# V. THE MIDDLE MISSISSIPPI "PHASE": ST. FRANCIS BASIN: PART I. THE CAIRO LOWLAND.

# 1. The St. Francis Basin: Introduction

In attempting to follow the distribution of what I have chosen to call the Cumberland culture up the Cumberland and down the Ohio, it has seemed to me that much of the material encountered could be more satisfactorily explained by reference to a center or centers other than the Cumberland. That is not to say that the lower Ohio, with such important sites as Kincaid and Wickliffe, may not itself constitute a center, a question that can only be answered with far more information than is at present available. My contention is merely this, that if these lower Ohio sites are for the present at least to be classified with better known centers elsewhere, it is to the Mississippi and not to the Cumberland that we must look. More specifically, to that portion of the great river roughly extending from the mouth of the Ohio to the mouth of the Arkansas. This is the real Middle Mississippi area. Notwithstanding the great site of Cahokia and the important manifestations associated with it under the Monks Mound Aspect, this is the region that immediately comes to mind when the term "Middle Mississippi" is encountered. We have reached at long last the heart of our problem. In doing so, unfortunately, we have also reached what is archaeologically speaking the least known portion of the entire Mississippi valley.

This central Middle Mississippi area, if the expression be permitted, has been not inappropriately called a "pot-hunter's

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Paradise". To the student, unfortunate enough to have allowed himself to become intrigued by the vast collections of this pottery mouldering in our museums, it is likely to prove a veritable Inferno. Such, at any rate, has been the experience of the present writer. My own entry into the field of Southeastern archaeology was the result of naïve interest in the extensive collections of the material in the Peabody Museum. Dr. Dixon was kind enough to point out some of the difficulties that lay ahead, but youth and inexperience were not to be put off. It seemed reasonable to hope that research in published sources, supplemented by study of collections in other museums and one or two excursions into the area itself would enable one to round out the full archaeological picture of which this pottery is but a part. These expectations were not justified in the event. One soon found out how little real archaeology had been done in this region, so that any sort of reconstruction, however synthetic, of the archaeological culture in toto was absolutely out of the question. Two alternatives (not counting the obviously sound one of giving up the thing entirely) suggested themselves: one, to make it frankly a pottery study, or more accurately, a mortuary pottery study; two, to undertake a synthesis on a larger scale, that is, to attempt to grasp the configuration of Mississippi culture in its largest sense and then by a sort of distillation to refine it down to a picture of Middle Mississippi culture against which as a background this pottery could be placed. The progress of the McKern school toward a definition of Mississippi culture

made the second alternative seem a reasonable possibility, and it was followed. There resulted an exceedingly toilsome journey from New York State, down the Ohio, with excursions into Illinois and Wisconsin, and up the Cumberland into Tennessee. Certainly a very roundabout approach to the Middle Mississippi proper, but perhaps under the circumstances the only possible one. At least one arrives with general notions of what Mississippi culture is and with fairly definite notions of what its Middle phase is likely to be, without which any sort of interpretation of the meagre and low-grade information ahead would be entirely out of the question.

Precise definition of the area in question is, of course, impossible. To find a satisfactory designation is scarcely less difficult. It is generally referred to by some cumbersome expression, of which "Eastern Arkansas and Southeastern Missouri" offers a fair exemple. Thorne Deuel, the recognized Middle Mississippi authority, simply calls it "Eastern Arkansas", a term which will surely never find favor among those students interested in the Tennessee, Kentucky and Missouri portions of the area. Difficulty in finding a geographical term has led some writers to refer to the "Effigy (1) Ware Area", which has obvious shortcomings it seems to me. Fortunately, the most prolific centers of pottery production lie within a physiographic area known to geographers as the St. Francis Basin, and I see no reason why this term should not serve our purpose in lieu of a better.

<sup>(1)</sup> Birmingham conference, 1932, fig. 7.

The St. Francis Basin comprises the tangle of abandoned river channels and swemps interspersed with low ridges of habitable land that constitute the head of the Mississippi embayment (map, fig. 51). Its geologic history is one of continual changes in the position of the Mississippi, which now forms its eastern boundary, but is thought to have formerly occupied its western portion. Added to which have been great tectonic changes, most recent of which were (1) the great New Madrid earthquakes of 1811-13. The most characteristic effects of these disturbances were the formation of depressed areas or "sunk lands", now become swamps and shallow lakes. The region being a low alluvial one to begin with even the slightest changes in elevation resulting from the earthquake must necessarily have played havoc with the drainage. A map of the district affected presents a crazy tangle of streams and sloughs, lakes and swamps.

These earthquakes are said to represent a continuation of the process by which the Mississippi embayment came into being, namely a subsidence of the hard rock floor, probably with incidental deep-seated faulting. Fennemen, 1938, p. 86-7.

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<sup>(1) &</sup>quot;Beginning December 16, 1811, and lasting more than a year, these shocks have not been surpassed or even equaled for number, continuance of disturbance, area affected, and severity, by the more recent and better-known shocks at Charleston and San Francisco. As the region was almost unsettled at that time relatively little attention was paid to the phenomenon, the published accounts being few in number and incomplete in details. For these reasons, although scientific literature in this country and in Europe has given it a place among the great earthquakes of the world, the memory of it has lapsed from the public mind." Fuller, M. L., The New Madrid Earthquake, U. S. Geol. Survey, Bull. 494, 1912, p. 7.

It is scarcely necessary to observe that at the time of the Indian occupation it may have presented a somewhat different appearance, though in all probabilities the general topographical characteristics

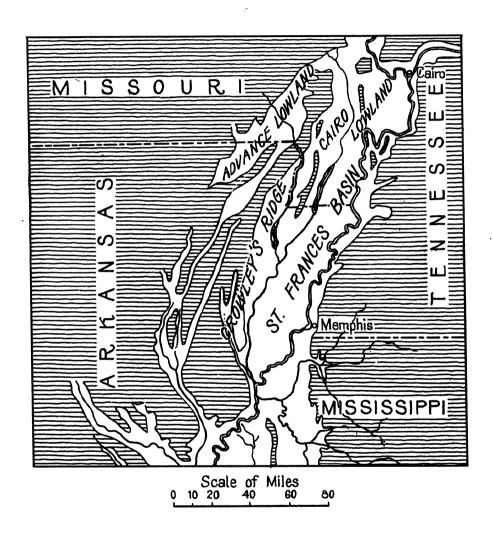


Fig. 51. The St. Francis Basin. (Bowman, 1911, fig. 210).

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were the same.

In borrowing the term St. Francis from the physiographer we may naturally reserve the right to extend its boundaries if necessary. There is no doubt that a certain portion of western Tennessee and northwestern Mississippi lying above the Chickasaw Bluffs, therefore not part of the St. Francis Lowland, must be included. A similar over-stepping of physiographic bounds may be necessary on the west and south. Furthermore it will be necessary, I believe, to subdivide the area. Though presenting a general homogeneity, which I shall endeavor not to lose sight of, there are local differences, chiefly expressed in pottery that require individual treatment. At least three sub-areas, or "centers", since their

In popular literature the entire central portion of the St. Francis Basin is referred to as the "sunk lands", evidently in consequence of the idea that the entire district "sank" as a result of the earthquakes of 1811-13. In his paper on the Chickasawba mound, Curtis J. Little expresses the common opinion, "The area which sank extends from the mouth of the St. Francis river on the south to New Madrid on the north, from the Mississippi river on the east to Crowley's ridge on the west. This depression filled with water which is now called the St. Francis Basin". (Little, 1904, p. 118) This notion, apparently, is wholly unsupported by scientific evidence. In speaking of the New Medrid earthquakes, Arthur E. Morgan continues: "Such is the disturbance which is supposed to have originated the present conditions of the "sunk lands" of Missouri and Arkansas. The examination during this survey indicates that while this territory was always low and wet, the condition of a part was probably changed at the time of the earthquake. The most obvious example of this change is seen in Big Lake. bottom of this lake contains a fallen forest of hardwood, of such varieties as usually grow on fairly dry ground, nearly all of the trees lying in the same direction. It is not clear, however, that this land was sunk by the earthquake. In the case of Big Lake it seems much more probable upon an examination of the local topography that the land west of the lake or at the outlet was raised, thus shutting off the natural drainage and forming a lake.". (Morgan, 1911, p. 10).

boundaries cannot at present be laid down, must be considered. The relationship between two of them seems in the present state of our knowledge closer than that between either and the third, consequently it becomes necessary, at the risk of undue complication, to resort to a pseudo-taxonomic arrangement, as follows:

#### St. Francis Basin

- A. Southeast Missouri, or as I shall prefer to call it, Cairo Lowland
- B. Eastern Arkansas
  - 1. Mississippi River (Pecan Point)
  - 2. St. Francis River

The taxonomy implied in this tentative classification is entirely hypothetical. Pecan Point and St. Francis river are not to be taken as "foci" of an Eastern Arkansas "aspect". Nor can Cairo Lowland and Eastern Arkansas be considered as "foci" of an St. Francis

Basin "aspect", nor for that matter as "aspects" of a Middle Mississippi "phase". How these manifestations will be ultimately classified I do not even care to guess.

#### 2. The Cairo Lowland

"Southeast Missouri" is one of the longest and least known archaeological areas in the United States. Actually its fame rests solely on a concentration of rich remains, fully exploited in the salad days of archaeology, in the eastern portion of the area.

The St. Francis Basin (see map, fig. 51) is divided longitudinally by a narrow tongue of land known as Crowley's Ridge, a topographical feature of no little importance, since it represents the divide

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between the ancient channel of the Mississippi and its present one. The northern extension of Crowley's Ridge into Missouri separates two lowland areas of approximately equal size, the Advance Lowland on the west, the Cairo Lowland on the east. The archaeological remains commonly designated as "Southeast Missouri" lie, so far as can be ascertained from published sources, entirely within the Cairo Lowland, and can therefore be appropriately grouped under If justification for taking liberties with established that name. terminology is required, one can advance the dictum that physiographic names are almost certain to make more sense in archaeology than political. Besides, no one has really gone very far with the old name, perhaps a change is in order. In any case, I shall hereinefter refer to the archaeological manifestation in question as "Cairo Lowland", since it is perfectly clear what is meant by the term.

The topography of the Cairo Lowland partakes of the general characteristics of the entire St. Francis Basin, though perhaps in somewhat accentuated form. Its general surface, but little elevated above the mean stage of the River, is cut up into innumerable tongues of arable land locally known as "ridges", alternating with sluggish streams, bayous and swamps, the whole system tending in

<sup>(1)</sup> Bowman, 1911, p. 526.

<sup>(2)</sup> If there are archaeological remains associable with a Middle Mississippi culture in the Advance Lowland, I have not encountered any reference to them.

a north-south direction. The ridges are generally quite level, with an average elevation above the swamps of 15-20 feet, the size of some of the larger ones being about 40 miles long by 3-10 miles wide. The intervening swamps are heavily timbered with cypress and other wet-land flore, which has given rise to the local expression "cypresses" or "cypries".

This rather special environment, fruitful but unhealthy, and always at the mercy of the River, unless, as some maintain, it was formerly better-behaved than now, seems to have supported a dense aboriginal population. The number and size of settlements fringing the ridges of habitable land has aroused much discussion as to the possibility of their having flourished before the silting up of these old channels, with the implications of antiquity invariably attached to such speculations. The subject scarcely deserves to be taken seriously, when one considers the waywardness of the River, to which must be added the effects of the "great (2) shakes" of 1811-13. However, another line of argument seems not to have been thought of, to wit, that this (to us) wretched environment may have been particularly favorable to our mound building

(1) Potter, 1880, p. 6.

<sup>(2)</sup> In any case, the recent geological history is a record of depression which "has recurred from time to time and is still recurring, as evidenced by the New Madrid earthquake" (Fenneman 1938, p. 84) so that instead of being a case of conversion of open water into swamp, it may rather have been the conversion of dry land into swamp.

savages, affording them protection from their enemies and communication with their friends, to say nothing of abundant supplies of fish and mollusks. While at the same time the frequent inundations of the River encouraged their primitive horticulture by periodically revivifying the exhausted soil. Relative immunity from the unhealthiness of the region would have long since been obtained. Therefore, while in certain respects it may be thought of as a refuge area, which it certainly is at the present time, it is an area that would have rewarded its refugee inhabitants by the bestowal of inestimable advantages, security and an abundant food supply. Instead of marvelling at the extent of aboriginal remains, we should perhaps be surprised if we had not found them.

The discovery that these sites yielded a large amount of saleable pottery was made early and was promptly followed by the usual results. An incalculable number of vessels found their way into private "cabinets", some from thence into museums, with little or (1) no attendant information. One or two creditable reports were published in the 'seventies and early 'eighties, and it is on these (2) that virtually all of the information to follow is based. By all

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<sup>(1)</sup> Evers (1880) states that his study of pottery is based on collections aggregating 4000 whole vessels, which probably represents a small part of the yield of these sites.

<sup>(2)</sup> Beckwith, 1887 Conant, A. J., 1873 Croswell, C., 1878 Evers, E., 1880 Hilder, F. F., 1883 Potter, W. B., 1880

odds the best of these is Potter's "Archaeological remains in Southeastern Missouri" published in 1880. Published material of more recent date there is none. So far as I have been able to discover, no archaeological work has been done since this first (1) period of activity. As a result of these conditions, one can draw on an immense amount of pottery in museum collections, for the most part undocumented, and very little else besides. Anything like a rounded picture of the archaeology of these Cairo Lowland people is, unhappily, out of the question.

Cairo Lowland sites: The sites described by Potter, our best source for this kind of information, are located (1) on the Sandy Woods Ridge near Diehlstadt, Scott county, and (2) on the New Madrid and Sikeston Ridge near New Madrid in the county of that name. Differences between the two locations, if there be any, are not significant from the point of view of this study. Pottery from the two groups of sites appears to be thoroughly homogeneous. Even the sites themselves are remarkably consistent in general features, so that it will be sufficient to describe one group of them, commenting briefly on the others only insofar as they present exceptional features.

Sandy Woods Site: This site occupied a small isolated portion of the Sandy Woods Ridge, a half mile long by an eighth mile

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<sup>(1)</sup> This is one of the few regions in the Southeast, accessible by water, unvisited by Clarence B. Moore, or at least unreported if visited. It is not improbable that the reason for his neglect was the knowledge that the pot-hunters had done their work well and thoroughly.

wide, completely rimmed about with "cypries". The settlement covering practically the whole of this tract, consisted of nine mounds of varying sizes and shapes and a large number of circular depressions, "house circles", the whole enclosed by a low wall and ditch in the form of an irregular parallelogram (fig. 52d). principal mound, Mound A on the plan, was of truncated pyramidal form, quite regular in outline, 250 by 120 feet at the base and 16 feet high. It is said to have been excavated to some extent but without significant results. A point of interest, however, is that its surface is said to have been covered with fragments of "rude bricks of baked clay, containing impressions of grass or straw". Next in importance was Mound B, a truncated cone, about 100 ft. in diameter and 20 ft. high. The remaining mounds were circular or oval in plan with slight elevation. Two of them, marked H on Potter's plan, are of interest for the large number of burials they contained. They were both very low, not more than 2 ft. in height, but rather large, somewhat over 100 ft. in diameter. was reported that each contained between 100 and 200 burials, and the number of vessels recovered was estimated to have been between 800 and 1000.

More interesting than the mounds, perhaps, are the "house circles". These are said by Potter and others to be a constant feature in all mound sites in the region. They are described as

<sup>(1)</sup> Potter, 1880, p. 8 et. seq.

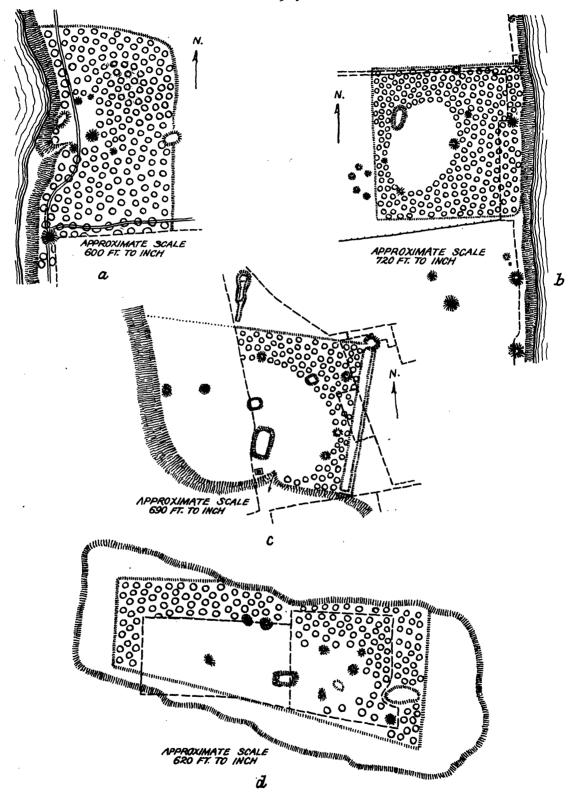


Fig. 52. Cairo Lowland sites (Potter, 1880).

circular depressions averaging about 30 ft. in diameter and 2 ft. in depth. As shown on the various plans, they are closely crowded together without any observable arrangement, their centers being (1) (according to Potter's estimate) about 50 to 65 ft. apart. At or near the center of each circle and about 15 in. below the present surface, is normally found a 2 to  $2\frac{1}{2}$  ft. "square" of burnt clay, the domestic hearth.

Potter draws attention to one feature, not quite as well exemplified at the Sandy Woods site, (owing to intensive cultivating of the northernmost of the two fields shown on the plan) to wit, the grouping of mounds and house sites around a plaza. This is an elliptical space, entirely free of house remains adjoining the large mound (it should have been mentioned perhaps that there seems always to be a single dominant mound). The long axis of the plaza runs parallel to the long axis of the mound. The remaining mounds, or some of them, tend to be irregularly placed about the periphery of the plaza.

New Madrid and Sikeston Ridge: This ridge, as may be seen by (2)
reference to Potter's map, is completely fringed with aboriginal settlements, marked by groups of mounds. Four of these, lettered A, B, C, and D are described by Potter, and there are at least

<sup>(1)</sup> A. J. Conant (1873) in connection with sites near New Madrid, says that the house circles were aligned in "streets".

<sup>(2)</sup> Potter, 1880, Plate B.

20 more. Considering the scale of the map (the grid represents square miles) one has the impression of a dense occupation, unless, of course, these sites represent a long period of shifting occupancy. Of the four lettered sites Potter gives plans of the first three, which are reproduced here (figs. 52a-c). Their general similarity to the Sandy Woods site just described is sufficiently obvious, nevertheless even the meagre records offer some points of additional interest.

Site A: The typical features may be seen at a glance (fig. 52a): dominant mound abutting directly on a plaza; lesser mounds grouped irregularly about the plaza; house sites packed into the remaining space; the whole enclosed by a rectangular embankment and ditch. Here, as in the Sandy Woods site, two of the lesser mounds were burial mounds containing a large number of burials, rich in pottery. They were excavated by Col. Croswell, whose report brings out some points of interest. The larger of the two mounds contained "at least 300 bodies". The manner of deposition merits quotation at length. "The mode of raising this mound was apparently by first depositing a layer of the dead over the space appropriated for the purpose and covering them to a depth of about 14 inches. After this had been accomplished a second layer was commenced, gradually contracting the circle to give the required slope. When the mound had received all the bodies that was desirable (elsewhere the author mentions six of such "layers"), soft clay was spread over the whole surface, after which followed a final covering of sand. The coating

<sup>(1)</sup> Croswell, 1878.

of clay was probably intended to prevent the penetration of water.

In the manner described the mound was gradually raised to a height (1) of about 7 feet." This clay cap, unfortunately not more particularly described, is an interesting feature as we shall see. The burials were, with one or two exceptions, extended at length without any consistent arrangement or orientation. Croswell got 18 skulls but does not describe them beyond commenting on their occipital flattening and high masal bones. This last point he finds significant in connection with the decidedly beaky features exhibited (2) by the effigies from this region.

Col. Croswell also excavated several house sites and found the features already described. He gives them smaller dimensions than Potter, however, giving diameters of 8 to 14 ft. as against (3) Potter's 30 ft. Both writers are describing the same site. The discrepancy is not serious when one considers the difficulty of measuring what could have been nothing more than vague depressions in the soil. There is no indication in either report that any house floors were actually cleared in such a way as to make the determination of their size and shape possible. I shall return to this point later in considering the question of the shape of

<sup>(1)</sup> Croswell, 1878, p. 534.

<sup>(2)</sup> Ibid., p. 535.

<sup>(3)</sup> Ibid., p. 532. Potter, 1880, p. 12.

these structures, whether circular, as all early investigators have assumed, or rectangular, as we have come to expect after examining similar evidence in other Middle Mississippi cultures.

Site B: This site (fig. 52c) is a mile and a half west of
New Madrid and is known locally (or was -- I have no doubt that it
has completely disappeared from view) as "Mound Group on Lewis'
Prairie near Mound Church". It seems to have been the largest of
all these settlements, but had suffered gravely from cultivation
at the time of Potter's survey. Again the same general features are
present. Potter notes however that the long axis of the big mound
is not parallel to that of the plaza, but this may not be particularly significant. The curious double wall at the east boundary
of the settlement with its bastion-like termination is an exceptional feature, as is also the elongated paddle-shaped mound just outside the north wall.

We have a little first-hand information regarding this site. Professor G. C. Swallow dug here in the early 'seventies. Later he sold his extensive collection to the Peabody Museum and with it there came evidently some fragmentary field-notes. These are interesting enough to make one keenly regret the loss of the complete record. On the basis of these notes, possibly more complete at the time, Prof. Putnam wrote a description of the Swallow collection (P. M. 8th. ANN. Rep. 1875, pp. 16-46) which contains a few additional details.

Swallow worked in the big mound and in a smaller burial mound. The latter disclosed the usual large number of burials and

pottery vessels. Burials seem to have been on a single level, ( it was a very low mound) extended, feet toward the center, and apparently crowded as close together as possible. The big mound is more interesting. Swallows dimensions are 240 by 192 by 29 ft. high. He ran a six foot trench through the center of the mound and down to base level. (It has just occurred to me to wonder why it didn't cave in on him.) The base of the mound was found to be about 9 ft. below the surrounding surface, which had been raised since the construction of the mound by the accumulation of six ft. of alluvium and three ft. of topsoil. The 3 ft. layer of soil also covered the mound. At the base of the mound, and in the center, were found remains of a structure which, if correctly interpreted by the excavator, presents some interesting features. This was a gable-shaped structure of slanting poles, covered by split canes laid on longitudinally, the whole being plastered inside and out with clay to a sufficient thickness, it seems, to have completely imbedded the poles and cane. The outside of this clay coating is said to have been rough, the inside smooth and painted red. fragments found had been, of course, subjected to the action of fire, or they would not have survived, but there is no means of knowing whether such firing was purposeful or accidental. One would like to know more about the alleged painting of this plaster. Both Swallow and Putnam refer to it, but it must be confessed the briquettes in the museum collection bear no traces of paint. The furnishings of this interior chamber are not very well described. Apparently

there was a hearth upon which was a heap of ash and charcoal containing many fragments of human and animal bone. Nearby was a pot containing a human skull. Swallow swears and will produce any number of reputable witnesses that the orifice of the pot was smaller than the skull, the pot had to be smashed to get it out. It would be easy enough to build up a pot around a skull, but whether it could be fired without destroying the skull, I do not know, but suspect the whole story. This was apparently the only indication of anything resembling a burial in the chamber, but a considerable number of artifacts were secured, all sufficiently typical of the culture so as not to require description here.

One feature remains, and in my opinion a very interesting one. The entire mound is said to have been covered by a four-inch coating of "plaster" (by which of course he means clay) which bore impressions of cane, leaves and grass. It will be recalled that something similar was indicated in the case of one of the Diehlstadt mounds, also at Site A of the present group. Dr. Kelly in his work in Georgia has found repeated evidences of what might be called an "architectural" use of clay, that is to say, as an outside plating for mounds, terraces etc. The implication of these facts is extremely interesting. We think naturally of mounds in terms of their present appearance, as covered with sod and vegetation and consequently lacking in sharp angles and plane surfaces, lacking, in short, any architectonic character whatever. Now if mounds such as the present one were plastered with clay it does not seem likely that they would accumulate any sod, unless indeed they were deliberately sodded by their builders, in which case one wonders how the

sod would be made to stick on the sloping flanks of the mound. It will be noticed in this connection that the 3 feet of topsoil on the mound corresponds to that on the surface and is of recent origin.

Therefore the clay cap seems to have formed the original outer surface of the mound. Such being the case I do not see how it is possible to escape the conclusion that the clay was applied deliberately for architectural effect, that its function is analogous to that of the stone veneer of mounds in the Middle American area. This idea brings with it a number of interesting possibilities, but it is perhaps wiser to refrain from pursuing them until we have secured confirmatory evidence bearing on the point.

Site C: A smaller settlement (fig. 52b) this site exemplifies remarkably all the characteristics that seem to be typical of Cairo Lowland in general, rectangular embankment, oval plaza with dominant mound abutting upon it, the remaining space being closely crowded with house "circles". Potter's only reference to excavations at this site is a remark that one of the mounds had furnished a large (1) amount of pottery. This probably refers to the excavation described by Conant, which adds very little to our knowledge of the site.

Conant does, however, mention the finding of briquettes of clay daub on some of the house sites, which seems to establish pretty definitely that wattle-and-daub construction was used not only for (2) building of a public character, but for domestic structures as well.

<sup>(1)</sup> Potter, 1880, p. 15.

<sup>(2)</sup> Conant, 1873, p. 353.

Site D: May be dismissed with the simple statement that it differs from the others only in lacking certain features, due no doubt to its small size. In every other respect it conforms abso(1)
lutely to the pattern.

### 3. Summary description of Cairo Lowland culture: non-ceramic

Little more than the foregoing can be gleaned from the older literature. Of recent literature there is none. Though replete with all the faults adhering to the period in which they were written (not one of these writers believed for a moment that he was not dealing with some "vanished civilization") nevertheless out of their accounts there emerges a remarkably consistent picture. The only possible conclusion is that the subject of their investigations was a strikingly homogeneous manifestation of culture. It becomes therefore, a relatively easy matter to define its main characteristics, and these will be seen to fit very well into the general pattern of Middle Mississippi culture as already defined. For closer comparative study, however, the necessary details (except in pottery) are unfortunately not at hand. The following summary of Cairo Lowland culture in its non-ceramic aspects can, therefore make no pretense to completeness.

General site characteristics: In general arrangement Cairo

Lowland sites agree more closely with the Cumberland than with

Cahokia. There is the same lack of rectangularity and consistent

orientation. As in the Cumberland the plaza is a conspicuous feature

(1) Potter, 1880, p. 16.

with its dominant mound close by, the smaller mounds grouped irregularly about the remaining three sides. This would seem to be the characteristic Middle Mississippi assemblage, the Cahokia sites being exceptional only though a more formal presentation of the basic plan.

Mounds: Mounds are not remarkable for their size nor number, corresponding in this respect closely with the Cumberland. evidence does not permit us to say very much about their interior structure, but so far as it goes is not at variance with the findings in the Cumberland. In other words it would seem safe to say that the larger mounds were domiciliary in character. Careful excavation would have, no doubt, revealed the same superposition of successive house floors. Unfortunately we shall have to be content with the mere assumption. Burial mounds seem, at first glance, to be more important here than in the Cumberland, since practically all the burials described were in mounds. On the other hand, judging from the one careful description of such a mound, it may still be questioned whether we have anything more than a vertical accumulation of burials independent of any actual mound-building intent. In any case the correspondence to the stone grave "mounds" of the Cumberland, subtracting the stone graves themselves, is very close.

In respect to superficial characteristics of form, we are in little better case. Only a few of the largest mounds are represented on Potter's maps as rectangular. This agrees, however, with our findings elsewhere, and seems to permit the generalization to

stand, namely, that the larger mounds were often, though by no means always, of the rectangular truncated type, whereas the smaller mounds may have lost their rectangular shape through erosion and cultivation, or may never have possessed it. The latter, I believe, is more likely to have been the case.

Circumvallations: Cairo Lowland sites would seem to have been pretty consistently in need of defensive works. Their exact nature is not disclosed. If the slight "ridges" mentioned by our authorities and delineated, too precisely one fears, on their maps, represent earth thrown against the bases of palisades, these must have differed from those of Aztlan and the Cumberland in not possessing the regular bastions or fighting platforms characteristic of those sites. It is unfortunate that the evidence is not more explicit in regard to this interesting point. These embankments apparently consistently agree in being rectilinear if not actually rectangular in outline. In this respect the similarity is more with Aztlan than with the Cumberland.

House types: In the matter of dwellings our information is incomplete, in the sense that it does not permit a reconstruction of the actual structure, but in some respects it is fairly clear and consistent. Apparently without exception houses were partly subterraneous. The original depth is difficult to estimate without better knowledge of existing topsoil conditions. Depressions at the time of investigation are said to have been about 2 ft. in depth, the surface of the burnt clay floor another 15 inches or so below that. The original excavated portions of these houses must have

been somewhere in the neighborhood of 2-3 ft. in depth, in other words semi-subterranean pit houses. In size they seem to have varied considerably, with the longest dimension averaging somewhere in the neighborhood of 30 ft. The question of shape is subject to the same difficulties to which I called attention in discussing the house types of the Cumberland. All investigators agree in describing the depressions as circular, but no actual excavations are reported that would establish the fact. Cumberland houses were not semisubterranean so the fact that they turned out to be rectangular may have no particular bearing on the question here. The houses of Spoon River, however, were semi-subterranean, and though the depressions that marked their former presence were round, upon excavation the houses invariably turned out to have been rectangular. The probabilities, it would seem, indicate a similar situation here, though one should naturally hesitate to pronounce upon it without confirmation by excavation.

The only facts bearing on the manner of construction are several references to the finding of "briquetts" bearing impressions of poles and split cane, indicating some type of wattle-and-daub construction. In respect to interior arrangement the only information is that at or near the center of each house floor was a baked clay hearth about 2 ft. square, flat on top, thus differing somewhat from the basin-shaped firepits commonly found in the Southeast.

Burials: I have already referred to the circumstance that all, or almost all, burials seem to have been in mounds, or at any rate, formed accumulations for which the term "mound" may or may not be an

appropriate designation. There seems to have been nothing comparable to the great flat cemeteries of the Fort Ancient, Cumberland and Eastern Arkansas cultures. The correspondence is rather with Spoon River and, I believe, the Wycliffe site in nearby Kentucky. If one accepts the interpretation advocated here that such mounds have little significance qua mounds, the correspondences or lack of correspondences just cited have little or no importance. In short, I find it easy to discount this alleged "mound" factor and thus arrive at the conclusion that Middle Mississippi burial practices, so far as we have considered them, run remarkably true to type.

The occasional burials encountered outside the mounds among the house sites seem to have been mostly children. Whether these were actually sub-floor burials is not clearly brought out by the evidence. By analogy with the Cumberland one would think it very likely. In any case, translated into more general terms, some sort of special treatment for children seems to have been in effect and is, perhaps, also a significant Middle Mississippi trait.

Precise statements as to manner of disposal are precluded by the fragmentary evidence. As far as it goes, however, there is nothing inconsistent with the general formula for Mississippi burial practices: predominatly extended, secondary "bundle" and mass burials not uncommon, flexed position rare; artifacts fairly abundant, chiefly in the form of pottery.

Artifacts: stone: Since they were dealing with an "extinct civilization" our authorities naturally shunned such low artifacts as stone tools and arrow points. Such Indianoid (as we would say

today) objects were disregarded entirely or attributed to later occupation by peoples of actual Indian stock. The latter interpretation was not so unreasonable as first appears, for, as we have seen, stone implements do not commonly occur in Middle Mississippi burials. The stone materials accompanying the immense pottery collections in the Museum are disproportionately few in number. Furthermore it would seem that, with few exceptions, they represent surface finds and are not even confined to the sites that produced the pottery. Accordingly we are reduced to a mere handful of specimens on which to base a few general remarks on the stonework of the Cairo Lowland culture.

The evidence, meagre as it is, shows a remarkable similarity to the Cumberland. Some individual specimens would be indistinguishable in a series of corresponding types from that area. In some cases even the material itself is the same, so that the possibility of trade comes in question. As in the Cumberland, projectile points and other small chipped objects seem to be very rare, in fact they are absent altogether in the collection before us.

Chipped agricultural implements compare closely with those from the Cumberland, (fig. 53 - cf. fig. 26) chipped celts and adzes (or "chisels") even more closely. (fig. 54 - cf. fig. 25) The smaller partly polished celts and adzes recall the Cumberland, at the same time, through similarity of material, suggest a closer connection with eastern Arkansas (fig. 55). It is most encouraging, the way in which these types run through the various Middle Mississippi cultures almost without change. Small polished celts, small

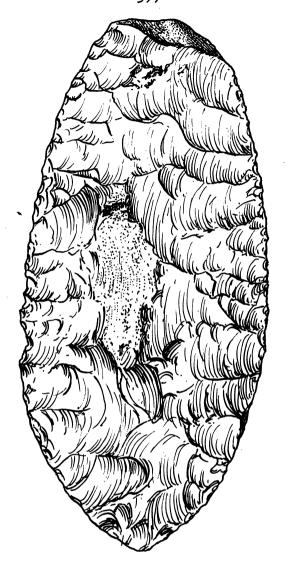


Fig. 53. Flint "spade", Cairo Lowland culture. Scale 1:2. (Peabody Museum).

discoidals and a single frog effigy pipe make up the balance of the collection. Altogether not worth wasting much time over, it does nevertheless in gratifying fashion bear out some of the assumptions in regard to Middle Mississippi stone types thus far arrived at.

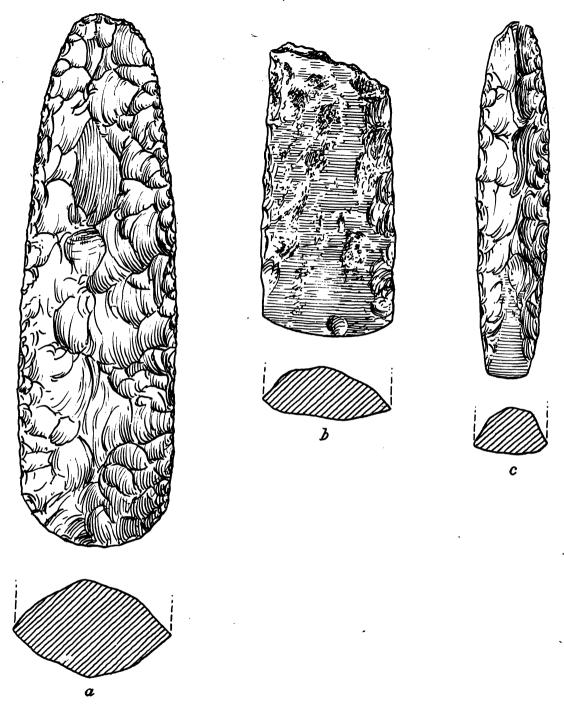


Fig. 54. "Humpbacked" celt, adze and "chisel", Cairo Lowland culture. Scale 1:2. (Peabody Museum).

Bone: There are not sufficient bone materials in the Museum collections to make any generalizations possible, nor can the deficiency be made up by recourse to the published sources.

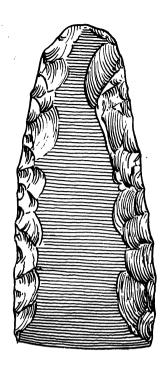


Fig. 55. Small partly polished celt, Cairo Low-land culture. Scale 1:1. (Peabody Museum).

Shell: engraved gorgets: Aside from a few casual references to utensils and objects of shell, such as we have come to expect in a Mississippi culture, there is little of a specified nature to report. Exception should be noted in the case of engraved gorgets which have occasionally received more particular attention. We have also a very interesting paper by MacCurdy describing a series of gorgets from Perry county Missouri. place of their occurrence lies somewhat outside the Cairo Lowland area as I have defined it, but their similarity to examples found within the area makes it possible to include them in a general discussion such as the present.

The guilloche: Referring to the very tentative classification adumbrated in the section devoted to the gorgets of the Cumberland, the present exemples fall into the following categories: the Cross (guilloche), Spider and Naturalistic (human figure). A very fine exemple of the guilloche is seen in fig. 56,c. This motive has a fairly wide distribution in the Southeast, being found occasionally in the stemped ware of the southern Appalachian region (fig. 56,a) and in the beautiful engraved ware of the Ouachita river (fig. 56,d). An exemple is figured by Moore, rudely scratched on the bottom of a typical Natchez vessel from the Bayou Macon in eastern Louisiana

(1) MacCurdy, 1913.

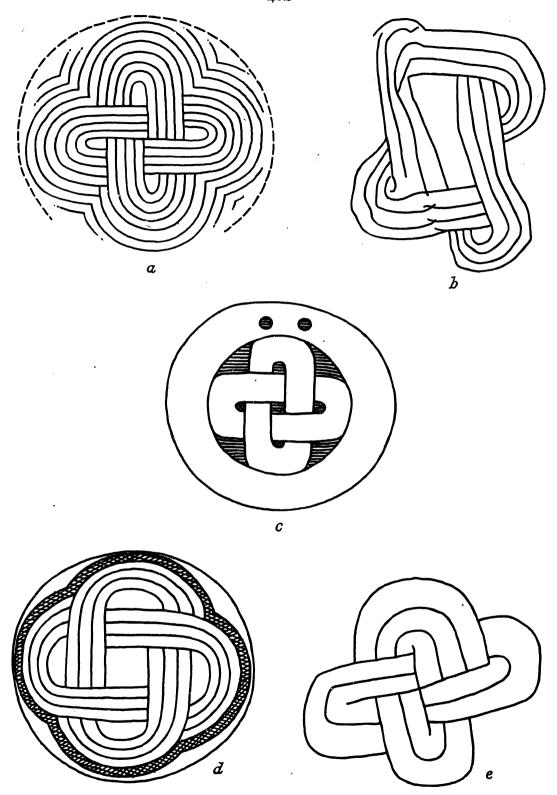


Fig. 56. The guilloche in the Southeast and Middle America. a, south Appalachian stamped ware (Holmes, 1903, Pl. CXIV,a); b, from bottom of Natchez type vessel (Moore, 1913, fig. 21); c, engraved shell gorget, Cairo Lowland culture (MacCurdy, 1913, fig. 62); d, engraved ware, Ouachita river (Moore, 1909, fig. 151); e, graffiti, Temple of the Chac Mool, Chichen (Morris, 1931, fig. 261,b).

(fig. 56,b). The figure has a wide distribution in Middle America, I believe. The only instance, however, that I can recall at the moment is among the graffiti in the sanctuary of the Temple of the (1) Chac Mool at Chichen (fig. 56,e).

The spider type: One of the most interesting, and certainly one of the rarest, classes of gorgets is that in which the spider is more or less realistically depicted. Holmes figures four exone from our Site A on the New Madrid and Sikeston Ridge; two from St. Clair County, Illinois, across the river from St. Louis; a fourth from Fain's Island in East Tennessee. To which may be added the two specimens figured by MacCurdy from St. Mary's, Perry County, Missouri; and one found by Moorehead at Etowah. This mere handful of gorgets seems to fall readily into two types. Tennessee and Etowah specimens are alike in presenting a rather more conventionalized spider against a cut-out background of concentric The remaining five specimens from southeastern Missouri and adjacent Illinois are so remarkably similar that they not only constitute a type, but may even have derived from the same workshop. A single illustration, fig. 57 will serve adequately for them all. The only specimen of the five with known archaeological

<sup>(1)</sup> For an excellent account of the use of the cross and related symbols as pottery decoration in the Mississippi valley see Willoughby 1897.

<sup>(2)</sup> Holmes, 1883, Pl. LXI, (opp. p. 288). MecCurdy, 1913, figs. 67, 68, p. 402-3. Moorehead, 1932, fig. 32b, p. 60.

associations is the one from Site A previously described. The circumstances of the find are fully described in Col. Croswell's (1) report of his investigations at that site. We can, therefore, with justification regard this as a Cairo Lowland type. The occurrence of two specimens on the Illimois side opposite St. Louis is interesting, suggesting a strong probability that the trait

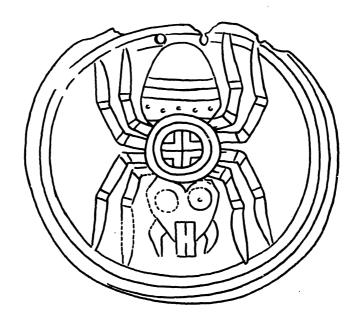


Fig. 57. Engraved shell gorget, Spider type, Cairo Lowland culture. (MacCurdy, 1913, fig. 67).

was also associated with the Cahokia complex which occupies that region.

The significance and remoter associations of these spider representations have occupied several writers. Zelia Nuttal was,

(1) Crosswell, 1878, p. 537.

I believe, the first to call attention to the Middle American implications involved. She saw in the symbolic bearing of the spider and other associated gorget types definite proof of historic connections with Mexico and the Mayas. MacCurdy, on the o her hand, takes a very conservative view, regarding the thing purely as an example of successful naturalism with only secondary, if indeed any at all, mythologic significance. Possibly Mrs. Nuttal spins too fine a thread for her Tezcatlipoca-as-spider and the migration of his cult to the outlandish northern regions. One feels, nevertheless, she is nearer the truth than MacCurdy. One gets a trifle impatient with common sense so flagrantly displayed. cross, which occurs on the backs of all spiders of the Missouri type, is robbed of any significance. "The cross which sometimes actually occurs on the abdomen, the artist has for some reason placed centrally over the thorax. In Epeira insularis, a species common to the Mississippi valley and the United States generally, the abdominal cross is quite distinct." The important consideration ably supported by Mrs. Nuttal but overlooked by MacCurdy is the association with the spider of other gorget types having obvious symbolic or mythologic implications, some of which have remarkably close analogies in Mexican and Mayan symbolism as we have seen.

<sup>(1)</sup> Nuttal, 1901, p. 44 et seq.

<sup>(2)</sup> MacCurdy, 1913.

<sup>(3)</sup> Ibid., p. 403.

Considered in this way, as one of a number of closely linked traits, the case for the Mexican derivation of the spider motive becomes a good deal stronger, though perhaps not asstrong as Mrs. Nuttal would have it appear.

Naturalistic human figures: Of the rare human figure gorgets two examples only are known, fig. 58, the first from St. Mary's, Perry County, Missouri, the second from a mound in New Madrid County, in the heart of the Cairo Lowland area. Notwithstanding the lack of positive associations, I think we may be justified in regarding both specimens as pertaining to the Cairo Lowland cultural facies. Comparison with the two similar gorgets from the Cumberland shows at once that they are of precisely similar type. Observations on the Cumberland examples apply with equal force here. short we have evidence of the closest possible stylistic affinity with the copper repousse of Etowah and the shell carving of Moundville and Spiro. These two gorgets alone, were other contributory evidence lacking, would suffice to bring the Cairo Lowland center into the orbit of that curiously enigmatic Etowah-Moundville-Spiro influence, the interpretation of which is becoming more and more the chief preoccupation of the present study.

Absence of copper: With the general scarcity of copper in Middle Mississippi sites and the lamentable incompleteness of the record in the present area, the non-appearance of copper in any form is hardly a matter for surprise. The famous Malden plates from Dunklin county are unfortunately utterly without archaeological association, nor have any sites of the Cairo Lowland facies been

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Fig. 58. Engraved shell gorgets, naturalistic types, Cairo Lowland culture. Scale 1:1. (a, MacCurdy, 1913, fig. 70; b, Thruston, 1897, Pl. XVII).

reported in the general vicinity of the find. Furthermore the location of the find, so near the headwaters of the St. Francis, suggests the possibility of their association with the important center further down that river, and I shall accordingly deal with them in the section devoted to Eastern Arkansas.

## 4. Cairo Lowland pottery

In the section devoted to Cumberland pottery I was constrained to offer elaborate explanations and excuses for the sort of material on which my tentative classification was based. now that I should have saved all apologies for I need them now far more than I did then. What follows here is based entirely on collections of mortuary pots in the Peabody and the American Museum of Natural History. To the extent that mortuary pottery differs from the ordinary run of the mill must the classification and description that follows be judged incomplete. Unfortunately I am not prepared to answer this question yet, and cannot well be until I have done some actual digging in the region (or until some one else has). By analogy with the Cumberland, where a modicum of sherd material was available, it would seem that the commoner domestic pottery, especially that represented by large cooking jars, seldom gets into burials. On the other hand we must not be led to suppose that the pottery before us is mortuary in the sense of specialization for purely mortuary purposes. One has the impression, rather, that for funeral purposes pottery was selected from

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forms that were in ordinary use as storage and service vessels, but
(1)
not actual cooking vessels. The factor of sizewas perhaps also
important, that is to say smaller sizes of cooking pots were often
included, if indeed they may not have actually been made expressly
for the purpose.

To the question, then, as to how far the material in hand may be said to be representative of Cairo Lowland pottery as a whole, one may tentatively reply that though perhaps a small fraction numerically of the total output, it embraces nearly all forms that were in daily use, and particularly all forms that are most (2) useful and significant for culture comparison. Thus, although the lacunnae in the tentative classification that follows are not to be minimized, its usefulness, I believe, is not entirely vitiated by them.

Classification: The tentative scheme put forward for the Cumberland can be re-used here with but little modification.

There are undoubtedly the same three types of drab ware, though because of the lack of sherd material the existence of a plain drab analogous to that of the Cumberland cannot be substantiated. A thin drab type is unmistakably present; it does not show, to

<sup>(1)</sup> I do not believe this generalization can be sustained for the whole Middle Mississippi region. In the St. Francis river collections, for example, a great many vessels show unmistakable traces of use over the fire. One is struck, too, in making gross comparisons of St. Francis and New Madrid collections, that the former run to larger sizes, an effect possibly due to the inclusion of many cooking vessels.

<sup>(2)</sup> What part, one may ask, have culinary wares played in culture classification in the Southwest?

the same extent as in the Cumberland, a tendency to merge with polished drab. The latter is, again, the definitive type, embracing all highly developed and specialized forms. When it comes to decorated wares the situation is somewhat more complicated than in the Cumberland, owing to the presence of both direct painting and lost color, and their frequent combination on the same vessel. Furthermore, there is a plain redware, which, it will be recalled, was surprisingly absent in the Cumberland. Finally, as to the question of salt-pan ware, we may venture to assert its probable presence but lack at the moment sufficient evidence to prove it. Thus we have the following types:

# Drab ware:

- 1. Plain drab
- 2. Thin drab
- 3. Polished drab

## Red ware:

## Lost Color:

### Painted ware:

- 1. Red on buff
- 2. Red and white
- 3. Polychrome (red, white and black)

Combination: (lost color and paint)

### Salt-pan ware:

Drab wares: Plain Drab: The presence of this type is inferred, but I would go bail for it, and for the fact that the predominant if not the only shape is the standard jar, on which I have already rung so many changes. There are, as a matter of fact, in the present material a few of these jars, which except in point of size could be classified as Plain Drab. Since, however, they might

also be considered as merely coarse variants of Thin Drab, I shall omit them entirely.

Thin Drab: Recognition, in the Cumberland, of a type intermediate between Plain and Polished Drab and its designation as Thin Drab was frankly a tentative proceeding. Doubts as to its validity were fully expressed at the time (vide p.309). Here in the Cairo Lowland section we find a parallel situation, but it is possible to make out a better case, I believe, for the validity of the type. Of its relationships to Plain Drab we can, of course, say nothing, but it is at least quite clearly distinct from Polished Drab, more so than was the case in the Cumberland. Briefly put, its chief distinguishing characteristics are thin walls and coarse shell The combination of the two seemingly incompatible tempering. characters results in a distinctive type of paste, a sort of ceramic disharmony, with a strongly laminated structure, the laminations necessarily running parallel with the vessel wall. The surface shows little if any effects of polishing, with the result that a good deal of the shell tempering is either visible on it or, having leached away, has left very characteristic angular pock-marks. One is seldom at a loss to distinguish this type from Polished Drab, even without the help of such factors as shape and decoration. Color ranges through various shades of drab, the greatest number of specimens falling perhaps somewhere between hair brown and

<sup>(1)</sup> In the case of shell tempering at least there seems to be no positive correlation between thinness of vessel walls and fineness of temper. So far, both in the Cumberland and here, we have found the thinnest pottery having the coarsest temper.

chaetura drab on the Ridgeway scale. In general, so far as color is concerned, there is little to distinguish this type from Polished Drab, except that a considerable number of specimens show a carbon deposition as a result of being used over the fire with a consequent slight rufous cast. This, however, is by no means well marked enough to be of any great utility in sorting.

A mortuary version of the standard cooking jar? Plates XI-XII: Representative examples of thin drab ware may be seen in Plates XI-XII. With the exception of a small but interesting group to be noted presently, they fall into what I have elsewhere designated as a small mortuary version of the standard cooking jar. The significance of this expression, if indeed it has any, will be discussed later. The shape is globular slightly flattened, that is to say with a diameter generally in excess of the height.

Average diameter is about 6 in. with a normal range from about 4 (2) to 8 in. With respect to rim adjuncts, the normal situation seems to be the possession of two vertical loop handles, which tend to be oval or flattish in section but without approaching the broad strap

<sup>(1)</sup> If, in the Cumberland, this expression may have been taken in the sense of a type of vessel specialized for mortuary purposes, it should not be so taken here. There is evidence in the form of carbon deposition on several vessels pointing to their use over the fire. They may have been ordinary domestic vessels in actual everyday use. In any case they were selected from the commoner larger cooking vessels (whose existence we have assumed) for use as funeral offerings, so in this restricted sense the term "mortuary" may be allowed to stand.

<sup>(2)</sup> Average diameter of 20 vessels selected at random was 5.86 in. with an extreme range from 4.5 to 7.75 in.

(1)

handles of the best Cumberland specimens. Vessels with four handles occur but rarely. The substitution of lugs for handles is seen in three examples (Pl. XII. D. 2-3) but associated with paste and surface characteristics that are transitional to Polished Drab, hence may be considered as doubtful members of the group. The combination of lugs and handles, however, as in the Cumberland, frequently occurs.

The majority of these jars are lobate with the effect accentuated, as in the Cumberland, by decoration in incision, punctation or both. Another device analogous to lobing, but accomplished by pressure from without rather than from within, may be seen in Plate XII. A.1-B.4. This decorative device, perhaps more appropriately referred to as 'gadrooning', is common in the Cairo Lowland section, possibly as the result of influence from the St. Francis where water bottles are sometimes gadrooned in the full sense of the term.

So far, what I have described is a situation precisely parallel to that of Thin Drab in the Cumberland. A comparison of Plates XI and XII with Plate I shows at once how remarkably similar are the two groups, particularly with respect to form and decoration. The absence in the Cairo Lowland of modifications by the addition of conventionalized animal features must be noted, however. This

<sup>(1)</sup> If we have any right to regard the handle as evolving from a small round-sectioned affair to the strap handles characteristic of what appears on other counts to be the most highly evolved forms in the Cumberland, the situation of the New Madrid material must be taken as intermediate.

arparently is a Cumberland specialty. In its place we have here a no less interesting modification, one which, far from being a local specialization, seems to have implications of far-reaching significance. I refer to the so-called shoe-form vessels shown in Plate XII D.1, D.4, E.2-4. The interest that attaches to this widely distributed form wherever found justifies, in fact compels, a digression at this point.

The shoe-form pot: There can be no question that these pots belong to the Thin Drab category as I have defined it. This is important as it distinguishes them from all other effigy and eccentric forms (which are invariably in polished or painted wares) and requires their separate consideration. It is also important insofar as it suggests their connection with culinary processes. Let me make this point as clear as possible. I have given reasons for supposing that Thin Drab, if not actually a culinary ware, is at least closely connected with the dominant culinary ware, possibly as a mortuary variant. Some vessels actually bear traces of having been used in cooking. The only variant from the standard form in Thin Drab is this shoe-form vessel. The conclusion that it also is (or represents) a cooking vessel follows plainly. other words, if it were advisable to attempt to divide Cairo Lowland pottery on the basis of culinary or non-culinary function, the shoe-form would find itself on the culinary side of the line, and it is the only effigy or eccentric form that would be so placed. The importance of this point will, I hope, presently appear.

The distribution of the shoe-form vessel is sporadic from

(1)the Mississippi valley and Southwest to south-central Chile. enormous spread alone would indicate a considerable antiquity. In support of which it is said to be found in Middle America in (2)circumstances pointing to a pre-Maya horizon. Its presence in the Mississippi valley has been noted by Vaillant and along with a number of other ceramic factors belonging to the so-called Q complex, attributed to a hypothetical movement of peoples from the east coast of Mexico. This interpretation ignores a number of important considerations. To begin with, the form (if we accept (4) the kinship of the "duck-pot", which seems perfectly obvious is far more common in the Southwest than in Mexico. It is particularly common in that portion of the Southwest lying nearest the Mississippi, namely the Rio Grande. At Pecos, Kidder found a number of whole specimens in graves (thirteen) and a great many sherds. They were made of the same paste as the contemporary cooking jars and most of them bore traces of soot. Furthermore, in this same cooking

(1) Lothrop, 1936, p. 16.

Kidder, 1936, p. 341. Kidder thinks the bird attributes were a secondary development in the Southwest, a "realization". That the original form copied some non-avian container, such as a gourd, sack, bladder, etc.

(5) Kidder, op. cit., p. 338. Wherever any real evidence of their function is forthcoming, it seems to have been connected with cooking. Thus Lothrop found them still in use among the Mapuche Indians in Chile, the point being inserted into the fire. He doesn't say what sort of food was cooked in them. (1936, p. 16)

Bennet & Zing found the Tarahumare still using a "pouch-shaped vessel" in making pinole. The idea seems to have been to keep the

corn from popping out of the vessel. (1935, p. 30)

<sup>(2)</sup> Vaillant, 1934.

<sup>(3)</sup> Vaillant, 1932.

Roberts, 1930, p. 102. Roberts lumps them all together under the term "bird-form vessels".

ware, were a large number of small globular vessels some with vertical loop handles. The latter are certainly not unlike the (1) small jars in Thin Drab that we have been considering. Thus we have not merely the presence of a similar form in the two areas, but a remarkable parallelism in the circumstances of its occurrence. I am not insisting on the significance of these facts, beyond pointing out that, if one is obliged to derive the shoe-form from outside the Mississippi area (of which I am by no means certain) it would seem that the Southwest is a better bet, at least as an immediate source of origin. Of course, ultimately the shape may be tied in with its immense Middle and South American distribution.

Polished Drab: This type is not easy to describe owing to the fact that, while more often perhaps tempered with fine shell or a mixture of shell and coarse sand, there are frequent instances in which no shell is to be seen, the tempering being only sand or occasionally what appears to be some sort of crushed stone. Since I am endeavoring to present a sort of gross appraisal of the pottery as a whole, I have not attempted to segregate these types of tempering. Indeed such would be impossible in a study based so largely on whole vessels. Furthermore I am convinced of a general homogeneity, displayed in surface features and form, sufficient to justify the inclusion of all this material in a single type regardless of temper. Surface features are fairly constant, the outstanding characteristic being a hard lustrous finish resulting from polishing

<sup>(1)</sup> Kidder, op. cit., p. 334.

or burnishing with a pebble or some other instrument that leaves definite marks or striations. Color ranges through the various shades of drab to black. The average would probably fall somewhere between hair brown and chaetura drab on the Ridgeway scale. Fire clouds are frequent and there often occurs, as a result perhaps of misfiring a sort of bluish cast suggestive of partial vitrification. In comparison with the polished drab of the Cumberland, there is, I think, this important difference, that whereas in that area the frequent combination of a dark surface and lighter past beneath suggested a smothered firing process, no such method is in evidence here. Even in the darkest specimens the paste appears (1) to conform in color to the surface.

Polished Drab shapes: Shapes in Cairo Lowland Polished Drab are considerably more varied than in the Cumberland, this being

<sup>(1)</sup> It will be objected that this, and all other ceramic descriptions in the present study, are too vague and generalized for proper identification of the types in question, an objection which, frankly, I am at a loss to meet. For example, after handling a considerable amount of polished drab from the Cumberland and Cairo Lowland areas, I have reached the point where I generally can tell the difference between them, but when it comes to putting it into words, so great is the range of variability of both types, I find it impossible to express without descending into particularities that would be applicable to only a fraction of the material from each area. This is the point where the ceramic technologist comes in. Actually the differences between these two types of drab, superficially alike as they are, would be readily detectable to petrographic analysis. In the meantime, for present purposes, it would seem better to state those differences in terms of form and, where possible, decoration.

particularly evident in the rottle category. For even the sort of gross superficial presentation aimed at in this study we shall require, I fear, a great number of illustrations and a tiresome amount of descriptive text. I shall attempt to keep the latter at a minimum.

Plate XIII: Excluding a number of effigy forms, there are very few vessels apparently that one would classify as jars, as distinct from bottles or bowls. The few examples in Plate XIII, Al-4 are merely grouped together because they do not fit anywhere else.

Obviously they are wholly discrete forms. The only purpose of including them is to give as complete a picture as possible of the full range of shapes. Some, or all, of them may actually be trade pieces. The fourth specimen (A4) is certainly remarkably similar in externals to the most characteristic shape in the fine black ware of Aztlan, which, it will be recalled, is also said to be the definitive ware in the lower level at Cahokia. We must not overlook any opportunities, however tenuous, of tieing on with that important center.

Bottles: Going on in Plate XIII (from Bl) are a number of specimens which by any logical system of nomenclature would be called jars, but which, in the present context, might equally well be considered as extreme forms of what passes in local archaeological parlance as the bottle. The transition between them and full fledged bottle forms is accomplished without break, as may be seen by glancing down the page. At the end of the series (which is not,

needless to say, intended to beg any evolutionary questions) we have what is, generally speaking, the commonest Middle Mississippi bottle type. We shall see it more fully exemplified in the St. Francis river region where it is particularly at home. Here, in the Cairo Lowland, it competes in popularity with tall-necked forms, which we shall consider presently. In fact one of the outstanding differences between the two centers is the relatively greater role played by the tall-necked bottle in the Cairo Lowland.

Plate XIV: The low-necked bottle is modified in a number of ways (Plate XIV) by lobing, in which case you get what is commonly called the "melon-pot", by the addition of handles, horizontal grooving, application of medallion heads and other effigy features. Most of these elaborations are far better exemplified in tall-necked types, as we shall see. Only a single low-necked bottle embellished with fish features is present in the entire collection, a circumstance worthy of remark since this is a characteristic type in the St. Francis and Pecan Point sections. Evidently the Cairo Lowland potters held with those of the Cumberland in confining their fish representations to a sort of seed-jar form with little or no neck. This is merely one of a great many respects in which Cairo Lowland pottery appears closer to the Cumberland than to the St. Francis, geographical propinquity to the latter notwithstanding.

The last line of Plate XIV shows a small series of pear-shaped bottles with almost no break between neck and shoulder. Because of their uniformly small size (4 to 5 in. in height) and marked tendency

to be lighter in color than the general run of polished drab, one has to record the possibility that they constitute a definite subtype. It appears to be possible to segregate them not only on the basis of form, but on color as well. The significance, I suspect, is not of earth-shaking importance.

The "carafe": Plate XV: With the tall-necked bottle or "carafe", we come to perhaps the most characteristic Cairo Lowland form. On first sight there seem to be two distinct types, exemplified by the first and last specimens on Plate XV. As is usual in such cases, however, it is a simple matter to arrange a series showing a smooth transition between, so that it is possible to regard them as extreme variants of a single type. One circumstance, on the other hand, militates against this view, namely that it is apparently only the second version that is subject to the various modifications and embellishments shown in Plate XVI. This, combined with numerical considerations, suggests that the latter is the dominant form, and that the curious ugly affair at the top of the plate is either: (a) an earlier, possibly a parent, form; (b) a contemporary or later specialization. To attempt to answer such questions without stratigraphic evidence would be purely gratuitous and a sheer waste of time.

Plates XVI-XVII: These plates show various modifications to which this type of bottle is subject. Lobing, as in thin drab jars, is extremely common. The result is, of course, a vessel markedly similar to the lobate bottles decorated by lost color in the Cumberland.

The alternate form of lobing, by vertical grooving from the outside, as in thin drab jars, is also present here, to which is added a type of decorative treatment by horizontal grooving (B3-4). The junction of neck and shoulder is often marked by a small fillet, which occasionally may be further embellished by very small decorative handles (C1-E2). In a few cases this junction point is exaggerated so that what we have in effect is the superposition of one vessel over another (E3-4). In both these instances the lower vessel is a typical jar form, so that one is tempted to wonder whether this may not be a skeuomorphic survival indicating the way in which tall-necked bottles first came into existence, to wit by the addition of a neck to the already present jar form. Idle speculation . .

The modifications shown on Plate XVII are in the domain of life factors of one sort or another. Application of medallion heads, always four in number, recalls the so-called "prayer bowls" of the Cumberland. Here the heads are more often seen on water bottles, the four examples shown in Al-4 being typical of a large number in the present collection. Bl-4 shows a very interesting type in which a recumbant human figure is impaled on the upper portion of the vessel. So far as I know this curious conception is a Cairo Lowland specialization, occurring nowhere else. The famous head vessels of the St. Francis and Pecan Point sections have excited a great deal of attention, but it has not been generally recognized that the potters of southeast Missouri also made them. The examples shown here (Cl-4) are typical, I believe, in being simply modifications of the basic carafe type of bottle made more realistic by

the addition of a flaring annular base which serves as a neck. must be admitted that, on the whole, the Cairo Lowland examples do not show a degree of skill in modelling comparable to those from Arkansas. The same type occurs with decoration in lost color, as we shall see presently. The balance of Plate XVII is given over to various effigy forms, all of which, however, may be conceived as elaborations of the typical bottle. The four-legged effigy (E1-2) is of especial interest. His kinship with similar forms in lost color from the Cumberland and other regions further eastward is unmistakable. The popular term "dog-pot" is peculiarly inapplicable here. No Indian should be accused of attempting to delineate a member of the canine species with a tail rolled up into a spiral and a snout upturned to the sky. It seems clear that a mythological concept is involved and there can be no doubt that it is the same concept that was exhibited in the eastern specimens. The suggestion was made of a combination of serpent, cat and bat characteristics. I shall say more about this interesting composite later.

Tripod and annular bases: Plate XVIII: There remains but to speak of basal modifications in the form of annular and tripod bases. While by no means common, the examples shown in Plate XVIII, Al-B4 being the sum total in the entire collection, their occurrence in association with absolutely typical Cairo Lowland forms gives them an importance worth commenting upon. The annular base was not encountered in the Cumberland, the tripod but once or twice. However the general lack of bottles of any sort (except in lost color)

must be recalled. It would seem, therefore, safe to assign the presence of the annular base in the Cairo Lowland to influence from Arkansas, where its occurrence is very much more marked. Tentatively the same conclusion might be entertained for the tripod, but with greater circumspection. Certainly it is a noteworthy circumstance that in all examples so far encountered (Cairo Lowland, Cumberland, Etowah) the tripod feet are what one feels is the primitive bulbous type. The slab tripod, which occurs in Arkansas, does not seem to have reached the Cairo Lowland or the centers east of the River. Both types of support, annular base and tripod, seem somehow to be vaguely related, are of considerable interest from the point of view of Mexican and Middle American relationships. I shall attempt to deal with the problem of their distribution in the Mississippi valley in a later section of this study.

Bowls: Plates XVIII-XXI: Bowls exhibit the same wide range of variability as do bottles. There are simple hemispherical forms such as may be seen in Plate XVIII, but they are distinctly in the minority. The only reason for even mentioning the possibility of this being a type as distinct from the commoner flare-sided bowls is that they seem to show a greater tendency toward embellishment by the indentation of the rim, in so doing approach somewhat closely the characteristic Cumberland type of bowl with its indented rim coil. Only one specimen to be exact (El) might conceivably be mistaken for this well defined Cumberland type. The presence of numerous intermediate specimens, as I have intimated, makes it extremely

difficult to separate these hemispherical bowls from the more characteristic forms shown in Plate XIX. This is a flat-bottomed, slightly convex, straight, or even occasionally concave sided affair generally, though not always, without rim indentations. varies greatly, extremes in the present sample being 42 and 11 inches in diameter, with the greatest incidence falling somewhere around 8 inches. Bowls of this type frequently have scalloped rims (D1-E4), a trait which we have already seen in the Cumberland. The manner of scalloping is so similar in some cases as to amount to a positive identity and must therefore be added to the growing list of specific correspondences between the two areas. The Cairo Lowland bowls perhaps show somewhat more advanced developments in that the scallops, or rather the portions between them, are sometimes decorated by incision in simple patterns. There is also a "terraced" type of scallop, which has interesting analogies with a special type of vessel at Moundville.

Another sort of rim modification is by the addition of lugs, generally two, sometimes four, in number (Plate XX Al-B4). These are not infrequently embellished by notching and sometimes by simple incised patterns on their upper surface. Perhaps more characteristic is the decoration of bowls by the application of nodes or groups of nodes just below the rim (Cl-2). This, particularly in groups of three, is a common form of decoration in the St. Francis river

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<sup>(1)</sup> I refer to the curious rectangular vessels figured by Moore in 1907 fig. 22, 23, the "Wall of Troy" pattern. The analogies of this in turn with a certain type of vessel at Zuni will be referred to later.

section. It was not encountered in the Cumberland. The replacement of nodes by human heads gives us the type that has been called a "prayer bowl" in the Cumberland (C3-4, cf. Plate VI, A1-2).

Rim effigy bowls: This leads to the subject of rim effigy features which occurred in several highly developed forms in the Cumberland, but are more common here, I believe, and certainly more highly diversified. The extent of individual variability makes it difficult to group them into recognizable "types", throws us back (1) on the entirely unsatisfactory method of classification by subject. I have, accordingly, grouped them into bird, animal and human classes with a catch-all at the end to include the fairly numerous unidentifiable specimens.

Plate XX. Dl-E4 shows a series of bird bowls that comes somewhere near to approximating a type, moreover, that has a wide distribution in the Mississippi valley, though strangely enough it did not occur in the Cumberland. The chief characteristic of this type is the high degree of conventionalization, or if you prefer the complete lack of realism, exhibited. If it were not for the eyes in most cases it would be impossible to say that a bird was intended. The entire head is flat as though cut out of a pancake of clay rather than modeled in the round. Seen head-on it looks

great majority of cases we don't know what they were doing, and in not a few they probably didn't know themselves.

<sup>(1)</sup> There is a good deal of terminology in regard to these things based on the assumption that the aboriginal potters were aiming at naturalistic representation and a childish faith in their ability to encompass that aim. My own opinion of their capacities in this direction is not so high. I think it may be safely said that in the

like nothing at all. The head, in most cases, faces the interior of the bowl which again defeats any realistic purpose that might have been intended. The "tail" is nothing more than a small semicircular lug. A fairly common feature, also present in the Cumberland, though I believe I failed to mention it at the time, is that these bowls (this applies to all rim effigy bowls, not alone to birds) are frequently oval with the head and tail on the short axis of the oval.

The flat-headed bird type just described is quite evidently dominant in the Cairo Lowland section. Only two specimens with fully modelled heads surely identifiable as birds appear in the present sample (Plate XXI, Al-2). The second one is of interest on account of its similarity, amounting almost to identity, to the characteristic duck bowls of the Cumberland (cf. Plate V, Al-4). Perhaps I should call to attention the fact that in this, as well as other close correspondences to Cumberland forms, differing characters of paste and surface rule out the possibilities of trade. This particular vessel is definitely of the Cairo Lowland type of Polished Drab. The only alternative, then, it would seem, is to suppose a continuum of culture based on common tradition and preserved by intimate contact, sufficient to account for the similarities in question.

The only two specimens clearly identifiable as animals may be seen in A3-4. In the Cumberland there were none at all, though a number of references to their existence were encountered in the literature. There follows a series (B1-C4) in which realism is

completely in abeyance. Exception should be noted in the case of C4 which is apparently a bird with human attributes, or at least with features about the head suggesting plainly a headdress of some kind. This brings up a point which I have already touched upon, namely that something beside a desire to represent life forms realistically animated the makers of some of this pottery. In short just as in other forms of artistic expression, such as carved shell and stone, there is an attempt to portray mythological concepts that combine human and animal features often with a considerable element of conventionalization, not seldom an element of pure grotesquerie. Without recognition of this fundamental principle any attempt to understand the so-called effigy pottery of the Middle Mississippi is doomed to failure.

Bowls with human heads occupy the remainder of Plate XXI. Additional heads are shown in fig. 59. There are no actual figurines to swell the series as in the Cumberland. A further point of difference is that none of these heads are hollow with pellets inside as was almost the rule in the Cumberland. The series is too small and too variable in execution to say very much about "type". Off-hand, the homogeneity of the Cumberland series would seem to be lacking. There may even be several types. Hair form and head-dress compare closely with the Cumberland, but in few cases are the details as carefully depicted. The basic Cumberland headdress, consisting of a top-knot, two flanking parietal knobs and one prominent occipital bun, may be seen in Dl-4. The tasseled cap of the Cumberland does not appear specifically but is suggested in the

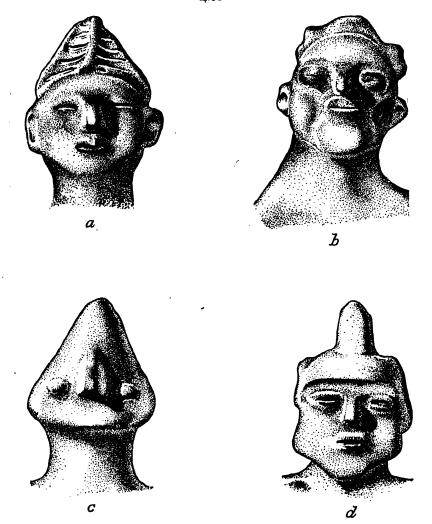


Fig. 59. Heads from rim effigy bowls, Cairo Lowland culture (Peabody Museum).

generalized peaked affairs of E,1-3. A beautiful example of the
(1)
"basketry" cap is seen in E,4, again in fig. 59a. In short the
parallelism with the Cumberland is remarkably close and explicit.
The type, if we may call it such, is somewhat different, as we

<sup>(1)</sup> Attention should be called to a headdress or cap depicted on one of the anthropomorphic gorgets, fig. 58a, in which some sort of basketry is clearly indicated.

should expect. The modeling is coarser, the facial features heavier, particularly the nose which is high and prominent. Can these differences be interpreted developmentally. Not without the greatest circumspection. The most one can say is this: if there were other evidences tending to represent the Cairo Lowland as a slight falling off from the Cumberland level, the present data would fall excellently into line with those evidences. I shall return to this interesting question later.

Effigy forms: difficulties of classification: In dealing with the Cumberland material an effort was made to present various effigy forms in connection with the more fundamental shapes from which they could be conceived as an outgrowth. For example the socalled "blank face" effigy was presented as a bottle form, shell effigies as a modification of simple bowls. It seemed worth while to attempt to keep such associations to the fore. I intended, however, to follow the same general scheme here, have done so in fact up to this point, but am forced to abandon it in the face of mounting difficulties. To give a simple example, a fish effigy may be in the form of a bottle with a tall neck, a jar with a low neck or collar, or a bowl with no neck at all. Obviously it would be absurd to split them up into three separate groups. Consequently, from now on I shall deal with effigies and eccentric forms in any sort of grouping that seems to make sense quite regardless of more fundamental aspects of shape. It may even be expedient, on occasion to put the same vessel into two or more groups, a classificatory

offence which I shall commit with an easy conscience inasmuch as I have emphatically disclaimed any effort to make a shape classification.

Frog effigies: Plate XXII: For a group of effigies, a type of vessel in which after all we must expect a good deal of individual variability, the frogs present a surprising homogeneity (Plate XXII). Differences are largely a matter of workmanship.

The basic form is a bowl or low jar with incurved rim, approaching but not quite attaining the "seed-jar" form, or with a low standing rim. In the latter case, particularly in a few examples furnished with handles (E3-4) the standard jar form, otherwise limited to thin drab ware, is closely approached. Whether this is merely an effect of convergence, or whether the frog effigy arose as a modification of this fundamental shape, is a question I cannot answer. One thinks immediately of the snouted jar form of the Cumberland. The difference, however, is that there the relationship to the unmodified jar is much closer since they are made in the same thin ware.

The Beaver: Plate XXIII: Similar in shape and general treatment are the beaver effigies, in which that admirable creature is represented holding a stick in his mouth and fore-paws. (Plate XXIII Al-Bl.) The prominent incisors are sometimes represented and occasionally an effort is made to suggest the flat imbricated tail. The conventional stick-carrying attitude is, so far as I know, always adhered to. One is reminded of the art of the Northwest

Coast, in which conventionalization of animal forms has proceeded to the point where one or two characteristic features stand for the whole animal. The principle is in effect here, but has by no means reached its limit of applicability.

<u>"Opossum" effigies: Plate XXIII:</u> Snouted forms, in which the vessel is conceived as the head rather than the body of an animal, are present but far less common than the types just described. These are frequently referred to as "opossum" effigies, though in many cases the resemblance is rather far-fetched. Examples may be seen in Plate XXIII, B2-4. One thinks, at once, of the shoe-form pots, to which this type seems to be related. The interesting thing is that even in Middle America the shoe-form is associated with similar snouted effigies. We have also the snouted forms of the Cumberland, already considered. Clearly the problem is not a simple one.

Shell effigies: Plates XXIII-IV: Nor is it made simpler by the fact that certain of these snouted vessels have a spout-like appendage to the rim (also seen at Holmul) which appears to relate them to an entirely different sort of vessel, the shell effigy. In the Cumberland we found two general types of shell effigies, depending on the proto-type, whether bivalve or univalve. So here. It is the first type, of course, that we are referring to. Examples may be seen Plate XXIII, Cl-E4. It is assumed that this type of

<sup>(1)</sup> Merwin and Vaillant, 1932, pl. 20, c, d.

vessel arose in imitation of the characteristic shell containers made by slicing off one side of a marine univalve and removing the columella. In the Cumberland no examples were found that approximated very closely this assumed proto-type. Conventionalization had, in all cases, proceeded rather far. Here, with considerably more examples at hand, the same might be said but for one specimen (Plate XXIV, Al-2) in which the basal nodes are supplemented by incision to give a more realistic effect. Vessels based on an univalve proto-type (Plate XXIV, A2-B4) show a more successful realization.

Fish forms: Plates XXIV - XXV: The balance of Plate XXIV and all of Plate XXV is given over to fish forms. Like the frogs these run remarkably true to type, the differences being largely a reflection of individual competence. One may note also that the essential form of the vessels is precisely similar to that displayed in the frogs, beaver, opossum, etc., that is to say something between a bowl and a jar with restricted orifice and occasionally a low standing rim. Like these other groups, the vessels run to small sizes. In short, if one were approaching the problem of classifying this material by shape, which, happily, I am not, it would be possible to consider all these effigies merely as modifications of a single fundamental shape. Exception would have to be taken in the case of those few examples in which fish features have been elaborated on a bottle form (Plate XXIV, Cl-4). Comparison with similar forms in the Cumberland (Plate V) brings out a remarkably

close similarity. Excluding factors of paste and finish, one would be hard put to differentiate them. Quite possibly a careful analysis of such factors as shape and arrangement of fins, eye treatment, etc. might bring out significant differentia, but such fine treatment is not within the purview of the present study.

Gourds and "gourd-like" forms: Plates XXVI-XXXIV: Some hope for the would-be classifier (which I am not) is offered by this last group of effigies, (frog, beaver, fish), since they could be lumped together on the theory that they represent variant elaborations on a fundamental bowl/jar shape. The exceptions, fish in bottle shapes, are not so numerous after all. A similar theory might be invoked in respect to the series of forms now before us. In other words the various effigies shown in Plates XXVI to XXXIV may also be conceived as elaborations on a basic form. To characterize that form, however, is not so easy. A closed container, it is more bottle than jar, but it differs from the normal bottle in one important respect, the orifice instead of being in its normal position in a horizontal plane at the top is in a vertical or oblique plane at one side. One is tempted to call it "gourd-like" were it not for the implication of derivation from gourd containers. Certainly the more generalized, that is to say least recognizable, forms are those that approach closest to the actual gourd effi-It seems, therefore, not unreasonable to take the latter as the point of departure. Starting with these, the most intelligible arrangement would seem to be to follow along with generalized gourds,

then "blank-face" effigies, after which we shall take up in turn the various "realized" forms, animal, bird and human. Such at any rate is the arrangement followed here. Let me again emphatically disclaim any suggestion that it is an evolutionary sequence.

The Cairo Lowland is undoubtedly the region in which the realistic gourd finds its highest expression (Plate XXVI, Al-C4). Some of these examples are doubtless identifiable as to actual species.

The question as to their having been made in imitation of actual gourd containers, naturally, comes up. The only evidence I can offer on this point is that we have in the Museum portions of gourds from Kentucky cave deposits utilized as containers by cutting an aperture precisely as in some of these effigies. In Dl-E4 the gourds are less realistic, more generalized, but the intention is nevertheless unaistakable.

"Blank-face" effigies: Plates XXVII-XXVIII: The next group, for which the term "blank-face" effigy has already been used in connection with Cumberland examples, is a very numerous one. No question that Cairo Lowland is a prime center for this curious type of vessel. Closely related to the generalized gourd effigy, the differences are simply matters of development in the upper portion which takes on a vague resemblance to a head without any face.

Various arrangements of protuberances suggest ears, horns or often headdress features. In some cases the resemblance to human effigies becomes very striking. The face, however, is always "blank".

The transition from this type to the fully realized effigies whether animal, bird or human, involves, of course a reversal in orientation.

Assuming that the orifice is in "front" (in those examples with headdress factors this is clearly the case), to provide room for a face it has to be swung around to the back. One may be permitted to elaborate this point a bit, because it involves the possible origin of a whole series of effigies of major importance in Middle Mississippi pottery. The interest centers in these blank-face effigies with headdress factors. Their relationship to similarly bedecked human effigies requires no demonstration. The question is simply as to the direction of the change. Did the blank-face effigy acquire human attributes (headdress) and then, by shifting the orifice, a face? Or did the human effigy gain a headdress and lose its face? The first alternative is a process of "realization" and implies an independent development of certain effigy types in the Mississippi. The second calls in the oft-abused process of "conventionalization", degeneration, if you prefer. Frankly I cannot see any real evidence one way or the other, but am bound to say that the probabilities are entirely with the latter view. To begin with, if we take the realization hypothesis, there are too many other types of human effigies (to confine ourselves to this category) that would still remain unaccounted for. Furthermore it seems inherently unlikely that potters would elaborate headdress features before they had first produced a human likeness to put

<sup>(1)</sup> There is one example in Evers, 1880, Pl. XX, fig. 3, in which the opening is at the side. By this expedient the potter was able to save both face and headdress. The device, sensible as it appears, was not generally taken up.

them on. Whereas, assuming them to have begun with a human likeness and then elaborated the headdress, it is quite possible to envisage their shifting the opening from back to front to give freer play to their ideas about headdress. In so doing they sacrificed the face. Let me, in concluding this rather speculative flight, emphasize the negative aspects of the argument. I am not insisting that the blank-face effigy came about in the way I have suggested, but merely that the probabilities are against a counter development. The theory of an evolution of various effigy forms out of a simple gourd or gourd-like proto-type, however attractive, finds no support but considerable opposition in the argument.

Plates XXIX-XXX: Plate XXIX shows a series of animal forms closely related to the gourd and "blank-face" effigies just considered. Some writers, affecting to see in these productions a remarkable fidelity to nature, would not hesitate to name the various species represented. My own feeling, after handling a large number of these vessels, is that the treatment is too generalized for precise determination, that any such realization is likely to have been accidental rather than intentional. In the case of birds, however, the ground is somewhat firmer, since apparently the only bird represented in this type of effigy is the owl, Plate XXX, and in all cases, however generalized, the owl features are sufficiently recognizable.

Before turning to the next group, the unquestionably human effigies, there are certain considerations in respect to gourdiform

shapes generally and "blank-face", animal and owl effigies in particular that merit attention. Glancing back over the Cumberland material, it is very evident that these several types play a very minor role in marked contrast to their numerical importance in the Cairo Lowland. In the Cumberland collections there are no true gourd effigies, only 2 "blank-face", no animals and, except in Lost Color ware, no birds. In view of the close affinities of the two groups in so many other respects, this so striking divergence cannot be passed over in silence. If we are justified in supposing that these incomplete effigies represent a stage in the break-down from more fully realized forms, rather than a stage in the upbuilding process of realization, then it follows that the course of breakdown was further advanced in the Cairo Lowland than in the Cumberland. I believe a number of other considerations could be brought to bear on this important point, but the place for urging them is not here.

Human effigies: Plates XXXI-XXXIV: Human effigies ranging from the type (closely related to the "blank-face") in which only the head is represented to fully modeled forms are shown in Plates XXXI-XXXIV. Judging from the number and variety in the present collection, the Cairo Lowland would appear to have been an important center for the development of effigies of all sorts. The variety, however, is more apparent than real, being largely a matter of differences in manner of presentation and degrees of skill, rather than actual stylistic diversity. More than in the case of

human heads on bowl rims (vide p.427) one is able to speak of a "type". The difficulty of describing the type in objective terms, however, remains as great as before. In general it may be characterized as an "inflated" type, in which even the facial features tend to have a sort of "blown-out" look. This may be clearly seen in fig. 60 in spite of the fact that these particular heads were selected for illustration because of more than usually pronounced physiognomy. This inflation and consequent generalization of features increases from the head down. Legs and feet tend to disappear altogether, though exceptions are sometimes made in the case of the sex organs which are prominently displayed. Arms are generally present, hands disposed on the knees or folded across the ab-Breasts are commonly indicated, the great majority of the figures being female. One interesting feature is seldom absent ... a misshapen humped back very often bearing an indented fillet or line of nodes indicating the vertebrae. Excellent examples may be seen in Plate XXXI, E2; XXXII, D2; XXXIII, D2. Sometimes also the arms are represented as skeletonized with scapulae and clavicles clearly shown. It is difficult to forego the supposition that these lugubrious features have some sort of significance in connection with death. It will be recalled that a frequent attribute of the Maya Death God as depicted in the codices is a spiny back with projecting vertebrae. For the hump alone, without the vertebrae, we do not have to go so far afield. The effigies of Casas Grandes (of which more anon) are occasionally humpbacked. Here, however,

<sup>(1)</sup> Kidder, 1916, Plate III, 2,4,6.

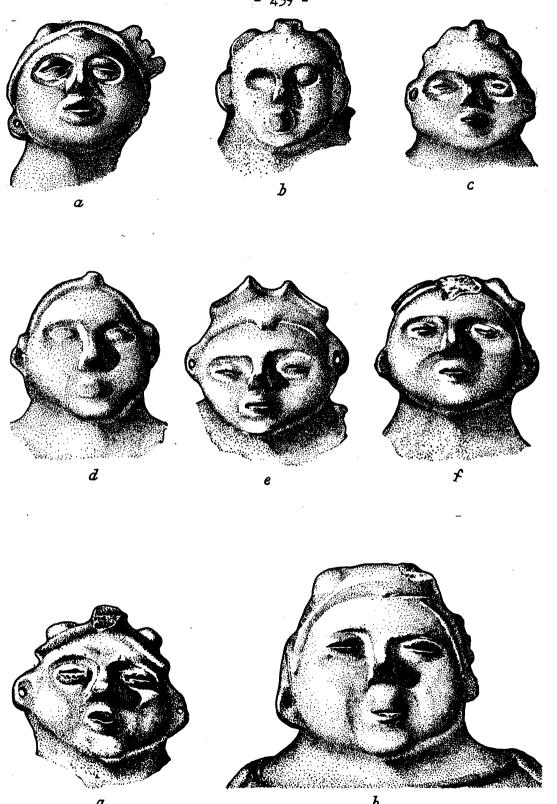


Fig. 60. Effigy heads. The Cairo Lowland "type". (Peabody Museum).

the trait is associated with masculine figures only, and there is no suggestion of death. In the double effigy vessels it is only the male that is humpbacked. Dr Kidder suggests their likeness to the (1) disreputable, erotic Kokopelli of the Hopis. Elsewhere in the course of this study I shall attempt to deal with the question of possible origins for the Mississippi effigy complex, in which discussion the humped back will no doubt play a part.

A type of effigy in which the figure is represented as seated atop the vessel with its legs dangling down the front is peculiar, so far as I know, to the Cairo Lowland area, Plate XXXIV, Al-Dl.

The following specimen, D2-4, in which a human figure is pancaked onto the bottom of the vessel, is completely aberrant and probably represents the whim of an individual potter. El-2 shows a compound vessel, effigy over standard jar, anomalous in respect to the opening, which is on top instead of at the back of the head. We shall see the same thing occurring in redware, which makes one wonder if this is perhaps the ancestral arrangement. It is, of course, the normal position of opening in the effigies of Mexico and Middle America generally. The two "man bowls", E3-4 are crude and unspecialized by comparison with the excellent examples from the Cumberland.

Miscellaneous shapes: Plate XXXV: Plate XXXV presents an ill-assorted display of loose ends, many of which could have been tucked in elsewhere. Rectangular bowls, Al-4, are fairly common

<sup>(1)</sup> Kidder, op. cit., p. 259.

in the Cairo Lowland. They did not occur in the Cumberland collection. As I shall attempt to show later, the rectangular bowl could be derived without violence to probabilities from the Southwest, in which case its non-appearance in the Cumberland is possibly not without significance. Compound vessels, of the sort in which one vessel is placed above another (B1-4) are common in Eastern Arkansas, more so than here, I believe. It is interesting, though perhaps not significant, that all the examples here are in connection with effigy forms. C1-2 presents an animal effigy, highly reminiscent of the so-called "dog-pots" of the Cumberland and related cultures in Georgia (vide p. 344). The two views of this interesting specimen unfortunately, are slightly out of focus so that it is difficult to say to what extent the serpent-cat-bat characteristics are present. One can suggest at least that some sort of mythological concept is involved. This is surely no attempt at naturalistic representation. C3, a tripod with elephantiasis, the upper portion broken off and ground down, should have been considered with the bulbous tripods of Plate XVIII, B3-4. From C4 to D4 we have an assortment of vessels about which very little can be said. They are slightly atypical, but without more evidence one would hesitate to ascribe them to an outside source. The remaining four vessels, El-4, are, I think, definitely extraneous. E1-2 represent the so-called beanpots (handles are broken off) typical of the later Cahokia culture. It would not have been surprising to find the bean-pot established as a regular feature in Cairo Lowland pottery, but the existence of only two examples in the present collection indicates pretty clearly that such is not the case. The next specimen, E3, is the only

cord-marked vessel in the entire series, showing definitely that cord-marking, as in the Cumberland, was not in the Cairo Lowland scheme of things. The last vessel, E4, is very definitely from Eastern Arkansas (cf. Plate LXIV, Cl-4). If it was actually found in a Cairo Lowland mound, as stated in the Peabody Museum catalogue, it constitutes the only certain importation from Eastern Arkansas in the entire collection. If Eastern Arkansas and Cairo Lowland were flourishing contemporaneously and in close contact with one another, as I have heretofore assumed, there is indicated a lack of trade in pottery very discouraging to the archaeologist.

Redware: Red slipped ware appears to have been an extreme minority factor in Cairo Lowland ceramics, being represented by only 16 out of 745 vessels in the present collection, or slightly more than 2%. This low figure alone would suggest that the technique of producing a red slip was not well established in the culture, an indication borne out by the extremely varied and generally unsatisfactory nature of the slips produced. It is impossible to invoke the Ridgeway scale in a general description of color, for no two colors are alike. Nor is their any conspicuous uniformity in other respects, except that in most cases the pigmented coating is so thin as to raise the question whether the term "slip" is in place. In some cases the term "wash", whatever it may mean, is (1) plainly applicable. All these factors taken together would seem

<sup>(1)</sup> The difference between "slip" and "wash" is one of the many thorns in the side of the ceramist. Henry Roberts reduced the whole question to an absurdity, and at the same time produced the only serviceable definitions by stating that "any coating of clay that can be seen in section with a 10-power lens" is a slip. If you can't see it, it's a wash. (Ms. notes on ceramic classification and description for use in Field-methods course at PM).

to point to a technological stage in which the use of red slip was still in process of establishment and the techniques involved in its production were still imperfectly understood. I shall return to this interesting point later.

Plate XXXVI: The entire series of 16 vessels is shown in Plate XXXVI. The number of shapes represented is not large. All are shapes that are more abundantly represented in Polished Drab, except perhaps the owls, which seem to be about as common in one (1) ware as the other. In view of the fact that no other effigies of any kind are represented, the large number of owls may be not without significance. It will at any rate be interesting to see if a comparable situation obtains in Eastern Arkansas, where redware is more at home.

The general situation in the Cairo Lowland with respect to

Redware is full of interesting possibilities, but is so closely

tied up with the position of the various types of painted ware,

that its discussion must be deferred until these have been considered.

Painted wares: classification difficulties: Classification of painted wares in Cairo Lowland pottery is beset by difficulties. To begin with the sample is inadequate. The seeming variety of techniques resulting in too many types would probably be simplified and the number of types reduced were a larger sample available for study. A major difficulty, however, would remain, and that is

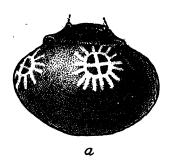
is only 4, as compared with 7 in Redware.

<sup>(1)</sup> Cf. Plate XXX. The number of complete owls in Polished Drab

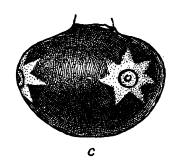
the disconcerting tendency for direct painting and lost color to coallesce, to the utter confusion of the whole classificatory scheme. In the Cumberland, what I have chosen to regard as "lost color" was the only type of decoration involving the use of pigments. In one or two instances direct painting was added merely as a means of emphasizing certain details. There was no conflict in the design areas allotted to the two contrasting mediums. Here the situation is entirely different. There are numerous instances where lost color is the only method displayed, others, fewer in number, where the decoration is entirely by direct painting, and a third group in which both techniques are involved. And involved in such a manner as to make their separation extremely difficult. It appears that lost color was used as a preliminary method for blocking out the design, which was subsequently filled in by direct painting. As a result of this, and the well known tendency for the stain used in the lost color method to fade, it is frequently very difficult to detect any remaining traces of the lost color portion of the design. The result is that a clear-cut classificatory division between painted wares and lost color is out of the question. The distinction, however, is important and must be kept to the fore. I shall, therefore, consider painted wares under three headings: lost color, direct painting and combination of both. Each of these divisions may be subdivided in the usual manner according to the colors employed. Let me emphasize again, however, that this is a classification of expediency based on an entirely insufficient sample and, what is worse, deliberately disregards certain obvious relationships in order to keep alive the distinction between positive and negative methods of decoration.

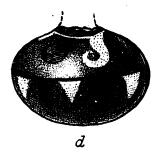
Lost Color: Plate XXXVII: Plate XXXVII shows examples of lost color ware unobscured by overpainting of any sort. Owing to the characteristic fading of the medium, designs are difficult to make out. Some of them may be seen reproduced at larger scale in figs. 61-62. It will be recalled that in the Cumberland there were two types of lost color depending on whether the vessel had been slipped in white before the application of the stain, thus giving a black-on-buff and a black-on-white. Here there is no question of a white slip, nor any other kind of slip. The stain is applied directly to a polished surface which ranges in color all the way from a light vinaceous buff to a dark red brown. Efforts to segregate types such as black-on-buff as opposed to black-on-red were entirely unsuccessful. Shapes and style of decoration cut right across any differences in color. Designs are simple and not particularly varied, commonest motives being concentric or radiating star-like figures of the sort usually referred to as "cosmic symbols". These are generally repeated four times and are sometimes connected by sets of horizontal lines. Horizontal lines alone make a simpler decorative scheme, possibly intended to show as a series of concentric circles when viewed from above. Except for the very fine head vessel, Al-2, and the very interesting effigy, E3-4, shapes are confined to bottles very nearly all of which belong to the longnecked carafe type. The effigy is of particular interest, not only because of possible relationships with the lost color decorated effigies of the Cumberland, but also because it has its opening at the top of the head, rather than in the usual occipital position.

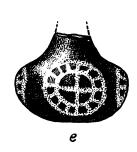
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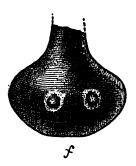












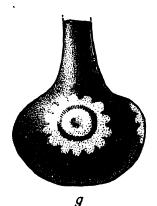






Fig. 61. Lost Color, Cairo Lowland (all but d, which is decorated by a combination of lost color and direct painting -- Peabody Museum).

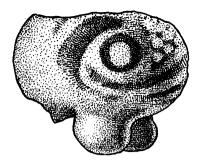


Fig. 62. Lost Color, Cairo Lowland. (Peabody Museum).

I have referred elsewhere to the possibility, purely speculative, that this may have been the ancestral effigy form. It is interesting that this is the only effigy so far encountered in the Cairo Lowland that is decorated in lost color. On the other hand, the large majority of effigies

in the Cumberland were so decorated. It is tempting to speculate on the possibility of an early association of human effigies with lost color decoration. But this is pure speculation . . .

While on the subject of lost color, I cannot forbear calling attention to one very interesting vessel on this plate, D4, reproduced at larger scale in fig. 63. The interest centers around a curious elongated spot in the ground color of the vessel, which can only be explained as the result of an accident. Its shape indicates clearly that a drop of the blocking-out medium, whatever it may have been, fell on the vessel and dribbled partway down the side, where it must have remained during the dyeing process. Why it was not detected, or at least daubed over with stain after the completion of the process, we can only guess. Possibly it was the actual firing that removed the blocking-out medium and after that it was too late to do anything about it. In any case it is impossible to regard this curious spot as a deliberate effect. It seems to me that this is the strongest possible evidence, if evidence were still needed, that the lost color process, or something analogous

to it, was responsible for the type of decoration under consideration.

Painted and "combination" wares: Plate XXXVIII: This plate presents in confusing array vessels decorated in various styles of direct painting as well as by a combination of direct painting and lost color. Classifying this material according to methods

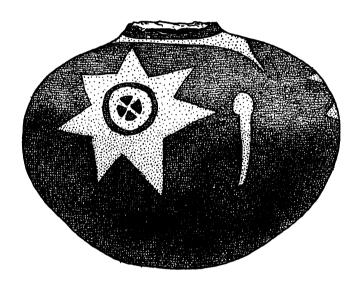


Fig. 63. Vessel showing accidental spot resulting from the lost color process. Cairo Lowland. Scale 1:2. (Peabody Museum).

in vogue at the present time (Southwest) we get almost as many types as vessels, which suggests that the ultimate grouping of this material will have to follow somewhat different lines. Direct painting in red on buff is seen in Al-4. The small number of examples is interesting in view of the fact that red on buff is the dominant tradition in Eastern Arkansas. Before undertaking

the present study I was under the impression that red on buff was the basic ware in all Mississippi cultures in which painted pottery makes its appearance. It was something of a surprise to find it absent altogether in the Cumberland. Now we find it all but absent here in the Cairo Lowland. It seems quite evident, therefore, that the history of painted pottery in this northern and eastern portion of the Middle Mississippi area does not begin with red on buff.

Red on buff: I shall have a good deal to say about the general characteristics of red on buff in describing its more typical manifestations in Eastern Arkansas. It is sufficient to note here that the ware consists of extremely simple decoration in a heavy sliplike pigment applied directly to the unslipped surface of the vessel which may range in color from drab to a light pinkish buff. general the buff shades predominate, and I think it might be possible to show that a buff surface was deliberately sought after and achieved to the end that the decoration should stand out in greater contrast against the background. The heavy consistency of the pigment, judging by its thickness, permitted only a rather broad handling of design. Furthermore the fact that the vessel was polished after painting gives a characteristic blurring of the edges which contributes greatly to the general effect of crudity. We shall see these characteristics more clearly exemplified in the red on buff of Eastern Arkansas. Returning to our 4 examples from the Cairo Lowland we can add very little. The style of decoration is extremely simple consisting of repeated sets of concentric circles

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or simple horizontal bands which would give the effect of concentric circles when viewed from above. Four specimens permit us to say very little about shapes. It is interesting, however, that two of the four, A3-4, are low-necked bottles of typically Eastern Arkansas shape, whereas practically all other decorated bottles are of the more characteristically Cairo Lowland tall-necked carafe type.

Red and white on buff: The next series, Bl-C4, in which the addition of white makes a three-color ware, red and white on buff, probably comprises more than one type. There is the typical broad handling of Bl, comparable to the red on buff already considered, together with a finer style, which might be termed "fine-line", which produces an entirely different effect as may be seen in B2-4. The last specimen, B4, is particularly interesting for its naturalistic decoration, fig. 64, with obvious affinities with the anthropomorphic shell gorgets already considered. This is the only example in the entire Middle Mississippi area, so far as I know, in which this style of naturalistic representation appears as painted decoration on pottery. Cl, also fig. 65, represents another style in which solid pendant figures alternately red and white give an effect totally different from the linear style just considered. (cf. E2 and fig. 66 which show the same style of decoration but with a preliminary blocking out in lost color -- an example of the futility of a rigid classification based on purely technical considerations. Here two precisely similar designs have been produced apparently by totally different means.) C2-3 show red and white designs which likewise have their closest analogies to lost color and

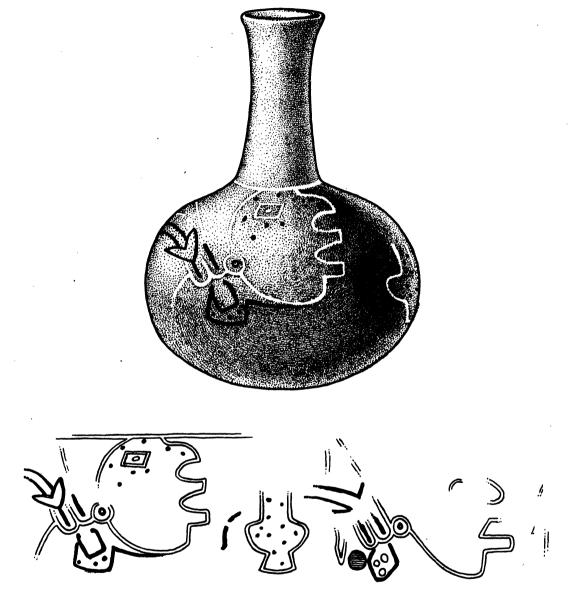


Fig. 64. Red and white on buff, fine line type, Cairo Lowland. (Peabody Museum).

combination ware. Re-examination of these specimens (they were collected early in the course of this inquiry before the importance of lost color was suspected) would probably disclose traces of the

tell-tale black stain, the trade-mark of the lost color process. C4 is something else again, a three color ware, red, white and black, in which the black seems to have been applied not by lost color, but by direct painting.

Combination, lost color and direct painting: The balance of

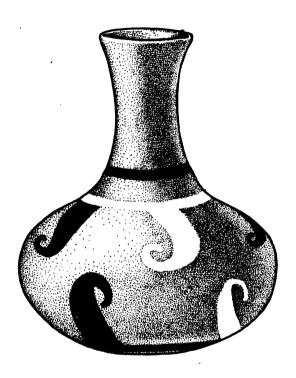


Fig. 65. Red and white on buff, Cairo Lowland. (Peabody Museum).

Plate XXXVIII, D1-E4, shows direct painting in combination with lost color in several styles most of which find their direct counterpart in the straight lost color group already considered. I have advanced the opinion that the lost color technique served as a preliminary method of blocking out the design. This comes out especially clearly in E2, schematically presented at larger scale in fig. 66. The advantage of such a method can be readily imagined. The wax,

or whatever blocking-out medium was employed, was presumably removable (since it was perforce removed after the dyeing process), mistakes could be rectified, if the design failed to come out right the whole thing could be taken off and started over again. Once the design was satisfactorily laid out and fixed by the stain, the painting becomes merely a matter of filling in blank spaces. Consider for a moment the difficulty of executing a complicated

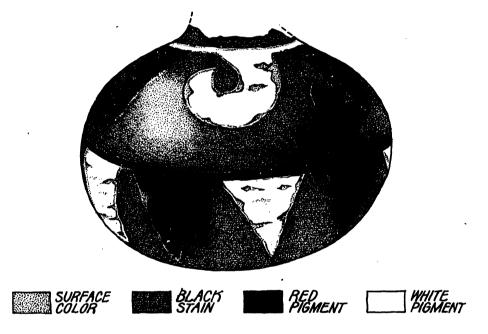


Fig. 66. Combination, lost color and direct painting, Cairo Lowland. (Peabody Museum).

design in the heavy slip-like paints without some such preliminary layout. Take such an example as E3, which is shown at larger scale in fig. 67 with the overpainting removed to show the rather difficult nature of the lost color design.

It is not contended that this complex method lies at the bottom of all pottery painting in the Mississippi valley. It may have come about rather as a historical accident. (No need to

caution the reader that what follows is pure speculation unsupported by actual stratigraphic evidence.) The lost color process may have been established before the introduction of a direct painting technique (how else explain the Cumberland data?) which was simply grafted onto the earlier method. Lost color may have survived for a time because it was the only possible method of laying out the sort of designs which had developed along with it.

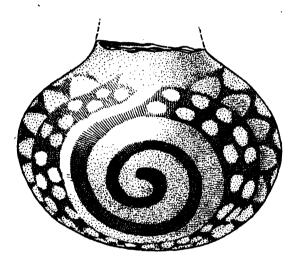


Fig. 67. Combination lost color and direct painting, drawn as it would look with overpainting removed. Cairo Lowland. (Peabody Museum).

In which case the material we have just considered would represent a transitional phase in which the older designs are still in vogue and the older method of obtaining them still in use, but overlaid by the newer and more colorful method of painting. Later, presumably, types of decoration more in harmony with a direct painting technique came into favor, and the lost color process fell into

abeyance. I cannot bring any actual proof to the support of this hypothesis, but can assert that it finds general confirmation in a number of interesting circumstances in connection with the distribution of lost color in general and certain specific designs in particular. However, this is not the place for such a discussion. The Eastern Arkansas center remains to be considered, and, though in that area lost color appears as a distinctly minor factor, it may nevertheless throw additional light on the question.

Miscellaneous pottery objects: Under this heading there is little to report. Miniature vessels are fairly numerous in the museum collections with most of the commoner full size shapes represented. There are a few poorly defined ladles vaguely reminiscent of the Southwestern bowl-and-handle type. I have followed the distribution of the ladle with considerable interest because of the possibility that it may have been introduced from the Southwest. The results as yet are not gratifying, a single occurrence in Fort Ancient, one or two doubtful specimens at Aztlan. The absence of ladles in the Cumberland, however, is suggestive. Supposing our guess as to the Southwestern origin of the ladle to be correct, does its non-appearance in the Cumberland suggest that that region was peculiarly out of reach of Southwestern influence? Other lacks in the Cumberland, such as the lack of redware and direct painting, are susceptible of the same explanation. It would indeed be interesting if the distribution of the ladle should prove to be parallel

with red and painted pottery. A number of "trowels", sufficient to mark this as a Cairo Lowland trait, are shown in fig. 68. Comparison with similar objects from the Cumberland, fig. 49, reveals no significant differences. A series of pottery pipes, too small to permit anything beyond the most general statements, is shown in fig. 69. Their relationships to Cumberland pipes already shown (fig. 50) is sufficiently obvious. Evidently this heavy blocky form, marked by the extraordinary size of the stem hole, is the generic type for the whole Middle Mississippi complex. Aside from the above-mentioned artifacts, the Museum collections are surprisingly barren of small pottery objects, except for a pair of small mushroom shaped earplugs (or labrets) and one or two pot supports. Pottery disks ought to be present, but are not. At the time these collections were made potsherds were not considered of sufficient account to be worth saving and it is very likely that pottery disks were treated as ordinary sherds. Whether or not this is the true explanation, I certainly do not regard the absence of such disks from these collections as of any significance. They have occurred abundantly in every Mississippi culture so far examined, not even excepting the hyperborean Iroquois. It would be very strange indeed if they were absent from the Cairo Lowland.

Summary: The foregoing account of Cairo Lowland culture cannot even claim to be approximately complete. For a full length archaeological picture a great deal more evidence would be required, particularly in respect to the non-ceramic aspects of the culture.

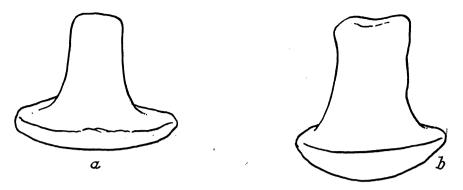


Fig. 68. Pottery "trowels", Cairo Lowland culture. (Peabody Museum).

So far as they go, however, the data fit admirably into the emerging framework of Middle Mississippi archaeology. Relationships with the Cumberland, still more with sites along the lower Ohio, are far-reaching and at the same time highly specific in character. Affinities with Cahokia are less conspicuous, doubtless due to our lack of knowledge of that great site and its satellites. Relationships with Eastern Arkansas remain to be demonstrated, but it involves no reckless anticipation to say that they are very close, as close perhaps as with the Cumberland. Finally, through a series of highly specialized traits notably expressed in carved shell and lost color decoration on pottery, the Cairo Lowland is brought into the sphere of influence of that mysterious Etowah-Moundville-Spiro congeries, speculation upon the nature of which will form the subject of a later chapter. Chronological implications I shall deal with at the conclusion of this work. It is sufficient to note here that while many of the differentia between Cairo Lowland and the Cumberland may be merely the result of geographical distance, others seem better explained by the hypothesis that the Cumberland is a slightly older culture. It is hoped that our further penetration



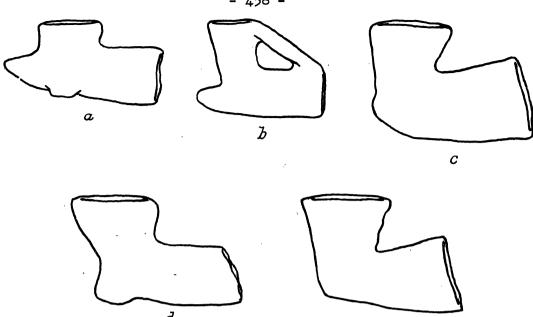


Fig. 69. Pottery pipes, Cairo Lowland culture (Peabody Museum).

into the remaining portion of the Middle Mississippi area will bring such faint indication into sharper focus.