites. In the Swift site collection, there is a single bowl with Addis paste that has four encircling

lines and head and tail rim effigies. The tail is merely a broad, flat flange projecting outward from the lip. The head is crudely formed and is suggestive of the head and shoulder of a bird facing inward. There is no dip in the lines beneath either head or tail. Beyond the Survey Area, Mound Place Incised sherds have been identified only at Anna. In one specimen illustrated by Cotter (1951:Fig. 10, 5) there are four horizontal lines and a cylindrical nob projecting outward from just below the rim. The lines dip beneath it. All of the Tensas area sherds are clay-tempered.

Parkin Punctated, var. Hollandale (Plate VI, a, b)

Phillips (1970:152) establishes a Hollandale variety in order to accomodate shell-tempered, punctation-decorated pottery in the Lower Yazoo Basin. In the Upper Tensas Basin, shell-tempered pottery with punctation decoration occurs at Transylvania (11 sherds), Fitzhugh (4 sherds), and Panther Lake (1 sherd). Following Phillips' classification, these sherds have been typed as Hollandale. At Transylvania, 10 of the 11 sherds are from Cuts 8-14, and 9 of these are in Fitzhugh phase levels (Analysis Unit C-D). There is, therefore, good evidence for the Fitzhugh phase affiliation of the type. With one exception, all of this pottery resembles Evansville punctated, var. Sharkey, in type of punctation, vessel

PLATE VI.--Fitzhugh phase pottery types

- A. Parkin Punctated, var. Hollandale, Fitzhugh site, Cut 3, Level C.
- B. Parkin Punctated, var. Hollandale, Transylvania site, Cut 11, Level C.
- C. Parkin Punctated, var. Transylvania, Transylvania site, Cut 11, Level C.
- D. Parkin Punctated, var. Transylvania, Transylvania site, Cut 11, Level C.
- E. Pouncey Ridge Pinched, var. Pouncey, Fitzhugh site, Cut 2, Level C.
- D. Plaquemine Brushed, var. Plaquemine, Fitzhugh site, Cut 1, Levels D, F.
- F. Plaquemine Brushed, var. Plaquemine, Fitzhugh site, Cut 1, Level D.
- G. Plaquemine Brushed, var. Plaquemine, Transylvania site, Cut 11, Level C.
- H. Plaquemine Brushed, var. Plaquemine, Transylvania site, Cut 7, Level D.
- I. Winterville Incised, var. Belzoni, Fitzhugh site, Cut 3, Level B.
- J. Winterville Incised, var. Belzoni, Canebrake site, Cut 5, Level A.
- K. Winterville Incised, var. Belzoni, Transylvania site, Cut 2, Level E.
- L. Winterville Incised, var. Belzoni, Transylvania site, Cut 7, Level D.
- M. Winterville Incised, var. Belzoni, Transylvania site, Cut 14, Level C.

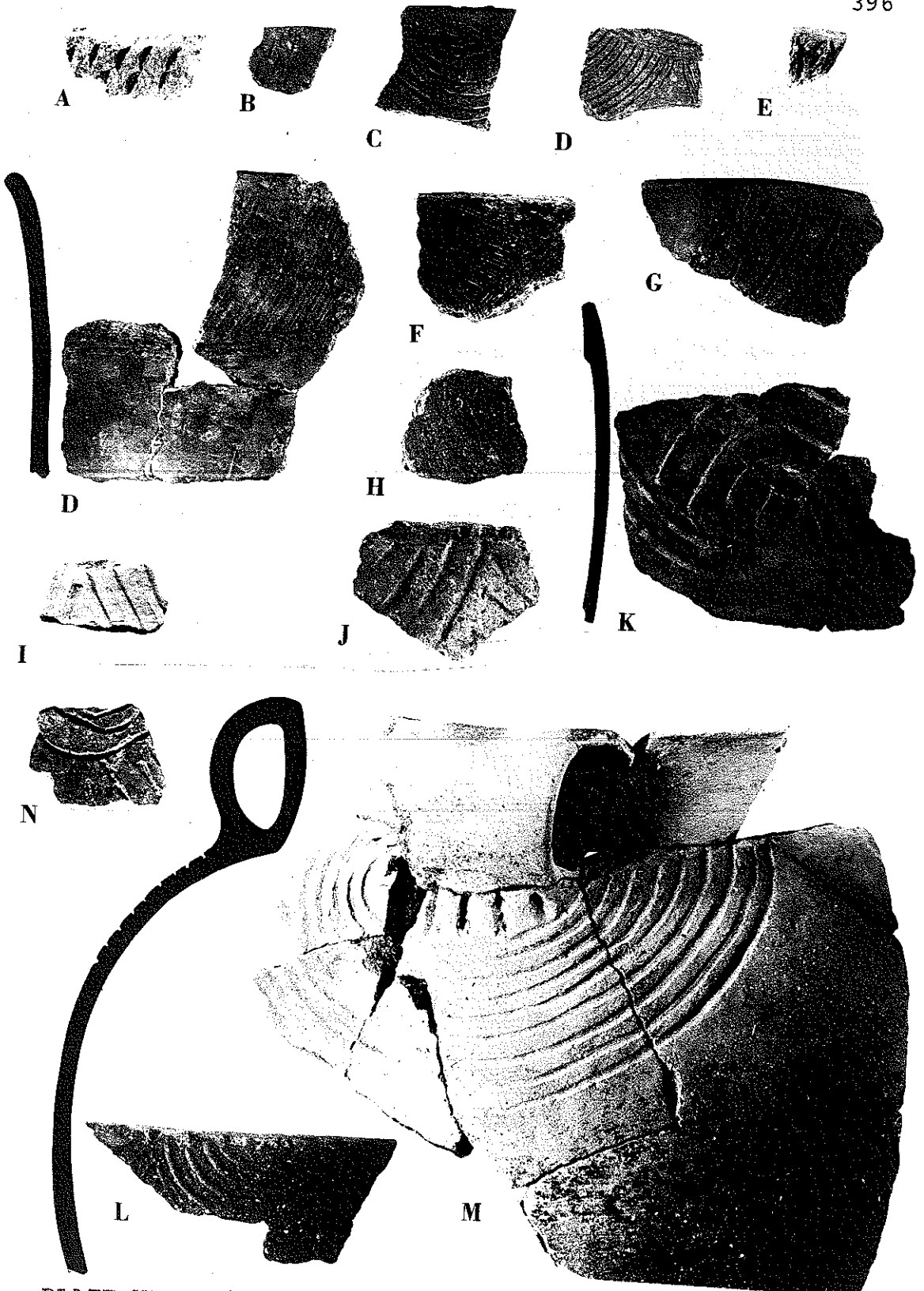


PLATE VI.--Fitzhugh phase pottery types (1/2 scale)

shape, and placement of decoration (Plate VI, b). There is even one sherd at Transylvania, classified as Sharkey, that has Addis paste with a small amount of shell added. The single exception (Plate VI, a) consists of two sherds from a jar in the Fitzhugh site collection which has heavy thumb-nail punctation on the shoulder area. In looking over LMS collections from several sites in the Lower Yazoo Basin--Grace, Arcola, Winterville, and Lake George--the author has noted a similar distinction between lightly pinched or fingernail punctated sherds and sherds with heavy pinch marks or fingernail punctation. The former usually occurs on rim and neck sherds while the latter are more frequently a body decoration. There is a tendency for the lightly punctated pottery to predominate in Deer Creek phase site, while at Lake George site, the two are of about equal frequency.

From the above, the author concludes that shell-tempered, punctated pottery in the Survey Area is predominantly the indigenous type, Evansville Punctated, var. Sharkey, with shell-tempered paste. Vessel shape is apparently that of the beaker with slight neck constriction. In the Lower Yazoo Basin, there seems to be two types of shell-tempered, punctated pottery. One is probably related to Parkin Punctated as found in the St. Francis Basin (Phillips *ibid.*:151) and is characterized

by jar-shaped vessels with punctation confined to the body and shoulder. The other type probably represents a situation similar to that noted for the Survey Area: an indigenous type, Sharkey, rendered on shell-tempered paste.

Parkin Punctated, var. Transylvania (Plate VI, c, d)

A total of eleven sherds from Transylvania site have been classified as Transylvania. This is the sole occurrence of the variety in the Survey Area. Eight of these sherds occurred in Analysis Unit C-D. The remainder, from Cuts 4 and 5, occurred in mixed Fitzhugh-Transylvania phase contexts. The type presumably belongs in the Fitzhugh component. Decoration is executed with either the fingernail or a very thin stylus. Punctations are so closely spaced that the effect is that of a solid line. Designs are exclusively curvilinear and in several instances can be recognized as that of the festoon and imbrication (Plate VI, d). Transylvania may be related to the type, Winterville Incised.

Two vessels with Transylvania-like punctation are present in the Peabody Museum, Moore collection from Sycamore Landing (22-H-4). Both are shell-tempered. One vessel has the general shape and decoration of a Sinner Linear Punctated specimen that is illustrated by Suhm and Jelks (1961:Plate 72, D). It differs only in that the panels of linear punctating are separated by plain

vertical bands rather than the applique ridges characteristic of Sinner Linear Punctated. The other vessel is a globular jar with short, undecorated neck, and decoration consisting of concentric "V's" pendant from the vessel throat and separated from one another by close spaced horizontal lines. It is possible that Transylvania is best seen as a variant of Sinner Linear Punctated, and related pottery in the Lower Ouachita Basin.

Plaquemine Brushed, var. Plaquemine (Plate VI, d-h)

As noted in Chapter III, only minor changes can be detected in Plaquemine between Routh and Fitzhugh phases. In the later phase, Plaquemine tends to have heavier and wetter brush strokes, horizontal brushing occurs in a narrow band usually less than 2 cm. wide and punctations are seldom placed at the bottom of the decorative zone. Paste remains Addis, but in a few instances (Plate VI, h) shell has been added.

As in Routh phase, Plaquemine is normally the most abundant decorated pottery type. At Fitzhugh, the type accounts for 63 per cent of all decorated pottery, while at Elk Ridge, Anna, and Somerset, this figure ranges between 50 and 35 per cent. The Fitzhugh component at Transylvania, where Winterville Incised, var. Belzoni, accounts for 56 per cent of the decorated pottery and Plaquemine, only 12 per cent, is the sole exception to this picture of Plaquemine dominance.

Plaquemine is entirely absent from the Transylvania phase type collection. It is virtually absent from the historic Taensa sites, Beasley and Clark Bayou, but well represented in the historic component at Fatherland site.¹ In the Fitzhugh component at Transylvania, Plaquemine is replaced by Winterville Incised, var. Belzoni, as the major decorated type. At Beasley and Clark Bayou, Barton Incised, var. Stowers, is the dominant decorated type. There can be no doubt that Plaquemine Brushed is disappearing in the general area of the Upper Tensas Basin in late prehistoric times. This disappearance occurs earlier in the northern part of the Basin than it does farther south, and seems to coincide with the spread and general acceptance of shell tempering through the Basin from north to south. The Natchez area has been relatively little affected by this diffusion as late as the dispersal of the Natchez Indians in 1731.

Pottery resembling Belzoni (classified as 'Winterville Incised' by Brain, 1969) occurs in Winterville phase contexts at the Winterville site, and in all likelihood this pottery developed in the Lower Yazoo Basin. It is possible that the decrease in popularity of Plaquemine

¹Chambers recovered two Plaquemine Brushed vessels in association with the historic burials in Mound C (Neitzel 1965:93) and the type is abundant in the upper, historic levels of Neitzel's Cuts 51 and 75.

Brushed in the Fitzhugh component at Transylvania is the result of the introduction of this new type into the Tensas Basin. With its globular body and constricted neck, Belzoni may have been superior to Plaquemine Brushed in any uses that they might have had in common.

Plaquemine Brushed, var. Grace

Grace, the shell-tempered equivalent of Plaque-
mine, is extremely rare in the Upper Tensas Basin. In the large collections from Canebrake, Fitzhugh, and Transylvania sites, there are a total of eight sherds of this variety. At Transylvania four sherds occur in Fitzhugh contexts, and two in Transylvania contexts. Two other late sites, Frisbie (Fitzhugh phase) and Beasley (Taensa phase), each have one sherd of the type. Grace--- and possibly also Barton Incised, var. Stowers; Parkin Punctated, var. Hollandale; Pouncey Ridge Pinched, var. Pouncey; and Mississippi Plain, var. Pocahontas---represents a case where an indigenous pottery type, Plaquemine Brushed, is transferred to a new ware. The shift in temper is short-lived, however, as Plaquemine Brushed is being replaced by other pottery types, specifically Belzoni and Stowers, in late Fitzhugh, Transylvania, and Taensa phases.

Grace is like-wise rare in the Lower Yazoo Basin during Lake George and Deer Creek phases. Grace site (21-M-7), with its relative abundance of the variety is almost unique (Phillips 1970:512).

Pouncey Ridge Pinched, var. Pouncey (Plate VI, e)

A total of 6 sherds occurring in Fitzhugh phase contexts (5 from the type site and 1 from Somerset) conform to the criteria for Pouncey Ridge Pinched, var. Pouncey. Two of these sherds are rims with vertical pinched ridges extended up to the lip. They differ in no observable way, except for temper, from sherds of Hollyknowe Ridge Pinched, var. Patmos, that are found in Fitzhugh phase collections. It is possible that Pouncey is actually a shell-tempered variant of Patmos.

Pouncey is not represented in the Transylvania phase type collection.

Winterville Incised, var. Belzoni (Plate VI, i-m; Plate VII).

In his redefinition of the type, Phillips (1970: 173) describes Belzoni as having broad, "trough-shaped" incised lines, a variety of curvilinear decorative motifs including concentric circles, festoons, imbrication, interlocking scrolls and guilloche, and decoration restricted to rim and shoulder areas of jars. A fairly large collection of sherds with these characteristics has been obtained as a result of LMS excavations at Transylvania. Stratigraphy at Transylvania, especially in Cuts 8-14, clearly demonstrates that this Belzoni pottery is associated with the Fitzhugh component, while other

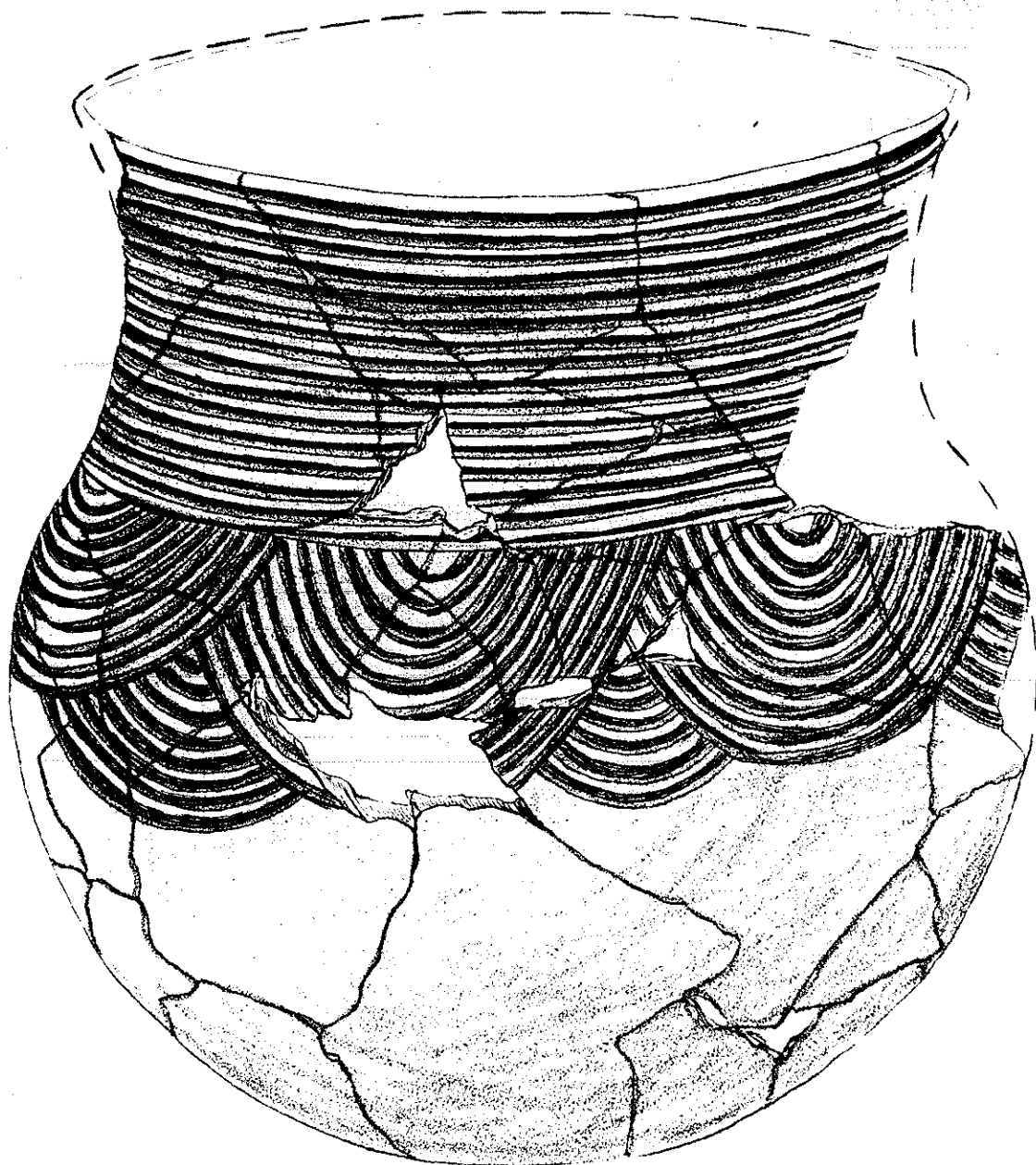


PLATE VII.--Winterville Incised, var. Belzoni, vessel from
Cut 4, Transylvania ($1/3$ scale)

sherds, conforming in general to Phillips' definition of Winterville variety, are largely restricted to the Transylvania component. Because of the large collection of Belzoni sherds available from Transylvania, it has been possible to fill out Phillips' description of the variety. What follows is a formal type description for Winterville Incised, var. Belzoni. The Winterville variety is described in Chapter V.

Sample: The type collection, from Transylvania, consists of 185 sherds. A small number of sherds, available from other Fitzhugh phase sites, were also used.

Paste: The great majority of Belzoni sherds at Transylvania are shell-tempered, but there are numerous examples with Addis or Addis/shell paste (Plate VI, i). At Fitzhugh site, Belzoni is predominantly clay-tempered, while at Canebrake both types of tempering occur, but with shell in the majority. It is apparent that tempering varies with both time and latitude. Canebrake and Transylvania are probably both slightly later than the type site.

Vessel Size: There is only one vessel in the sample from Transylvania complete enough to provide data on a number of dimensions (Plate VII). It is 37 cm. tall, with a maximum diameter of 36 cm., a rim diameter of

32 cm., and a neck height of 12 cm. Table 40 gives measurements for those dimensions that could be obtained with any degree of reliability from eight different Transylvania site vessels.

TABLE 40

DIMENSIONS OF BELZONI VESSELS FROM TRANSYLVANIA SITE

Rim Diameter	Neck Diameter	Body Diameter	Neck Height
32 cm.	30 cm.	36 cm. (max.)	12 cm.
30 cm.	26 cm.	36 cm. (max.)	4 cm.
36 cm.			6 cm.
16 cm.	18 cm.		5 cm.
21 cm.			4 cm.
	31 cm.		
28 cm.	28 cm.		10 cm.
	30 cm.		

These figures indicate a considerable range in vessel size. The author's impression is that most Belzoni sherds from Transylvania belong to large vessels similar to the reconstructed specimen in Plate VII. Lemley and Dickinson (1937:Plate 2, 7) illustrate one Belzoni vessel from Medley Place (18-K-1) which measures 14 cm. in height and 15 cm. in diameter. Another Belzoni vessel collected by Lemley and Dickinson from Marschiemer Place near Parkdale, Arkansas¹ measures 16 cm. x 18 cm. Both vessels are from burials, and, as is the case with carinated

¹Thomas Gilcrease Institute, Tulsa, Oklahoma.
Cat. No. V1188.

bowls, this pottery type may have been produced in two distinct sizes: one presumably for domestic uses and one for mortuary use.

Vessel Form: There are two vessels in the Transylvania collection that are complete enough to show vessel shape. Both are characterized by globular bodies, but differ in other respects. One (Plate VII) has only moderate neck constriction with no break in vessel profile at the throat; shoulder and neck merge in one continuous curve that is carried up to the rim. The other (Plate VI, m) has greater neck constriction and the junction of neck and shoulder is marked by a break in vessel profile.¹ This latter specimen bears one of the two handles occurring in the entire LMS collection from Transylvania. Both vessel forms appear to be about equally represented in the Belzoni sample from Transylvania.

Rims: Rims are in all cases straight or slightly out-flaring. In the latter case they merely continue the outward flare of the neck. Decoration, as in the case of festoons and horizontal lines, may be carried right up to the lip or it may terminate below leaving a plain or

¹This vessel shape seems to conform closely to the form described by Brain (1970:188) as typical of "Belzoni Incised" at the Winterville site.

slightly thickened band one or more centimeters wide (Plate VI, k). Lip notching is quite prevalent and usually takes the form of diagonal slashes or semi-conical depressions located on the outer edge of the lip (Plate VI, l). Lips are invariably square when notching is present and tapered when unmodified.

Base: There is only one vessel sufficiently complete to provide information on this point. In that specimen, the base is rounded.

Appendages: One of the two handles found in the entire Transylvania site collection occurs on a Belzoni vessel. No other appendages have been found with the type.

Decorative Treatment: Phillips (ibid.) has characterized the incision technique of Belzoni as producing "predominantly broad, shallow 'trailed' lines..." that are "more trough-shaped than U-shaped as though made with a square ended implement." Analysis of the Transylvania sherd collection bears this out and makes possible further descriptive comment. To begin with, the incision is typically made with a cylindrical stylus that has a flat end. Depending upon the angle at which the stylus is held, the resulting lines may be rounded or square in cross section. Lines are begun by setting the stylus on

edge deep into the clay and then pulling it forward. This procedure results in a characteristic squared end to the line. At the termination of the incision stroke, the stylus is apparently lifted away from the clay so that here the lines have a more tapered end. There is furthermore, a tendency for lines to terminate before coming into contact with other lines that lie across their path or to be terminated by them. There is never any overlap as is frequently the case with Winterville.

Lines vary in width between 2 mm. and 5 mm. The burr resulting from this broad incision is mostly removed and the remainder smoothed over. The spacing of lines varies between 2 mm. and 8 mm. The tendency is for lines to be spaced a distance approximately equal to their width. When this is not the case, spacing is more frequently less, rather than more than line width.

In sum, Belzoni may be characterized by the care and precision evident in its incision. Lines are well executed, evenly spaced, and never overlapping at their point of junction.

Design: Three major design motifs, the festoon, the guilloche and close-spaced horizontal lines characterize Belzoni. The three occur in several combinations and in different locations on jar surfaces. By far the most frequent combination involves horizontal lines,

encircling the neck with festoons pendant from the lowest line at the junction of shoulder and neck (Plate VII). At Transylvania, 147 out of a sample of 185 sherds with identifiable decoration show either or both motifs. The horizontal lines occur exclusively in the neck position. They may be replaced, however, by festoons (Plate VI, l) or by a plain surface (Plate VI, m). In all instances where enough design field is present in the Transylvania sample, festoons as a body decoration occur in a single layer below the throat. There is no evidence for the use of this motif to form an imbrication design.

The guilloche occurs on 38 sherds out of the sample of 185. Limited evidence from Transylvania suggests that the guilloche occurs primarily on the vessel neck (Plate VI, k) but is also a body motif (see Lemley and Dickinson 1937:Plate 2, 7). Definitely absent are the interlocking scroll (volute) and concentric circle motifs that Phillips has reported.

Distribution: This variety occurs within the Alluvial Valley from the Deer Creek phase sites in the northern portion of the Lower Yazoo Basin, to the Natchez region in the south.

Temporal Position: Fitzhugh, Lake George, and Deer Creek phases, with possible occurrence in Winterville phase (see discussion below).

Cultural Significance: Belzoni is common only at Transylvania site, but it is represented at several Fitzhugh phase sites throughout the Survey Area: Panther Lake, 2 sherds; Fitzhugh, 27 sherds; Canebrake, 22 sherds; Ulmer, 4 sherds; Somerset, 1 sherd; Elk Ridge, 3 sherds; and New China Grove, 4 sherds. Belzoni occurs in as many Fitzhugh phase components as do Evansville Punctated, var. Sharkey, and Hollyknowe Ridge Pinched, var. Patmos. It is very nearly as common as Sharkey, and occurs with twice the frequency of Patmos. The unique position of Belzoni as the dominant type in the Fitzhugh component at Transylvania should not obscure the fact that it is as much a part of the phase as some other more traditional pottery types.

According to Phillips (ibid.:564), Lake George phase differs from Deer Creek phase in having Winterville in greater frequency than Belzoni. Sites of both phases, however, possess both Belzoni and Winterville. The author has studied Phillips' type collections from Lake George (Cut A), Winterville and Arcola sites, and, using his criteria for the two varieties, finds a much higher frequency of Belzoni than Phillips did. This kind of discrepancy is to be expected when two different people sort the same artifact collection. It is noted here only to show that the difference between Fitzhugh phase as

represented at Transylvania and the two Lower Yazoo Basin phases is not as great as sherd counts indicate.

Stratigraphy at Transylvania indicates that Winterville variety replaces Belzoni in the Transylvania phase component. Brain (1969:272-3) seems to have found these types in reverse chronological order at the Winterville site. His type, 'Winterville Incised', first appears in the Winterville component and persists into the Deer Creek component when 'Belzoni Incised' appears. Actually, both of Brain's types have quite specific similarities to Belzoni as defined here (ibid.:189:90, 203-4). 'Belzoni Incised' may have broad line incision, and one of the most characteristic vessel forms, a squat, short neck jar with decoration confined to the body area (ibid.:188), is very similar to one of the two vessel shapes characteristic of Belzoni. 'Winterville Incised' may also have broad line incision. Its most common decoration, consisting of horizontal lines on the vessel neck with pendant festoons below, sounds very much like the characteristic decoration of Belzoni. Interlocking scrolls are also said to occur on the vessel neck.

Although 'Winterville Incised' first appears in the Winterville phase, it reaches its peak of popularity only in Deer Creek phase (ibid.:273). Since this type occurs in two phases, it is possible that some of the characteristic features Brain describes for it are present

during only a part of its existence. Specifically, those features with parallels in Belzoni may be late, being characteristic of the type only as it occurs in the Deer Creek component. In the earlier Winterville component, the type may be rather similar to Coleman, its Routh phase contemporary in the Upper Tensas Basin.

While Belzoni does appear to be related to the earlier Coleman variety, there is considerable difference between the two. Belzoni differs in having a larger vessel size, reliance on shell tempering, broad line incision and new decorative designs such as the guilloche and horizontal lines. Although Belzoni is widely distributed in the Survey Area during Fitzhugh phase, it is abundant at only one site, Transylvania, in the northern end of the Basin. This fact, along with the occurrence of a shell-tempered variety of Winterville Incised in the Lower Yazoo Basin in the earlier Winterville phase, suggests that the development of Belzoni may have taken place beyond the Upper Tensas Basin and entered it only as a result of diffusion. Irregardless of what the exact relationship between Coleman and Belzoni is, it is most probable that they and the other Winterville Incised varieties are historically related and represent a development indigenous to the general area of the Upper Tensas and Lower Yazoo Basins.

One of the most distinctive features of Belzoni is the form of decorative incision employed. To anyone familiar with late period pottery types in the Lower Mississippi Valley, the description of the Belzoni incision technique presented above sounds surprisingly similar to that given for the type, Wallace Incised, in the 1951 Survey Report (Phillips et. al. 1951:134-5). Phillips' recent description of the established variety of Wallace Incised is even more strikingly similar.

Incision by means of a broad flat-ended instrument making a characteristic trough-shaped line, averaging 4 mm. wide and 1 mm. deep..... Especially characteristic is the tendency for lines coming together at an angle not quite to meet, but to be stopped with a slight extra pressure making a very pronounced, usually squarish termination (1970:169).

Careful study of sherds of Winterville Incised, vars. Belzoni and Erwin, from Transylvania indicates that the lines were begun with the depression and not so terminated. Irregardless of how the incision was executed, the effect is the same. Belzoni and Wallace Incised would seem to be related types.¹

Moore (1940:Figs. 54, 62-6) illustrates vessels from the Greer site in Jefferson County, Arkansas, that evidence decorative design and incision technique similar

¹Phillips (ibid.:173) notes this relationship also.

to that of Wallace Incised. Suhm and Jelks (1962:87) classify this pottery as Keno Trilled, but it is obviously related to Wallace Incised. South of Menard, on Bayou Bartholemew, the Tillar site (17-J-1)¹ has produced several vessels with a broad-line incision similar to that of Wallace Incised and Belzoni. Jars and bottles are the predominant vessel shape, but one bowl is present in the collection. Scroll designs occur in four of the five specimens.

It is evident from the foregoing that the technique of incision characteristic of Belzoni and Wallace Incised is similar and quite widespread, being found in southeast Arkansas, the Lower Yazoo Basin, and the Upper Tensas Basin. There is good evidence that it is contemporaneous in the latter two areas. It is the opinion of the author that its occurrence at Menard and related sites is also contemporaneous. This, of course, is contrary to Ford's conclusions (1961). Ford sees Wallace Incised as a marker for the historic Quapaw. The fact is, however, not one Wallace Incised vessel was found either by Palmer, Moore or Ford in a historic burial at Menard and related sites. Ford's seriation of sherds from test excavations purportedly shows Wallace Incised to be

¹Thomas Cilcrease Institute, Tulsa, Oklahoma.

late, but these seriations are not very convincing. There is good evidence, in the form of Leland Incised pottery (Ford 1961:Fig. 17, d-g; see Appendix II) for an earlier prehistoric occupation in the area. Since the Wallace Incised vessels all came from a single deposit in Mound B where there was no evidence of historic occupation, there is no reason why this pottery type cannot belong to an earlier prehistoric component.

Winterville Incised, var. Coleman (Plate VI, n)

Coleman has been described in detail in Chapter III. Pottery fitting this description occurs in several Fitzhugh phase sites within the Survey Area: Fitzhugh, Transylvania, Somerset, Welch, Hopkins, Chelly Landing, New China Grove, and Turkey Point Landing. Coleman is definitely an integral part of the ceramic complexes of both the Fitzhugh and Routh phases. Given the limited sherd samples of Coleman from Routh and Fitzhugh phases, it is not possible to delineate any change in the variety through time. At four of the above listed sites, the Belzoni variety of Winterville Incised is also found. The question of the relationship of these two varieties to one another is discussed in the preceding definition of Belzoni.

Discussion

Nature of the Ceramic Complex

A complete inventory of Fitzhugh phase pottery types and modes is presented in the introductory section of this chapter. Many of the types and modes listed there are represented in only a few components, and are not truly characteristic of the Fitzhugh phase. At least two modes, the "Delta City" bowl and the "Preston" bowl, are characteristic of Routh phase and disappear early in Fitzhugh phase. Several other types, Barton Incised, vars. Atherton and Stowers; L'Eau Noire Incised, var. Paine; Leland Incised, vars. Dabney and Fatherland; and Winterville Incised, var. Winterville, appear late in the Upper Tensas Basin and hence are characteristic of Transylvania phase and only contemporaneous, late Fitzhugh phase components. Finally, the center of distribution of Cowhide Stamped lies outside the Survey Area, and the type is restricted in occurrence to only a small area within the Basin.

With the exception of the "early Tunica" rim mode, there are no pottery types or modes which occur exclusively in Fitzhugh phase. This results from the fact that Routh, Fitzhugh, and Transylvania phases represent only segments of a single, continuous line of ceramic development. Each phase shares a number of ceramic elements with one or both

of the others. Diagnostic types and modes exist, but they contrast Fitzhugh phase with only one of the other phases, not both. In comparing Routh and Fitzhugh, the following elements are diagnostic of the latter.¹

Addis and Pocahontas Modes

"interior-beveled" bowl rim
 "Walnut Bayou" bowl
 "thickened-beveled" bowl rim
 "early Tunica" rim
 "Yazoo" bowl
 "Haynes Bluff" rim
 Barton Incised, var. Atherton
 var. Stowers
 Cowhide Stamped
 L'Eau Noire Incised, var. Paine
 Leland Incised, var. Blanchard
 var. Dabney
 var. Fatherland
 var. Ferris
 Parkin Punctated, var. Transylvania
 Winterville Incised, var. Belzoni

In comparing Fitzhugh and Transylvania phases, the following elements are diagnostic of Fitzhugh:

Baytown Plain, var. Addis
 "Delta City" bowl
 "early Tunica" rim
 Evansville Punctated, var. Sharkey
 Hollyknowe Ridge Pinched, var. Patmos

¹Several types--Maddox Engraved, var. Silver City; Parkin Punctated, var. Hollandale; Plaquemine Brushed, var. Grace; Pouncey Ridge Pinched, var. Pouncey--could be listed as diagnostic of Fitzhugh phase. However, because it is their association with shell-tempered paste that makes them distinctive, and shell tempering is spreading into the Survey Area during Routh phase, it is quite possible that they may eventually be identified in Routh phase contexts.

L'Eau Noire Incised, var. L'Eau Noire
var. Anna
var. Carter
Leland Incised, var. Ferris
Plaquemine Brushed, var. Plaquemine
var. Grace
Winterville Incised, var. Belzoni
var. Coleman

The only ceramic elements distinguishing Routh and Fitzhugh phases that occur with any frequency are Belzoni and the plain ware modes, "Walnut Bayou" bowl, "Preston" bowl and "Tunica" rim. This means that when working with small sherd collections, it is usually not possible to assign a site to either Plaquemine phase. This difficulty has been encountered in the following sites, all of which can be classified only as Plaquemine culture:

21-K-4	Tensas Bayou	24-K-8	DuRosset
22-L-2	Julice	24-L-5	Muir
23-K-15	Taxodium	24-L-6	Quimby
23-K-16	Joe's Bayou	25-K-5	Avondale
23-K-25	Bear Lake	25-K-10	Aubrey
23-L-7	Yerger	25-K-11	Cooter Point
23-L-8	Mound	25-K-14	Azucena
23-L-21	Kimbrough	25-K-19	Formosa
24-J-5	Grovell Place	26-J-3	Elkhorn
24-J-27	New Hope	26-J-4	Indian Village
24-J-31	MacMurray	26-J-12	Section 35 Mound

25-J-14 Mound
Lake

Ceramic counts for these sites can be found in Appendix I.

The problem of defining a Plaquemine ceramic complex was discussed in Chapter III. There, emphasis was placed upon the relationship of Plaquemine to its predecessor, Coles Creek Culture, and it was demonstrated that certain commonly held beliefs about the occurrence of

Coles Creek pottery types in the later phase were in error. It is now necessary to comment briefly on the relationship of "Mississippian" pottery to the Plaquemine ceramic complex. In defining Mayersville phase for the Lower Yazoo Basin, Phillips (1970:558) lists only clay-tempered, Plaquemine pottery types. According to Phillips (*ibid.*: Figs. 248, 249) a number of sites in the Lower Yazoo Basin possess both Mayersville and Deer Creek or Lake George components. In no instance is the existence of a Mayersville component with shell tempering or other Mississippian ceramic features noted. At the Arcola site, where a large surface collection contained 686 decorated Deer Creek phase sherds and 3 Mayersville phase sherds, the latter are interpreted as "intrusive" into the Deer Creek occupation (*ibid.*:464). The meaning of this interpretation is not clear to the present author. But it does seem clear that Phillips is not allowing for the possibility of Mayersville components that contain some shell-tempered sherds or other Mississippian ceramic features--or for that matter, Deer Creek or Lake George components that possess some clay-tempered sherds.

The fact is, clay-tempered and shell-tempered pottery and Plaquemine and Mississippian decorated types frequently do occur together in a single component. Both Crippen Point and Winterville components at Winterville

site are characterized by both shell-tempered and clay-tempered pottery and other diagnostic features of Plaquemine and Mississippian cultures. In the Upper Tensas Basin, Routh and Fitzhugh phases likewise possess pottery with both kinds of tempering and Fitzhugh phase is characterized by several decorated types (Winterville Incised and Barton Incised) that may be related to Mississippian cultural developments to the north. In the Upper Tensas and Lower Yazoo Basins, there is through time a gradual addition of Mississippian ceramic features to the indigenous Plaquemine ceramic complex. In short, shell tempering and various "Mississippian" types must be seen as integral parts of the ceramic complex of some Plaquemine phases.

Relationships Within the Survey Area

There is a great deal of ceramic continuity between Routh and Fitzhugh phases. Nearly all Plaquemine decorated pottery types found in Routh phase carry over into the later phase and undergo little change. L'Eau Noire Incised, var. Evangeline, is an exception as it is not represented in any known Fitzhugh phase collections. Two other types, Coles Creek Incised, var. Hardy, and Mazique Incised, var. Preston, which are actually more characteristic of Late Coles Creek culture also disappear by Fitzhugh phase. With Fitzhugh phase, we do see the

addition of several new decorated types to the Plaquemine ceramic complex, but despite the rather large number of them, they do not represent much of a discontinuity. The types Parkin Punctated, var. Hollandale; Plaquemine Brushed, var. Grace; Pouncey Ridge Pinched, var. Pouncey; and Maddox Engraved, var. Silver City, are all probably the result of applying shell tempering to the traditional types, Evansville Punctated, var. Sharkey; Plaquemine Brushed, var. Plaquemine; Hollyknowe Ridge Pinched, var. Patmos; and Maddox Engraved, var. Baptiste. The varieties L'Eau Noire Incised, var. Paine; Leland Incised, var. Ferris; and Barton Incised, var. Stowers, furthermore, are clearly developmentally related to the earlier varieties L'Eau Noire, Leland, and Manchac. They represent exactly the kind of change to be expected within a ceramic tradition through time. Two of them, furthermore, Stowers and Paine, appear only late in Fitzhugh phase. Barton Incised, var. Atherton; Cowhide Stamped; Parkin Punctated, var. Transylvania; and Winterville Incised, vars. Winterville and Belzoni, alone are difficult to account for except as new types derived from beyond the Survey Area.

Continuity is the outstanding feature of the plain pottery in Fitzhugh phase also. The "Delta City" bowl continues into the phase, but eventually terminates. The

"Walnut Bayou" bowl, a rare form in Routh phase, becomes quite common in Fitzhugh phase. Rim forms characteristic of Routh phase are joined by several new rim modes in Fitzhugh phase.

With the exception of Transylvania site, Fitzhugh components yield primarily clay-tempered pottery. Shell tempering is only slightly more common than in Routh phase. In sum, the existence of Fitzhugh phase is primarily the result of a gradual evolution in Plaquemine pottery with little evidence of outside influence.

The distribution of Fitzhugh components indicates that the phase occurs throughout the Survey Area. In the northern part of the Basin, Fitzhugh is terminated around A.D. 1550 by Transylvania phase. The ceramic change at this time and in this area is considerable. Over most of the Survey Area, however, the Fitzhugh pottery complex persists right up to the historic horizon with relatively little change. Historic Taensa is ceramically distinct from Fitzhugh and merits phase recognition on this basis alone. Historic Natchez, however, is essentially Fitzhugh phase in nature and phase recognition is primarily in response to the convenience of European contact as a time marker.

Within the Tensas Basin, the ceramic shift from Fitzhugh phase to Taensa phase apparently comes quite

late. Four sites, two of them historic Taensa (Beasley and Clark Bayou) and two Fitzhugh phase (New Ground and Elk Ridge), are all associated with the 16 stage Mississippi River meander loop that gave rise to Lake St. Joseph. Contemporary French accounts indicate that the Taensa villages were strung out along both banks of Lake St. Joseph. The location of Beasley and Clark Bayou, the two candidates for historic Taensa sites, is such that they were both apparently situated on the banks of Lake St. Joseph in the past. New Ground is located approximately one-half mile farther east of the lake than Beasley. Since it lies within the meander loop, it could not have been occupied until the river passed beyond the site location. Elk Ridge is located in the middle of a 15 stage channel. Using Fisk's (1944) estimate of 100 years for the duration of a channel stage, only about one century must have elapsed between the occupation of New Ground and Elk Ridge and the creation of Lake St. Joseph. The unknown factor is how long the lake had been in existence before the occupation of Beasley and Clark Bayou sites. Presumably not much time has elapsed. In any case there is geological evidence for relatively little elapsed time between these Fitzhugh and Taensa site occupations.

Ceramic Change Within Fitzhugh Phase

By definition, ceramic change should have been minimal during the approximately three centuries of Fitzhugh phase existence. Those changes that did occur can be attributed mainly to two sources: influence from Mississippian cultures to the north and east, and indigenous ceramic evolution.

Throughout the Mississippi period, the technique of tempering pottery with shell is gradually diffused into the Survey Area and accepted. The process begins with the first appearance of shell-tempered pottery in the Basin during Routh phase. At this time, only undecorated pottery is known to have this kind of temper, and it is relatively rare. In the three largest Routh phase collections, Routh, Preston, and Rose Hill, Mississippi Plain accounts for no more than 3.5 per cent of the undecorated sherds. With the data available, it can not be determined with certainty whether this pottery is being imported or whether the technique of shell tempering has been borrowed and applied to indigenous pottery types. The single jar from Routh site, which resembles Winter-ville phase jars in the Lower Yazoo Basin, suggests that the former is the case.

By this same time period, the northern half of the Lower Yazoo Basin has experienced at least one

instance of direct contact with the Cahokia Region to the north, and shell-tempered plain and decorated pottery accounts for most of the ceramic inventory of the contemporaneous Winterville phase (Brain 1969:272 and Table 22).

In the Fitzhugh phase, shell-tempered plain pottery still occurs in only small quantity--below 3 per cent of all undecorated pottery at Fitzhugh, Somerset, Elk Ridge, and Chelly Landing--with one exception, Transylvania site. In addition, however, some shell-tempered decorated types now occur in small quantities. Exclusive of the component at Transylvania, a total of 98 sherds, representing 11 different decorated types¹ are found at 10 Fitzhugh phase sites. Together with the small amounts of shell-tempered plain pottery found at most Fitzhugh sites, these sherds indicate a different sort of Mississippian contact than that characteristic of Routh phase. In some instances, the presence of these decorated types probably reflects trade contacts with Transylvania, Deer Creek, or Lake George phases. Some types, on the other hand, probably reflect limited experimentation with shell tempering on the part of Fitzhugh potters.

¹Barton Incised, vars. Barton, Arcola, Atherton, Stowers, and unspecified; Parkin Punctated, var. Hollendale; Pouncey Ridge Pinched, var. Pouncey; Plaquemine Brushed, var. Grace; Winterville Incised, vars. Winterville and Belzoni; Leland Incised, var. Dabney; and Old Town Red.

The Fitzhugh component at Transylvania site is unique within the phase in that 40 per cent of the plain pottery and 70 per cent of the decorated pottery is shell-tempered. In this component there is definite evidence that the technique of shell tempering is being applied to indigenous pottery types. Many of the Fitzhugh decorated types (Plaquemine Brushed, Manchac, Sharkey, and Patmos) and plain ware modes ("Walnut Bayou" bowl and "Tunica" rim) are represented by a few sherds in which shell has been added to the Addis paste. These specimens are indistinguishable in all other respects from their more common counterparts without shell. There are also examples of Fitzhugh phase plain ware modes which occur on coarse shell-tempered paste identical to Mississippi Plain, var. Pocahontas. It is possible, furthermore, to interpret the few examples of the types, Pouncey Ridge Pinched, var. Pouncey, Plaquemine Brushed, var. Grace, Parkin Punctated, var. Hollandale and Barton Incised, var. Stowers, as instances where the shift to completely shell-tempered paste has been attempted for traditional Plaquemine types.

In addition to shell tempering, it appears that Mississippian cultures north and east of the Texas Basin are contributing at least one other item to the Fitzhugh phase ceramic complex. The flat bottomed and straight

sided beaker, standard vessel shape for many Plaquemine pottery types, is apparently giving way to a jar form with rounded bottom, globular body, slightly constricted neck and slightly out-flaring rim. This vessel shape is characteristic of Barton Incised, var. Stowers, and Winterville Incised, var. Belzoni, in the Fitzhugh component at Transylvania and is also found there in a few instances with Parkin Punctated, var. Hollandale, and Evansville Punctated, var. Sharkey. Since jars seem to appear in the Survey Area at approximately the same time shell tempering does, it is likely that they also are a result of diffusion from the north. Several points need to be considered, however, before reaching a conclusion on this matter. To begin with, Ford's (1951:Figs. 17, 21, 25, 32, and 33) reconstructions of vessels from the Greenhouse site indicate that jars are present there during the Coles Creek period occupations. Secondly, the presence of the jar form in Routh phase is indicated by a partial vessel of the type Winterville Incised, var. Coleman from the type site. Finally, the particular jar form in question is rather different from the "Standard Mississippi Jar" (Philips et al. 1951:105) characteristic of Mississippian cultures farther north. Handles are a common feature of the latter, but only two are known with

jars at Transylvania.¹ Shape and proportions of the "Standard Mississippi Jar" actually differ markedly from the usual Fitzhugh phase jar. Most striking are differences in amount of neck constriction or shoulder development, height of vessel neck and rim, and ratio of total vessel height to maximum diameter (see pg. 514). The presence of jars in the Fitzhugh component at Transylvania and elsewhere in the Survey Area at the same time, may be attributed to influences from Mississippian cultures to the north, but there seems also to have been considerable local modification of the form.

At Transylvania site the numerically dominant pottery type is not Plaquemine Brushed, var. Plaquemine, as is the case elsewhere in Fitzhugh phase, but a new type, Winterville Incised, var. Belzoni. Although Belzoni is typically shell-tempered and occurs in a jar form, it should be seen as a local ceramic development rather than an introduced Mississippian item. The sudden popularity of Belzoni can probably be attributed to a functional superiority the type had over Plaquemine. It is probable

¹One occurs with the Belzoni jar illustrated in Plate VI, m; the other occurs with a miniature jar bearing unidentified, curvilinear incised decoration. These both occur in Fitzhugh stratigraphic contexts at Transylvania and represent the only handles obtained by the LMS in the entire Upper Tensas Basin.

that both were general utility types. Quimby (1951:110) reports that rim diameters of 'Plaquemine Brushed' at Medora site range between 11 cm. and 49 cm., and average 28 cm. Available rim sherds from Fitzhugh phase collections average 25 cm. in diameter. Belzoni rims from Transylvania site average 27 cm. in diameter, but the type possesses a globular body of greater diameter than its rim. With its constricted neck and probably greater body capacity, Belzoni may have been superior to Plaquemine for certain purposes and became popular for that reason.

Except for the abundance of shell-tempered pottery, Winterville Incised, var. Belzoni, and the jar form, the pottery of the early component at Transylvania looks like Fitzhugh phase and has been so identified. Fitzhugh phase components further south are largely unaffected by developments at Transylvania, and it is not until the historic horizon that one element at least, shell tempering, is fully accepted throughout the Survey Area.

With Transylvania phase, the northern part of the Basin undergoes a radical change in ceramics. This is largely the result of indigenous development, but it is such a thoroughgoing change that we are obliged to assign Transylvania phase to a different culture, Mississippian. This change can be documented only at Transylvania site,

but the pottery from Beasley and Clark Bayou indicates that the middle portion of the Survey Area is experiencing something similar by the historic period.

From the foregoing observations, it can be seen that there is a gradual spread of Mississippian traits, including shell tempering, the jar form and pottery types usually identified as Mississippian, through the Survey Area during the centuries following A.D. 1200. This situation is illustrated in Fig. 63, where the importance of shell as a tempering agent and the ratio of Plaquemine to Mississippian pottery types is shown to vary from north to south and from early to late.

In addition to the gradual spread of Mississippian ceramic influences into the Upper Tensas Basin, there are changes through time which equally effect Plaquemine (Fitzhugh, Taensa, and Natchez), Mississippian (Transylvania), and Caddoan (Glendora) phases in the general area. The pottery collections from Fatherland, Burthe, Beasley, and Transylvania (Transylvania component) sites, and Glendora phase sites in the Lower Ouachita Basin, have a number of distinctive features in common which can be interpreted as a result of late ceramic developments over a fairly large area:

1. In Transylvania phase, the "late Tunica" rim completely replaces the "early Tunica" rim. At Fatherland,

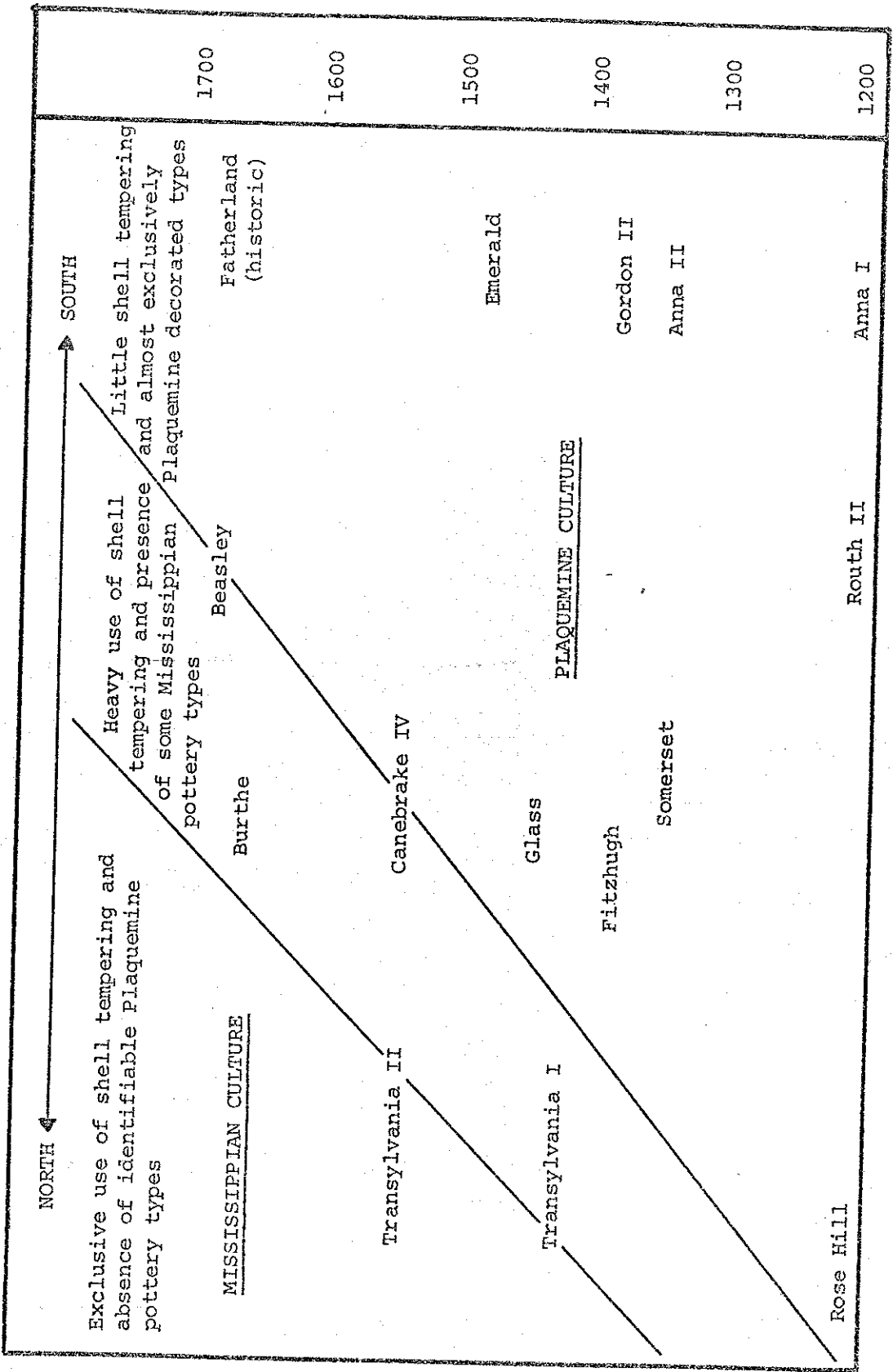


Fig. 63.--Spread of Mississippian ceramic traits through the general area of the Upper Tensas Basin.

the latter is still present but "late Tunica" rims are in the majority.¹ It is hypothesized that throughout the Upper Tensas Basin and in the Natchez area, the "late Tunica" rim replaces the "early Tunica" rim as the historic horizon is approached.

2. L'Eau Noire Incised, var. Paine is found in abundance in Glendora phase and at the Burthe site. It is also represented at Fatherland and Beasley. Paine then, is quite certainly a very late development over a broad area that includes at least the Lower Ouachita Basin, the Upper Tensas Basin, and the Natchez area.

3. All other L'Eau Noire varieties (Anna, L'Eau Noire, and Carter) seem to disappear in late prehistoric times. They are not represented in Transylvania phase, nor in the large collection from Beasley. They are found at Fatherland site, but may date to an earlier prehistoric component.

4. Leland Incised designs characteristic of the latest prehistoric and historic components in the general Survey Area are Design A, Stages 2 and 3; Design B, Stages 2 and 3; Design F; and Design G (see Appendix II).

5. Sherds and whole vessels of Mazique Incised, var Manchac, from Burthe, Emerald, and Fatherland sites

¹
No rim modes are included in the historic Beasley, Clark Bayou, and Burthe sites collections.

frequently have rectangular-shaped, exterior rim straps. This feature is not known from sites in the Upper Tensas Basin and apparently is characteristic of late sites in the Alluvial Valley to the south. South of Natchez it occurs in Fitzhugh-like components at Rosedale (31-K-1), Peter Hill (31-K-2), and Baptiste (28-H-10).

Given the general southward spread of Mississippian ceramic features through time, it can be expected that late dating Fitzhugh sites will tend to have greater amounts of shell-tempered pottery and decorated types characteristic of Transylvania, Deer Creek and Lake George phases. Combining this observation with the five outlined above, it is possible to identify at least three Fitzhugh phase sites as being late within the phase; that is, contemporaneous with or perhaps even later than Transylvania phase. These are Ulmer and Canebrake within the Basin, and Emerald on the east side of the Mississippi River. Geological evidence and, to a limited extent, typological evidence allows us to add Elk Ridge and New Ground to this list.

Two sites, Beasley and Clark Bayou, located on Lake St. Joseph, quite probably are the remains of historic Taensa villages (Williams:1968). The author's classification of pottery from these sites is presented in Appendix I. The Clark Bayou sherd collection is really quite small, and we should, therefore, rely primarily

on the Beasley collection for our definition of historic Taensa.¹ If it is assumed that only one component is represented by the Beasley collection, it is evident that historic Taensa has evolved out of Fitzhugh phase. Plain vessel modes of any kind are unfortunately not present in the collection, but the presence of Baytown Plain, var. Addis; Mazique Incised, var. Manchac; Plaquemine Brushed; Leland Incised; and Maddox Engraved, attest to such antecedents. The abundance of shell-tempered pottery and decorated types such as Barton Incised, var. Stowers, and Winterville Incised, var. Winterville, on the other hand, indicate that the Taensa ceramic complex is changing in the direction of Transylvania phase.

The Fatherland site (26-K-2) is of considerable value in reconstructing late ceramic developments in the Survey Area. Here is a site located at the southern end of the Survey Area with a documented historic occupation that is characterized by a Plaquemine pottery assemblage. Comparison of Fatherland, Transylvania, Fitzhugh, and Taensa phases should be of help in evaluating the amount of ceramic change occurring in the Upper Tensas Basin during the last several centuries before European contact.

¹ Both collections are difficult to work with due to generally small sherd size. This accounts in part for the rather large number of unidentified sherds listed for each.

In attempting to define the pottery assemblage of the historic occupation at Fatherland, only three collections can be expected to represent single components or short time spans: the burial pottery from Phase 4 of Mound C; the sherd collection from pre-mound levels of Mound C; and the deposits identified as the floor debris of Temples 1 and 2, Building Level 1, Mound C. The first is historic, the second should represent initial site occupation, and the last should represent terminal pre-historic site occupation. Counts for these collections, using Neitzel's published data (Figs. 13, pp. 19-21 and Appendix I), but translated into Phillips' type-variety nomenclature are presented in Table 41 below. Also included in this table are the author's own counts for one of the three cuts (Cut 75) Neitzel excavated at the edge of Mound B. These pits intersected mound slope wash and presumably in-situ midden deposits. Cut 75 is of interest as ceramic change is evident between Levels A-S and Levels T-AA.

From the counts in Table 41, it is evident that the types Leland Incised, vars. Blanchard, Natchez, and Fatherland; Plaquemine Brushed, var. Plaquemine; Mazique Incised, var. Manchac; Maddox Engraved, var. Emerald; Mississippi Plain, var. Pocahontas; and Baytown Plain, var. Addis, are characteristic of the historic Natchez

CLASSIFICATION OF POTTERY FROM SELECTED
 PROVENIENCES AT FATHERLAND SITE

	Mound C Burials (Whole Vessels)	Mound C Pre- Mound	Mound C Bldg. Level 1	Cut 75 Levels A-S	Levels T-AA
Barton Incised, <u>var. Stowers</u>			6	4	2
Baytown Plain, <u>var. Addis</u>	1	393	590	89	41
"early Tunica" rim				3	15
"late Tunica" rim				5	22
Bell Plain, <u>var. St. Catherine</u>	5	6	10		
Evansville Punctated, <u>var. Sharkey</u>		1	6		
L'Eau Noire Incised, <u>var. L'Eau Noire</u>		10		1	
<u>var. Anna</u>		10	6	1	
Leland Incised, <u>var. Leland</u>			6	12	16
<u>var. Bayou Goula</u>		5	9		
<u>var. Blanchard</u>	1				
<u>var. Fatherland</u>	17	4	11	82	9
<u>var. Natchez</u>	5	6	13	76	8
<u>var. unspecified</u> ¹	2		6	3	
Maddox Engraved, <u>var. Emerald</u>	1	4	10		
Mazique Incised, <u>var. Manchac</u>	1	2	20	62	27
Mississippi Plain, <u>var. Pocahontas</u>		6	12	16	9
Parkin Punctated, <u>var. unspecified</u>			6	1	
Plaquemine Brushed, <u>var. Plaquemine</u>	1	39	77	34	33
Winterville Incised, <u>var. Winterville</u>			6		
<u>var. Belzoni</u>					3
<u>var. Coleman</u>				4	
unidentified plain	7				

¹ One vessel and the 9 sherds classified as Leland Incised, var. unspecified are characterized by multiple, horizontal, broad lines incised below the rims of bowls and beakers. Neitzel classifies this material as 'Hardy Incised' (Fig. 21, a) and 'Unclassified' (Plate 11, m, q). This motif and a similar incising technique occur on a Leland Incised bowl from Emerald site (Cotter 1951:Fig. 16, 5, 6). The pottery in question is evidently related to Leland Incised rather than Coles Creek Incised.

ceramic complex. One Fatherland vessel and one plain vessel from the burials in Mound C had red slips. This feature is apparently also characteristic of historic Natchez. With less certainty, we can add to this list Leland Incised, var. Bayou Goula; Parkin Punctated; Barton Incised, var. Stowers; Winterville Incised, vars. Winterville and Belzoni; the "Tunica" rim mode, Evansville Punctated, var Sharkey; and L'Eau Noire Incised, vars. L'Eau Noire and Anna.¹ This complex is in some respects more similar to the Fitzhugh phase type collection than the latter is to the Fitzhugh collection at Transylvania site. It differs from the type collection in only a few features: abundance of Fatherland and Natchez, occurrence of later Leland Incised designs, and the use of red filming.

It appears then, that developments in the Upper Tensas Basin, which are affecting Fitzhugh phase in the north and historic Taensa farther south at a later date, have had no effect on the Natchez area by the historic period. Were it not for the fact that European contact

¹It has been argued elsewhere that L'Eau Noire and Anna disappear in late times. Paine variety cannot be associated with any of the collections listed in Table 41, but it does occur at the site (see Neitzel 1965:Plate 10, v). Perhaps some of the sherds he classifies as 'L'Eau Noire Incised' in Fig. 13 are of this variety.

makes a convenient point for phase distinction, historic Natchez would be best classified as Fitzhugh phase.

External Relationships

The Natchez Locality and South

Similarities in pottery indicate a close relationship between the Upper Tensas Basin and the Natchez area during Fitzhugh phase. Counts for selected collections from Cotter's investigations at Anna and Gordon sites are presented in Table 42. The Emerald site collection, in storage at Ocmulgee National Monument, Macon, Georgia, was incomplete when the author studied it, and as a result, only the presence or absence of types is indicated in Table 42.

Except for a high frequency of Leland Incised at Emerald and the occurrence of exterior rim straps on Mazique Incised, var. Manchac, the author can find no differences in the pottery complexes of the two areas. Consequently, Emerald site, and the latest component at both Anna and Gordon sites have been included in Fitzhugh phase. On ceramic grounds, Emerald site is later than Anna. This is indicated by Leland Incised designs (Appendix II) which at Emerald are consistently of late varieties and by the presence of L'Eau Noire Incised, var. Paine, and Leland Incised, vars. Natchez and Fatherland at Emerald.

TABLE 42

CLASSIFICATION OF POTTERY FROM SELECTED PROVENIENCES AT
ANNA, GORDON, AND EMERALD SITES

	Anna (Mound 5- Zones C-E)	Gordon (Mound B- Feature 4)	Emerald
Barton Incised, <u>var. unspecified</u>			+ ¹
Baytown Plain, <u>var. Addis</u>	+	+	+
"early Tunica" rim	22	+	+
"late Tunica" rim	12	+	+
Evansville Punctated, <u>var. Sharkey</u>	1	1	+
Hollyknowe Ridge Pinched, <u>var. Patmos</u>	1		+
L'Eau Noire Incised, <u>var. Anna</u>	11		+
<u>var. Australia</u>		1	
<u>var. Paine</u>			+
<u>var. unspecified</u>	1	1	+
Leland Incised, <u>var. Leland</u>	14	23	+
<u>var. Ferris</u>	1	1	
<u>var. Natchez</u>			+
<u>var. Fatherland</u>			+
<u>var. unspecified</u>	1	11	+
Maddox Engraved, <u>var. Baptiste</u>	4	25	+
<u>var. Silver City</u>		1	
Mazique Incised, <u>var. Manchac</u>	34	34	+
Mississippi Plain, <u>var. Pocahontas</u>	17	+	+
Parkin Punctated, <u>var. Hollandale</u>	1		
Plaquemine Brushed, <u>var. Plaquemine</u>	69	134	+
<u>var. Grace</u>	1	1	
Winterville Incised, <u>var. Belzoni</u>		2	
<u>var. Coleman</u>	1	22	+

¹A plus sign indicates that a particular sherd frequency could not be obtained. In the case of Emerald, no accurate counts were possible since part of the collection was missing at the time of the author's analysis.

South of Natchez, several sites--Baptiste (28-H-10), Angola Farm (29-J-2), Peter Hill (31-K-2), and Rosedale (31-K-1)--have yielded artifact collections which resemble Fitzhugh phase to some extent. The author's counts for Louisiana State University collections from these sites are presented in Table 43.¹ Most characteristic Fitzhugh types are present in these collections including the diagnostic "early Tunica" rim mode. The poor showing or absence of types such as Sharkey, Patmos, L'Eau Noire, Anna, and Evangeline may reflect regional differences or simply sampling error. Certainly distinctive, is the presence of Australia, Sanson Incised, Leland Incised, var. unspecified, and Hardy. The former two seem to have distributions centering to the south or southwest of the Survey Area. Several of the sherds classified as Leland Incised, var. unspecified, are similar to specimens from Fatherland site that resemble Coles Creek Incised, var. Hardy, but are obviously a late variety of Leland Incised. There are also in these collections a number of sherds that conform closely to the criteria for Coles Creek Incised, var. Hardy. A number of Plaquemine Brushed sherds in these collections combine incision and

¹Because of the size of the pottery collection and the presence of multiple components, only the presence of types is noted for Baptiste.

TABLE 43

CLASSIFICATION OF POTTERY FROM BAPTISTE, ROSEDALE, PETER HILL,
ANGOLA FARM AND BAYOU GOULA SITES

	Baptiste	Rose- dale	Peter Hill	Angola Farm	Bayou Boula (Top Level)
Barton Incised, <u>var. Stowers</u>				9	
Baytown Plain, <u>var. Addis</u>	+ ¹	+	+	+	1848
"Preston" bowl	+				
"early Tunica" rim	+	?	7	1	
"late Tunica" rim	+		3	1	
Coles Creek Incised, <u>var. Hardy</u>	+	10	18	6	
Evansville Punctated, <u>var. Sharkey</u>			5		
L'Eau Noire Incised, <u>var. L'Eau Noire</u>	+			1	
<u>var. Anna</u>	+			5	
<u>var. Australia</u>	+	4		7	
<u>var. Evangeline</u>	+				
Leland Incised, <u>var. Leland</u>	+	7		3	
<u>var. Bayou Goula</u>					192
<u>var. Dabney</u>			1		
<u>var. Fatherland</u>		1	3	1	725
<u>var. Natchez</u>				3	
<u>var. unspecified</u>		5	5		
Maddox Engraved, <u>var. Baptiste</u>	+	12	7	3	
Mazique Incised, <u>var. Manchac</u>	+	47	20	3	+
Mississippi Plain, <u>var. Pocahontas</u>	+				63
Owens Punctated, <u>var. unspecified</u>		3			
Parkin Punctated, <u>var. unspecified</u>	+			3	
Plaquemine Brushed, <u>var. Plaquemine</u>	+	34	48	20	10
Pocahontas Punctated					28
Sanson Incised	+	3	2	1	
Winterville Incised, <u>var. Belzoni</u>		2		2	
<u>var. Winterville</u>		1		13	

¹A plus sign indicates that a type is present, but its frequency can not be calculated with accuracy.

brushing in the standard Plaquemine design and the Hardy sherds may derive from such vessels. There is, except for the historic component at Angola Farm, little shell-tempered pottery in these collections: Peter Hill has one sherd of unidentified incised, and Rosedale has 2 sherds of unidentified incised and 3 of Owens Punctated.

Angola Farm resembles the prehistoric sites except in features its historic date would lead us to expect. In the Louisiana State University collections, there are twenty-nine sherds and four vessels with shell tempering. Identifiable Leland Incised designs are late and include Design A, Stage 2 (LSU collection, Cat. No. 5240), Design B, Stage 2 (Ford 1936:Fig. 27, c), and Design C, (ibid.:Fig. 27, e). Two Fatherland sherds are red filmed.

All in all, the pottery collection from Angola Farm is exactly what we should expect for an indigenous historic occupation in the area. It does not conform to our expectation for historic (Tunica) pottery from the southern portion of the Lower Yazoo Basin. Ford (1936: 140) realized this when he stated that:

"If Tunica ware has been correctly identified on the Yazoo River in Mississippi, then at the date of the occupation of this [Angola Farm] village (1706 to about 1800) the Tunica had taken over the pottery types of the Caddo and Natchez rather thoroughly."

Rather than Tunica adopting to local ceramic styles, it is more likely that the Angola Farm pottery represents an historic occupation by people indigenous to the area around the mouth of the Red River.

The Bayou Goula site is reported to have been occupied by as many as seven distinct tribal groups between 1699 and 1722 (Quimby 1957). These people came from as far north as the Upper Taensa Basin, and as far south as the mouth of the Pearl River. As Quimby has observed, there is a definite problem in assigning the pottery collection from the site to any specific tribe.

The most distinctive features of the Bayou Goula collection are the overwhelming predominance of Leland Incised, and the lack of variety in decorated types.¹ In these features, it differs from both the prehistoric Plaquemine sites, Peter Hill, Rosedale, and the historic Fatherland occupation to the north. The collection is, however, suggestive of historic Taensa in several respects: abundance of shell tempering, abundance of Leland Incised, absence of most traditional Plaquemine types, and the occurrence of Late Leland Incised designs.² It differs

¹The author has not studied the historic material from this site, but Quimby's (1957) published counts and illustrations are adequate for interpretation here.

²Leland Incised designs represented in Quimby's illustrations include Design A and B, Stage 3 (Fig. 38, 4th row), broken down Design C or D (Fig. 38, 5th row) and Design F (Fig. 41, Lower row).

in the absence of Barton Incised and the presence of Bayou Goula variety of Leland Incised.

Why historic Taensa and the Bayou Goula inhabitants should both have pottery collections with little variety in decorated types is not known. Perhaps both reflect the effects of European contact, or alternatively, the Bayou Goula pottery collection is predominantly derived from the occupation of the Taensa. Perhaps a re-analysis of the pottery from Bayou Goula with attention to the spatial distribution of types within the site would provide some insights into this question.

The Vicksburg Locality

Immediately south of Vicksburg, Mississippi, four sites have been investigated that bear close relationships to Fitzhugh phase. These are Ring (24-M-5), Glass, (24-M-2), Oak Bend Landing (24-M-7), and Burthe (24-M-6). The Ring site is a prehistoric cemetery situated on a hilltop three miles back from the bluffs overlooking the Mississippi. Ford excavated the site in 1929 obtaining an unspecified number of burials and pottery vessels. Most of the artifact collection from this site was lost in a fire which destroyed the museum building of the Mississippi State Historical Commission in the 1930's, but five vessels have survived, and there are available drawings made by Ford of an additional four vessels.

There is nothing in this collection (Table 44) which would exclude it from Fitzhugh phase. The abundance of Leland Incised is not a Tensas Basin trait, but the fact that this is a burial collection probably accounts for this difference. Leland Incised designs represented are as follows:

Design A, Stage 2	1 vessel
Design B, Stage 1	1 vessel
Design B, Stage 2	3 vessels
Design F	1 vessel

These, together with the Barton Incised, var. Stowers vessel, indicate a late Fitzhugh date for the collection.

Glass site consists of four mounds arranged around a plaza. Moore visited here in 1910 and excavated in all four mounds. Burials were found in only one of the smaller mounds. The total collection of grave goods included 35 vessels, of which Moore (1911:Figs. 6-12) has illustrated seven. An additional two vessels exist in the Peabody Museum at Harvard University, and the Heye Foundation in New York. As is the case with Ring site, Leland Incised predominates. Designs include:

Design A, Stage 1	1 vessel
Design B, Stage 1	3 vessels
Design D, Early Stage	1 vessel
Design F	1 vessel

These, together with the "Yazoo" bowl with "Haynes Bluff" rim indicate an early Fitzhugh phase date for the collection.

TABLE 44

CLASSIFICATION OF WHOLE VESSELS FROM RING, GLASS,
OAK BEND LANDING, AND BURTHE SITES

	Ring	Glass	Oak Bend Landing	Burthe
Baytown Plain, <u>var. Addis</u> bowl	2			3
effigy bowl				1
"Walnut Bayou" bowl	1			1
Barton Incised, <u>var. Stowers</u>				1
Bell Plain, <u>var. Holly Bluff</u>				
"Yazoo" bowl		1		
small carinated bowl				1
L'Eau Noire Incised,				
<u>var. Carter</u>				2
<u>var. Paine</u>			1	6
Leland Incised,				
<u>var. Leland</u>		3	2	
<u>var. Blanchard</u>			1	
<u>var. Dabney</u>	1			
<u>var. Fatherland</u>	3	2		6
<u>var. Natchez</u>	1	1		3
<u>var. unspecified</u>	1			1
Maddox Engraved,				
<u>var. Baptiste</u>				2
<u>var. Silver City</u>		1		
<u>var. unspecified</u>				1
Mazique Incised, <u>var. Manchac</u>				1
<u>var. Stowers</u>	1			
Mississippi Plain,				
<u>var. Pocahontas</u>				
bottle	1			
Mound Place Incised,				
<u>var. Chickasawba</u>			1	
Nodena Red on White,				
<u>var. unspecified</u>			1	
Winterville Incised,				
<u>var. Winterville</u>				1
unidentified incised		1		3

Moore (1911) also visited the Oak Bend Landing site in 1910 and excavated twenty-eight burials from a low mound. Forty-six vessels were recovered, and a number of burials were accompanied by glass beads and sheet copper or brass. Moore describes and illustrates three vessels and the author has seen three additional vessels in the Heye Foundation collections. Leland Incised again predominates with Design D, Early Stage, and Design D, late Stage, being represented.

Ford (1936:71) refers to an historic cemetery one mile east of the Glass site which he visited in 1930. He was unsuccessful in obtaining artifacts from the site owner, and since he mentions no investigation of his own, he was apparently unable to obtain permission to excavate. This site is recorded in the LMS files as Burthe (24-M-6).

In April, 1930, Carl Clausen of East Stroudsburg, Pennsylvania, visited this cemetery and "secured 5 earthen vessels."¹ Two of these were sent to Nels Nelson at the American Museum of Natural History. In 1932, Clausen returned to the site along with John H. MacPherson and together these two men excavated 33 burials.² A brief

¹Letter sent to Nelson, American Museum of Natural History, accession files.

²Apparently Clausen found Burthe cemetery before Ford and secured digging rights from the owner, T. R. Paine.

report of the 1932 excavations was written by Clausen and sent to Nelson. This report describes the burials and their contents. From it, we learn that 118 vessels were recovered, and that 7 of the burials had European trade goods.

The author has been able to track down and study a total of 36 vessels from this cemetery. Two are in the American Museum and 34 others are part of a collection MacPherson presented to the North Museum at Franklin and Marshall College, Lancaster, Pennsylvania. Much of this collection is shell-tempered: 15 of 36 vessels including the types L'Eau Noire Incised, vars. Carter and Paine, and Barton Incised, var. Stowers. Leland Incised designs represented are as follows.

Design A, Stage 3	2 vessels
Design B, Stage 2	2 vessels
Design C, Early Stage	1 vessel
Design D, Late Stage	1 vessel
Design E	2 vessels
Design F	1 vessel

These designs agree fairly well with the historic date of the cemetery. The total collection can be easily derived from prehistoric Fitzhugh phase, and is not too different from historic Taensa and Natchez.

It is difficult to compare the collections from Ring, Glass, Oak Bend Landing, and Burthe, with Fitzhugh phase collections in the Upper Tensas Basin. The latter consist of sherds from occupation and ceremonial areas

primarily, while the former are whole vessels from burials. The functional differences implicit in these contexts are bound to result in biased samples of artifacts, a fact that probably accounts for the predominance of Leland Incised in the collections from Mississippi. Other than the abundance of Leland Incised, there is nothing to distinguish the Mississippi sites from Fitzhugh phase. In fact, given the general absence of cemetery sites in the Survey Area and their abundance in the area below Vicksburg, it is not impossible that the Fitzhugh phase inhabitants of the Tensas Basin utilized the bluffs across the river for burial.

The Lower Yazoo Basin¹

Phillips (1970) distinguishes three Late Mississippian phases--Deer Creek, Lake George, and Wasp Lake--in the Lower Yazoo Basin. Of these, Deer Creek is the most widespread and in closest proximity to the Tensas Basin. Sites are distributed along the Mississippi and Deer Creek meander belt ridges from tier 19 to tier 22 with the greatest concentration being in the north. Wasp Lake phase is relatively remote from the Survey Area, being

¹Most of the following observations are based on the author's brief analyses of LMS collections.

located on the Yazoo meander belt ridge in the north-eastern part of the Lower Yazoo Basin. Lake George phase, with a very restricted distribution, is found at the southern end of the Yazoo meander belt ridge.

Ceramic differences between the three phases are primarily quantitative, and Phillips is not able to establish the exact chronological relationships between them, although he suspects Lake George is younger than Deer Creek (ibid.:563). Of the three phases, Deer Creek shows the closest ceramic similarity to Fitzhugh phase. In addition to the types, Leland Incised and Winterville Incised, Deer Creek parallels with Fitzhugh phase include Plaquemine Brushed, var. Grace, and the Plain ware modes "Walnut Bayou" bowl and "Tunica" rim. The differences between these two phases, however, are at least as great as the similarities. Deer Creek is distinctive in being entirely or almost entirely shell-tempered; possessing the types Barton Incised, Parkin Punctated and Pouncey Ridge Pinched in abundance; and lacking types such as L'Eau Noire Incised, Evansville Punctated, Mazique Incised, and Hollyknowe Ridge Pinched. These differences are given taxonomic recognition by classifying Deer Creek as a phase of Mississippi culture, and Fitzhugh, a phase of Plaquemine culture.

Perhaps the distinction between Deer Creek (and the other Lower Yazoo Basin phases) and Fitzhugh is

overplayed. The author's experience with Fitzhugh phase collections, where shell tempering is applied to plain and decorated Plaquemine pottery, indicates that some Plaquemine types are being transformed into shell-tempered Mississippian types. This is definitely the case for Leland Incised, certain plain ware modes and Plaquemine Brushed. The occurrence of a few specimens of Manchac, Sharkey, and Patmos with Addis/shell paste suggests that these are also being transferred to shell-tempered paste.

Perhaps the major Mississippian element in Fitzhugh and Deer Creek phases, as well as Wasp Lake and Lake George, is the technique of tempering pottery with shell. The actual pottery types and modes characteristic of these phases may be basically indigenous developments. In the Lower Yazoo Basin, shell tempering gains wide acceptance at about the same time as new types such as Leland Incised; Winterville Incised; and the plain ware modes; "Yazoo" bowl, "Walnut Bayou" bowl, "Tunica" rim, and "Haynes Bluff" rim, appear. From the perspective of the Yazoo Basin, it is logical to see the two, tempering and new pottery types, as being intimately related and deriving from Mississippian cultures to the north. In the Upper Tensas Basin these same types and modes appear as early as their Yazoo Basin counterparts, but they have clay-tempered paste and occur in

Plaquemine contexts. It would appear that these types and modes are developing simultaneously over a large area, that includes at least the Lower Yazoo Basin, the Upper Tensas Basin, and the Natchez area. From the perspective of the Upper Tensas Basin these types and modes can only be viewed as local Plaquemine developments.

No one, to the author's knowledge, has ever suggested that Grace is a Mississippian type. This is doubtless due to the fact that there is a good antecedent for it in Plaquemine culture and none in Mississippian cultures to the north. Yet, pottery classified as Parkin Punctated, Pouncey Ridge Pinched, and Barton Incised in the Lower Yazoo Basin is identified as Mississippian despite the existence of Plaquemine counterparts. So little is known about shell-tempered, ridge pinched pottery in the Lower Yazoo Basin that Phillips (1970:155) classifies all specimens as Pouncey Ridge Pinched, var. unspecified. Such pottery could very well be the Plaquemine type, Hollyknowe Ridge Pinched, var. Patmos, transferred to shell-tempered paste. Pottery classified as Parkin Punctated, var. Hollandale from Deer Creek and Fitzhugh phase sites, is characterized by light finger-nail punctation on the rim and neck area of vessels with little shoulder development. This pottery is as similar to the Plaquemine type, Evansville Punctated, var. Sharkey, as it is to the established variety of Parkin Punctated

which is found in northeast Arkansas. Were it not shell-tempered, such pottery would be classified as Sharkey without hesitation by most workers in the Lower Mississippi Valley.

Most Barton Incised pottery in Deer Creek phase collections is classified as variety unspecified by Phillips (ibid.:564). The majority of this pottery conforms to the present author's criteria for Stowers, a variety which not only may be clay-tempered (see Cotter 1951:Fig. 20, 7), but also shows close similarities to the Plaquemine type, Mazique Incised, var. Manchac. The author would identify some Barton Incised pottery at Lake George as Stowers variety also. The relationship between all three typical Lower Yazoo Basin varieties, Stowers, Estil, and Arcola, is undoubtedly close. Arcola, largely restricted to Lake George phase, should perhaps be seen as a specialized development.

In the Lower Yazoo Basin, there are ceramic elements other than shell tempering that suggest Mississippian influences, specifically handles and the jar vessel form. Furthermore, the disappearance of types such as L'Eau Noire Incised and Plaquemine Brushed in post-Mayersville times does suggest a radical change in the local ceramic tradition. The author does not deny the evidence for Mississippian influences and marked

ceramic change in the Lower Yazoo Basin between approximately A.D. 1200 and 1400. He does feel, however, that there may be less ceramic discontinuity between Deer Creek, Lake George, and Wasp Lake phases on the one hand, and Fitzhugh, Mayersville, and Routh phases on the other than is implied by the Plaquemine-Mississippian dichotomy. On the surface, Fitzhugh phase and its contemporaries in the Lower Yazoo Basin appear to be quite distinct and unrelated, but this picture may be to a large extent the creation of our own ceramic typologies and culture taxonomies.

The Fitzhugh component at Transylvania has a number of similarities with Deer Creek phase, especially as this phase is represented at Refuge (19-L-6) and Grace (21-M-7) sites. The presence of "early Tunica" rims and "good" Winterville Incised, var. Belzoni indicates the latter are roughly contemporaneous with Transylvania. Grace site, furthermore, yields both clay-tempered and shell-tempered pottery. Phillips (ibid.:512) identifies two components at Grace--Mayersville and Deer Creek; but it is possible that the site had only a single occupation which, like the early component at Transylvania, was adopting the technique of shell tempering.

The Lower Ouachita Basin

Comparison with sites to the west, specifically in the basin of the Lower Ouachita and Boeuf Rivers, is hampered by a lack of professional research and the fact that what material is available for study is exclusively burial furniture. Moore made collections at several sites in the Ouachita Basin, including Pritchard Landing (25-I-1), Myatt's Landing (23-H-3), Keno (22-H-5), Glendora (22-H-3), Sycamore Landing (22-H-4), Seven Pines Landing (21-I-4), and Ward Place (21-I-5), but in all cases he was working with cemeteries or burials in mounds. The resulting pottery collections, huge in the case of Keno and Glendora, are therefore probably biased toward "fancy" and miniature sized pottery. At least some of the differences between the ceramics of this area and the Tensas Basin are due to this fact.

Utilizing Moore's published illustrations and artifact collections he presented to Peabody Museum and the Heye Foundation, it is possible to distinguish two phases in the Lower Ouachita Basin: one, an historic and late prehistoric Glendora phase;¹ and the other, an earlier phase which probably is roughly comparable to

¹See Williams' (1964:564) redefinition of historic phases in the Caddoan area.

Routh and early Fitzhugh phases in time (see pp. 296-298). Glendora phase is represented by collections at Glendora, Keno, Ward, Seven Pines Landing, and Pritchard Landing. The latter is represented by collections from Sycamore Landing and Myatt's Landing.

Suhm and Krieger (1954:224) list Natchitoches Engraved, Hudson Engraved, and Keno Engraved, as characteristic and diagnostic of Glendora phase, and suggest that Glassel Engraved and Cowhide Stamped may occur as minority types. When compared with pottery Moore illustrated from Keno and Glendora sites, this list seems accurate. In several of his publications (for example, 1909:131), however, Moore states that he is illustrating only the finer and more interesting artifacts. Pottery in the Peabody Museum collections from Keno and Glendora sites confirm this admission. As Table 45 shows, Moore illustrated a disproportionate number of some types and largely neglected others. Consequently, the Suhm and Krieger definition of Glendora phase does not fit the facts in the Lower Ouachita Basin.

Pottery available to the author from the five Glendora sites is classified in Table 46.¹ All vessels

¹Vessels from these sites have been found in the following sources: Heye Foundation of the American Indian; Peabody Museum of American Archaeology and Ethnology; P. Phillips photograph collection; and Moore, 1909.

TABLE 45

ILLUSTRATED AND UNILLUSTRATED POTTERY
FROM GLENDORA SITE

	Moore (1909)	Museum Collections
Cowhide Stamped	1	5
Foster Trailed-Incised	3	0
Keno Trailed	13	1
L'Eau Noire Incised, <u>var. Paine</u>	1	11
Leland Incised, <u>var. Fatherland</u>	5	13
Natchitoches Engraved	29	9

are shell-tempered. The five numerically dominant types are Natchitoches Engraved, Keno Trailed, Cowhide Stamped, L'Eau Noire Incised, var. Paine, and Leland Incised, var. Fatherland. It is not possible or appropriate to present a definitive description of the Glendora phase pottery complex here.¹ Nevertheless, comments are in order for some types:

1. Pottery identified as Cowhide Stamped does not conform in all details to the type description given by Suhm and Jelks (1962). This matter is discussed in some detail in Chapter V.

2. Carinated bowls with incised and cross-hatched step motifs are very common at Keno and Glendora. These can be legitimately classified as L'Eau Noire Incised, var.

¹The large number of unidentified vessels in the five collections indicates the extent to which the author has mastered the material.

TABLE 46
 AVAILABLE WHOLE VESSELS FROM
 GLENDORA PHASE SITES

	Glendora	Keno	Seven Pines	Ward	Pritchard
Avoyelles Punctated, <u>var. unspecified</u>					1
Barton Incised, <u>var. Atherton</u>		1		1	
Cowhide Stamped	6	17	2		3
Foster Trailed-Incised	3				
Glassell Engraved	1	2			
Hudson Engraved	1	14			4
Keno Trailed	14	4			
L'Eau Noire Incised, <u>var. Paine</u>	12	9			
Leland Incised, <u>var. Leland</u>	2				
<u>var. Fatherland</u>	18	8	1		
<u>var. unspecified</u>	2	12	2		2
Maddox Engraved, <u>var. unspecified</u>					1
Natchitoches Engraved	38	3			
Owens Punctated, <u>var. Menard</u>	1				
<u>var. unspecified</u>	1				
Pouncey Ridge Pinched, <u>var. unspecified</u>			1		1

Paine, and in fact, constitute a large portion of the sample upon which definition of the type is based.

3. A number of vessels have been classified as Leland Incised, var. unspecified. These bear Leland Designs B, E, and F, but in other respects are divergent from the type as found along the Mississippi River. Bottles of the kind associated with Keno Trailed and Hudson Engraved are common in this type, and there is a tendency to fill the decorative zone with multiple, evenly spaced lines in the fashion of Keno Trailed and Taylor Engraved. This pottery, in short, combines Plaquemine and Caddoan characteristics.

4. A number of vessels from Keno and Glendora have been classified as Leland Incised, var. Fatherland. Bowls and bottles with pedestal bases are common and decoration is usually Leland Designs C and D. Moore (1909:Fig. 54) illustrates a specimen with slightly divergent vessel shape and design, but the similarities to Fatherland in the Mississippi Valley are obvious.

A number of specific similarities exist between the Glendora phase pottery complex as outlined in Table 46 and the late Fitzhugh and Transylvania phase pottery complexes in the Tensas Basin. Lower Mississippi Valley pottery types occurring in Glendora phase are Leland Incised, vars. Leland (Moore 1909:Fig. 80) and Fatherland;

L'Eau Noire Incised, var. Paine; Barton Incised, var. Atherton; and Owens Punctated, var. Menard. Glendora phase types occurring in Tensas Basin sites are Cowhide Stamped (Canebrake site and Transylvania phase type collection) and Hudson Engraved (Canebrake site).

All of the above similarities could be accounted for through the mechanism of trade. There is reason to believe, however, that the pottery classified as Leland Incised, var. Fatherland, is indigenous to the Lower Ouachita Basin. Of the Leland designs distinguished in Appendix II, only two, Designs C and D, occur with this pottery; a third design, represented in the Glendora site collection (Moore 1909:Fig. 59) is not found in the Mississippi Valley. Likewise, Paine may be an integral part of Glendora phase. Some examples of this type occur with a vessel form (Moore 1909:Fig. 57) that also occurs with Fatherland and Owens Punctated in Glendora phase, but is not known for the Mississippi Valley.

Moore generalized similarities between Glendora phase and the Upper Tensas are to be seen in the types Cowhide Stamped, Leland Incised, var. unspecified, and Hudson Engraved. Decorative designs associated with the latter two types suggest that the Lower Ouachita Basin is producing its own version of Leland Incised. Cowhide Stamped in the Lower Ouachita Basin frequently has

herringbone-punctation decoration on necks of jars, with brushed or multiple incised line guilloche designs on the body below. The incised version of this pottery is not all that different from Winterville Incised, var. Winterville. The two may be local expressions of a widespread idea.

The full extent of Tensas Basin-Lower Ouachita Basin similarities will not be known until there are village collections available from the latter area. Undoubtedly cultural relationships are closer than is indicated by the Glendora phase pottery illustrated by Moore. With access to the Caddoan area via the Ouachita River and access to the Mississippi Valley by way of the Ouachita River in the south and Bayou Bartholomew and the Boeuf River in the north, Glendora phase should prove to be an amalgam of the cultural developments in both areas.¹

¹The widespread occurrence of shell-tempering in the Lower Ouachita Basin is probably the result of influences entering the area along Bayou Macon and the Boeuf River.

Non-Ceramic Artifacts

Flaked Stone

Projectile Points

Large projectile points occur at a number of sites with Fitzhugh components:

Canebrake	2 unidentified fragments
Fuller	1 unidentified fragment
Welch	1 unidentified fragment
New China Grove	1 unidentified fragment
Chelly Landing	1 Gary
Panther Lake	1 unidentified
Mott	1 Carrollton
Indian Bayou	1 Gary

It is probable that these points are associated with earlier occupations at each site.

Stone arrow points are not characteristic of Fitzhugh phase, occurring if at all only in the later components. No points were found in excavated and surface collections from the single component sites, ^{Fitzhugh} Somerset, Elk Ridge, and Ulmer. A single barbed point (Plate XI, b) was recovered from Cut 3, Level A, at Transylvania; but on typological grounds it most likely belongs to the Transylvania component. A single Madison point is included in the surface collections from both New Ground and Panther Lake sites. These are discussed below.

In addition to the seven sites noted above, there are fourteen others that have multiple components and are known only through mixed collections. Four of these sites,

Sundown, Chelly Landing, Canebrake, and Mott, have yielded arrow points (Alba, Scallorn, Hayes, Cliffton, and "fish tail"); but in all cases, they probably date to the Balmoral or earlier components and not the Fitzhugh occupation.

Triangular projectile points are well documented on the historic horizon in the Lower Mississippi Valley, south of Memphis, occurring at Menard (Ford 1961), Oliver (Peabody 1904), and Fatherland (Neitzel 1965), as well as the Taensa sites in the Upper Tensas Basin. In the Lower Yazoo Basin they are characteristic of the prehistoric Deer Creek occupation at Winterville site (Brain 1969) and the Wasp Lake component at Jaketown site (Phillips *et al.* 1951). Given their association with Deer Creek phase, it is entirely possible that such points appear in the Survey Area prior to European contact. The occurrence of single specimens at Panther Lake and New Ground (Plate IV, s), can be interpreted as evidence of this situation.¹ In both cases, of course, we may be dealing with strays that date to the historic period.

¹There is a fair amount of shell-tempered pottery in the Fitzhugh component at Panther Lake, but given the site's location in the northern part of the Basin near Transylvania, it is probably early. Geological evidence indicates that New Ground is late, probably immediately pre-contact.

New Ground, lying less than one-half mile from the historic Taensa sites, could very well be interpreted in this fashion.

Triangular points are frequently cited as markers for Mississippian culture, but in the Upper Tensas Basin their first appearance is not too closely associated with the influx of Mississippian ceramic features. Beasley and Clark Bayou sites represent the only full scale acceptance of shell-tempered pottery in the southern half of the Survey Area. Triangular Madison points occur at both sites. Fatherland site has also yielded Madison points,¹ but the historic component there is not at all characterized by Mississippian ceramics. New Ground is a similar exception if its single point is not a stray. Transylvania phase, on the other hand, is entirely shell-tempered and has other Mississippian ceramic features, but no triangular points have been found with it, despite extensive excavation at the type site.

The appearance of triangular stone points at the end of the Upper Tensas Basin cultural sequence, is no doubt attributable to Mississippian cultural developments in the north and northeast. The evidence from the Tensas

¹Neitzel obtained 8 from historic levels in Mound C and the strata Cuts. Chambers found one with Burial 15 in Mound C (Neitzel 1965:48).

Basin and Natchez area, however, indicates that this trait is diffusing somewhat independently of Mississippian ceramic features.

Miscellaneous Flaked Stone

If anything, the flaked stone tool assemblage of Fitzhugh phase is more impoverished than that of Routh phase. The combined collections from the type site, Analysis Unit C-D at Transylvania, and the single component sites of Somerset, Ulmer, Elk Ridge, and New Ground contain six items. Fitzhugh site, with large surface collections as well as test pits, has yielded none. At Transylvania a single bifacial tool occurs in Analysis Unit C-D. This specimen is triangular in shape, bifacially retouched and exhibits wear-pressure retouch along most of its working edges (Plate XI, g). Two additional items-- a percussion flaked sandstone disk, (Plate XI, f) and the mid-section of a biface with a small nub projecting from one lateral edge (Plate XI, c)--derive from Transylvania phase or indeterminate stratigraphic context. Other than Transylvania, only New Ground has yielded flaked stone artifacts. There are, in the collection from that site, one snub-nosed scraper and four biface fragments (Plate IV, t, z). Beasley and Clark Bayou have also yielded snub-nosed scrapers and fragments of bifacial tools. As with projectile points, New Ground resembles

the historic Taensa sites and differs from Fitzhugh phase. Excluding the New Ground material, there is only one flaked stone tool known, from good Fitzhugh phase context: the triangular specimen from Transylvania.

A number of multicomponent sites with Fitzhugh occupations do yield flaked stone tools, but component affiliation can not be established with certainty:

Canebrake	1 knife fragment
	4 bifacial blades
DuRosset	1 pebble scraper
Frisbie	1 bifacial blade
	1 bifacial blade with scraper edge
Welch	1 bifacial blade fragment
Turkey Point	
Landing	1 oval blade with scraper edge
	1 circular blade with scraper edge
Chelly Landing	4 pebble scrapers
	9 bifacial blades with scraper edges
Panther Lake	1 pebble scraper
Mott	1 pebble scraper
	7 bifacial blades

Flaked chert pebbles and flakes are a common element in Fitzhugh phase collections. Flakes frequently have one or more edges blunted by wear-pressure retouch as was the case in Routh phase. Sixteen out of 161 flakes picked up at Fitzhugh site show this modification (Plate IV, bb). Flakes are common at Transylvania, but Analysis Unit C-D yielded only 5 flakes and none with blunted edges. The Somerset stone collection was discarded in the field. Elk Ridge, another single component site, yielded 50 flakes of which 4 show wear-pressure retouch. Several multi-component sites with Fitzhugh occupations have also yielded

modified flakes: Panther Lake, Frisbie, Welch, Turkey Point Landing, Chelly Landing, Indian Bayou, Willow Bayou, and Mott. Flaked chert pebbles occurred at Fitzhugh (Plate IV, hh), Transylvania, and New Ground (Plate IV, ii) in Fitzhugh phase contexts and at several multicomponent sites: DuRosset, Panther Lake, Frisbie, Blanche, and Chelly Landing. Some, if not most, are probably cores.

It is a well known fact that flaked stone artifacts do not occur with great frequency in pottery-bearing cultures in the southern half of the Lower Mississippi Valley. The evidence for Fitzhugh and Routh phases certainly bears this out. At least two early visitors to the general area of the Tensas Basin, Tonti and DuPratz, have commented on the kinds of material used for tools. Cane, bone, and gar scales were used for projectile points of different types, and knives were made of cane. Paraphrasing DuPratz, Swanton (1901:58) states that:

Knives were ordinarily made of a rather small variety of cane. This was split into four pieces, each of which made a knife that cut very well for a little while. New ones had to be obtained constantly, but the canes from which they were manufactured were very common.

Given the general absence of stone artifacts throughout the southern half of the Alluvial Valley, it seems likely that the Natchez were not exceptional in their reliance on cane for cutting implements. Presumably the use of cane was not so much due to inaccessibility of suitable stone, as

to the superiority of cane in respect to ease of fabrication, efficiency, and accessibility.

Contrary to DuPratz, Tonti reports that the Taensa "knives are of flint" (Swanton 1911:259). In all probability, Tonti is referring to tools such as those from New Ground illustrated in Plate IV, z. Excavations at the Fatherland site have yielded 10 flaked stone artifacts that are probably part of the historic component. These include 2 scrapers (Neitzel 1965:Plate 12, g, k) and 8 projectile points (ibid.:Plate 12, w-DD). Some of the latter may actually be knife fragments, but exact identification is not possible with only Neitzel's illustrations. Considering the amount of excavation conducted at Fatherland, this collection is small compared to that from Beasley and New Ground, and we may conclude that stone tools are less frequent in the Natchez phase. As is the case with ceramics, the Taensa appear to have taken over Mississippian stone technology to a greater extent than the Natchez.

The Taensa stone tool assemblage appears to be very similar to that known for Menard (17-K-1) and Oliver (16-N-6) as Williams has noted (1968:9). Between Lake St. Joseph and the mouth of the Arkansas River, no comparable material is known. Triangular projectile points are characteristic of Deer Creek phase (Brain 1969) and

may be diffusing slowly down the Alluvial Valley, but the remainder of the Taensa stone tool assemblage is not found in that phase. There are at least three alternative explanations for this discontinuous distribution.

1. The Taensa assemblage is the result of diffusion from further north, but on a very late time level subsequent to Deer Creek and also Transylvania phases.

2. Well developed stone technologies are known to the west of the Alluvial Valley in east Texas. The Gilbert site (Jelks 1967), an historic component of the Norteno focus, is the most thoroughly reported manifestation. Triangular points, end and side scrapers and other tool types are present. Without a knowledge of northern Louisiana cultural development in late prehistoric and historic times, we have no idea of the distribution of such technologies within the state. It may be that the Taensa stone assemblage is the result of contact to the west.

3. Perhaps the most intriguing explanation involves the Mosopelea refugees reported to be residing among the Taensa in 1682 (Swanton 1911:262). Griffin (1943) has summarized the ethnohistoric evidence on the aboriginal location of this tribe. He favors the location given by Marquette and Joliet who found them "well below the Ohio on the Mississippi, [and] concluded that their main habitat was south of the Arkansas on the east side"

(1943:21). The Mosopelea cannot be identified with either Menard or Oliver sites, but given their original location in the same general area, it is quite possible that they possessed a lithic industry similar to that found at those two sites. What appears, with present information, to be a sudden appearance of a well developed stone industry in the Upper Tensas Basin on the historic time level, may be the result of this small population movement. The size of sherds from Beasley, Clark Bayou, and New Ground is generally so small that it would be difficult to distinguish most Quapaw pottery types from the resident Tensas types. It may be significant that 41 out of 79 decorated sherds in the Beasley collection were unidentified as to type.

Ground Stone

One fragment of a polished greenstone celt was obtained in a surface collection from Fitzhugh site. Only one sherd (Marksville Stamped, var. Troyville) out of over 5600 surface collected sherds from this site cannot be associated with the Fitzhugh occupation. It is likely, therefore, that this celt is of Fitzhugh phase affiliation. The only other ground-stone artifact from the type site is a tabular piece of fine-grained sandstone which apparently has been used as a whetstone (Plate IV, 11).

At Transylvania, a small geometrical piece of sandstone with a depression on one surface was obtained from Analysis Unit C-D (Plate XI, m). The depression is rounded in cross section, but roughly rectangular in plan. Other groundstone artifacts from this site include two celt fragments (Plate XI, h, i), and a piece of weathered limestone bearing a single, deep groove with rounded cross section (Plate XI, l). The celts were obtained from Analysis Unit A-B and probably date to the Transylvania component. The grooved limestone derives from Cuts 3, Level 3. With three components represented by pottery in this cut, the artifact's cultural affiliation is difficult to establish. Most likely it is associated with the burned structure which is probably Transylvania phase.

The single component Elk Ridge site has yielded a piece of granular stone with a grinding surface on one side. Other sites with Fitzhugh occupations that have yielded ground stone are multicomponent. Artifacts from Canebrake have been described in Chapter III. Welch, Mott, and Hopkins have all yielded celt fragments and the latter also yielded a sandstone grinding slab. No ground stone occurs in the historic Taensa collections.

Beyond the Survey Area, Brain (1969) reports celts as characteristic of the Deer Creek component at Winterville. At Gordon site, Cotter (1952:Fig. 59 and p. 114)

recovered one sandstone grinding slab and two discoidals in Balmoral phase context (Sub-Mound A village, Mound B, first fill, and Mound A, first fill). A small greenstone celt (ibid.:Fig. 59, 27) was obtained from Plaquemine stratigraphic context (Burial 14, Mound B). Excavations at Fatherland site by Neitzel and Chambers have resulted in the recovery of a number of ground-stone tools including discoidals, whetstone, celts, a boatstone, and paint palettes (Neitzel 1965:48). Chambers recovered the palette and seven discoidals from historic burials in Mound C. The remainder of the artifacts, with the exception of the "boatstone," which came from Stratum 3, Mound C, are without good stratigraphic context.

As with Routh phase, little can be said about the type of ground-stone artifacts associated with Fitzhugh phase. Celts, sandstone whetstones, and discoidals are probably characteristic, but their specific characteristics cannot be determined with the available evidence.

Stone Pipes

Only two pipes are known for the post-Coles Creek occupations of the Upper Tensas Basin. Both were obtained from the Swift Mound opposite Vicksburg, Mississippi (see Appendix II) and are of sandstone. One is a badly weathered effigy pipe, consisting of an unidentified mammal standing on a small rectangular platform. The pipe

bowl is located in the center of the animal's back with the stem opening located between its rear legs. The bowl is accentuated by a slightly raised lip. This specimen belongs to a very distinctive class of pipes found over a large area extending from the Moundville site in the east, to the Lower Ouachita Basin in the west, and from Lake Catahoula in the south, to Memphis, Tennessee in the north. Provenience and published sources for known specimens are:

1. Dundee site (14-0-8), Tunica County, Mississippi (Brown 1926:Fig. 213).
2. Quitman's Landing, Adams County, Mississippi (Brown 1926:Fig. 215).
3. Shadyside Landing, Washington County, Mississippi (Moore 1911:Plate 29).
4. Emerald (26-L-1), Adams County, Mississippi (Brown 1926:Figs. 218-226).
5. Fatherland (26-K-2), Adams County, Mississippi (Neitzel 1965:Plate 13, b).
6. Sycamore Landing (22-H-4), Morehouse Parish, Louisiana (Moore 1909:Fig. 107).
7. Bellaire Mound (18-K-3), Chicot County, Arkansas (Lemley and Dickinson 1937:Plates 5 and 6).
8. Pocahontas (23-0-1), Hinds County, Mississippi (Ford 1936:Fig. 24).
9. Moundville, Tuscaloosa, Alabama (Moore 1905: Figs. 1-3).
10. Kent Place (13-N-4), Crittenden County, Arkansas (Moore 1911:Fig. 26).
11. Mayes Mound (27-I-2), Rapides Parish, Louisiana (Moore 1913:Plate 1).

Brown (1926:Figs. 206-8, 10-12 and 14) illustrates other pipes from Mississippi that may belong to this same class.

The common characteristics of the pipes listed above are as follows:

1. They are effigy pipes depicting humans, cats, birds, or frogs.
2. With the exception of the specimen from Shady-side Landing, the effigy rests on a rectangular platform of roughly the same dimensions as the effigy itself.
3. The effigy faces away from the smoker.
4. The pipe bowl is frequently accentuated by a slightly raised lip.
5. Bowl and stem openings are conical in shape.
6. With the exception of specimens from Kent Place and Mayes Mound, these pipes are made of stone.
7. Cat effigies from Moundville, Emerald and Bellaire share the feature of having the tail encircle the pipe bowl.

Specimens for which cultural affiliation is known (Emerald, Pocahontas, Moundville, Kent Place, Sycamore Landing, Fatherland, and Mayes Mound) date to the general Fitzhugh phase time level with the exception of those from Mayes Mound and Fatherland. The former site is apparently pre-Routh phase in age (Belmont 1966), the pipe from Fatherland may be historic (Neitzel 1965:48). With specimens from Emerald, Quitman's Landing, and Mayes Mound, it is not improbable that this type of pipe is an indigenous development in the general area of the Lower Mississippi Valley.

The second pipe from Swift site is of the elbow type. It bears an incised guilloche design on both sides and two incised lines around its bowl. Bowl and stem holes are conical in shape. Somewhat similar pipes of stone, but without the incised decoration are illustrated by Moore (1911:Fig. 3) as coming from Church Hill, Jefferson County, Mississippi, and are known for Fatherland (Neitzel 1965:Plate 13, A) and Greenhouse (Ford 1951:Fig. 42, 1).

Similar pipes, made of clay, are fairly common in the Lower Mississippi Valley, being represented at a number of sites in the Lower Ouachita Basin (Pritchard, Sycamore Landing, Keno, Seven Pines Landing, and Bray Landing) at Fatherland (Neitzel 1965:Plate 13, c, d) and at Mayes Mound (Moore 1913:Fig. 4). Brain (1969) notes similar pipes as characteristic of the Deer Creek occupation at Winterville site. There is considerable variation on the elbow form in the Lower Ouachita Basin sites, but some Sycamore Landing and Keno specimens (Moore 1909:Figs. 111, 112, 114, and 125) resemble the plainer forms from Fatherland and Mayes.

Two distinct types of pipes--a stone effigy pipe, and a plain clay or stone elbow pipe--seem to have been in use in the southern half of the Lower Mississippi Valley during the Mississippi period. Whether or not

these pipes have different functional significance remains to be determined.

Worked Bone

There is no worked bone in the LMS collection from the type site. Two pieces are present in Analysis Unit C-D at Transylvania, however. One, a cut section of long bone from a large bird (Plate XI, o), is possibly a bead, and the other is a section of deer antler which has been severed at both ends (Plate XI, p). The tine had been deeply incised around its circumference, and was then snapped off. A small incision occurs near the proximal end of the tine. Worked bone from Canebrake, described in Chapter III should also be considered as possibly of Fitzhugh affiliation.

Faunal Remains

Faunal material from the Fitzhugh site and Analysis Unit C-D at Transylvania is identified in Table 47 below. The Canebrake material, some of which doubtless dates to the Fitzhugh occupation of that site is listed in Chapter III. Shell occurs in small amounts in all three cuts at Fitzhugh site. All specimens recovered here have been identified as fresh water mussel (*unio naiadus*) by Dr. W. J. Clench, Department of Mollusks, Harvard University.

TABLE 47

FAUNAL REMAINS FROM FITZHUGH PHASE SITES

	Fitzhugh	Transylvania (Analysis Unit C-D)
Deer	78	61
Rabbit	2	14
Squirrel	3	2
Opposum	1	2
Bear		1
Dog		2
Turkey		1
Unidentified bird	4	1
Gar	10	17
Unidentified fish	72	13
Turtle	5	38
Unidentified	72	146