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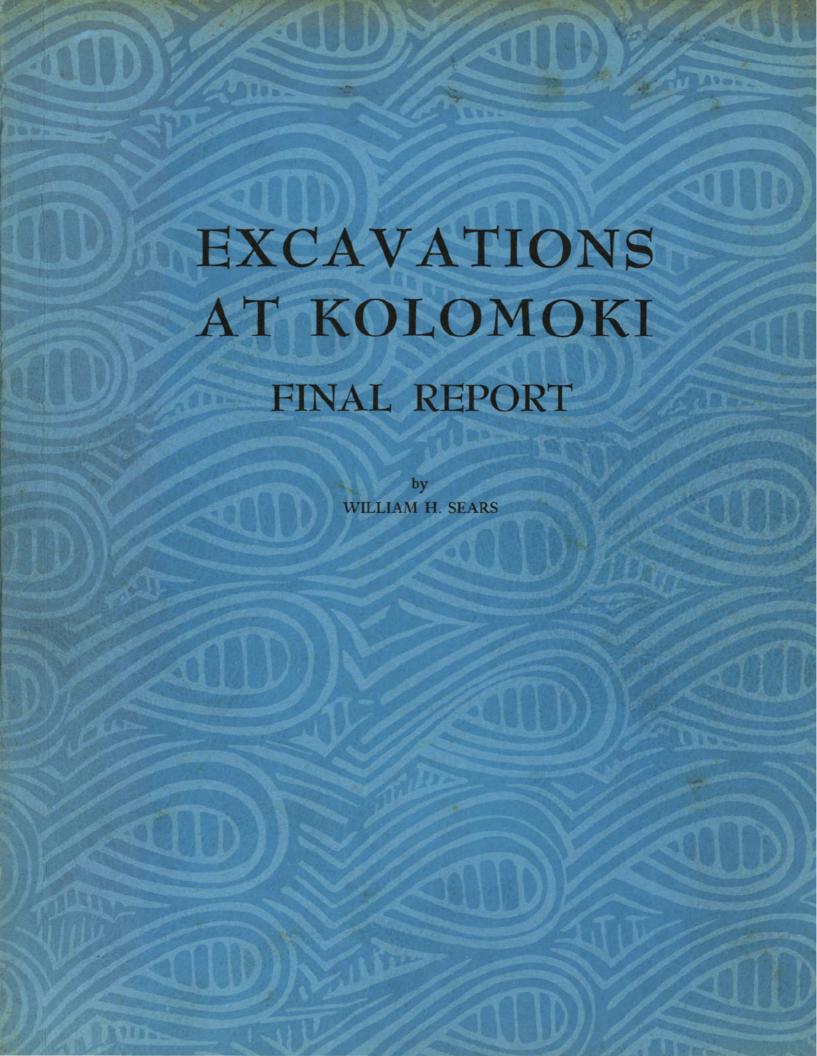
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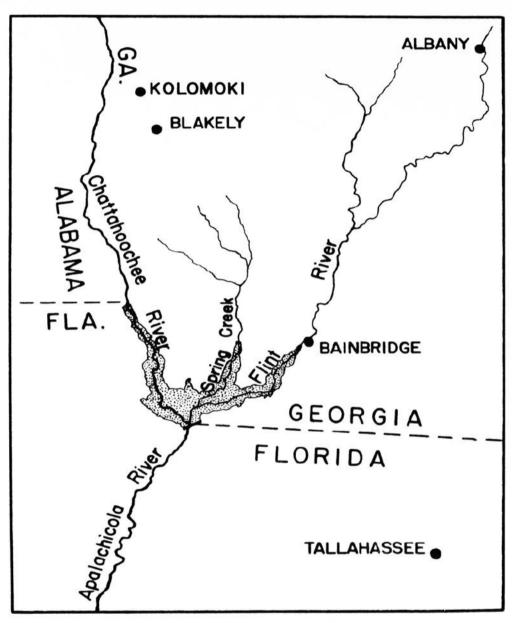
EXCAVATIONS AT KOLOMOKIFinal Report

WILLIAM H. SEARS





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Location of Kolomoki

EXCAVATIONS AT KOLOMOKI FINAL REPORT

by WILLIAM H. SEARS

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PREFACE

It is possible that a few more archaeological holes will be dug at Kolomoki, but the work necessary for this project is completed. This report comes after five years of work at Kolomoki. There have already been published several seasonal reports on various segments of the work, and this report is based largely on these earlier ones. Also resulting from the Kolomoki excavations are an assortment of popular pamphlets and several papers in archaeological journals, as well as a museum and field exhibits. During each of these five years, we spent the three to four summer months working somewhere in the three hundred acres of the site with one of several trained assistants and a labor force of ten to fifteen men.

In five years the writer has accumulated a considerable debt of gratitude to the many persons and organizations who have made the work possible. I wish here to thank first the young men and boys of Blakely and the surrounding countryside, close to a hundred of whom have made up the bulk of the crews at various times. A group of more willing, able, and congenial workers could not be found. My particular thanks goes to Monroe Askew, Presley Harrell, Everett Macdonald, Glen McCabe, John Hunt, Jimmy Holman, Jobie Flanagan, and Hezekiah Flanagan, who returned on successive years, forming a trained nucleus for each season's crews. Also I wish to thank the persons who acted as assistants in the work at Kolomoki: Molly Allee, Henry Brett, Lewis Larsen, and Mary Shepard.

This work has been done for the Georgia Department of State Parks, as part of its development program. Relationships between the archaeologist and the Parks Department have been uniformly excellent. Interference with good archaeological practice has been non-existent; funds have always been adequate, and there has always been co-operation. The Assistant Director of State Parks, John Mann, in charge of parks

operations, has been particularly helpful since the inception of the project.

On the whole, this final report is intended to present the over-all synthesis and interpretations relating to the excavations at Kolomoki, they having been kept at the lowest permissable level in the seasonal reports. To give internal coherence to this synthetic attempt, however, the data from the various excavation units, presented in detail in the seasonal reports, are summarized in the briefest possible fashion. Too, some additional work done during the last season is described herein. Excavations in Mounds A, B, C, F, G, and H, the latter excavated by Larsen in 1951, can be reported in very little space, so that the excavation data from them are included for the first time. The same is true of certain excavations in the village area, mostly Units 2, 3, and 4 in the N.W. Area. With these minor exceptions in the way of new data, and the summaries of previously reported units, this final report, then, is intended to be synthetic and interpretative rather than descriptive.

I would like at this time to express my thanks to the University of Georgia for making it possible for me, during several academic years, to spend a considerable proportion of time in the laboratory to produce this and the other reports on Kolomoki.

I also owe a considerable debt of gratitude to the Wenner Gren Foundation for Anthropological Research. Funds provided by that organization in the form of a fellowship at the University of Michigan in 1949 and 1950 enabled me to perform the basic comparisons and analyses necessary for this final attempt at synthesis and interpretation. Without the support of the Foundation, neither this report nor the others resulting from excavations at Kolomoki would have been possible.

William H. Sears

1 INTRODUCTION

As this report is intended to be comparative in the widest sense, it may be well to begin with a brief review of the total prehistory of Georgia, the South Appalachian Province, as the writer understands it at present. In giving such a review, we may fit Kolomoki into its place in the long picture of cultural development.

Undoubtedly Georgia was occupied by peoples with the culture type called Palaeo-Indian during the immediate post-glacial period, perhaps 10,000 B. C., down to the better known "Archaic" period, 5,000 B. C. As Fairbanks (1952, p. 285), Kelly (1938), and others have pointed out, the fluted points found at Macon and, as surface finds, elsewhere in the area clearly indicate this much. And, from the writer's point of view, these few indications are all the evidence we have. Assemblages are lacking, and there is little more to be said on the problem currently. I do feel, with Coe (1952, p. 303), that the assemblage at Macon is fortuitous or mechanical rather than cultural. The projectile points other than the fluted one are late Archaic in type, and there is no way of ascertaining whether particular scrapers, etc., actually belong with the fluted points or the late Archaic assemblage. I may add too that there is in my mind, Fairbanks notwithstanding (1952, p. 285), no doubt that artifacts do migrate downward, so that Palaeo-Indian flint and flints of the late Archaic period could easily be associated in the same strata. Assuming that the materials were left on a surface, in either or both cultural stages, five to ten thousand years of tree growth and decay, rodent activity, and so on, produce a large number of holes for things to fall into. If in a given five foot square area only one flint object per year moves downward one inch, a great deal of movement will have taken place in five or ten thousand years. Further, the stratum in which these objects were found at Macon appears to be normal red clay, which in this area is a breakdown product of rocks laid down in the upper Eocene period. Since that time, the rocks have been breaking down into clay, and erosion has been constant. With no deposition, the flints must either have moved downward into this zone, or have been there when the original rocks were being formed in the upper Eocene, an assumption which seems improbable to say the least.

This early period, characterized in all probability by a thin population, with primary dependence on the large game animals pursued by small hunting bands, gives way to the Archaic, better known in the total Southeastern area. As Fairbanks has indicated, typological intermediates between the fluted points and the Archaic points are not known at present, so that a gap must be postulated. There is little doubt however, that a development took place, and the materials should be found eventually.

Our knowledge of the Archaic in Georgia is more limited than it perhaps should be, most of our information coming from the Stallings Island site (Clafin, 1931; Fairbanks, 1942) and Lake Springs (Miller, 1949). Other than the reports on these two sites, we have only brief notes concerning the Tuft Springs, Adkins Mound, and Shell Rock Cave sites in the Macon area (Fairbanks, 1952, p. 286). The writer has been able to sort out, on typological grounds, a few projectile points presumably characteristic of the Archaic period occupation at Kolomoki, and has had the opportunity to observe a number of collections in Southwest Georgia.

Populations are clearly larger and more stable in this period than in the preceding one. The size and thickness of deposits at the Stallings, Lake Springs, and Southwest Georgia sites argue for villages composed of a number of dwellings, occupied for some period of time. Along the Savannah River, and on the Georgia coast, the economy has obviously changed into one based on shell fish as the primary food source. Since no shell mounds have been observed to date in the Central Georgia-Southwest Georgia area, although a number of rather large sites are known, it may be suspected that hunting continued as the major food gathering technique away from the coast and the Savannah River.

The major artifact type of the Stallings-Savannah River complex is well known, a large projectile point with one of several types of stems, most often with sloping shoulders. Bullen's term "corner removed" (Bullen, 1948, p. 37) is perhaps most descriptive. Material associated with these are the bannerstones common to most of the Eastern Archaic, grooved axes including the three-quarter grooved variant, decorated bone pins, perforated steatite slabs, and other less distinctive items. As I have pointed out elsewhere (Sears, n.d.) the basic projectile point complex, in form and material associated with bannerstones and the three-quarter grooved axes, is characteristic of the Atlantic Coast east at least as far as New Jersey. Better known manifestations include Marcey Creek (Manson, 1948), the Washington quarries (Holmes, 1897), and such New Jersey sites as Koens Crispin, Salisbury, and Goose Island (Cross, 1941; Schmitt, 1952). The complex also seems to be

present in New England (Bullen, 1948) and in Pennsylvania (Witthoft, 1949, pp. 12-13). In every case there is evidence for the addition of pottery to an otherwise unaltered complex, fiber tempered pottery in Georgia, steatite or grit tempered cord or fabric marked ware to the north and east.

The Central and Southwest Georgia Archaic projectile points fall in the same general form and size series as the Stallings complex points, although they are usually made of brightly colored, often banded flints. Grooved axes of some type are probably associated, and choppers seem to be of some importance. Until publication of the reports on Macon area sites, and excavation in Southwest Georgia, we must leave the Archaic here.

For the writer, the Early Woodland period begins with the appearance of pottery, apparently at a relatively constant temporal level in the Georgia area. It appears that classification of the relatively obvious cultural continuum, extending in time from 5,000 B.C. to 1700 A. D., must depend on arbitrary divisions into segments which can be handled. Certainly there are peaks, such as the Hopewellian and that of Mississippian culture in the Southern Cult, but we cannot handle only the peaks and leave out the developmental stages. With this fact in mind, I seriously doubt the validity of classifying the fiber tempered and fabric marked levels with the Archaic on the basis of a supposed continuation of the basic economy. These doubts apply even more strongly when the Deptford complex, here considered a late development in Early Woodland or Burial Mound I, is also classified as Archaic (Goggin, 1949, p. 22). The writer will freely grant that there are no strongly defined changes, or abrupt ones, in the cultural continuum until the Hopewellian level is reached. However, even here there is a marked change only when one becomes preoccupied with ceremonialism. It seems then that to break the cultural continuum down into segments of some value for comparative purposes, currently the main point of classification, we must use distinctive cultural elements, not estimates of the economy, unless there is good evidence behind these estimates. The introduction of pottery is a distinctive time marker, and a good case can be made for the comtemporaneity of appearance of the two major types, fiber tempered and fabric marked, in Georgia. I will grant that the Deptford complex, which appears next, is a good horizon marker, and might well be used to define a rather widespread culture period. I would have no objections to seeing this done, although in this report Deptford is considered late Early Woodland. Even so, it is not reasonable to throw the entire fiber tempered-fabric marked horizon back into the Archaic. Division of Early Woodland then into two periods might be of some value. Throwing one or both of them into another larger class is not of any apparent utility; in fact it seems to defeat the purposes of classification.

As noted above, there can be little doubt in the case of the Stallings complex that fiber tempered pottery, first plain and later decorated, is added without other marked change to the pre-existent cultural complex.

This was abundantly clear at Stallings (Fairbanks, 1942, p. 227) and was verified by Miller (1949, p. 38) and later by Caldwell (personal communication) at Lake Springs. A transition from plain to punctate decorated pottery has been observed by Waring at Bilbo and other coastal sites, and it is understood that development in other artifact types, as bone pins, has been observed (Waring, A. J., Jr., personal communication). On the basis of present knowledge, the fiber tempered pottery development is limited to the Georgia coast and the Savannah River valley upstream to the Augusta area. Occasional surface finds indicate that the complex may extend eastward for a few miles out of the Savannah Valley and it is definitely of some prominence as far west as Macon plateau (Fairbanks, personal communication). In Southwest Georgia, occasional plain fiber tempered sherds, apparently from vessels with shapes more like those of the Orange series (Sears and Griffin, 1950) have shown up. Presumably, although they are called St. Simons Plain rather than Stallings Plain, the sherds Willey found on the Northwest Florida coast are related to these (Willey, 1949, p. 252). Since they are all plain ware, the decision would have to be based on shape features. In any event, fiber tempered pottery of a plain variety seems the best candidate for the earliest ceramic levels in Southwest Georgia.

In North Georgia, there can be little doubt that fabric marked pottery, *Dunlap Fabric Marked*, is the earliest pottery, although thus far the preceding Archaic is little known. Certainly indications of succession elsewhere in the area (Sears and Griffin, 1950, for summary) indicate that this general pottery style was grafted onto a pre-extant Archaic over large parts of Eastern United States. Apparently, this is nearly the only pottery type in the period. Until Caldwell's Allatoona Report is published (Caldwell, MS.) the remainder of the complex, the non-ceramic features, will remain unknown, since all published discussions, as Caldwell's (1950, pp. 12-19; Wauchope, 1948, p. 202) note only the pottery.

There has been a great deal of controversy concerning the relative time position of the fabric marked versus the fiber tempered wares. The writer here must ignore most of this, and simply point out again that both seem to develop in place from a pre-extant Archaic, and both seem to be succeeded by the check stamped and simple stamped types of the general Deptford level. This to me indicates a general contemporaneity, even though it be admitted that one

might have had a beginning a few centuries before the other, or have disappeared into other types a few centuries later.

One of the unfortunate aspects of Georgia archaeology is a tendency to talk about various periods, cultures, and complexes as if we really knew something about them. In many cases, as with the Deptford level, Lamar, Swift Creek, and most others for that matter, we have available only type descriptions of some of the pottery, a knowledge that these types are too broad, a few personal observations on the extent of area of occurrence, and opinions, unpublished, of various individuals. The "conjunctive approach" (Taylor, 1948) or not, it is information that we need for comparative and analytical purposes rather than mere descriptions of some of the pottery from some sites-descriptions which handle only the ideal type, without frequencies, internal changes, or other necessary data.

Regardless of the foregoing, we do know something about the distribution of the Deptford pottery series (Caldwell and Waring, 1939; Sears and Griffin, 1950). The series, characterized by sand tempered pottery decorated with check stamping, linear check stamping, and simple stamping produced through the use of a grooved paddle, and tertapod supports, seems distributed over the entire state and down into Northwest Florida. There are variations in the complex not fully understood thus far, as indications of simple stamping appearing before check stamping in Allatoona (Wauchope, R., 1948, p. 203). It is clear, however, that the total assemblage is as characteristic of the South Appalachian province in the latter part of Early Woodland times as complicated stamping is from the next time period on.

We are not so sure of how the complex developed. A probable line of ancestry from the Savannah River complex has been indicated (Sears and Griffin, 1950). Wauchope (1948) has suggested that the check stamp may have developed, at least in part, from the fabric marking. It does seem probable that the often-noted Refuge series (Waring, n. d.) is in the developmental line from the Stallings series. It also seems probable that the equally mysterious Mossy Oak Simple Stamp, with a known distribution covering most of the state north of the Fall Line, may have some part to play in the ancestry of at least the Deptford Simple Stamp. Mossy Oak may be the simple stamp before check in Allatoona.

As I have indicated elsewhere (Sears, 1952, p. 529), the cultural split explicit in ceramics between the Piedmont and the Coastal Plain, clears in the Early Woodland period, reappears markedly in the next level, Middle Woodland or Hopewellian, and continues through to the Lamar horizon in the protohistoric period, although even in that horizon traces of the divergence in ceramic decoration techniques

can still be found. This divergence in ceramic decoration is in the use of complicated stamps with markedly curvilinear design elements in the Coastal Plain, and in stamps using angular motifs in the Piedmont.

It may be best to state before proceeding with this development that the writer feels rather strongly that the term "Swift Creek" per se should not be used as a term descriptive of curvilinear complicated stamping. This usage, stemming from A. R. Kelly (1938), has been productive of many abuses, particularly in that its adherents, even though aware of the temporal and spatial, hence cultural, variations in this stamping, tend to treat it as the type representative of a culture period. It is, in one sense, of a culture period covering over a thousand years of Georgia prehistory, which makes it rather useless for comparative studies. Thus used, it is perhaps equivalent in usefulness to the term "painted pottery" for designating all of the painted pottery types of the Anasazi Area. More explicit types have been and are being defined, and it would be far more useful to deal with these as specific ceramic types, reserving Holmes' old term "South Appalachian Ware" for the total decorative style, or just "complicated stamp," which is as good a synonym for Swift Creek.

Early Swift Creek Complicated Stamp, a pottery type discussed by Kelly (1936), Fairbanks (1952, pp. 287-288), and many others, is almost obviously a direct descendant of Deptford pottery. As I have suggested elsewhere (Sears, 1952), the rather abrupt appearance of this pottery type may well be due to old usage of carved stamps for other purposes and their transference to pottery. Although there is published information only from the Northwest Florida coast (Willey, 1949) and the Swift Creek site (Kelly, 1938, n. d.), this type has been observed in a sufficient number of collections from south of the Fall Line to make it reasonably clear that it occurred over the entire area during the Middle Woodland period.

The Piedmont version of complicated stamping in Middleland or Burial Mound II times is not as certain. Largely on typological grounds, it seems probable that an early and simple version of *Napier Complicated Stamp*, observed in collections, is at least important. The better known variety of Napier, with rather formal motifs, seems to be a regional equivalent of our next horizon, Swift Creek II.

It is probable that the fine check stamp in North Georgia as Caldwell's Booger Bottom Check Stamp (1952, pp. 323-324) or his Cartersville Check Stamp (1950, pp. 16-17), which is apparently culturally and descriptively identical to the Booger Bottom type, are regional equivalents of the Deptford Check. With the late addition of simple stamping to check stamping in the area (Caldwell, *Ibid.*; Fairbanks, personal Communication) the complex may develop into the regional equivalent of the Deptford complex. However, the full

Deptford complex with all three types—check, linear check, and simple stamped—is present in North Georgia both in the Etowah Valley and in the Athens area. Presumably, it develops from the horizon with the fine check. This is then the earliest appearance in Georgia of the fine check stamping. When it appears in the South, it is taken as a time marker for almost the other end of the prehistoric time scale.

In spite of this, small check stamping throughout the state, also known in pure sites from the Jim Woodruff Reservoir (Kelly, A. R., personal communication) seems to represent an "unnaturalized" culture, which appears rather erratically, and does not take part in the main developmental streams. It may account for the erratic appearance of small check stamped sherds in all sorts of contexts, through influence on other peoples at various times plus the "trade ware" theory. Napier Complicated Stamp, on the other hand, is so clearly typologically ancestral to the total ceramic development in the Piedmont that it must be considered important, regardless of lack of knowledge and properly excavated sites pro tem.

I might also point out here that there seems to be a completely unauthenticated theory that "Swift Creek" pottery is characteristic of all of Georgia, and an even vaguer theory that its "genesis" lies in the Piedmont. In spite of the lack of work, it is possible to state that I have never seen an Early Swift Creek sherd from the Piedmont. Sherds of the Swift Creek II horizon, similar to the Middle Swift Creek of the type site and other variants to be discussed below, do occur sporadically. The earliest variety of pottery decorated with curvilinear complicated stamps does not occur in the north at all, to the best of my knowledge, which certainly does not verify the theories of either uniform spread or origin.

Unfortunately, our knowledge of culture in Georgia during this period is limited to some understanding of the time-space distribution of the ceramics, since we lack even the original type site report to date. The situation is relieved somewhat by Fairbanks' statements concerning the non-ceramic artifacts (Fairbanks, 1952, pp. 287-288) indicating generally that a strong trace of the Archaic-Early Woodland culture is still hanging on. For the North Georgia Napier-Small Check Stamped horizon, we do not have even this. Fortunately, the work of C. B. Moore on the Northwest Florida coast, interpreted and brought up to date by Willey, gives us some idea of the mortuary and ceremonial aspects of Early Swift Creek culture. Moore makes it quite obvious that Santa Rosa-Swift Creek burial mounds are early Swift Creek mounds, and clearly indicates that early Swift Creek participated in the Hopewellian ceremonialism.

The next stage in the development of the curvilinear stamped tradition, "Middle Swift Creek" at the type site, is perhaps best known from Kolomoki, and is described and discussed at some length in this report. Ceramics of this period are distinguishable most obviously by the loss of tetrapod legs and the development of the folded rim. Seemingly, as indicated in chapters IV and VI, this sort of pottery is characteristic of a long interval, about equivalent to the total Troyville and Coles Creek periods in Louisiana. Variant assemblages are known, and several are discussed in this report, two having been given type status.

Very clearly, the Brewton Hill or Deptford Complicated Stamp from the Deptford site, or at least those sherds illustrated (Caldwell and Waring, 1939), are allied to the Swift Creek II horizon, as Fairbanks has pointed out. I interpret this as indicating a missing culture development in the coastal series rather than overlapping sequences. On the whole, while the writer is not an extremist in uninterrupted cultural developmental theories, it does appear that Fairbanks in his Cole Volume treatise has a great many overlapping cultures. Development of one ceramic sequence from another seems far preferable. I find it particularly difficult to believe that Early Swift Creek could have developed from a Deptford complex uniform enough to cover much of the state, indicating a high intensity of cultural contact, and then continue unchanged on the coast through the entire Middle Woodland development. Inspection of a small collection from the Evelyn Plantation site, and a photograph of one complete vessel recovered from that mound, indicates that the mound excavated is a Swift Creek II mound, post Early Swift Creek, but precedent to the definitely Kolomoki type of complicated stamping.

It is with this sort of complicated stamping that our series begins at Kolomoki, associated with a dominance of Weeden Island decorated types and a very strong representation of well developed Napier Complicated Stamp. Since documentation of the development of the stamped ware as well as the total series, is one of the main functions of this report, I will here only point out that the stamping develops in the direction of greater and greater simplicity, that the folded rims drop out, and that the Weeden Island types disappear gradually. The end point, with Kolomoki Complicated Stamp in the Kolomoki period, has the stamped type as the sole decorated ware. This interval in North Georgia, generally Early Mississippi and the Woodland-Mississippi interregnum, seems characterized ceramically by the Napier and Woodstock pottery types. The temporal equivalence of the Napier variant with rather formal diamond motifs is attested by its presence at Kolomoki. This variant is by far the most common throughout the Piedmont, although some collections contain only much more erratically carved motifs which are presumably earlier. The sherds illustrated in the type description (Jennings and Fairbanks, 1939) with circles at the termini of the

diamonds apparently are a Macon area variant, since I have not seen any others like them with the possible exception of one sherd from Northwest Florida illustrated by C. B. Moore (1902, Fig. 98). Since there have been no excavations of any consequence in a Napier site, our knowledge is confined to ceramics. The same is true of the next North Georgia type, Woodstock Complicated Stamp (Wauchope, 1948, for discussion). Stratigraphically and typologically, this underlies Etowah Complicated Stamp, the ceramic co-efficient for the Etowah and Southern Cult periods. Judging by its distribution in collections, it is the diagnostic type for the Early Mississippi period through the Piedmont, but further information concerning the culture must wait for Caldwell's and Miller's reports on their work in the Allatoona Basin.

On the Georgia Coast, as best one can tell from the scanty publication and from discussions with Caldwell and Waring, the Wilmington period develops into the Savannah period somewhere along this Napier-Woodstock transition line. It may be well to point out here that with the intrusion of cord marking at the end of the Deptford period, the coast ceases to participate in the main stream of ceramic and cultural development in Georgia. Rather, it reacts and interacts largely with coastal South and North Carolina and areas even farther east. That the population at Irene seems to have remained stable matters little; the culture developed along lines so radically different from those of the rest of Georgia that there might just as well have been complete population replacement. Until the area rejoins Georgia culturally with the advent of the Irene variant of Lamar, the only things held in common are the occasional attempts at complicated stamped pottery manufacture, quantitatively very unimportant, in the Savannah period. Since contacts with the main streams of South Appalachian culture are so limited, I would tend to mistrust even these occasional attempts at stamping, or mistrust their use as temporal markers. The probability is present that this coast was a cultural backwater from the end of the fiber tempered period with considerable cultural lag.

This is also the period of the Macon Plateau culture. Since, as far as the writer can see, this culture does not participate at all in specifically South Appalachian cultural developments, we need not do a great deal with it here. Obviously, the culture is intrusive. Thus far, it is known only from two sites, Macon Plateau itself and Brown's Mount. Rather intensive search has failed to locate more such sites. Its genesis lies to the north, in the Cumberland, with such clearly related cultures as Hiwassee Island and Small Log Town House. Although considerable development took place at Macon itself, I fail to see any available evidence allowing for participation of the culture in the development of Creek or any other specific known historic

complex culture. Legendary statements, or interpretations of legends to the contrary, ceramic developments indicate a continued emphasis on complicated stamping, characteristic of the area from Middle Woodland times to the contact period. I have not seen, nor been told of, any assemblages which could, for example, be in an intermediate stage between Macon Plateau and Lamar. If these people became "infected" with complicated stamping, they must have been subjected to a mass epidemic overnight, and all moved somewhere else to start making such pottery the next morning. I hardly think it fair to decide that the Timucua or Yuchi originated complicated stamping, and that, after the Creeks took it over at Macon, they retreated to the South while the Creeks carried on the tradition. For one thing, Timucua ceramic development is reasonably well-known (Goggin, 1952, n. d.) and while the Timucua seem to have been guilty of many things, the making of complicated stamped pottery in any significant quantities is not one of them. To blame this too on the Yuchi is even less helpful, since no one really knows what sort of pottery the Yuchi made at any specific point in space or time. While the matter needs discussion at greater length in chapter VI, it is relatively obvious that if the southern variant is protohistoric lower Creek, then the lower Creeks, and specifically such groups as the culturally aberrant Apalachee and Apalachicola, had behind their cultures and their ceramics a long development in the South Appalachian Province.

The next period in North Georgia is as well known as the preceding one in Southwest Georgia. This is the period of the peak development of the Southern Cult, which I regard as a uniform time marker in its elaborate manifestations at the Etowah site, Moundville, Spiro, Mount Royal, Dallas focus, and so on. The Etowah period ceramically is marked by the distinctive Etowah Complicated Stamp, most of the designs being variations of diamonds, line blocks, or, only late, Filfot crosses. Development within the period has been discussed at some length by Wauchope (1948 to 1950) and the writer (1952 and n. d.). Further elucidation may be expected when the reports on work in the Allatoona Basin, now in preparation by J. Caldwell and Carl Miller, are made available. At one site, CK-5 (Sears, 1950, n. d.) a square earth lodge was part of the complex. At the Etowah site itself, a large temple mound, the combined temple and burial mound excavated by Rogan and Moorehead (Thomas, 1884, pp. 95-107; Moorehead, 1932) as well as the Southern Cult artifacts from the burial mound are part of the Etowah period complex.

Something like Savannah or Wilbanks stamps (Caldwell and McCann, 1941, p. 45; Sears, n. d.) should be the ceramic diagnostics of the period following Kolomoki in the southwestern and central parts of the state. The stamped development at Kolomoki

indicated this, particularly in that the large, heavy stamps with simple motifs appearing only in the last period are those closest to Savannah and Wilbanks. Unfortunately, material of the Savannah genre is not known from Southwest Georgia thus far. It is possible that the Fort Walton development on the coast, which spread up the Chattahoochee at least as far as the mouth of Kolomoki Creek, inhibited the stamped development. At CK-5, a level containing only the Wilbanks stamp appeared after the last Etowah period. Recent excavations at the Etowah site have revealed the same sequence. Caldwell has some indications (personal communication) that a more definitely Savannah-like stamp appears with Etowah in a period following my last Etowah period at CK-5. I would interpret this to mean that the development into Savannah stamp took place in the southern part of the area, contacting the northern development just after the cult peak. From this point on, the southern development continued its own line, while in the north the two blended. I do not believe that a great deal of time intervenes between the end of the Etowah period as such and the definite beginning of the Lamar period. The latter may be characterized by the pinched or luted rim, grit rather than sand temper, and heavy overstamping.

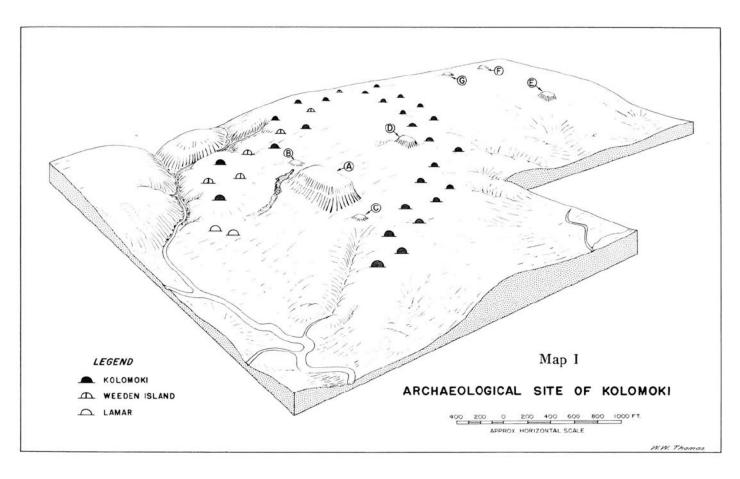
On the Georgia coast this is the Savannah period, which has been well worked out and described, with its temporal variants, by Caldwell and McCann. I may point out here again, however, that complicated stamping is not characteristic of this assemblage, while cord marking and check stamping are. The Southern Cult peak at sites producing and using the Cult artifacts must have corresponded in time to some portion of the coastal Savannah period.

Following this level, with the intervening steps nowhere well understood, comes the Lamar development. Lamar to the writer is a horizon instead of a cultural or ceramic period, marked ceramically by heavy overstamping, luted, notched or pinched rim strips and rather simple incising on bowl rims, often Cazuela bowls. There is a great deal of variation within this horizon, some of the variants still remaining to be worked out. Temporal variation is clear in some cases

while other variants are definitely cultural. In regard to the southern part of the area, I see no reason at the moment for doubting the hypothesis that the Lamar sites, with their complicated stamping, usually with a curvilinear basis to the designs, represent Creek culture of the 15th century. I might emphasize again, however, that the ceramic development indicates long Muskhogean occupancy here, not replacement by a batch of foreign plain pottery users from the Macon Plateau. Well to the north, the stamping has a strong angular cast, although motifs obviously also find part of their derivation in the Savannah-Wilbanks type of stamping. At a number of sites, such as Tugalo and others in this area (Caldwell, n. d.) and in the Tennessee (Kreberg, 1952, Fig.111), this type of ceramics, accompanied by incised ware intermediate in depth of incision between Lamar Bold Incised and Ocmulgee Fields Incised, is definitely the marker for early 18th century Cherokee culture. Again, it is possible to see a line of ceramic development working out, with roots well back in the Napier-Etowah-Woodstock level, and tieing in more specifically to the Savannah-Etowah hybrid appearing after the Cult. This indicates to me that the genesis of a large part of Cherokee culture lies in the South Appalachian Province.

These remarks concerning both Creek and Cherokee origins are not of course meant to indicate a naive and simple-minded belief in single origins for either. All cultures, historic Indian or our own, are formed from many streams, and often many peoples. What I do wish to emphasize is the theory that a large portion of the culture and peoples of 18th century Georgia descended from long-time South Appalachian population and cultural streams.

Eighteenth century Creek culture has been subjected, judging by ceramics, to rather strong influences. The incised ware degenerates at Macon Trading Post and at Kasita (Willey and Sears, n. d.) into the weak and sloppy Ocmulgee Fields Incised (Jennings and Fairbanks, 1939). The complicated stamped types are completely replaced by brushed ware, Walnut Roughened (Jennings and Fairbanks, 1939) or Chattahoochee Brushed (Bullen, 1950, p. 103).



THE SITE-EXCAVATION UNITS IN MOUNDS AND VILLAGE AREA—

Kolomoki, covering some three hundred acres, is one of the larger southeastern sites. Located on Kolomoki Creek which flows into the Chattahoochee River about six miles to the west, it is in the southwestern corner of Georgia. This position places it on the fringe of the Gulf Coastal Plain, not far from the Florida Northwest Coast. In terms of culture areas, it is reasonably close to interior Alabama-Mississippi cultures, in the area of Georgia cultures distinguished by the complicated stamped tradition in ceramics, and on the northern fringe of the area ceramically characterized by Weeden Island style pottery through a large part of its history. It seems at least highly probable that this location, in or adjacent to at least three main streams of cultural development, is largely responsible for the size, cultural complexity, and rapid cultural change evinced at Kolomoki.

The village areas and mounds representing the remains of aboriginal occupation are found concentrated

toward the center of a low spur, somewhat separated from the surrounding countryside by rather deep gullies and stream cuts which have almost precipitous sides in places. Large numbers of springs issue from the lower edges of these cuts, the water flowing from an underlying limestone stratum. These springs, which never run dry, may well be one of the reasons for the selection of the site as a center for a large population concentration.

Since the uplands apparently have been farmed for nearly a century and for an unknown period of time during the aboriginal occupation, it is difficult to say what the original vegetation may have been. Today, as with all such land in this area, it has a sparse covering of pine and evergreen oaks. The surrounding bottom lands and ravines bear a lush, semi-tropical cypress-magnolia-gum-evergreen-oak vegetation, which has probably changed little in character since the Kolomoki period.

The accompanying detail map (1) indicates the layout of the site, shows the terrain, and gives the location of the various excavation units of Kolomoki.

A feature of importance in the site plan, or city plan, is the relationship between the large temple mound at the east end of the site, fronted by a large plaza, and the village of the Kolomoki period in a large arc surrounding the plaza. This tends to knit the plaza, village, temple mound, the two mounds of somewhat uncertain function which flank the temple mound, and Mounds D and H into an interrelated complex rather than an assortment of discrete parts. Mound E, a burial mound, and its related satellite Mound F fall outside the village area, although they are part of an alignment of mounds. Insofar as is determinable, all of the mounds noted are of the Kolomoki period, there being some slight doubt in the case of B and C, although in view of their position in the structural complex the doubt is really very slight that they are of this period.

Only a few units of the Weeden Island I period village occur in the area covered by this map. Most of the earlier area is just over the south park boundary. There is also a small mound some distance to the south, which may eventually be demonstrated to be a burial mound of the Weeden Island I period. This situation is unfortunate. However, I believe our ceramic sample is sufficiently large for characterization of the Weeden Island I period complex.

The small Lamar period village, too, is outside this area. Its location, behind the great temple mound on the banks of Little Kolomoki Creek, the waterway which gives the site a route to the Chattahoochee some ten miles to the west, is sufficient indication that it bears no relationship to the mound-plazavillage complex. This is of course backed up by its late temporal position and the extremely small size of the village unit.

There is evidence at Kolomoki of some definite occupation during the Archaic period, although this has not been entered on the map. Apparently a thin representation of Archaic occupation once extended over the entire site, with a definite concentration on the ridge running through the northwest area.

It may be noted that only a small percentage of the actual occupied area has been excavated. There are of course a number of reasons for this. First, there are the simple limitations of time and money. Second, although the surface material of the indicated periods can be found in many parts of the village arc, particularly to the west and northwest of Mound D, because of heavy erosion there is little or no material left in place. Other sections of the village area are now part of the entrance road. Finally, it does not seem either necessary or desirable to completely excavate a site of this size. A point of diminishing returns is certainly reached at which the size of the

sample is increased but not the amount of information. It is believed, with various qualifications which will be encountered in other sections, that this point of diminishing returns has been reached at Kolomoki.

VILLAGE EXCAVATION UNITS

For the purpose of description, the village area, predominantly that of the Kolomoki period in this discussion, may be divided into three units. These are: (1) the Southern Area, the flat land south of Mound A, excavated the first season; (2) the Northwest Area, location of the richest remaining deposits, both in terms of thickness and areal extent; and (3) the Western Area, preserved in significant quantities only under one mound and under a wash deposit.

I might state here, to avoid confusion, that materials from the plow zone do not enter into any of the discussions of Kolomoki ceramics. We discovered during the first season's work that plow zone material over Weeden Island period pits and over rich Kolomoki middens was identical, a thorough mixture having resulted from the long cultivation of the site. In certain areas, this mixture might not take place, since there is a great deal of distance between units of the several periods, but since we have at least adequate samples from undisturbed deposits in many periods, it does not seem wise to use the plow zone material. This has meant that materials from many of our trenches in the plow zone have not been used. Thus while we have excavated some 33,475 square feet, mostly in five and ten foot wide trenches, the thoroughly analyzed materials come from a comparatively few units, about half the total excavated square footage of the site.

At the end point of aboriginal occupation, the entire village area must have been covered with a midden deposit anywhere from one to three feet thick. Since that time erosion in some areas, deposition in others, and the levelling effect of plowing have produced a new soil or ground surface. The undisturbed units of midden are, seemingly, those which occupied slight hollows in the original surface or were protected by structures. From this point of view, the plow zone is not a midden, although it is at many points rich in artifacts. Figure I is an idealized cross section which would apply to almost any of the midden units as we found them. For the sake of emphasis, however, I may repeat that these basin shaped depressions are not structures in any sense of the word, but are the fortuitous results of aggrading activities which have taken place since they were filled.

All excavations except those in obvious refuse pits were carried out in arbitrary six-inch levels, and all artifact analysis was in terms of these levels. In spite of this, no vertical change in artifact types, let alone physical stratigraphy, was encountered at the site.

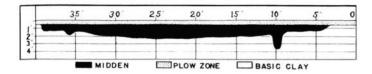


Fig. I—Idealized Cross Section of Midden Unit 28

South Area

There are four units in this portion of the site which possess some significance. They may be characterized as follows:

Unit 28: Midden area, roughly circular, thirty-five feet in diameter and up to thirty inches in thickness. Excavation consisted of one ten-foot wide trench through the center with one additional ten-foot square on each side of the center line. Kolomoki period.

Unit 21: Midden area, roughly circular, thirty feet in diameter, up to eighteen inches in thickness. Completely excavated, no trace of structures except scattered postholes. Kolomoki period.

Unit 29: Actually two units. A three-foot wide and three-foot deep refuse pit with a burial at the bottom and a very small refuse pit a few feet away, connected with the burial by several inches of undisturbed midden. Completely excavated. Kolomoki period.

Unit 4: This unit is also two-part, containing, only three feet apart, two very large refuse pits. Both were four to six feet in diameter, were excavated about three feet into basic red clay, and were washtub shaped with flat bottoms. They were of course troweled out from the top. They contained our largest sample of Weeden Island I-a period materials.

Northwest Area

The village in this section of the site was located on a long ridge. Because of this, there had been somewhat less erosion here than in other parts of the site, although over most of the ridge artifacts occur only in the plow zone. Plow disturbance at this point has been heavy, probably because the ridge is capped by a leached, rather sandy soil, much lighter than that in other parts of the site. This excavation consisted of three rather long interconnected trenches and one ten-foot square pit.

Unit 1: A five-by-ten-foot square initially, widened into a ten-foot square in a later season. Disclosed another of the basin shaped midden areas, some thirty inches thick in the center. Total unit seems to have been about twenty feet in diameter although it becomes very shallow out of our square, fortuitously located near its center. Kolomoki period.

Unit 2: A ten-foot wide trench, two hundred feet long. A small pit was encountered near the south end, the only Weeden Island I-a period deposit found on this side of the plaza (See N. W. 1-95R100). A com-

paratively thick section of midden, one hundred feet long but not overly rich, was sliced through toward the center of the trench. Materials from the remainder of the trench were scanty and are not presented in detail in this report since, in a situation where horizontal stratigraphy is obviously present, inclusion of the data from the entire unit would only cause confusion.

Unit 3: This trench, seventy feet in length, runs eastward from near the center of the Unit 2 trench. Through most of its length the collections were also too scanty for use. Rather thick midden was encountered toward the end of the trench where it was broadened and an area fifteen feet to a side was opened up. However, a probable Early Kolomoki or Late Weeden Island I-b midden had been disturbed by several small pits of the full Kolomoki period. Again, to avoid further confusion only artifacts from the pits have been used in the comparative analysis of the various site units. They will be designated from this point on "Northwest Area-Unit 3" and are representative of the Kolomoki period.

Unit 4: Actually, this is a continuation of Unit 3, but was excavated in a different season and runs at a slight angle from Unit 3 in order to follow the ridge line. The 200 feet of trench cuts through three physically indistinguishable units of midden in its western end, covering the Weeden Island I-b through the Kolomoki periods. The remainder of the trench was through a section in which materials were limited to the plow zone, and consequently were not useful. The three units considered in this report are: "Sections 2 and 3, N. W. Area Unit," "Sections 4-6, N. W. Area Unit 4," and "Sections 7-12, N. W. Area Unit 4." Although there is no physical segregation into cultural units in this long segment of twelve-to-eighteeninch thick midden at the eastern end of Unit 4, cultural change was obvious when the materials were laid out on a table. The 120 foot midden segment was then divided into the three sections used for analysis, although it is fully realized that we are artificially segmenting a cultural continuum which in this case happened to be laid out horizontally rather than vertically.

Central Area

Midden deposits were preserved only under Mound D and under an outwash slope.

Mound D Midden: A six-to-twelve-inch thick section of midden, partially in place and partially scraped up into a core mound, was preserved beneath this large burial mound. This was an exceptionally fortunate circumstance, since the deposit was very rich and gave us our best sample of late Kolomoki ceramics.

Unit 5: Another rich section of twelve-to-eighteeninch thick midden was cut by a ten-by-twenty-foot pit

into a supposed mound. Seemingly some wash had taken place here, followed by some gully erosion, producing the mound appearance. Nevertheless, a rich sample, comparable in all respects to that beneath Mound D, was preserved.

Mounds

Of a total of nine mounds on the site, eight have been excavated in whole or in part. The ninth, Mound G, may not be a mound and in any case has been used for a cemetery containing the late nineteenth and early twentieth century burials of the Mercier family, owners of the Mercier Plantation which once included the Kolomoki site. We will in this chapter only describe the mounds as we found them, describe the general plan of excavation as briefly as possible, and note the internal organization and relationships of the various features of mound construction, artifact types, etc. Description, discussion, and comparative analyses of the artifacts and other data susceptible to comparative analysis will be reserved for later chapters.

Mound A

One of the rectangular truncated pyramids classified at Temple Mounds in the Southeast is the dominant feature of the site. Located at the eastern end of the plaza, in view from all points in the village which bordered the other three sides of the plaza, this mound is 325 by 200 feet at the base, and fifty-six and one-half feet high at its highest point, near the south end. Although the contours are well preserved, with comparatively straight slopes and sharp corners, with a minimum of wash and gully formation, there is no definite indication of a ramp on the structure. We may surmise that this usual feature was replaced by some sort of log or clay steps.

The southern half of the top platform is about three feet higher than the northern half, indicating the probable existence originally of two clearly defined top platforms, probably with a structure on each. This situation would be comparable to that found at Hiwassee Island (Lewis and Kneberg, 1946, Pl. 13-19).

Excavation was limited to two cuts, one into the toe of the mound toward the south end of the west face, the other into the center of the supposed higher platform at the south end of the top.

Cut I at the base of the mound, ten feet wide by twenty feet long, seemed to be confined largely to clay wash, with some of the final red clay cap present in the end toward the mound. Underlying this was a white clay layer which seemed to represent the last completely buried cap. These layers are illustrated in Fig. 2 below. Although a sharp distinction has not been made between clay wash and red clay cap, there is a textural difference which is difficult to define.

Cut 2, ten feet square, went through several feet of red clay on the top of the mound, with occasional

sherds, and then encountered a hard-packed surface on white clay, quite clearly now the surface of the last fully-buried mound construction stage. A few sherds were found definitely in place on this cap.

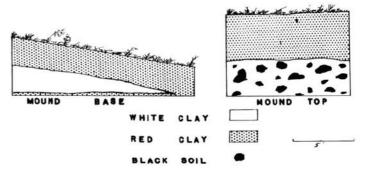


Fig. 2. Schematic Profile, Schematic Profile,
Cut 1 Cut 2
White clay is first buried surface.

It was rather obvious that the sherds in the red clay of the last cap had been brought in with the clay, probably along with the occasional pockets of topsoil which were also encountered. This clay seems to have been gathered in the immediate vicinity of the mound, perhaps from the part producing the gully which runs along its southern end. The yellow clay, on the other hand, like that used in Mounds D, F, and H, can only be found in stream beds since it is a product of a normally buried geological formation. Sherds on it and in it must be contemporaneous with the period of its deposition, while sherds in the red clay can and do cover the total span of occupation at the site. At least the last two caps on Mound A fall in the Kolomoki period.

Mound B

This was the most unusual mound it has ever been the writer's misfortune to encounter. As a result of a trench cut into it in the first season's work, it was hypothesized that this small structure, fifty feet in diameter and not over five feet high, represented the remains of a collapsed earth covered lodge. It would be difficult to have been more in error. The original trench was extended in 1952 without any positive results. Technique was then changed to striping, combined with more cuts to provide cross sections. It rapidly became obvious that Mound B consisted of a collection of postholes. Very large posts, twentyfour to thirty inches in diameter, were erected successively in this small area. Since a great deal of yellow clay in small amounts as well as red clay and topsoil are present, some earth must have been mounded around the base of each post. Later posts often cut through the remains of earlier ones, so that in only a few instances were complete outlines produced. On the whole, the lower thirty to thirty-six inches of each post was buried. It was even possible in a few instances to note that a trench, triangular in longitudinal cross section, had been dug to receive the posts (See Fig. 3). They were then raised with their points in the point of the triangle, up from the sloping base of the trench until they rested vertically against its end. Earth was then piled behind them to secure them in place on the open fourth side. To necessitate this elaborate method, the posts must have been of considerable height, probably with at least ten feet protruding above the surface.

The ceramic assemblage contains sherds of all periods, as is true in the topsoil of adjacent areas, indicating that the end point at least of post erection fell in the Kolomoki period.

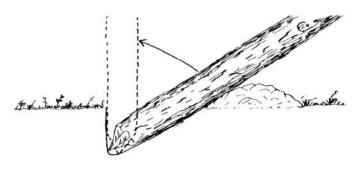


Fig. 3-Post Erection Technique, Mound B

Mound C

This mound is almost precisely the same size as Mound B, and is located in a position at the north end of the temple mound corresponding to that of Mound B at the south end. In spite of complete excavation of the eastern half of this mound, running a trench through the center of the remaining half, and stripping the topsoil off one of the quadrants remaining, I was still not able to ascertain the nature or function of Mound C. The earth composing it shows basket loading clearly and includes topsoil, midden, red clay, yellow clay, and white sand. Soil of each type may be found as single basketfuls, or as basketfuls of all types combined. Assuming that Mound C was built in a continuous operation, as seems probable in view of the lack of developed sod lines in its interior, its construction dates in the Kolomoki period.

Mound D

Mound D was the most elaborate of the mounds at this site, and the largest excepting the Temple Mound. Since it was reported in considerable detail in a seasonal report (Sears, '53b) we may keep our summary here to a minimum description of its most important features. The mound was twenty feet high and one hundred feet in diameter when completed.

Since its excavation was rather complex, we may perhaps best summarize it by a description in terms of building operations, simply listing the various features of construction and referring the reader to the descriptive report for further details.

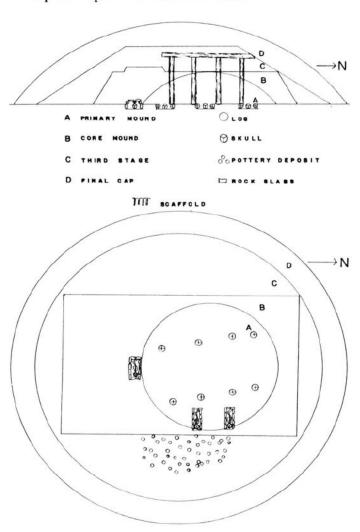


Fig. 4. Schematic Profile and Floor Plan, Mound D

The first step was clearing an area about fifty feet in diameter of all debris, including midden. Five individuals, slightly flexed at the knees accompanied only by a few beads, were interred here in log lined graves. As their graves were being filled, eight large logs were held in a vertical position. The earth mounding over the graves, plus midden from the area which had been scraped aside, was used to support these logs in the upright position. The resultant primary mound was then covered with rocks. After the scaffold was complete, but before any more construction took place, one male was buried in a rock slab and log grave adjacent to the southern edge of the scaffold. After the earth was piled into and

over his grave, several individuals or parts of them were cremated on top of the earth. A square framework of poles, believed to have been a litter, was then placed on top of the cremated remains. Two more individuals, the only two definitely female bodies in the mound, were placed in two more rock slab and log tombs, side by side, in front of the scaffold. In all three cases, no offerings were placed in the graves, except for occasional conch beads which appear to have been ornaments in place on the bodies at the time of burial rather than offerings per se. It may be noted that a definite relationship is implied between the male and the two females in terms of shared use of the scaffolding and the common grave type.

After these graves were completed, a miniature temple mound, fifty by thirty feet and five feet high, was erected over the core mound. The scaffolding still protruded from the top of the platform mound. A mass deposit of complete vessels, sherds, and human heads was then piled against the east edge of this mound.

The next stage of mound building involved a succession of interments over the main burial, with each complete body or skull or long bone bundle partially cremated in place, the bodies in a log outline. As each fire was burning, rocks and earth, turned red by the fire, were placed over the cremations. On the south side of the mound, over the main burial, yellow clay was piled over each of the burials. Brown earth was piled simultaneously over the upper portion of the scaffolding on the north side. The interlensing of basket loads and complete lack of any developed surfaces indicated that the processes of earth piling and interment with cremation were continuous and simultaneous.

This stage was completed as a flat topped mound with a circular base. A mass cremation of complete bodies, long bones, and skulls covered the entire top of this platform.

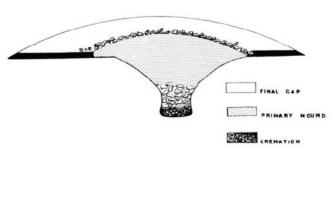
Following this, the entire structure was coated with from three to ten feet of red clay, producing the final dome shaped or slightly conical mound.

Two lots of ceramics, one from the sub-mound midden and the other the mass deposit at the eastern side, indicate placement late in the Kolomoki period. In all probability this is the latest structure in the site.

Mound E

Mound E, twelve hundred feet west of Mound D on a line from the Temple Mound, was a smaller edition of Mound D. It was built with an internal plan of organization similar to that of Mound D but on a smaller scale.

The first step in its construction, after the usual removal of topsoil and debris, was the excavation of a large rectangular funnel shaped pit. Its depth was seven feet, with basal dimensions of six feet by nine feet. On the bottom of this pit the already cremated remains of one individual were placed with a large number of conch shell beads and two copper cymbal shaped ornaments with pearls in their centers. The lower portion of the pit was then filled with large rocks, ranging in size from mere pebbles to one slab measuring six by three by two feet. Two bodies, with heads to the east as were all burials in these mounds, were then placed on the sloping upper sides of the pit in the extended position. The fill over them, finally rock capped, produced a small core mound. A single skull with a copper covered wooden cymbal shaped ornament was placed on its peak.



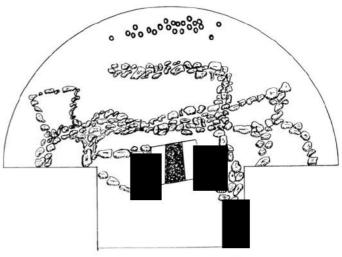


Fig. 5-Schematic Profile and Floor Plan, Mound E

A mass pottery deposit containing fifty-four complete vessels was then placed on the ground surface directly east of this core mound. A final cap of red clay, with a great many included rocks, was added over the core mound and pottery deposit to complete the structure.

Mound F SANDY CLAY WHITE CLAY BLACK LOAN

Fig. 6-Mound F Schematic Profile

Mound F, four hundred feet south of Mound E, was of fair size, sixty feet in length, fifty feet wide, and six feet high, with a slightly ovoid shape. It was excavated by the usual vertical slicing technique initiated at the eastern margin. This was later modified to a stripping technique. We found in the interior of the mound a white clay platform about thirty feet square with a flat top. The shoulders of the structure, as shown in Fig. 6 above, were composed of solid white clay, unusually pure in color and texture. Inside this was a soft black humus with only a thin coating of white clay over the top which seemed to have been tracked there by people climbing up over the shoulders. Apparently, the final two-to-three-foot thick red clay cap was added only to preserve and memorialize this structure. Artifacts consisted solely of a handful of sherds, most of them plain and the rest probably assignable to the Weeden Island I-b period. Since this is the period of the only nearby midden deposit, from which some of the soil must have come, I doubt that it is indicative of the period of mound construction.

If this were the only case of such a memorialized platform, I would not care to hazard a guess as to its period of construction. However, Mound H was of the same variety, and on the basis of association with burial mounds, F and H may be dated in the Kolomoki period.

Mound H

This small mound must originally have had about the same proportions as Mound F, and was still of about the same diameter at the time of excavation. Seemingly, the internal yellow clay platform, about three feet high, had not been greatly disturbed. A great deal of the final cap had been removed or leveled by plowing and other disturbances incident to short term usage as a house site. These disturbances may also have affected the margins of the contained clay platform.

Again, while there were a few postholes and burned areas, there were no certain traces of structure on the platform, and no intentionally included artifacts. A great many sherds were recovered, both from the two caps and from the subsoil. In all cases, they seem to represent the entire period of site occupation, indicating that the soil was largely scraped up from the surrounding area during the final period of occupation.

Since both this mound and Mound F contained only the clay platforms, and since both are approximately the same distance south of Mounds D and F, respectively, it appears probable that the platforms were of some use in the burial ceremonies incident to the construction of the burial mounds, and were simply covered with the clay caps to memorialize them as sacred sites immediately after usage.

It was rather clear in the case of Mound F that the usage was short termed, since there was only a very slight feather edge at the base of the white clay platform, no more than could be accounted for by the traffic from a few individuals for a day or two. Lack of layers in the feather edge, composed of small lumps of the lime-like white clay, makes it rather certain that the small amount of material which did work its way down the slopes was moved down by human feet and not simply washed down in rainstorms.

It is then reasonably certain that Mounds F and H may best be regarded as satellite mounds, ceremonial adjuncts to burial Mounds D and E.

Lamar Village

Well away from the main area of occupation, at the top of a slope overlooking Little Kolomoki Creek and a large "boiling spring," a few refuse pits and a thin midden yielded materials of the Lamar horizon. Most of the excavation was carried out by bulldozer and pan, with the individual small pits troweled out by hand. For all practical purposes, this might well be considered a discrete site, isolated from the main stream of occupation culturally, spatially, and temporally.

Summary

It may be well here to emphasize again the point that the various mounds, village area, and plaza at this site are not a mere spatial agglomeration of discrete entities. Rather, they can be understood only as units of a rather tightly knit complex as is almost obvious from their spatial orientation. The location in space of the Temple Mound, with its two small flanking mounds, the plaza in front of the temple, mound, the village surrounding the plaza on three sides, the location of the two burial mounds due west of the Temple Mound and plaza, and the rather definitive location of the two memorialized white clay platforms with respect to the burial mounds, all imply specific organization, a definite intent in city planning from all points of view.

I am not completely certain how Phillips, Ford, and Griffin would designate this site in their discussion and classification of ceremonial centers and village sites possessing temple mounds (1951, pp. 309-343). Obviously it is a village site with a temple mound, but so are most, if not all, ceremonial centers. The three

men mentioned above appear to have worked largely on the basis of community plan with a preconceived notion that the earlier sites were ceremonial centers only, a position I am not completely certain is justifiable.

A point which must be considered here, although documentation will be reserved for the next chapter, is the rather long occupation of the site. Even excluding the earlier Weeden Island I level from consideration, since its village area is out of the main complex, the major arc of village covers a time period equivalent to a long segment of the Louisiana Coles Creek period and continues on into the level classified there as Early Plaquemine. With only this information, we should tend to believe that the village occupation was rather thin at any one point in time. However, the majority of the excavated units, and all of the richest middens, are of the latest Kolomoki period. This cannot have lasted much over a century by any normally accepted scales. Inspection of surface sherds, performed by picking them up, looking at them, and returning them to their original position on the ground, indicates that a vast majority of the decorated sherds in any portion of the village arc are also of this period.

The burial mounds and the temple mound also bear out the theory that both burial mounds, their satellite mounds, and at least the last two caps of the temple mound also fall in the Kolomoki period.

Considering all of this, I would say that while the site plan took form in the Weeden Island I-b period, the real concentration of population was in the end period. Only then do we seem to have had structures over most of the village arc, indicative of population concentrations at the site large enough to build the temple mound and burial mounds and support the number of specialists, religious and secular, who appear to have lived at the site.

With some facts and lots of hypotheses to consider, I have little doubt that during the last century of its existence Kolomoki was a city, small by our standards but extremely large for the cultural level of its day. A population of two thousand people in the main village is not improbable, and there may well have been at least this number in smaller villages up and down the streams within five miles.

3 THE ARTIFACTS

A total of 56,090 sherds, 163 projectile points 195 restorable vessels, 34 other artifacts, and numerous shell beads have been catalogued from the excavations at Kolomoki. This report is based on a selected sample from the total, consisting of 24,765 sherds from the distinctive units described in Chapter II, all of the restorable vessels, shell beads, and projectile points, plus twenty-two other artifacts from the same units. The artifacts, largely sherds, that have not been considered in this final synthesis have been omitted for a number of reasons, some of which have already been noted.

First, no artifacts from the plow zone have been used in synthesis. This is because long cultivation at the site has produced a practically uniform mixture of ceramics from several periods in rather wide areas. In a few instances plow zone sherds could have been used since units of only one period were in a given sector of the site. However, for the sake of unformity, such collections have been discarded in all cases. With a sample as large as the one we retain, I see no point in confusing issues by attempting to work with collections in which there is even a slight possibility of mechanical mixture.

The sample from another group of excavated units, largely in the northwest area, has been discarded because of probable long temporal coverage in small samples. In this part of the site, we cut certain sections of trench through very thin middens, or middens with scanty artifactual material. In most cases, at certain points, we clearly had collections of some richness representing distinct points in time and cultural development. Since we are attempting to deal with rather minute ceramic changes in many instances, no purpose would have been served by including collections of only a few sherds from each unit. If these collections were lumped together to produce a sizeable sample, long temporal periods would have been included and change would have been masked. Thus we are using in this synthesis only large collections from reasonably short segments of trench or similiarly large collections from refuse pits. Selection has admittedly been on a heavily subjective basis at times, because of a feeling that a particular lot of sherds represented as short a time period as we had thus far been able to find in an as yet unrepresented range of cultural and ceramic development. Although this is not an ideal situation, the total selection has produced results in which the writer has some confidence, and he feels that the results justify the techniques used.

I might emphasize again the point that we have not been able to find any instances of physical stratigraphy at this site. In every case, material from trenches has been analyzed by six inch levels. In every case, even percentage changes were not apparent in comparisons of the derived data. One almost suspects that clean areas for house sites were selected so that superposition never took place. Certainly something of the sort must be used for explanation since at times, as in the southern area of the site, only a few feet intervened between pits of our earliest Weeden Island I period and units of the latest Kolomoki period.

POTTERY TYPES

The ceramics from this site may be readily divided into three major series, the Complicated Stamped Series, the Weeden Island Series, and the Mortuary Ware Series. All pottery excepting trade ware is sand tempered, buff to dark red-brown in color and was constructed by a segmental fillet technique. For the sake of convenience, the plain wares from village areas are considered separately, although clearly part of them are to be associated with the Complicated Stamped Series and part with the Weeden Island Series. Consideration of the mortuary vessels as a separate assemblage, separate series herein, is not standard practice, but the justification offered below is believed sufficient for such separation. A total of twenty-one types and several sets of material not classifiable into types are considered in addition to the Mortuary Ware Series which is analyzed on the basis of vessel shape rather than by types as such.

COMPLICATED STAMP SERIES

Little Kolomoki Complicated Stamp (New Type)

Paste: Method of Manufacture: Coiled, apparently segmental fillet.

Tempering: Fine sand, amount perhaps one-half total bulk.

Texture: Compact, thoroughly amalgamated, little distortion or lamination.

Hardness: 2-3, average 2.5.

Color: Varies from light reddish-buff to dark reddishbrown, most sherds in medium reddish-brown. Occasional gray to black sherds, probably from smudged or clouded portions of vessels. Firing usually even, cores and surfaces same color except for some darkening through use on interiors.

Surface Finish: Exterior: Very sandy, many protruding grains of sand in majority of specimens. Surface not well smoothed before application of stamp, or very wet when the stamp is applied.

Interior: Well smoothed, tool marks slow in broad concentric rings.

Decoration: Complicated Stamp, usually rather faint with narrow lands and grooves. Lands usually rounded on upper surface. Lands 1.5 to 2 mm wide in majority of specimens, range 1 to 2.5 mm. Stamp shallow, impressed on sandy surface, difficult to make out design in most cases. There may be rare instances of well carved and impressed stamps, or these may at Kolomoki be later sherds present with dominant variant through mechanical mixture. Question cannot be decided at Kolomoki. Commonest motifs are chain designs—connected elements such as ovals, circles, sometimes squares. Many lands and grooves, five to ten or more, used in production of each design.

Distribution: Apparantly total vessel wall, rim to base, no cases of stamped bases.

Vessel Form: Insofar as predictable from sherds, majority seem to be vertical walled overgrown beakers, 6-10 inches in height, 4-8 inches in diameter.

Rim: Form III, a broad fold, most frequent. Direct rims, form II and narrow folds, form IIb, also present in some quantities. No notched or serrated rims, no smoothed form I rims.

Base: Slightly convex. No flat bases present in samples.

Thickness: 4-5mm, most 4mm.

Area of Distribution: Information scanty. Probably all of Northwest Florida and Southwest Georgia, range to north unknown. Probably grades into Middle Swift Creek to be defined as a type at Macon. Time Range: Weeden Island I period.

Weeden Island I-b Period Stamped Pottery

A great many stamped sherds in our collections are from units placed on the seriation chart between the Weeden Island I-a period, which possesses as one type Little Kolomoki Complicated Stamp described above, and the Kolomoki period with Kolomoki Complicated Stamp (See Sears, 1950a) as the major decorated type. In the following chapter on seriation, units so placed are equated with the Weeden Island II period and possess as parts of the complexes varying amounts of a number of Weeden Island Series types.

The stamped ware is, in its total characteristics, intermediate between Little Kolomoki Complicated Stamp and Kolomoki Complicated Stamp. This being so, I should of course be able to follow the normal process of noting the ranges of variation in the several attributes and then striking a descriptive mean with notation of the ranges. However, I believe that to be useful for our problems in this area, pottery types should have some comparatively short-term temporal significance whenever possible as well as be representative of a style of pottery manufacture for smaller ethnic segments. This has nothing at all to do with the

current argument as to whether pottery types have a real existence or are creations of the archaeologist through his classification system. This argument seems to me to be largely semantic, and rather sterile at its current level. Types possessing the cultural attributes noted above could not be described by the usual procedures. Clearly the material covers a long time range, and equally clearly, as shown by the seriation charts in following sections, it shows in most elements significant developmental trends through time. I might mention the fading out of wide fold rims late, the beginning of the plain rim band late, and the tendency of direct rims to fade out. Further, several sorts of stamps seem to be involved, although none of them in statistically significant quantities in this assemblage. For example, a few sherds from several units had designs in which the lands were carefully crossed over to produce a small check stamped area as a part of the design. There is also a range from very clear fine stamps to comparatively heavy ones, although most use design elements repeated two or more times, or, alternately, repeat the same element combined with fill elements to produce a total nonsymmetrical design. All of these seem, at this site, to vary in a direct relationship with the chronological scale.

Admittedly, these characteristics might be simply those of an unusually variable style. That this is not the case is indicated by the evidence that they are temporal co-efficients. Further, certain sites are known in which certain of these features are of particular importance, sites which are smaller and seem to be representative of short term occupations. An example of this is the Howell site, about ten miles down stream on the Chattahoochee from the mouth of Kolomoki Creek. The development of small checks as part of a curvilinear stamped design is of real importance here. Other units in the area use stamping which has the rim forms and repeats the motifs, but does so with stamping which is deeply and clearly carved.

To sum up, it is felt that in this period at Kolomoki we have, because of the nature of the deposit, combinations of stamped styles which individually will have temporal and cultural significance. Unfortunately we have not been able, at this site, to sort out the specific style units which can be designated as individual pottery types and consequently do not feel that the mass should be given type status even though as a mass it is distinguishable from earlier and later units of style combination.

To make this report more useful, however, it may be best to recapitulate here some of the features of the stamped pottery in this middle or Weeden Island I-b period.

Paste features are close to Kolomoki Complicated Stamp. A moderate amount of sand is used; colors

range from light buff to almost black, with most in the red-browns. Interiors and exteriors are well smoothed. Stamps are well carved, with lands and grooves either rounded or flat with widths ranging from 2 to 2.5 mm, most stamps just above 2 mm. Execution, or placement on the vessel, tends to be careless, with a great deal of smudging through stamp slippage and an unusually large amount of overstamping. Designs are characterized largely by the complete absence of designs based on a single dominant unit, with a tendency toward repetition of the same unit rather than use of two or more different ones. Fill elements are large, but usually are not elaborate. There is present a distinct tendency toward design asymmetry.

In rim forms the wide fold is perhaps most characteristic although it fades late in the period while form II, the narrow fold or extrusion, is important in all levels. Form I, the smoothed rim band, appears only late in the period, and probably sherds bearing it should be classified as *Kolomoki Complicated Stamp*. The direct rim, form II, seems to be on the way out, its greatest importance being in the earlier levels.

Kolomoki Complicated Stamp

This type needs little further discussion, since ancestral types and varieties are listed above. The formal type description will be found in the Season I report (Sears, '51a, pp 9-10) and no comments are necessary here although certain developments will be discussed under seriation and in the various comparative sections. Design element and rim form frequencies will not be listed here either, although they are necessary data in the study of complicated stamped pottery. These frequencies are recapitulated for each unit in the next chapter.

I might emphasize here that this is not a minor type restricted in its occurrence to Kolomoki and the vicinity. Available evidence indicates that it is the dominant type in this time period over all of Southwest Georgia and Northwest Florida. Trade sherds have been found at Hiwassee Island (Lewis and Kneberg, 1946, Pl. 47, 2nd row from top, 2nd sherd from left), Macon (Kelly, n. d.), and at points between. Two sites have recently been found near the head of the Altamaha River with complexes similar in most respects to our Weeden Island I-b complex, but with a respectable percentage of Kolomoki Complicated Stamp.

Blakely Complicated Stamps

This type as described below, a development out of *Kolomoki Complicated Stamp*, is representative of the development into the stamped ware of the next cultural period.

Blakely Complicated Stamp (New type)

Paste: As Kolomoki Complicated Stamp in all respects, except that color tends toward the darker

end of the range with dark brown predominant, black sherds very common. Change in firing technique?

Surface Finish: As Kolomoki Complicated Stamp. Decoration: Complicated stamp, very heavy and bold. Land and groove width 5 to 7 mm, depth ca. 2 mm. One or two lands used to produce simplest snowshoe, scroll, and bullseye designs predominantly, others may occur. Very little overstamping or stamp slippage. No fill elements, single motif without repetition.

Distribution: Entire exterior vessel wall. To lip with common form V rim, to base smoothed band with form I rims.

Vessel Form: Two variants. 1-Vertical walled beakers, flat based, ranging to high shouldered flat based jars. The Kolomoki stamped form. Or: 2-Globular bodied convex based jars with slight neck construction and gently flaring rims. Latter form has form V rims, other has form I.

Rim: Form V diagnostic, often with notched or serrated lip. Form I of considerable importance.

Base: Flat or convex. Flat bases may be disc or square.

Thickness: 5-6 mm.

Area of Distribution: Information scanty. See next chapter for distribution at Kolomoki. Known to occur on other sites in this area, including sites on the Florida side of the Chattahoochee (Bullen, R. P., personal communication).

Time Range: Late Kolomoki period. This type or a derivative should be characteristic of ceramics in the stamped tradition during the immediately post-Kolomoki period in this area.

Relationship: See discussion this chapter and next, complicated stamp developments generally.

Stamped Vessels in Mortuary Deposits:

The following discussion does not include the specimens definitely identifiable as Kolomoki Complicated Stamp which appear in mounds at this site and in a great many other Weeden Island style burial mounds. These are listed in a table in Chapter VI. Other stamped vessels, classifiable neither as Kolomoki stamped nor as any of the earlier variants, do occur in Mounds D and E at Kolomoki and might be mentioned with a note as to other occurrences in Weeden Island Burial Mound context. Large jars: Vessel 41 from Mound E is a large globular bodied jar with stamping confined to a slightly defined neck. A thick rim strip encircles the orifice. Stamping is generally Kolomoki in character. A somewhat similar vessel in form, size, and stamp characteristics came from Mound D, vessel 48. The rim varies in that a collection of appliqued points descend from the collar. A third related vessel is from the Mound Field mound (Moore 1902, Fig. 302). All three of these show definite Mississippian influences in vessel form, rim treatment, and area of decoration. I rather suspect that they do not represent a real type, in terms of a culturally defined style anywhere, but are rather products of the combination of elements from many sources which is a feature of mortuary ceramics in this cultural context.

An even more unclassifiable vessel from Mound E, is a small bowl with a tall flaring rim, with stamping confined to the rim. The stamping in this case is in the Kolomoki range while the form might logically fit the general Weeden Island style categories. On the whole, it may best be regarded as an idiosyncratic combination of usually discrete concepts.

I listed Mound E vessel 44 as unclassifiable in the seasonal report. This is a somewhat conoidal jar with stamping confined to the neck area and with a narrow fold rim. With a better knowledge of stamping in this period, and on re-inspection of the vessel, I have no doubt that while it may be best not to classify the vessel as *Kolomoki Complicated Stamp* in view of the base shape, it is certainly not too abnormal for the period dominated by that type. The complexity of the design would, by itself, be indicative of the earlier part of the period.

Perhaps the most unusual of these vessels in some respects is the red painted affair with four rim points from the Mound D cache. The stamping, vessel shape except for the points, and the squared base all fit Kolomoki Complicated Stamp as described. The red painting is of course applied to vessels intended for mortuary usage regardless of type, although this is the only certain instance of such usage in stamped ware. The rim points are probably related to other uses of this concept in the general Mississippian period, common in the entire area characterized by shell tempered Mississippian pottery.

The type Mound Field Complicated Stamp (Sears, '50a) was set up to classify vessels observed in mortuary deposits which possessed the following characteristics:

Shape: Jar with definite, often narrow neck or widemouthed bottle form, similar to the engraved Moundville jars.

Rim: IIb, usually running over into the narrow fold classification.

Stamping: Variable, usually rather fine, but may otherwise partake of the characteristics of *Kolomoki Complicated Stamp* or of one of the earlier types.

Sherds with these characteristics have proved almost impossible to sort from the village collections since the type is based on total shape and rim form concepts, more specifically on rim-neck shape in sherd lots. A few sherds, definitely from the shoulders of vessels with the stamping confined to the rim, have been found in almost all units, never enough to matter statistically.

Quite probably, the type should be dropped since we seem to be dealing with a vessel shape which runs through several levels while the decoration varies with time. Yet with the consistent recurrence of the narrow fold rim on the constricted neck vessel form, I hesitate to drop it completely. I have a feeling that the type may eventually be definable and important at some specific levels. Some comments regarding probable frequency of the type at the Hall site will be found in Chapter VI. The midden at this site seems to fall generally in the earlier portion of the Kolomoki period. There is a very respectable percentage of narrow folded rims associated with stamping which is rather fine but is at the Kolomoki level of simplicity, and an unusually large number of shoulder sherds from small iars with definitely constricted necks.

Certainly, too, the decorative concept, stamping on a neck area rather than on the shoulder area used in the Kolomoki type of the over-all stamping of earlier periods, is distinctive. I feel that it may have some importance in tracing cultural change and contacts. Perhaps it is best to leave it as a provisional type for the present, which may be defined more explicitly or dropped after further work with complicated stamped ceramics.

Napier Complicated Stamp

This type is extremely important in the complicated stamped assemblage which is part of the Weeden Island I complex at this site. Seriation charts in the next chapter (Chart I) demonstrate that its span of popularity is extremely short-lived. However, we do have this definite association in the early period, an association which is important in relating North and South Georgia, or Coastal Plain and Piedmont, complexes. This relationship will be discussed at some length in Chapter VI on "Kolomoki and the Development of Complicated Stamping." I may point out here, though, for the sake of clarity, that Napier Complicated Stamp is an important North Georgia type with a rather clearly defined position at the beginning of complicated stamped development in that area. It does not occur, to the best of my knowledge, on any other site in the Coastal Plain, and, most specifically, not in any other site with Weeden Island affiliations. The type is possibly related to Saint Andrews Complicated Stamp (Willey, '49, pp. 385-386) which is also angular in motif lay-out. The relationship is rendered somewhat less probable because of the emphasis on line block motifs in Saint Andrews Complicated Stamp, a motif which in North Georgia does not appear until Woodstock Complicated Stamp, a type which follows Napier Complicated Stamp.

WEEDEN ISLAND SERIES

The nine types discussed under this heading are the most important types other than complicated stamped variants which are found in the Weeden Island I period units at this site. As the seriation charts worked out in following sections indicate, they tend, on the whole, to drop out of the total complex rather rapidly at this site. All of the type definitions except the first one are Willey's ('49, pp. 409-448) and are considered by him on the Gulf Coast to be definitive of the Weeden Island period as a whole, the presence or absence of stamped types defining an earlier (Weeden Island I) or later (Weeden Island II) period.

In this section, then, we need only list the types in most cases, although some discussion is necessary for a few types.

Weeden Island Red

This type name was assigned by me through misunderstanding of a letter from Willey. Since the type was isolated at Kolomoki, perhaps some term other than "Weeden Island" should have been used. However, the name is now in the literature (Sears, 1951a) and we may describe it here formally and continue to use it rather than confuse issues further. In any case, although no separation from simple red painted sherds was made by Willey, inspection of available collections indicates that it may be important in Weeden Island I period village collections from the Florida Northwest Coast.

Paste: As remainder of the Weeden Island Series, fine and sand tempered. Color tends to remain in the light buff range although exteriors are often fire clouded.

Surface Finish: Well smoothed. Tool marks obliterated on interior and exterior, but not polished.

Form: Open bowls only. Rims are usually thickened, although a few direct rims may be included in the type. Thickened rims may be wedge-shaped, thickened by the addition of exterior straps, or by broad heavy folds. In some cases rectangular thickened rims bear incised line at base to simulate folds. Rim is always at least twice as thick as subjacent vessel wall

Decoration: Thick coat of red paint, water soluble iron oxide pigment. May be fired on. Interior of vessel solidly coated, may cover rim fold on exterior but not vessel wall.

This type is extremely common in the earliest period at Kolomoki as shown by charts in the following chapter. Holmes noted its frequent occurrence on an Early County site, probably Kolomoki, in 1898 (Holmes, 1903, p. 112).

I see no reason to doubt that all body sherds with red paint on one side only from Weeden Island I-a period deposits at this site pertain to the type as described. In later periods, however, both this sort of red painting and red painting on both surfaces may be from vessels intended for mortuary usage and thus not classifiable in the series of types based on decorated sherds from village context.

Carabelle Incised: All sherds which seemed to bear parallel incised lines, either vertical or forming chevrons, located in the rim area, have been classified as members of this type. It is possible that a few such sherds might actually better have been classified as Weeden Island Incised, but I have held to the distinctions noted and to the probable distinction between round-bottom incised lines in Weeden Island and lines made with a sharply pointed instrument for Carabelle, in doubtful cases. The best sherd of Carabelle, however, so typed on the basis of vertical incised lines arranged in parallel fashion in a band below the rim, has shallow round-based lines.

Keith Incised: No sherds of this type, with cross hatched incised decoration in the rim area, have central punctates at Kolomoki. In no case has there been any difficulty sorting out sherds with rather open cross hatching. However, a variety of fine cross hatching on a rather distinctive fine orange paste occurred on many sherds from Weeden Island I-a period pits. On the basis of the cross hatching, this might be classified as Keith Incised. Because of a tendency toward zoning the incised areas on the body rather than confining them to the rim area, Willey suggested (personal communication) that these be classified as Weeden Island Incised and they are so carried in charts and tables. I must confess that I am not happy with this, but with the small number of such sherds available at Kolomoki, we lack justification for setting up another type. I have noted such sherds in other collections representing about the same total complex, and the use of fine orange paste seems to obtain uniformly. There are also specimens from mortuary deposits.

I do not feel, however, that, on the whole, valid types which have real application to village collections can be set up on the basis of mortuary vessels from Weeden Island context. They can of course be used to illustrate complete vessel forms, as Willey and others have used them, but the type should be well known before using the mortuary vessels for illustration. Another difficulty, particularly applicable to mortuary collections, is which aspect of the decoration is considered most important. Thus a vessel from the "Larger Mound Near Burnt Mill Creek" (Moore, 1902, Fig. 2) is decorated with the cross hatched type of incision, but the incision is zoned inside a series of four arches. The same type of arch-zoned incision, frequently in a more open cross hatching and thus closer to Keith Incised, occurs on other sites. In all cases, such vessels have been classified as Weeden Island Incised by Willey (1949).

It seems quite possible that in the case of the mortuary vessels, consideration of the total decorative complex and the recurring use of arches might be more important than the cross hatching. I do feel that little is to be gained by lumping so many decorative variants together as "Weeden Island Incised," even though lack of such lumping would leave us with very few vessels in each type. In village collections again, I do feel that such cross hatching, when found in assemblages with other Weeden Island types, might best be considered on its own merits and not classified as either Weeden Island or Keith Incised. Perhaps we need to develop two ways of looking at ceramics, as I have attempted to do in these collections from Kolomoki. The standard type descriptions are in most cases close enough to cultural reality to serve in measuring rates of cultural change, directions of influences, and so on, when applied as classificatory tools to collections comprised of sherds from everyday culinary vessels. I am not at all certain that we will ever derive useful data when applying the same typological concepts to the mortuary collections, made for and used in a completely different aspect of culture.



Fig. 7 Weeden Island Incised—Free—Zoned—Arch

Weeden Island Incised

In this study, the type has been restricted considerably from Willey's original definition. All of the pottery so classified from village areas, with the exception of the cross-hatched variant discussed under Keith Incised above, is definitely zoned. That is, incised lines are used to delimit areas filled with other parallel incised lines. Insofar as is discernible, the outlines of the zones are rarely regular geometric forms, but are rather unpredictable motifs which may be conventionalizations of natural phenomena. In opposition to this, in burial mounds only, the incised ware may be classified as free incised. Zoning concepts are secondary and the designs are slightly conventionalized features of various effigy forms. In most cases, some punctation is used as part of the total design layout. With this in mind, zoned punctated sherds, all from deposits later than Weeden Island I-a, have been carried separately although as parts of the Weeden Island complex. In view of possible confusion between many types, sherds bearing only one or two incised lines are carried separately as a sort of Weeden Island residue. On the whole, I feel that zoned Weeden Island Incised is almost entirely restricted to the Weeden Island I-a period village level. Later developments were intended for mortuary use, a fact which accounts for their scarcity in village assemblages. I should point out here, although the matter needs considerable documentation, that vessels of both incised types may occur in mortuary assemblages. The decision as to period for a mound must be based on the latest vessel form or decorative style present, since in most cases a number of periods will be represented.

Carabelle Punctated: This type, characterized by punctated decoration achieved through the use of all sorts of tools, is not difficult to handle. I have no quarrel with Willey's definition except to point out that occasional sherds which must be so typed will appear in late Kolomoki period collections as a result of odd sherds lost from free incised vessels intended for mortuary use.

Mound Field Net Marked: No discussion of this type is necessary since sherds from Kolomoki fit the type description exactly, and it cannot be confused with any other type found in the area.

Indian Pass Incised: This type, characterized by large numbers of fine parallel incised lines worked into curvilinear motifs over most of the exterior of the vessel, is notable at this site largely because of the tendency of the few sherds found to cluster up in the Weeden Island I-b period (See Chart IV). Again, some confusion with Weeden Island Incised is possible, and I have used the Weeden Island "waste basket" category in doubtful cases.

Tucker Ridge Pinched: Rare at this site.

Wakulla Check Stamped: This type is considered by Willey to be definitive of the Weeden Island II period on the Gulf Coast, and its relative St. Johns Check Stamp as definitive of equivalent periods further to the south by Goggin (1952 and earlier reports). Actually, I am not even certain that all of these few sherds are Wakulla. Except for the one very finely checked sherd from the Unit 2 block in the seriation charts and tables, they might equally well be classified as Deptford Bold Check Stamp since as these types are handled and defined by Willey, these sherds with 4 mm. checks could be either large Wakulla or small Deptford.

I might also point out here, anticipating the problem somewhat, that while this Weeden Island I-b interlude may be a long one at Kolomoki, it definitely does not represent the end of Weeden Island culture as ceramically definable, since the ceramic style and the burial mound style continue on into the Kolomoki period which seems to fall within the time span allotted to Weeden Island II.

West Florida Cord Marked: The few cord marked sherds found possessed impressions of rather heavy cords widely spaced on the sherds, and presumably

must be so classified. I might point to the apparent rather late position of the type, not in full accord with the position accorded it by Willey ('49, pp. 388 and 440). Few as the sherds are, however, they are proportionately more important than *Wakulla Check*, so that if the position of the check is accepted as indicative of chronological placement, the same value must be attached to the cord marked type.

OTHER SERIES

St. Johns Plain: A few sherds of this plain chalky ware, which is dominant for as long a span or a longer one than Weeden Island Plain in its Central Florida homeland, indicate very little in this context except that there was actual contact between the two areas. Similar traits in the two areas may be considered to be the result of actual contact of peoples, and not stimulus diffusion. We also found three sherds of Dunns Creek Red, a St. Johns I and II period type (Goggin, '52, p. 102). These came from units which we did not include in the seriation study in the next chapter, units which seemed representative in a small sample of the entire Weeden Island I-b range.

Pasco Plain: This type seems often associated with the St. Johns Series, although it may be the dominant Plain Ware on the Central Gulf Coast. Sherds so classified at this site had soft chalky paste augmented by large quantities of angular limestone particles. By themselves, they are not particularly useful except to reinforce the conclusion of actual physical contact between Kolomoki and South Central Florida. Several limestone tempered sherds which have turned up in the past at this site seem to belong to this type.

Most puzzling are several complicated stamped sherds associated with the *Pasco Plain* on the basis of paste and temper. In most cases, the stamping is too indefinite and the sherds are too small to tell much about them. In one case, however, a sherd from another of the units classifiable only as Weeden Island I-b, has the stamping and rim that are definitely Kolomoki in character. This seems to mean that a few individuals in South or Central Florida were copying Kolomoki pottery in their native ware, and that a sherd or two of this ware then got back to Kolomoki. Certainly with paste of this sort the vessel was not made at Kolomoki. I doubt if appropriate clays, particularly mica-free clays, could even be found.

Single Sherds: A few other single sherds may be of some interest. From the Unit 2 block with the best specimen of Wakulla Check came one sherd of Lemon Bay Incised (Willey, '49, pp. 474-475) and one sherd of Englewood Incised (Ibid., p. 472), plus another zoned puctated sherd which seems closer to Englewood than to any Weeden Island variant. Both of these types are supposedly post Weeden Island, since the

tentatively accepted position for these types and the Englewood period is after Weeden Island and before Safety Harbor or Fort Walton. However, with the rarity of these types in Florida, their appearance at Kolomoki—even their identification—is of dubious value.

Even more unexpected than the St. Johns area sherds and the Englewood sherd were two sherds of *Yokena Incised*, a Troyville-Coles Creek period type from Louisiana. Since it has a considerable range there, even running up into Plaquemine in some of Ford's latest charts, we cannot do much of a job of correlation with these two sherds. The general position accorded the levels in which we found these sherds checks with Ford's synthesis, however. The two do at least indicate direct contact with the lower Mississippi Valley, suggesting an even greater degree of participation on the part of Kolomoki in the culture of the Gulf Coastal Plain than I had suspected on the basis of shared ceramic shapes and decoration features.

PLAIN WARE

Two plain types have been used in classifying the Kolomoki collections. However, the two types are closely related; in fact, they form a genetic series with only gradual change in the proportions of the several features. Plain body sherds cannot be classified with any confidence at all, so that any theories concerning the proportions of plain to decorated pottery in the several complexes must be based on rim forms. However, it is fairly obvious that if the two types are separable at all, as they are, then the plain ware at our earliest level, Weeden Island I, is Weeden Island Plain in its entirety. With due allowances for undecorated portions of vessels properly classified in the series of decorated types, the relative proportion of plain sherds is indicative of the importance of plain ware in the complex. The same situation is true at the other end of the time scale, the Kolomoki period. In between these two periods, the Weeden Island I-b period, we may say either that both the Kolomoki Plain and Weeden Island Plain were made, or that features of both types formed a rather variable complex in the process of change from one extreme to the other. The latter hypothesis is the more probable.

Weeden Island Plain (Willey, '49 pp. 409-411): The type description is applicable to sherds from Kolomoki. The complex can best be described by noting the relative proportions of rim types in seriation charts in the next chapter.

Kolomoki Plain: The wide folded rim, important in the Weeden Island type, is almost absent, while the other types remain about constant. The only really distinguishing feature of the type is a tendency, as compared with Weeden Island Plain, toward a much better surface finish, nearly polished in some cases.

It also seems probable from rim profiles that the compressed globular bowl, usually rather small, four to six inches in diameter and three to five inches high, is the only important form. The early Weeden Island Plain runs through a rather large gamut of forms as indicated by Willey.

MORTUARY WARE

It has become obvious at Kolomoki that the mortuary ware forms a distinct series which should be considered on its own merits aside from the series used in working with sherds from the village. There are several reasons for this. First, at this site, the vessels other than the stamped ware in the Mounds D and E caches, while they can be typed in the Weeden Island Series, were manufactured and used after such types had been completely dropped from the village assemblage. Second, although the decoration, in many of these vessels, permits them to be classified as Weeden Island Series types, many of the vessel forms are limited to mortuary or other ritual contexts. Third, many concepts derived from different sources appear on single vessels from these ritual contexts. Of these, decoration seems to be the most conservative, while vessel shape reflects the widest contacts and is the most useful in comparative studies.

Since Weeden Island decorative styles in mortuary assemblages continue past the end of a Weeden Island period as definable by village ceramics, it is nearly useless to make comparisons and analyses by classifying mortuary vessels on the basis of the Weeden Island decorative styles and comparing these classifications to chronologies achieved through stratigraphic and seriation analyses of village assemblages. The only dependable types for relating the two sorts of assemblages in the Southwest Georgia—Northwest Florida area are the complicated stamps, obviously quite sensitive through time. The most useful of these types, when it is present, is the later Kolomoki Complicated Stamp.

On the basis of shape features, the mortuary ware from the two Kolomoki burial mounds may be classified into the following categories. I do not wish to call these "types," although the attempt will be made after discussion of the individual categories to characterize Weeden Island style mortuary ware as a culturally real unit.

- A. Effigy forms: Subdivided into free effigies, pedestaled effigies, and derived effigies.
- B. Abstract forms.
- C. Functionally derived forms.

In each mound, as indicated in the tabulated presentation of artifact classifications in the next section, there are also a few plain everyday pots and bowls, normal functional vessels which may have been used for cooking or other everyday purposes. Since these may be classified in terms of the types normal for the site, Weeden Island Plain, Kolomoki Plain, and Kolomoki Complicated Stamp, types discussed above, no further mention will be made of them except the notation in the tables of their occurrence. All of the mortuary ware is sand tempered, and it seems invariably, even in the most elaborate vessels, to have been constructed in large part through the use of a segmental fillet technique with the most complex elements modeled from the mass and welded on to the fillet constructed major portion.

EFFIGY FORMS

This class of vessels, used only in mortuary or other ritual context, may be defined as recognizable life forms, hollow, modeled in clay. Because of the usual presence of such features as pre-cut kill holes, perforations as part of the decoration, and occasional lack of usable bases and orifices, the class could not be even remotely functional for domestic purposes. As noted in the individual discussions of the various sub-classes below, certain forms are derived, esthetically, from functional forms. In a few cases, the artifacts are vessels which might conceivably have been used as containers. For the total class, I have deliberately refrained from use of the term "effigy vessels," since in certain cases the objects are definitely not vessels and in other cases esthetic or ritual considerations seem to have greatly outweighed utilitarian concepts.



Fig. 8 Free Effigies. Bird——Deer

Free Effigies: In these forms the intent seems to have been an accurate, if greatly stylized, representation of life forms. They tend to lack pedestals or other modifications designed to aid them in maintaining an upright position, as well as spouts or other orifices. They also lack pre-cut kill holes in many cases. In all respects, they seem to represent an end-point in the development of the Weeden Island art style, sculpture in the round, freed from the utilitarian concepts implicit in vessel forms. It seems highly probable, in view of their specialized nature and lack of the precut kill holes which seem to be a modification special

cifically for mortuary purposes, that these vessels served some esoteric function in the ceremonial life of the culture; they may have been items of temple furniture or cult pieces of some sort.



Fig. 9-Pedestaled Effigies. Duck-Bird

Pedestaled Effigies: This is probably the most distinctive form in the Weeden Island mortuary ware tradition, and one of the commonest classes. The effigies, most often birds with the duck, owl, and raptorial bird—important in that order of frequency are usually well made. The intent to produce life forms is clear although they are often rather heavily stylized, as in the usual incised depiction of the wing area, and they are frequently rather foreshortened. Pedestals cover the range shown above, plus some rather crude types with roughly convex bases. The well made cylindrical variety of pedestal is more frequent at Kolomoki than elsewhere. Orifices vary from spouts, usually funnel shaped and rounded in horizontal cross section, to small holes in the back, to orifices so large that they virtually eliminate the back of the bird or animal.

Derived Effigies: Such effigies are defined as those forms in which a functional vessel form is modified, usually by the addition of such features as heads, to produce a variable degree of resemblance to life forms. The various bowls with head effigies commonly found throughout the Southeast would fall in this classification, making this simplest effigy form the commonest in the total area.



Derived Effigies
Fig. 10-Panther from squared form, duck from beaker,
Quadruped from squared bowl.



Fig. 11-Abstract Forms

ABSTRACT FORMS

In this category are vessel shapes which are remotely functional, that is, have bases, walls, and orifices, but have developed these features in rather exotic styles. The vessel forms produced are heavily modified from functional forms, but not in the direction of either life forms or of greater functional utility.

UTILITY FORMS

These are vessels which had, or could have had, normal utilitarian functions such as containers and cooking vessels. It includes *Kolomoki Complicated Stamped* bowls, beakers, and small jars as well as plain bowls and jars. There is a decided tendency toward the broad, thickened rims in the plain ware so that they must be classified as Weeden Island rather than Kolomoki plain. Since these rim forms had disappeared from village usage by the time of Mound D and E construction, it seems possible that although the vessels were made in normal shapes, and although kill holes were usually broken through the base after firing, they may have been made specifically for some usage in mortuary or other ritual context.

Particularly important under the utilitarian forms are Large Jars. These are much larger than vessels of other shapes in the mortuary cache; usually are round or convex based, and usually have clearly demarcated erect rims, giving them definite necks. Rims are modified by the addition of notched or plain rim strips or lugs of many varieties or combinations. Perforations are frequently used as additional decoration, so that the forms are functional, but the vessels are not. In Mound E, all of the vessels in this form were decorated with free hand painting in red stripes and were classified, along with several bowls similarly decorated, as Mercier Red on Buff. Only one complete vessel of this type, and sherds from a few others, came from Mound D. In the latter cache, large jars were usually painted red all over, with one case of red and white painting. The rim series parallels that for the Mercier Red on Buff vessels, with the addition of

multiple lugs, bands of horizontal lugs encircling the rim on a number of vessels.

Decoration: Although the classification of vessels from the two Kolomoki burial mounds is on a form basis, the decoration on many of them is of course significant in and of itself. Certain of the decorative styles, techniques, and methods are of some importance in understanding the composition of this complex. I should re-emphasize the fact that there is in this mortuary ware no necessary or actual correlation between decorative style and shape, and no correlation at all between method of decoration, as incision, punctation, or painting, and vessel shape. To perform a complete analytic job and to obtain useful data for comparative purposes, the styles in vessel form, in such features as rim and base shape, and in decoration, must all be handled separately. In this complex normally distinctive styles of decoration are combined in only one pot, or a very few; and types as they are usually understood gain us nothing. Classes based on vessel shape only, or decoration only, are larger and more useful, although again there is considerable conservatism in the use of decorative style. Perhaps this is all most obvious in the case of the plain ware, particularly if vessels with an overall wash of red paint are classified as Weeden Island Plain as Willey has done. Certainly, for any archaeological purposes, absolutely nothing is gained by classifying plain bowls and large bird effigies together as Weeden Island Plain. The bowls and bird effigies gain considerably more significance when they are studied with respect to the distribution of bowls and bird effigies in time and

Incisions: This is the most important decorative treatment on most of the decorated vessels from the two mound caches. It occurs on all of the form classes noted in one major style, free incising, with two variants.

"Free Incising" is a term introduced by the writer (Sears, '51b, p. 12) to describe and isolate a variant of Weeden Island Incised. As defined by Willey ('49, pp. 411-419) the type includes all incised and sand tempered pottery found on Weeden Island sites which uses relatively fine incising with a curvilinear layout, as opposed to the angular layouts of Keith and Carabelle Incised. The fine lines serve to distinguish it from Basin Bayou Incised. At times, as noted in the discussion of Keith Incised, it may even include angular cross hatching.

In our work at Kolomoki, it rapidly became apparent that incising used in zones, an alternate area technique, was largely confined to the village deposits where it formed part of the Weeden Island I Series. With the exception of the crosshatched sherds noted above all village sherds are of this type. Incision on mortuary vessels is quite different, with the exception of one vessel from Mound D (Vessel 58). In these



Fig. 12-Free Incision—Wing Motifs and Triangles

mortuary vessels the alternate area concept is not used except in the delineation of natural features on effigies, particularly with punctation in head areas. Most of the incision is used to depict wings in a heavily stylized fashion as illustrated in Fig. 12, or tails, legs, etc. Certain of these stylized elements, particularly wings, are then at times used on vessels where they do not really make up a part of the total effigy. Examples of this are the deer head from Mound E on a bowl with the wing design (Vessel 27) and the squared bowl with applique wing elements from Mound D (Vessel 57). Free incision, usually in the form of geometrical curvilinear designs, is also used to decorate pedestals, spouts, and other areas of effigy vessels not directly concerned with the effigies as such. Generally speaking then, vessels with some trace of effigy features are usually, in the Kolomoki period, incised in a free rather than a zoned fashion. This is illustrated in Fig. 13 where the probable line of descent for this decorative style is outlined.

The other major type of incision is also free, and is most often used on large jars, particularly in Mound D. Most commonly the lines are arranged in the form of triangles with their bases at the rim. A set of examples is shown in Fig. 12. There is occasionally some zoning in that painted areas or other incised lines are

confined within the incised triangles. However, the style is very distinct, particularly in view of the area covered, from the over-all treatment or large area treatment of the classic Weeden Island Incised.

Perforation: Decorative perforation of vessel walls, used either alone or in combination with incision or painting, seems to be a hallmark of this period. It occurs most commonly on effigies and the large jars, but may occur on almost any form. I feel that is highly probable that this style of decoration developed from the use of pits terminating incised lines, a hallmark of the earlier zone incised decoration. An evolutionary course for the total development is illustrated in Fig. 13, but the use of such perforations to terminate incised lines on some vessels seems clearly indicative to the writer, simply carrying the pit concept to its ultimate conclusion. In the latest pieces in the style, such as the large duck from Mound D, the incised lines have been dropped. This is one of the few stylistic developments which is difficult to invert chronologically. Since the perforations do not appear in earlier horizons, and incisions do, and since a development within the style is clear, the end point must be as indicated.

Painting: This is probably the major decorative technique in this context, since few vessels escaped at least a coat of red paint. Most vessels which at first glance seem plain bear traces of red paint in the corners. Use of paint other than over-all coats ranges from zoned red painting, as the cat from Mound D (Vessel 6), and the use of paint in a similarly zoned fashion with an almost Hopewellian looking incised and punctated bird (?) on a large pot from Mound E (Vessel 49). The cat is of course best classed with the other effigies, incision and perforation supplementing the modeling, perforation, and painting. The large pot is perhaps most significant as a member of a class of large Mississippian pots. The other extreme of the range is the use of the paint in stripes forming curvilinear motifs on vessels of the type Mercier Red on Buff.

Red and White painting is rare, confined to one bowl in Mound D, a large jar in Mound D, and several Mound D effigies. Usage is different in each case.

Perhaps in concluding this section I should point out again that any or all of these various techniques may appear on a single vessel of any shape. It simply is not profitable to set up a "type" for each, since this would clearly give us as many types as vessels.

Appendages: The only appendages which occur at Kolomoki are horizontal lugs. Handles are missing completely from this complex as they are from other Weeden Island or complicated stamp complexes with rare exceptions in the later periods. For some cultural reason which the writer does not even pretend to understand, the entire South Appalachian Province and the entire Gulf Coastal Plain seem to have shared a general antipathy toward the use of handles in any

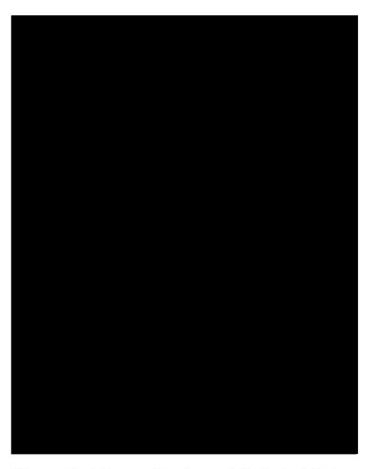


Fig. 13 Evolutionary Development in Incised Style

form on pottery vessels. This is rather odd in view of the development of handles in Middle Mississippian cultures in the Piedmont and to the north, west, and east generally. There are numerous exceptions in later periods, as the Lamar, Fort Walton, and Lake Jackson complexes as well as the intrusive Macon Plateau complex. However, without cultural intrusion, handles are simply not important in the area. This checks well with the data of the Central Mississippi Valley survey, where the authors note that "In this part of the Mississippi Valley, the handle is a northern feature that has just about reached the southern limit of its distribution" (Phillips, Ford, and Griffin, 1952, p. 151). Lugs at Kolomoki are important only on mortuary vessels, although a very few sherds of Kolomoki Complicated Stamp from the village area, with only one from the midden beneath Mound D in dateable context, bear similar lugs. In the Mound collections, they occur on large jars and on bowls. Any variant may be solid or perforated, and the thickness varies tremendously. Usage varies from the common four lug treatment, perhaps descended from the Coastal Plain trick of lugs developed at the corners of squared open bowls, to an encircling row at the rim of a large pot. In certain cases, on bowls with effigy heads, the lugs are part of the effigy layout, serving as wings, tails, or heads with slight modification.

KOLOMOKI PERIOD MORTUARY WARE

It may be well at this point, after having reviewed the several classes of vessels found in the mortuary context at Kolomoki, to attempt to state the essential characteristics of the total class of mortuary (read "ceremonial") ware.

At first glance, the task looks impossible, with the tremendous variation in vessel shape ranging from the commonplace to the exotic, and the equally variable decoration. Classification on the basis of shared characteristics is then certainly difficult. However, there are a few characteristics which are held in common by all, or many, of the vessels found in these mounds other than those varieties as the stamped vessels which are obviously not specialized ware per se, but have been diverted to this function.

Perhaps the most uniform characteristic, the one shared by all the vessels making up this class, is the use of elements, decorative and otherwise, which makes the vessels incapable of being utilitarian containers. This would include both the basal perforations made before firing and the perforations made as part of the decorative scheme.

In the class, there are two major sub-classes based on vessel shape. These are the functional vessel forms, modified through use of the decorative or esoteric concepts noted, and those forms in which utilitarian vessel shape concepts are submerged by other concepts, perhaps best labeled esoteric. The classes of free and incised effigies are the obvious examples here in which, even without the perforations, the effigy form is more important than any ideas concerning vessels as such. The same may be true of the abstract forms. The point to be emphasized in the effigies is that, again omitting the perforations from consideration, the effigy form itself received first consideration within the technical limits of plastic clay as a medium. The utilitarian features, such as spouts or other orifices, and pedestals, come second, and may be dropped completely in the final class of free effigies.

To somewhat anticipate the comparative sections, the general class of mortuary ware seems to be, in its over-all stylistic characteristics, a Kolomoki period marker, although single features may go well back in time. Perhaps the most characteristic elements to be looked for in a complex are the free and pedestaled effigies, use of single birds' heads facing inward on bowls, use of pedestals (sometimes occurring on other forms than effigies), free incised decoration which is most often a variant of the birdwing theme even when on vessels bearing no other relationship to birds, and, perhaps most important and appearing in combination with all other classes, the use of perforation as a decoration.

Although any of the vessels in this mortuary ware complex may be typed in the Weeden Island series as these types have been defined by Willey, they form a distinct complex made for ceremonial functions only, in a time period when such types, or their utilitarian relatives, were no longer made for non-esoteric functions.

LAMAR PERIOD CERAMICS

The small Lamar period campsite at Kolomoki (See Map 1) has produced sherds of three pottery types which appear representative, at least in this area, of one segment of the internally extremely variable Lamar complex.

Lamar Complicated Stamp: The sherds from this unit fit the type description (Jennings and Fairbanks, 1939) but since the type is rather variable, with obvious spatial and temporal, hence cultural, differentiation, the following additional characteristics might be noted:

Paste: Heavily tempered, crushed grit and sand. Contorted, irregular fracture. Color ranges from brown and black through blue-white on the few sherds with self or floated slip.

Rim: Most are folded, with lower border notched. Notched extruded bands are also present.

Decoration: About half of the sherds are in the Lamar tradition and fit the type description in that they are stamped with heavy units, curvilinear in layout, sloppily applied, and, through the use of the stamp paddle to shape the vessel, are heavily overstamped. The other half of the sherds bear small neat units, either circles with four circular punctates inside or even more neatly stamped circles with a cross inside and a dot in each of the quadrants thus formed. The only other sherd of this type which has been noted is from the Etowah site, in the Andover collections. Since we have so little knowledge of the distribution of the style, we can do little more with it now, although the suggestion that it is early in the protohistoric period may be worth some attention in the future.

Mercier Check Stamp: This type described in the Season I report, is similar to the complicated stamped type in all respects except the decoration. The check stamping ranges from very neatly carved and applied checks to very crude and sloppy ones. The combination of paste characteristics and large check stamp size should make it relatively easy to separate this type from the earlier Wakulla and Deptford check stamps. There are other types with which it might be confused, as noted in the comparative sections of this report. I might also point out here that it seems to be of some importance in the Chattahoochee Valley, since a similar, if not identical, check stamp is also characteristic of the "Lamar" Bull Creek site in Columbus, Georgia.

Fort Walton (?) Incised: Incised sherds from this unit were originally naively typed as Lamar Bold Incised on the assumption that all Lamar complexes were composed of Lamar pottery types, although the check stamp should have been sufficient warning. On rechecking the material, it is obvious that the sherds are much closer to Fort Walton Incised. Incised lines are relatively fine, similar to the free incised Kolomoki period sherds. Motifs tend to be more complex than the Lamar scrolls and guilloches, and there is some use of punctations with the lines. The rims also possess Fort Walton characteristics, particularly in the use of a narrow fold, sometimes lightly notched at the top outer edge. On checking over the Fort Walton type description (Willey, '49, pp. 460-462), I am not completely certain that the sherds fit that type either, since they seem to partake to some degree of characteristics more usual in Pinellas Incised.

This sort of incised pottery seems rather common in the Bull Creek site collections, and a new type description to cover these and the Kolomoki specimens will probably be in order when that site is analyzed and reported.

KOLOMOKI NON-CERAMIC ARTIFACTS

Projectile Points:

Kolomoki and Weeden Island periods: Projectile points are comparatively scarce in both periods, the total site collection including less than fifty complete points from excavated units. As far as the writer can determine, there is no change between the points of the two periods, except that definitely triangular points may come in late in the Kolomoki period. All of the other points are small to medium in size, 3.5 to 6 cm. long, with a decided majority falling between 4 and 5 cm. All have rather long narrow blades, 1.5 to 2 cm. in width with outlines varying between slightly incurved and slightly outcurved. The dominant shape is the long narrow one with straight blade sides. Stems are extremely variable, running from mere nubbins to well developed stems with expanded bases. Most usual is a definite stem of amorphous and asymmetrical shape.

A few triangular points were found in the midden beneath Mound D, and differ from the stemmed points only in that even the nubbin is missing. They may indicate a trend toward the small triangular points charcteristic of the next time period in parts of the

Lamar Periods: One large projectile point was found, an equilateral triangle.

Archaic Periods: Half a dozen rather large projectile points, made from brightly colored flints, have turned up in the excavations at Kolomoki. A great many other's have been found on the surface and are in local

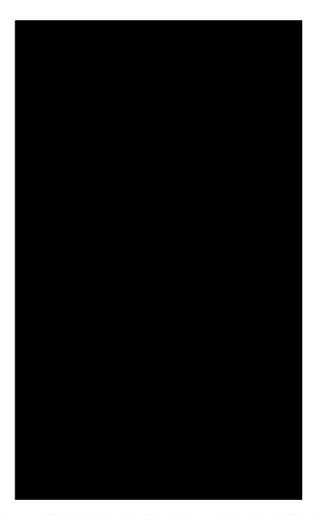


Fig. 14 Typical Projectile Points—Weeden Island and Kolomoki Periods, Full Size.

collections. The shapes run very much like those of points in the Savannah River complex in that they are large, stemmed or "corner removed," occasionally side notched, very rarely corner notched. There is a decided preference for the more brightly colored banded flints. A few chipped flint choppers are probably to be associated with the points.

Other Chipped Flint: In the large assortment of flint chips worked through by the writer, definite forms other than projectile points were conspicuous by their absence. Except for the probably archaic period choppers noted, and one snub-nosed end scraper from a Lamar period pit, there are no definite forms. In the Weeden Island and Kolomoki periods at least, chips and flakes seem to have been used without further modification, and to have been discarded when they had lost their edge. Perhaps a portion of them could be classified as end and side scrapers, but it would be pointless to do so, and would only provide trait list enthusiasts with a few more items to use in one-to-one trait list comparisons.

GROUND STONE ARTIFACTS

Celts: One complete celt, a small affair, only four and one-half inches in length, shaped from a waterworn flint pebble, came from a Kolomoki period unit. Chips from other celts made from a gray igneous rock were found in other Kolomoki period units.

Chisel: A long stone chisel, plano-convex in cross section, with a very small bit at each end, came from Mound D in which it was associated with a burial. The form is unique for Kolomoki, and, since it could not have actually been used as a cutting tool, is probably a ceremonial implement related to similar forms found in the Southeast and the "spuds" in this and later horizons.

CYMBAL SHAPED ORNAMENTS

Seventeen of these ornaments, some manufactured from copper, some from meteroic iron, sometimes with pearls in the center in either material, have been recovered from this site. Except for one which came from a unit not certainly ascribable to either Weeden Island I-b or Kolomoki, these ornaments are from burial mounds. Three copper specimens with pearl centers were found in Mound E. Three copper and eleven meteroic iron cymbals and one copper cymbal with an iron disc in the center and central pearl over this came from Mound D.

Presumably the mica discs found at the ears of a burial in Mound D were considered functional equivalents of the metal artifacts. Mound E also produced one wooden cymbal-shaped ornament which had been coated with copper, and a small wooden button-shaped object, copper coated, came from Mound D and may have been functionally related.

These ornaments at Kolomoki were found with burials, located near the ears, singly on frontal bones, at the chin, in strings at the neck, and at the waist. At this site certainly, and presumably also at other sites where this late single cymbal form is found (See table, Sears 1953b, pp. 20-21) they cannot be classified solely as ear ornaments. They seem rather to have been general purpose ornaments used in many different ways. In all probability Le Moyne's drawings of the Timucua represent rather accurately the various ways in which they could have been used, since they are shown everywhere except at the ears, where the Timucua used inflated fish bladders (Lorant, 1946).

This variation in usage, as well as the clearly different form, serves to differentiate these ornaments from the bi-cymbal Hopewellian copper ear ornaments. They are probably derived from these earlier forms, however, the depressed center having developed from the need for central attachments in the older type.

I do not attach any great importance to the use of meteroic iron for some of these ornaments, particularly since the phenomenon seems to have been restricted to the Kolomoki site in the focus. For some unreconstructable reason, some craftsman secured a supply of meteroic iron and simply treated it as a differently colored and textured copper.

CONCH SHELL BEADS

Conch shell beads from this site have been arbitrarily divided into three groups on the basis of size: large, one-and-a-half to two inches long, made from columellae; medium size, one-quarter inch to one inch long, made from columellae; and small, under one-eighth inch, probably made from the wall of the conch shell. The large and medium sized beads are barrel shaped, while the small beads tend to be rather thick discs. All of these beads were found with burials. The size differentiation seems worthwhile, particularly the division into large and medium sizes since the large beads are most commonly found with the burials of particularly important individuals. Medium sized beads tend to occur with the retainer class of burials, so that the size classification seems to reflect an actual cultural division.

Large and medium sized beads were found most often in positions indicating that they were worn in strings around the neck, but they also appear on arms, legs, and in the waist region, indicating that bands or strings of them were worn around arms and legs. Their disposition in the main burial in Mound D makes it quite possible that large and medium sized beads were sewn on to some sort of skirt or kilt. One copper ornament from Mound D had associated two medium sized beads, probably pendant from the lower rim of the ornament. There were also several cases of beads placed on the forehead, apparently indicative of beaded forelocks. Small beads in the main burial in Mound E were found adhering in rows, several beads long and wide, and this arrangement is taken to mean that they were sewn on to leather, fabric, or something similar in solid bands. Small beads from Mound D were found only with one skull, the same one which had the copper ornament with pendant beads. There was a suggestion here too of use in solid bands as a collar.

Everything considered, the cymbal-shaped ornaments and beads, with their position on burials, reflect rather clearly the general style of dress found in Southern Cult representations, as do the copper figures from Etowah with their beaded forelocks, beads around the neck, beaded bands on arms and legs, and cymbal-shaped ornaments at ears and as hair ornaments in the temporal regions. Similar figures are characteristic of Spiro. All we lack, apparently, are the specifically cult items sometimes shown, as the bi-lobed arrows in the headdresses from Etowah.

PEARLS

These were rather common in the two burial mounds, although no accurate count could be obtained because of their poor state of preservation. In Mound E they were confined to the centers of copper cymbals. In Mound D pearls were used in this fashion as well as in strings, singly, and in one case, seemingly sewed to a piece of leather or fabric which had decayed to a black mass. Their size varies from about one-eighth inch in diameter to perhaps three-eighths of an inch, and most of them are surprisingly round and uniform for fresh water pearls. All specimens observed are perforated.

CONCH SHELLS

One complete conch shell dipper was found in the Mound D pottery deposit, although its state of preservation did not permit removal intact. It seems to have been the usual shell, sectioned longitudinally, with the inner segments removed. Many shell fragments came from this deposit, all of them irregular and probably representative of several dippers smashed during the mortuary ceremonies. One segment with several whorls from the top of a shell appears to have traces of incised decoration, a simple open cross hatching. No decoration of any sort was observed on other specimens. A few fragments have also been found in village areas, particularly in the midden beneath Mound D, which may indicate use of the dipper in daily life, although certainly not commonly used.

MICA

Irregular mica sheets of varying shapes and thicknesses are of very frequent occurrence in both the village areas and in the mounds. They are absent only from the Lamar unit. Definite forms were found only in Mound D, where one skull had a pair of mica discs at the ears. The same mound also yielded, in association with burials, one sheet which seemed to have been roughly shaped into the outline of a projectile point, and, with another burial, a number of irregularly shaped sheets perforated for attachment. Most of these mica sheets must have had some real cultural function, since the material is not native to areas south of the Fall Line. The function may have

been ceremonial and esoteric, or perhaps, as indicated by the perforated sheets, they were attached to clothing or ornaments.

KAOLIN

In the odds and ends department we have one crudely shaped little pendant, about an inch in circumference, with a groove setting off a small nubbin at one end.

No bone tools were found at Kolomoki, although considerable collections of animal bones were made (See appendix). I rather suspect that this lack, and the comparative scarcity of projectile points—both situations rather normal for the Coastal Plain area—reflect intensive use of cane. Most of the tools made from bone in more northern and western regions could as well be made from cane, with less trouble. Judging by the ethnohistorical literature available for the deep Southeast, cane was prominent as a raw material from the sixteenth century on. The archaeological evidence, negative evidence really, seems to demonstrate that this situation was of considerable antiquity.

SUMMARY

We have attempted in this chapter to describe, either directly or by reference to seasonal reports, the various classes of artifacts found at Kolomoki. Ceramics in the various types and classes have been noted, with some comments concerning the utility of standard typology in assemblages of several sorts. In a few cases typological or classificatory innovations have been introduced, in both ceramic and nonceramic categories. The success of these innovations may best be measured by their utility in the analytic and synthetic sections which follow this chapter. In one or another of these we attempt to trace the cultural origins and space-time behavior of the various typological units as well as to interpret further, in some cases, their functions in Kolomoki culture. The writer feels that the innovations are useful, particularly the separate classification of the Kolomoki period mortuary ware on a shape basis with separate consideration of decorative features. The reader, and particularly persons plagued with similar problems, can make the decision for themselves after reading of our attempts to use the classified data.

4 CERAMIC SERIATION

This chapter will be concerned largely with the material excavated from village units of the Weeden Island I, Weeden Island I-b, and Kolomoki periods. The Lamar period is omitted since it is not a part of our developmental continuum. After reviewing the village data, presenting the basic information, and developing a chronology from it, we will fit the assemblages from the two burial mounds to this chronology through analysis of the village materials.

It is necessary to emphasize again the lack of any sort of vertical stratigraphy at this site. Ceramics from every unit have been analyzed by arbitrary levels in the hope that some vertical change in artifact types would be apparent. In a very few cases, there seemed to be minor proportional changes in the relative importance of certain ceramic features, but these proved to be self-contradictory as between different units. We have then abandoned all hope of vertical stratigraphy, physical or otherwise, and have resorted to the application of seriation techniques to the various units in order to achieve a valid chronology for the site.

Fortunately, it was clear at the very beginning of the work at Kolomoki that we had at least two very distinct ceramic assemblages, the Weeden Island and the Kolomoki. The first was characterized by a heavy representation of the various Weeden Island series incised, punctated, and red painted types with complicated stamping a proportionally minor decorative technique. The other assemblage lacked the Weeden Island series completely, using a complicated stamp only for decoration. As both complexes had complicated stamped pottery, it was also probable that a continuum was represented. Since then, we have found other units which, we will attempt to demonstrate, belong between these two extremes. As a mass, they form a variable complex which fits between the two extremes. It seems safe to assume, even without knowledge of cultural development elsewhere in the area, that the differences between the Kolomoki and Weeden Island complexes are a function of time. A situation in which two cultures so different could occupy a site simultaneously is inconceivable to the writer.

Although not a necessity before beginning seriation work, it is desirable, and almost unavoidable, to have some idea of the order in which these periods occurred. This is not completely necessary, of course, since the charts can be turned upside down if desirable. In fact, I strongly suspect that some Southeastern archeologists will feel happier looking at the one here produced in the inverted fashion. However, a number of points might be mentioned which indicate that the Kolomoki

period is the latest. A more complete discussion will be found at the end of the chapter after the data have been presented. First, it was realized quite early that Mound E belonged in the Kolomoki period since Kolomoki Complicated Stamp vessels were a part of the assemblage. Other vessels in Mound E, particularly the Mercier Red on Buff pots with their free painting and Mississippian shapes, indicated affiliations with, or influences derived from, Mississippian rather than Woodland temporal levels. A second point is the association of the village areas bearing Kolomoki Complicated Stamp as the major pottery type with the temple mound and plaza set-up. Since this feature too is Mississippian, the Mound E evidence is strengthened.

To look at the other end of the problem, the roots of the Weeden Island decorated types, back into the Santa Rosa horizon, Troyville, and Marksville, are rather obvious. This is supported by the known facts concerning the development of complicated stamping, outlined in Chapter VI. We need here only point out that affiliations of the complicated stamp associated with the Weeden Island series are early. This stamped ware must be put at the bottom of a chart developed partly through stylistic seriation and partly through stratigraphy. The Kolomoki stamped ware on the other hand is clearly related stylistically to types known to be late.

Putting all of these facts together, our probable development is from Weeden Island to Kolomoki. This assumes that we have continuous occupation and cultural development at the site, an assumption borne out to some degree by the results. The items considered to be of greatest importance in developing the basic seriation were the Weeden Island types, treated as a mass complex for most purposes. It appeared certain that they would become successively less important until they had dropped out of the total complex in the end. Useful to lesser degrees were the width of lands and grooves on stamped sherds, obviously narrower in the Weeden Island period stamped ware than in the Kolomoki type; the behavior of the thickened rims of Weeden Island Plain sherds; and the relative importance of complicated stamping in the complex, obviously a factor of the importance of the Weeden Island series. With the basic seriation worked out using these traits, other items were checked for temporally correlated behavior. A few of them as noted in the individual charts behaved consistently and showed patterns in accord with those of the major items.

I might indicate before going into any detail that I fully realize that the various units are not temporal and cultural equivalents. It seems highly probable that the Kolomoki period units overlap heavily; in fact, they may on the whole be nearly contemporaneous. In the Weeden Island I-b period, units probably have a much longer span, with a good deal less overlap. However, these units are what we have to work with, and seriation achieved with them has some definite value.

I have attempted to work out something of the temporal behavior of ceramics at this site in the seriation charts and in the discussions of them. Consequently, percentages at various levels of decorative types, pottery types, rim forms, land widths, and anything else which seemed to promise measurable change through time have been worked out. I fully realize that my charts are not comparable in every detail to others which have been worked out for other sites, and if the data from Kolomoki is to be compared with those from other areas, it may be necessary in many instances to re-work the data from the basic descriptive tables. However, I have used techniques which aid in the solution of Kolomoki problems. I see no point in handling Weeden Island

sherds in the Weeden Island I-b period, for example, as percentages of the total assemblages in each unit. Handled thus, they would simply disappear from the charts, or be represented by solid or dotted lines and would indicate only that Weeden Island types were present, and not how the series behaved through time. The percentages on the chart for Weeden Island ware, then, are with decorated ware as 100 per cent. In fact, plain sherds enter into the counts only where plain sherd percentages of total complexes are carried on the chart and where, on the same chart, complicated stamped percentages with the total collection from a given level as 100 per cent are carried. Elsewhere, plain sherds if allowed to enter into all percentages, would simply mask the ceramic changes we are interested in tracing.

In the tables which follow, complete data are entered only for previously unreported units. Minimum recapitulations of the data are provided for the others, since full information is available in the seasonal reports.

A number of drawings have been used in these tables to save words in describing design motifs. With this exception, it is hoped that the tables are self explanatory.

Table I

Central Area - Unit 5 Total Sherds 650 Total Plain Sherds 243 38% total (plain body only) Total Decorated 67% total (includes all rims and bases) Total Comp. Stamp 340 83.5% decorated sherds Total Weeden Island Series sherds 0 L. G. Average 2.9 (does not include Early C.S.) Complicated Stamped Series Kolomoki Complicated Stamp 285 sherds 76% dec. Uncertain motif 244) includes rims recognizable motifs 41) snowshoe-----17% recog. Kol. C.S. bull eyes-----19.5% concentric circles-- 1----scrolls, all-----26.8 8----- 19. 5 unclassifiable 12----- 29. 3 (1 vessel) Rim Forms, Kolomoki C.S. I----- 20 II---- 7 IIb-----14 V----- 2 Uncertain Motif ---- 5 scrolls, all----- 4 3 1 Rims: Form V-2 Rim Forms, Plain Ware: Weeden Island Series: 4-11% Plain rims Kolomoki Series: Form II----- 18 Wedges----2 Straps-----2 IIb---- 13 III----- 1 Basal Sherds: -----31 sherds Flat, disc or square --- 17 -Flat, square----4 - 13%) Flat, disc---- 5 - 16%) Convex----- 5 - 16%

Table II

MOUND D Unit-Central Area. (Midden Beneath Mound.) (See Sears, '53, pp. 24-25 for full description)

Total Sherds

4,410

Total Plain Sherds

2,076 (body only)

52% total sherds

Total Decorated

2, 334 (includes all rims and bases) 48% total sherds

Total Comp. Stamp 2, 11

97% decorated sherds

Total Weeden Island sherds

7 sherds

Land-groove average 3mm

Total Rims:

427

Complicated Stamp Plain, Kolomoki series Weeden Island Series 187 240

SOUTHERN AREA (See Sears, '1950, for full description all units in this area.)

Table III

Unit 28:

Total Sherds

6,067

Total Plain Sherds

2,284

30.7% total sherds (body sherds only)

Total Decorated Sherds

3,783

69.3% total sherds (includes all rims and

bases.)

Total Comp. Stamp 3,275

86.1% decorated sherds.

Total Weeden Island Series Sherds

28

. 7% decorated sherds.

Total Rims:

573

Complicated Stamped

240 333

Plain Weeden Island Series

0

Table IV

Unit 29

Total Sherds

626

Total Plain

401

64.4% total sherds

Total Decorated

225

35.6% total sherds

Total Comp. Stamp 152

67.5% decorated sherds

Total Weeden Island

Series Sherds

12

3% decorated. (9 W.I. in actuality.
 Dunlap Fabric Marked, 1? incl.)

Total Rims:

72

Complicated stamp Plain 23 36 13

Weeden Island

Basal Sherds:

8

4 Flat disc or square

50%

4 Convex

50%

Table V

Unit 21					
Total Sherds	1, 142				
Total Plain Sherds	656	57.5% total sherds (body sherds only)			
Total Decorated	486	42.5% total sherds (includes all rims and bases)			
Total Comp. Stamp	366	75.3% decorated sherds			
Total Weeden Island Series Sherds	30	6.2% decorated sherds			
Land-groove	?	(not measured, sample not available in 1953)			
Plain, K	107 ated Stamped olomoki series sland series	. 45 . 59 3			

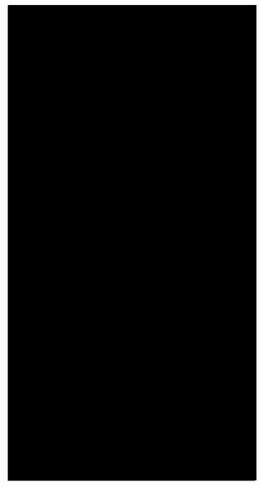
Table VI

Unit 4 Pits (Weeden	Island Pits)	
Total Sherds	3,102	
Total Plain Sherds	2,024	64.1% total sherds (body sherds only)
Total Decorated	1,078	35.9% total sherds
Total Comp. Stamp	133	12.3% decorated sherds. (Includes Napier and Little Kolomoki C.S.)
Total Weeden Island		
Series Sherds	702	65% decorated sherds
Total Rims	?	(Weeden Island series rims not counted separately in 1948, not available in 1953)

NORTH WEST AREA

Table VII

Unit 4, sections 2 ar	nd 3			
Total Sherds	1,625			
Total Plain sherds	655	40.3% total sherds (body only)		
Total Decorated	970	59.7% total sherds (incl. all rims and bases)		
Total Comp. Stamp	778	80.2% decorated sherds		
Total Weeden Island				
Series Sherds	10	1% decorated sherds		
Land-groove average	e 2.8mm			
Complicated Stamp S	Series			
Kolomoki Complicate	ed Stamp 7	68 sherds 79.8% decorated sherds		
Uncertai		77) includes rims		
recogniz	able motif 9			
3				
snowsho	e	2527. 5%		
		2527. 5% 7 7. 8		
bullseye	s			





```
97 total
Rim Forms, Kolomoki C.S.
               22
         I
          II
                   2
                   71
          IIb
          III
          other
                   1
Blakely Complicated Stamp -----6-----1% decorated sherds
          Uncertain motif----- 5
          Scroll -----1
Plain Rim Sherds - 140
          Kolomoki Series - 121 Weeden Island Series - 19
          II 9
                                      Wedges 5
          IIb
                 110
                                        Straps
                                                  14
          III
Basal Sherds: 51
          Flat, disc or square ---- 35
          Flat, disc of square ---- 9 - 17.6%) 98%
          Flat, disc----- 6 - 12 %)
          convex----- 1 - 2 %
Weeden Island, trade and foreign types: 10. Weeden Island - 8 - 1% dec.

Crystal River Incised----- 1
          Cord marked. (note W. Fla.)1
          Weeden Island Red ---- 5
          Red, modeled, mortuary warel
          Carabelle Punctate ----- 1
Incised, ? type -----1
```

Table VIII

		1 able	VIII	
Unit 4 - Sections 4-5	-6.			
Total Sherds	1,229			
Total Plain Sherds	542	44.1% total sher	ds (includes body she	rds only)
Total Decorated	687	55.9% total sher	ds (incl. all rims and	bases)
Total Complicated Stamp	52 5	76.7% decorated	lsherds	
Total Weeden Island Series Sherds	32	4.7% Decorate	d sherds	
Land-groove width average	2, 4mm			
Complicated Stamped	Series			Ä
Kolomoki Complicate	d Stamp	513	98% C.S.	
snowshoe bullseyes concentri	able motif		- 27.7% C.S. - 13.9 - 2.7	
Rim Forms, Kolomok	d C.S.			
I II	8			
	42			
Blakely Complicated	Stamp	3 sherds	5% C. S.	
Little Kolomoki C. S.		6 sherds	1% C. S.	
Rim Forms, Plain W		105		
Kolomoki II IIb III	Series 29 46 6	Weeden Wedges Straps		
Basal Sherds		- 8 - 32%) - 2 - 3%) 86%		
Carabell West Flor	Punctate rida Cord Ma : Incised	32	4.7% dec.	

Table IX

Unit 4, Sects 7-12

Total Sherds 5,270

Total Plain Sherds 2,686 51% (plain body sherds only)

Total Decorated 2,584 49% (incl. all rims and bases)

Total Comp. Stamp 1,809 70% decorated (Incl. all rims and bases)

Land-groove width average 2.3 MM.

Complicated Stamped Series:

Kolomoki and/or Swift Creek II Variant Complicated Stamp - 1,727 .63% dec.



1% C.S.

Stamped Rim Sherds

II------ 32 -----17. 8% II------11. 1 --- 11. 1 IIb ----- 20 ---- 63. 9

III----- 13 ---- 7. 2

```
Little Kolomoki Complicated Stamp
                                   4% C.S.
                           66
       Uncertain motif ----- 49
       snowshoe----- 2
       bullseye -----
       with checks as part of design - 6
       IIb ---- 6
Plain Rim Sherds:
                           451
                                   Weeden Island Series
       II ----- 110
                                               54
                                        Wedges
      ПЪ ----- 228
                                        Straps
                                                 54
      III ----- 3
                                        Others
                                                 2
Basal Sherds
       Flat, disc or square -----38
       Flat, square ----- 12
       Flat, disc ----- 10
       Convex ----- 9
Weeden Island Series, Trade and Foreign Types: 145
                                        5.6% decorated
       Weeden Island Red ----- 68
       Carabelle Punctate ----- 25
       West Florida Cord Marked ----- 7
      Weeden Island Incised ----- 3
       Wakulla Check Stamped ----- 5
      Keith Incised ----- 5
      Tucker Ridge Pinched ----- 3
      Mound Field Net Marked ---- 3
      Pasco (?)----Complicated Stamp------ (Pasco Paste)
       Yokens Incised ----- 2
      Zoned Punctate----- 2
      Misc. Incised ------13 (presumably W.I.)
      Random Pinched ----- 1
      Off decorations, sand past excision, tc --- 3
                         Table X
Unit 2, Sammer School Block
(Plain Body sherds mislaid, certain percentages not available)
Total Sherds
Total Plain Sherds
Total Decorated
             637
Total Comp. Stamp 455
                   79.3% decorated sherds
Total Weeden Island
 Series Sherds
                   12.2% decorated sherds
```

Land-groove width av. 2.3 mm

Complicated Stamped Series:

Kolomoki and/or Swift Creek II Variant. (Shades into Little Kolomoki Complicated Stamp. Cannot sort out consistently in this small sample.) Uncertain Motifs ----- 423 Recognizable Motifs----- 26 Snowshoes ----- 8 Bullseyes ----- 4 All Scrolls ----- 5 Complicated Stamp Rim Forms: TT 15 IIb 30 III 15 Blakely Complicated Stamp 4 All unrecognizable motifs Napier Complicated Stamp Plain Rim Sherds Weeden Island Series---30 II 32 Wedges ---- 25 IIb 25 Straps ---- 5 III 3 Basal Sherds----13 Flat, disc or square ----- 9 Flat, disc -----1 Flat, square ----- 1 Convex ----- 2 Weeden Island, Trade and Foreign Series 12.2% decorated sherds Weeden Island Red ----- 30 Carabelle Incised ----- 3 Keith Incised----- 4 Wakulla Check Stamped ----- 1 (1.5 mm checks) Weeden Island Incised ----- 3 (Zoned variant)

(or free incised)

(Englewood Series)

ably W. I. Series)

? Incised, 3 motifs spaced around vessel, shallow round based incision.

 Mound City Net Marked
 1

 Indian Pass Incised
 1

 Carabelle Punctate
 18

 Basin Bayou Incised
 1

Pasco Plain ----- 1 Lemon Bay Incised ----- 2)

Englewood Incised ------2)

Raptorial Birds head on plain rim -----

Table XI

Unit 2-9-0R100 (Refuse Pit Collection)

Total Sherds 244
Total Plain 149 61. 1% total
Total Decorated 95 38. 9% total
Total Comp. Stamp 53 55. 8% decorated
Total Weeden
Island Series 25 26. 3% decorated

Land-groove width - 2mm. Range 2.5 to lmm. Most sherds classifiable as Little Kolomoki C.S., few Swift creek II period variants associated.

Complicated Stamp Series:

Swift Creek II or Little Kolomoki - 51

Uncertain motif----- 31 recognizable motif----- 20



26.3% decorated sherds.

Stamped Rim Sherds - S.C. II Variant, or Little Kolomoki C.S.

IIb 3 II 5 III 2

Plain Rim Sherds:

Weeden Island Series: 25 sherds,

 Wakulla Check Stamp
 1

 Weeden Island Red
 10

 Mound Field Net Impressed
 1

 Carabelle Incised
 4

 Indian Pass Incised
 1

 Weeden Island Incised (zoned)
 1

 Carabelle Punctate
 6

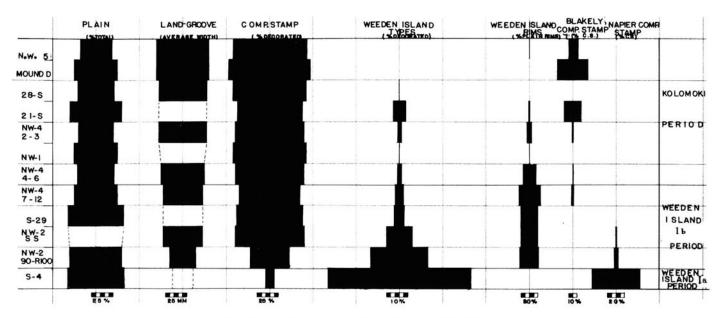


Chart I-Base Seriation Chart, All Units.

SERIATION ANALYSIS

Chart I presents the basic seriation data for the site, with an arrangement in large part derived from the behavior of the Weeden Island types and the contrariwise behavior of the complicated stamp series. The validity of this development is attested by the behavior of the Weeden Island Plain rim series, the appearance of Blakely Complicated Stamp only at the top of the chart, the place of Napier Complicated Stamp only at the bottom, and the constantly increasing width of stamped lands from the bottom to the top, all phenomena not causally related to complicated stamp and Weeden Island series behavior.

We may comment on the behavior of the graphed units singly before moving on to the next composite chart. Plain ware, charted on the basis of the percentage of plain body sherds in the total collection from each excavation unit, is of little utility in measuring temporal and/or cultural change. Its presence on the chart is largely to demonstrate the point that inclusion of plain body sherds in all graphs would mask significant developments without contributing much of anything. There is a slight tendency toward a higher percentage of plain body sherds at the bottom, which may be of some significance in spite of the lack of consistency.

Land width was measured on approximately twenty-five per cent of each sample, selected only for sherds which had at least one measurable land. Sherds in which land width was altered by smoothing, apparent slippage of the stamp, or anything of the sort, were not included. Also omitted from this graph was the sample of *Blakely Complicated Stamp* with an average land width of over six mm. and the *Napier Compli-*

cated Stamp sample with a 1.5 mm. average. Since these are distinctive types and, in the case of Napier at least, not part of the resident developmental continuum in stamped pottery, inclusion of them would have falsely emphasized an already obvious development

Unfortunately, several samples were not immediately available for measurement. In the case of Units 21-S, 1-N. W., and 29-S, the other data are so consistent as to indicate that they would have fitted the graph in the manner shown by the dotted lines. My notes for the sherds from the Weeden Island pits, as well as the sample available, indicate that fine lands, the 1.5 mm. average range, were predominant as indicated by the dotted lines on this segment of the graph.

Behavior of the stamped ware from unit to unit, as graphed, tends to be somewhat erratic. Nevertheless, the over-all trend is clear, particularly in the obviously greater importance of stamped sherds at the top than at the bottom. I might also point out that while the percentage differences are small, none of the stamped percentages in that segment of the continuum designated as Weeden Island I-b approach the maxima in the Kolomoki period.

Unless it is felt very strongly that the graph should be pointed at both ends, the behavior of the Weeden Island series may be viewed as satisfactory. Actually of course, this graph is *the* arbitrary arrangement which served as a basis for the entire seriation. Thus it would be invalid without the complementary behavior of the other graphed units. The arbitrary arrangement did break down in several cases, notably Unit 21, which, basing seriation on the Weeden Island series percentages only, should have been placed down around Units 7-12. However, this placing would clearly

have been in error, since the stamped ware in Unit 21 is typical Kolomoki Complicated Stamp. Further validation of the position of the unit in Chart I will be found in Chart II, where developments in complicated stamp rim forms are illustrated in graphic form.

We might pause here to consider a minor philosophical or interpretative problem. Judging from the total character of the assemblages, particularly of the stamped ware, and from the nature of the deposits, I am completely certain that the Weeden Island series types were part of the actual cultural assemblages in units on the chart from the bottom up through Units N. W. 7-12, and perhaps Units N. W. 4-6, and even N. W. 2-3. I am equally confident that the Weeden Island series sherds in Units S-21 and S-28 are present as a result of mechanical mixture, the Weeden Island sherds having been on the ground before any Kolomoki period sherds were deposited. This may even be true for N. W. Units 2-3 and N. W. Units 4-6, since actually the N. W. 2-3, 4-6, and 7-12 units are arbitrary divisions of a physically continuous midden deposit. Here the 7-12 segment was in place while 2-3 and then 4-6 were forming.

The point is simply that there are two sorts of things involved which are necessarily indistinguishable on the chart, actual cultural assemblages and mechanically mixed assemblages. I do not think that the problem is a serious one here, particularly in the case of Unit S-21, only a few yards from the Weeden Island period pits in Unit S-5. In other words, the probabilities are that the Weeden Island types were not really a part of cultural assemblages after the line drawn on the chart to divide the Weeden Island I-b from the Kolomoki period.

I would not care to interpret the development in the Weeden Island Plain rim forms the same way. Their real importance in the Weeden Island periods is clear. I have a feeling that they do continue on as a part of the Kolomoki period complex for some time, at least longer than the Weeden Island decorated types, but I cannot be certain of this point on this site. Again the total sample is not available for checking, but the heavy rounded straps at least are dominant in the Weeden Island I end of the chart, although the wedges there seem largely confined to the Weeden Island Red type

The graphs for Blakely Complicated Stamp and Napier Complicated Stamp need little comment per se. Accepting the major outlines of the seriation as valid, the graphs for these types merely document tightly their respectively late and early positions in the overall development.

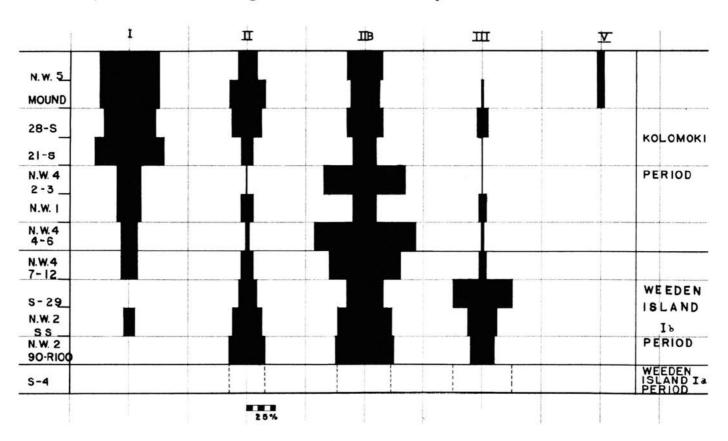


Chart II—Complicated Stamp Rim Forms

Chart II, a graphic presentation of the percentage occurrence of the major rim forms on the complicated stamped ware, omitting here only Napier Complicated Stamp, demonstrates some rather important developments within the stamped tradition. The insignificant representation of Form I in pre-Kolomoki periods with its dominance in the Kolomoki period is particularly important, making the rim form a definite type and time marker. Correlated with this is the reverse trend for maximum occurrence of Form III, the broad flat fold, in the earlier periods.

Form II-b is unpredictable. The form is rather important in all periods, but behaves very erratically from unit to unit. Probably the over-all importance is the only significance of this form.

Form V, a sharply flaring rim, is sometimes notched as were *Early Swift Creek* rims. This form appears only late and, whenever definitely ascertainable, the

notched variant appears only in *Blakely Complicated Stamp*. Without the notches, it is also of some importance as a rim form for *Kolomoki Complicated Stamp*. The only point of distinction between this form and Form II rims is the flare.

Form II rims are not as erratic in their behavior through time as might be believed from the chart, which shows a rapid diminution as we move up into the Kolomoki period, and then a sudden sharp increase. In *Early Swift Creek period*, which is without any Form V rims, all direct rims are Form II. However, when Form V rims do appear, small sherds from the lips of vessels will not show the flare, and consequently must be classified as Form II. I would not be at all surprised if Form II rims as defined were not almost totally absent in these late periods, possibly completely absent, if all rim sherds were large enough to show the flare.

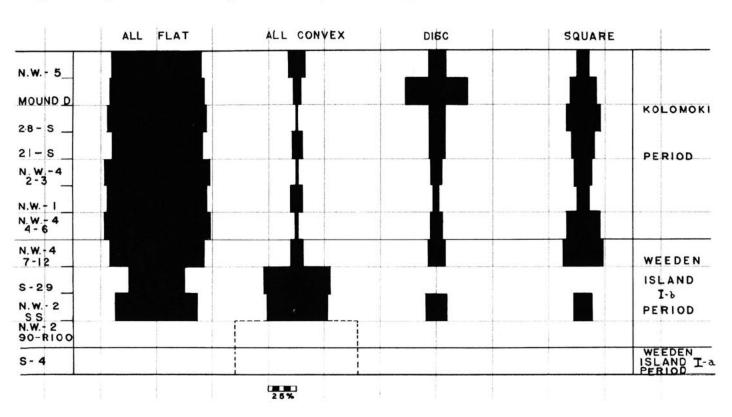


Chart III-Vessel bases

Chart III is designed to illustrate the change in shape of vessel bases and comparisons of the finds of several excavated units. The most significant point is the abrupt disappearance of flat bases below the N. W.-2 units on the chart, and their complete absence in the two earliest units, the Weeden Island I segment of the graph. Correlated with this abrupt disappearance, foreshadowed to a degree if one looks downward at the earlier portion of the Weeden Island I-b segment of the

chart, is the importance of convex bases which completely replace flat bases as shown in the two lower units of the chart.

The appearance of the two types of flat bases is not necessarily of positive value, and I do not even trust the apparent predominance of square bases in all periods. I base my doubts on the knowledge that sherds from square bases are much easier to recognize than sherds from disc bases and, because of their

thick corners, are more apt to be preserved as fragments of some size.

I have no doubt that many sherds from convex bases were present in the collections and were not recognized, particularly sherds from plain bowls which were not thickened at the base. Consequently, the chart from Units N. W. 2-SS up does not represent the true relative importance of the two major base forms. It is interesting to note that in the two units at the base of

the chart, no sherds from flat bases were present. While very few sherds could be definitely stated to have come from convex bases, it is certain from the lack of distinguishable sherds from flat bottomed vessels that only convex bases were used during this early period. The abrupt appearance of flat bases is perhaps in line with other evidence concerning the nature and direction of culture contacts at this time, and will be considered again at several points.

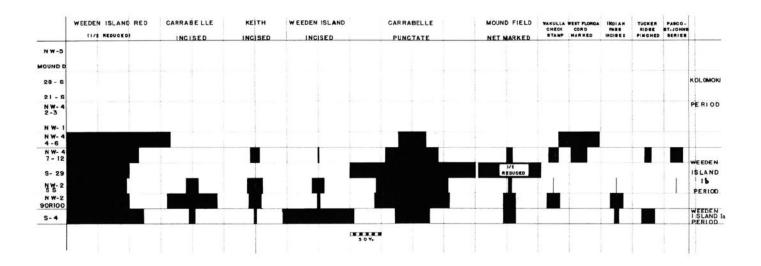


Chart IV—Temporal Change within the Weeden Island Series. Percentages with Weeden Island series as 100 per cent at each level.

I am not completely certain that Chart IV demonstrates anything except that the proportions of the various Weeden Island series types vary from unit to unit. There are a few possibilities which may be of of some interest. It will be noted that the only types of major importance in the Weeden Island I unit are Weeden Island Red and Weeden Island Incised, the latter the zoned variant as noted elsewhere. The other incised types, Carabelle and Keith with angular motifs and incisions executed with a sharp tool, reach their peak in the Weeden Island I-b period and fade out early in the Kolomoki period. Carabelle Punctated, the major unpainted type in the Weeden Island series during the Weeden Island I-b period, follows the same pattern. This makes it appear as though there are two complexes, one with the curvilinear incised executed with the rounded implement, and the other angular incising performed with a sharp pointed tool.

Mound Field Net Marked is a minority type which appears throughout the Weeden Island units, although its importance in Unit S-29 is exaggerated through the necessary use of a very small sample.

West Florida Cord Marked, presumably the "late" variant, although we have only body sherds with widely spaced cord impressions to work with, is late. Indian Pass Incised, definitely a minority type, seems to be early on the basis of an extremely small sample. The distribution of Tucker Ridge Pinched is too erratic for comment.

Probably the late appearance of *Pasco Plain* and *St. Johns Plain* is of some significance, particularly since it is corroborated by the generally Weeden Island I-b position of other units not recorded here because of long time coverage, units with more sherds of these types. A few sherds each of *Yokena Incised*, *Englewood Incised*, and *Lemon Bay Incised* also fall in this general Weeden Island I-b period (See descriptive statements).

BURIAL MOUND ASSEMBLAGES

It is possible to fit the assemblages of ceremonial ceramics from burial mounds D and E to the charts worked out for the village area assemblages by using

the complicated stamped vessels from Mound E and the sherds from the midden under Mound D. By using these only, we may avoid the difficulties noted earlier concerning the specialized nature of ceremonial vessels and their lack of adherence to the standards apparent in ceramics produced for utilitarian purposes.

Mound E: Produced eleven vessels classified as Kolomoki Complicated Stamp. Nine of these have the Form I rim, important only during the Kolomoki period. In all eleven vessels, the motifs, style of execution, land width, and general stamp character indicate placement well up in the Kolomoki period. Lack of the very heavy stamping of the late units, while not completely definitive, suggests that the vessels were made before the latest segment of the Kolomoki period. This feeling is reinforced by comparisons of the specialized ceramics. It seems at least probable that the greater number of effigy vessels, pedestals and greater use of perforation in Mound D place it as later than Mound E. Furthermore, as noted below, the Mound D assemblage, on the basis of Mound D evidence, seems to pertain to the very end of Kolomoki culture occupation of the site, with no room left after it for Mound E. On the whole, I would suggest that Mound E was produced during the same period of time as Unit S-28 in the village.

Mound D: This mortuary deposit cannot be easily dated by the one aberrant specimen of Kolomoki Complicated Stamp included in it. However, the entire cache is definitely later than the submound midden already entered in the seriation charts. This means that Mound D was constructed during the very latest period of Kolomoki culture occupation of the site, after Early Complicated Stamp became a part of the complex. Reasons for believing that the specialized mortuary ceramics of Mound D is later than that of Mound E have already been noted.

We may consider, then, that Mound E is approximately coeval with Unit 28, and Mound D with Unit N. W. 6, or, assuming that only a short interval elapsed between abandonment of the village area producing the Mound D sub-mound midden and the construction of that mound, for practical purposes the mound and the midden are contemporaneous.

In Chapter VII and Chart V, an attempt is made to develop this seriation further for burial mound units, using data from the various mounds excavated by C. B. Moore, and matching this seriation with the village ware seriation developed here.

The writer feels that, on the whole, this attempt at seriation has worked out quite well. The original assumption that the Weeden Island and Kolomoki units, with quite different ceramic complexes, were extremes in a cultural development seems justified by the gradation of intermediate stages.

With some adjustment, the basic assumption that the Weeden Island series of types would drop out gradually has been adhered to in the main graphs. The developments thus outlined are strongly reinforced by the complementary behavior of other items, particularly those completely unrelated to the Weeden Island series stylistically and statistically. Important here is the consistent increase in complicated stamp land width; the appearance of Napier Complicated Stamp only in the three bottom blocks and in constantly decreasing percentages there; and the appearance of Early Complicated Stamp, with its late affiliations, only in units at the top of the graph. Equally corroborative are the behavior patterns of the two rim forms in the stamped ware: Form I with its plain band coming in gradually about the middle of the graph replacing the flat fold, Form II, until in the latest graphed units Form I is dominant. Base forms are also important here with convex bases as the sole form in the earliest levels, replaced almost completely by flat bases, disc or square, in later units.

For convenience in handling, we have chopped this continuum into three segments-roughly the two extremes with an intermediate period. The earliest is labeled Weeden Island I; the latest, Kolomoki; the intermediate, Weeden Island I-b. The division was drawn between Weeden Island I and Weeden Island I-b because of the marked shifts at this point in percentages of complicated stamp and the Weeden Island series, the importance of Napier Complicated Stamp in the earliest block, and the dominance of Weeden Island Incised in the Weeden Island series in the earliest unit. This shift is rather pronounced, and might indicate cultural discontinuity. However, I am confident that intermediate units, units on the line, could be found in the area just south of the park boundary.

A dividing line between the Kolomoki and the intermediate periods is less well marked. A sort of balance has been worked out, taking into consideration the abrupt drop in stamp land width, the drop in Weeden Island Plain rims, the lack of most of the Weeden Island series types above the line, and a somewhat subjective judgment that more of the complicated stamp was Kolomoki Complicated Stamp in the unit just above the line as drawn than in the unit just below. The division is not clear, but is serviceable. It could be moved up a unit without dire consequences, but would be less useful if moved down since more Weeden Island types would be included in the Kolomoki period, thus eliminating one of the most useful, though arbitrary, distinctions. Though similar at the dividing line units from the middle of our Weeden Island II block and from the middle of the Kolomoki block are quite different. A sharp dividing line must be placed where most convenient in solving our problems.

Probably this division is as well adjusted as is possible from data available at Kolomoki. Certainly we

cannot here define a Weeden Island II period of any variety on the basis of the handful of check stamped sherds, since we had to excavate fifty-six thousand sherds to find these.

We have outlined the ceramic continuum at Kolomoki, and have broken it down into segments in order to define the average ceramic complex for each of the three periods—the sort of complex which we should expect to find in culturally related sites of the same time period.

WEEDEN ISLAND I

The percentage of plain ware tends to be high, around 60 per cent. The thickened rims, usually with rounded exterior rim strap, on open bowls, are important. In the decorated ware, the Weeden Island series in toto is considerably more important than the complicated stamp ware. The Weeden Island series has, at this level, Weeden Island Red and Weeden Island Incised as the major types, with lesser percentages of Carabelle Incised, Keith Incised, Carabelle Punctated, Mound Field Net Marked, Indian Pass Incised, and Tucker Ridge Pinched.

In the stamped ware, all vessels have round bases and Form II, Form II-b, or Form III rims. Stamping covers the entire vessel exterior, and lightly impressed complex designs are used. The type has been defined as *Little Kolomoki Complicated Stamp*.

WEEDEN ISLAND I-b

The Weeden Island I-b period at this site is perhaps best viewed as transitional from Weeden Island I to Kolomoki, although it is probably longer than either of the more distinctive extremes of our cultural continuum. Most of the complicated stamped pottery can be seen as transitional between Kolomoki Complicated Stamp and Little Kolomoki Complicated Stamp in most features. Definition must await excavation of a one period or short span site. However, there are in units classified in the latter part of this period sherds which are definitely Kolomoki stamp, and in early units there are sherds which are definitely Little Kolomoki stamp. The Form III rim is most important early in this period, excepting the ubiquitous Form II-b, prevalent in all periods. Convex basal

sherds predominate in the earliest units, but are replaced by flat bases toward the end of the period.

This is the period of maximum diversification in the Weeden Island series, and the maximum appearance of sherds from other series and other areas of the Southeast. At this site, Weeden Island Incised drops quickly in importance, its place being taken by increased amounts of Carabelle Incised and particularly Carabelle Punctated, proportionally the most important Weeden Island series type of the period excepting the painted ware. Wakulla Check Stamp is confined to this period, while West Florida Cord Marked occurs only at the end of this period and the beginning of the next. All of our definite trade sherds come from Weeden Island I-b units including St. Johns Plain and Dunns Creek Red of the St. Johns Series; Pasco Plain and a related complicated stamp from the St. Johns and Central Gulf Coast; and Yokena Incised, a Troyville-Coles Creek type from the lower Mississippi Valley.

KOLOMOKI PERIOD

Although a few Weeden Island series sherds may be present in the earliest Kolomoki period units, balanced by Early Complicated Stamp only late, the Kolomoki period can best be defined by practical absence of any pottery types excepting Kolomoki Complicated Stamp, with Form I rims dominant, Form III nearly absent, and nearly all bases flat. The associated plain ware leans heavily to the Form II-b rim with the compressed globular bowl, well smoothed, as the most important vessel form.

Our knowledge of the mortuary series ceramics at Kolomoki is limited to the assemblages from the two mounds of the Kolomoki period, D and E. A summary of these is not necessary here.

Without going into detailed documentation at this point, it may be well to point out that this Kolomoki seriation covers a rather considerable time-span. The Weeden Island I period is considered to be generally coeval with the latter half of the Troyville or late Burial Mound II period, Weeden Island I-b as generally equivalent to the Coles Creek or Temple Mound I, the Kolomoki period with the late Coles Creek and early Plaquemine—a period in which the full fledged Mississippian culture type had just come into being (See Chart VI).

5 MORTUARY PRACTICES

More than eighty-five burials have been excavated during the five seasons of work, all but two of them in burial mounds. These two need little comment: one burial, probably an adolescent male, was found in the small Lamar village area without grave goods or ornaments; the other, a young female, at the bottom of the pit, was the only significant feature of Unit S-29, and also lacked grave goods. Neither of the two was in shape to permit metric or other studies.

Burials in the two mounds might be considered under the two headings of primary burials and secondary burials, with several sub-headings. We may here treat them generally as classes, noting in which mounds representatives of the several classes were found.

Primary Burials

Primary burials immediately break down into two classes on the basis of inferred function in the mortuary ceremonies:

(1) In each mound there is one burial believed to have been the main burial—the remains of the individual for whom the mortuary ceremonies were carried out. This individual, burial 1, was cremated in Mound E, and thus should be classified as a secondary burial. Functionally, however, he is to be classified with the main burial from Mound D. His remains and ornaments were placed at the bottom of a central pit which was then filled with rocks. Subsequent burials, construction features, and artifact deposits were oriented horizontally and vertically with respect to burial 1 and the pit which contained it. The main burial in Mound D was not central, because of the nature of ceremonies, other interments, and certain construction features antedating, but prerequisite to, the burial of this male. The course of mound construction has been outlined in Chapter II, and will be considered again in Chapter X. The main burial in Mound D, number 77, was extended, accompanied only by conch shell beads of the large size in considerable numbers, in a rock slab and log tomb. All features of construction, artifact deposition, and all later burials were oriented, again both horizontally and vertically, with respect to burial 77.

(2) The second class of primary burials might best be denominated retainer burials, from their seeming function in the mound and its attendant ceremonialism. These were most spectacularly apparent in Mound D in which five adults, probably all males, were interred in normal sized graves before there could be built a scaffolding and a primary mound, which seemed to

have been necessary prerequisites for the main burial. These five, as was the main burial, were slightly flexed at the knees. Apparently simultaneously with the main burial, the only two definitely female bodies in the mound were placed in rock slab and log tombs directly in front of the scaffold erected over the main burial. These two individuals, again accompanied only by a few conch shell beads, were the only two burials in the mound to share the unusual grave type with the main burial. By this point, the reasoning behind the term "retainer" burials is perhaps apparent. Certainly all seven of these individuals, and others to be noted below, did not all die natural deaths conveniently within a few hours. Their sacrifice at the burial of the paramount individual implies that they stood in a socially and ritually subservient position to the paramount individual in the society which constructed Mound D.

Ten other persons were placed in extended positions in log outlines and partially cremated in place during the stage of mound construction which covered the scaffolding, which included previous burials, a small platform mound, and pottery deposits. As detailed in the seasonal report and summarized herein, there is no doubt that these burials represent a continuous series of interments during a time span measured in days and hours, which went on as earth was added to the mound during this construction stage.

Three burials were also placed inside large log outlines at the bases of pits dug through the nearly completed mound. Neither the function of the pits, the individuals at their bases, nor the secondary burials placed as the pits were filled, is understood. In all

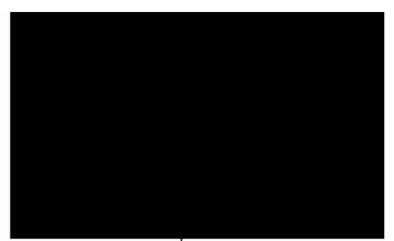


Fig. 15. Skull with copper Skull resting on hand with cymbal in place forearm attached

probability, since the mound was constructed during a relatively short period of time, the individuals at the bases of these pits might best be classified as retainers too.

Three definite retainer burials, again accompanied by a few beads and flexed at the knees, were found in Mound E. One of these was found at each side of the nearly completely filled central pit, the third just to the west of the pit edge.

All of these primary burials of either class in either mound were placed with heads to the east, the direction for the orientation of almost everything in these mounds. In cases where determinable, the single skulls noted under secondary burials also faced east.

Burial 23 in Mound D is of doubtful classification as primary or secondary. A log outline had been constructed, but the remains in it consisted of a small pile of thoroughly cremated bones and a completely uncharred skull. The charred remains were found under some rocks, the skull on top of them.

Secondary Burials

The three major classes of secondary burials are single skulls, bundles of long bones, and deposits of thoroughly cremated and fragmentary bones, probably deposited as basketfuls.

(1) Single Skulls are the most numerous class of secondary burials, two cases in Mound E and forty cases in Mound D. The class might be subdivided into single skulls deposited alone and single skulls associated with the bones from hands and arms, seven cases in Mound D. It may be well before going any further to indicate that I seriously doubt that these specimens can safely be classed as trophy skulls, according to the usual practice. In Mound E, the last specimen placed in the mound, on top of the primary mound, had a copper-covered wooden cymbal-shaped ornament in place on the left parietal, near the frontoparietal suture. In Mound D, single skulls had copper and iron cymbal-shaped ornaments in place, most frequently in the fronto-parietal region, and in at least two cases, beads were found in the region where a neck should have been. These were very small beads with a skull in the pottery deposit and medium sized beads with a skull and arm combination from the fill of feature three. Another skull, somewhat higher in the fill of the same feature, seemed to have a string of the cymbal-shaped meteoric iron ornaments under the chin. These cases lead me to believe that there exists at least a distinct possibility that these specimens were fleshed heads when placed in the mound. I do not quite understand how the ornaments, particularly the copper or copper-covered wooden cymbal shaped ones, could have been kept in place without some of the skin and hair present. This is somewhat strengthened by the fact that a certain amount of human hair is preserved on the back of every copper ornament found in contact with a skull. Just how these heads were preserved is a matter for some conjecture. In any event, it is highly probable that the single skulls in Mounds D and E were trophy heads, with ornaments in place when buried in these mounds. Quite probably they came from the temple on Mound A where they had been preserved as trophies of enemies or of important members of the community.

As noted, one string of the beads and the string of iron ornaments in Mound D were with skulls sitting on hands which had the forearm attached. I know of no similar custom elsewhere in the southeastern mounds, although several supposedly Lamar period pipes in Georgia collections seem to represent the same concept. The rather frequent appearance of hands and skulls on Moundville vessels may also be indicative, particularly the ones shown in C. B. Moore's (1905, Fig. 163) with an encircling row of skeletal hands and skulls, and (1905, Fig. 147) which has an encircling row of four skulls, two skeletal hands with forearm attached, and two doubtful smybols.

Since ornaments appeared with these Mound D specimens, they must have been fleshed when deposited. Although the beads and string of iron ornaments are present it is strange that no certain remains of vertebrae could be located.

- (2) Long Bone Bundles: Five cases of this type burial were found in Mound D, but none in Mound E. In D the bundles were placed only in stages of mound construction post-dating use of the scaffold and small platform mound. All of them were difficult to work out, but arm bones seemed commonest. In one instance a large iron cymbal-shaped ornament was associated which seems to represent trophies.
- (3) Cremations: Basketfuls of already cremated bones were also limited to Mound D, where we found five instances of the custom. Only one had any associated artifacts, three projectile points of the type common at the site and some large mica sheets, somewhat altered by the heat, at the bottom of the bones. The amounts of charcoal with these cremations were so small, and fragmentation of bones so complete, that one suspects thorough breakage of the crematory residue followed by hand picking to sort out the larger fragments and perhaps sifting to sort out the smaller ones. Cremation was quite thorough, all bones being altered to a bluish white color and a brittle texture.

Others: In addition to the types noted above, there are a few secondary burials not classifiable in any of the groups discussed. In Mound E, one human jaw was found on the old ground surface near the west central edge of the main burial pit. Two sets of cut human jaws came from Mound D, in the fill of the construction stage covering the miniature temple mound, just west of its center.

Three mass cremations were also found in Mound D. One was in a pit lined with logs at least two deep in

the surface of the small platform or temple mound; one in the fill of the next construction stage, and one covering the entire flat top of the next to last construction stage. In each case, long bones and skulls were present, definitely disarticulated when found. Probably these are assortments of trophies rather than bodies disarticulated just prior to cremation or perhaps they are examples of disturbed cremation in place.

Summary:

Mound burials at Kolomoki may be divided into three major classes, based primarily on probable function in mortuary ceremonialism, secondarily on burial type. These classes are:

I—Main burials, primary or secondary. Individuals for whom the mounds were built and for whom the ceremonies were carried out.

2—Retainer burials. Most primary burials may include some secondary burials. Individuals whose

deaths coincided too closely to those of the main individuals for natural causes of death to be considered. They, then, represent cases of retainer sacrifice and interment.

3—Secondary burials in the form of skulls, long bone bundles, containers of cremated remains. I have a strong feeling that from the point of view of the culture, these might better be classified as artifacts, that they represent trophies, temple furniture, in the same way as do some of the vessels in the pottery cache. Certain of them were in fact deposited with the pottery vessels. This most numerous class of human remains clearly received treatment in the mound and in the ceremonies productive of the mound different from that of the primary individuals and the sacrificed retainers.

We may leave the burials at this point. More complete information is available in the detailed seasonal reports. The recapitulation and reclassification above are sufficient for the attempts at analysis and synthesis which are the function of this final report.

6 COMPLICATED STAMPING

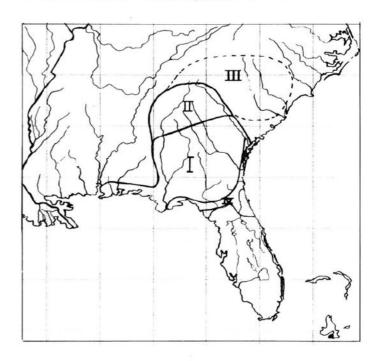
The writer has made several attempts in the last few years to understand, and to outline, the development in time and space of ceramics decorated with complicated stamps. This is another such attempt, and no doubt more will be made. A mode of ceramic decoration characteristic of a large area for over a thousand years is, from the writer's point of view, worthy of such repetitive treatment and study. We view the relationships and temporal arrangements, which we have outlined as hypotheses, not as final results. The probable degree of approximation to what may be eventually demonstrable fact varies as noted in several instances. The writer feels that this sort of attempt is necessary since we will never have answers without constant attempts at comprehension of the observed phenomena and constant attempts at problem formulation on the basis of them. That is, you can't solve a problem before you can comprehend it.

Complicated Stamped pottery by definition is that class of pottery with decoration impressed by total units into the soft clay, this decoration, excluding simple stamped linear designs and check designs, formed through carving multiple lands and grooves in a definite pattern into some substance capable of retaining the design and impressing it into the clay. Variables in the stamping, all with some temporal-cultural significance, are:

- I—Clarity of impression, a function of stamp carving, method of impression, and surface finish before impression.
- 2-Width of lands and grooves.
- 3—Angular or curvilinear bases predominant in design layout.
- 4—Complexity of design, which involves number and relationship of major and minor or "fill" elements as well as number of lands and grooves used to produce a design.
- 5—Size of stamp. This is not completely independent of design symmetry.

These variables in the decoration together with those involved in the total vessel shape, rim form, base shape, and area of decoration singly and in combination are the features which may be used to measure space-time change within the South Appalachian Province for some thousand years. Changes in temper are nearly valueless, since we have only a late change to grit from the otherwise all prevailing sand and several other variations in temper in types outside the main developmental stream.

Map 2 indicates the area through which complicated stamping is the predominant mode of pottery decoration through the entire time span from Middle Woodland to early historic periods. Several short-term spreads to other areas are noted separately. This is of course Holmes' "South Appalachian Province." The



Map 2. Area of Complicated Stamp Predominance in Pottery Decoration With Short Term Spreads.

- I Early Swift Creek to Kolomoki to Lamar-Curvilinear Stamped Tradition.
- II Napier to Etowah to (Cherokee?) Angular Stamped Tradition
- III Late Spread. Overhill and Pee Dee Stamps, others.
- IV Spanish Indian Stamped Pottery, Mission Sites.

writer prefers his term "South Appalachian" as a generic term for complicated stamp pottery rather than the endemic term "Swift Creek." This was originally defined as a rather limited variation although now it is often used for practically anything with stamped decoration except the differently tempered Lamar style of pottery and perhaps Savannah Complicated Stamp. As Holmes ably demonstrated, South Appalachian pottery stands as at least as distinctive an entity as Middle Mississippi or any other groupings which have since been adopted.

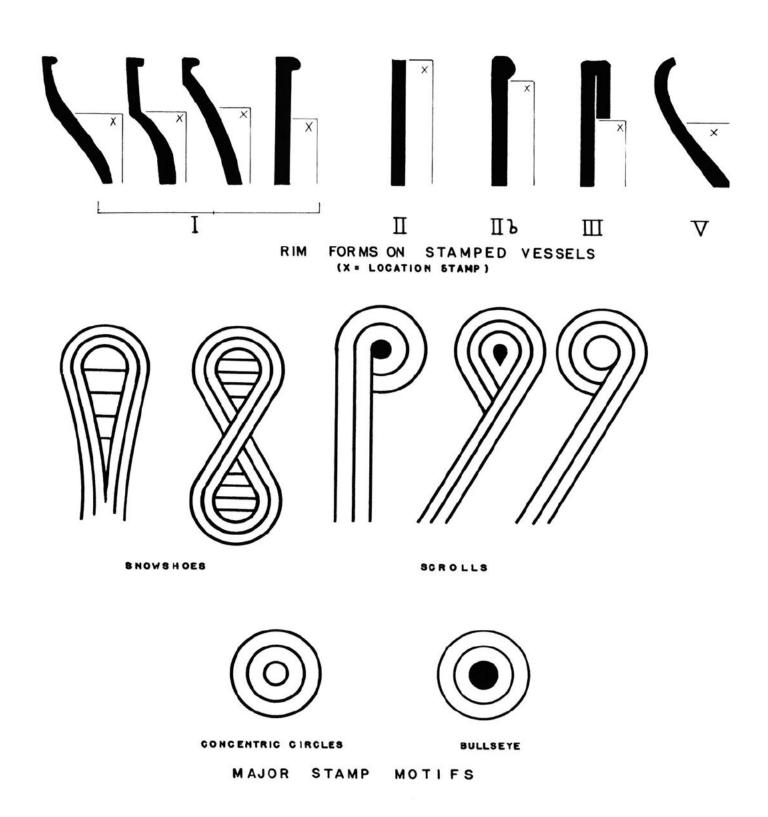


Fig. 16 Major Rim Forms and Stamp Motifs in Stamped Pottery at Kolomoki

Many suggestions have been made as to the origins of this ceramic decoration technique, some of them advanced with a considerable degree of certitude. These include West Indian wood carving (Holmes, 1903), and Illinois Hopewell dentate pottery stamps. On the whole, these suggestions might well be classified as wishful thinking. While the problems cannot be solved now, there is one point which should be re-

membered, that is that it is only the complicated style of stamping which is suddenly introduced. Vessel shapes are those of the precedent Deptford series which was also decorated with stamp designs. The shift is only from check and simple stamps to more elaborate designs. It is not a shift to a completely new decorative technique. Willey's New River Complicated Stamp may well represent an intermediate type as he suggests (Willey, 1949, p. 386).

A further note is that the South Appalachian Province is on one edge of an area of complicated stamping (not complicated stamped pottery) which in late times at least was generally circum-Carribean (See Nordenskiold, 1928). Elsewhere, stamps seem to have been used more often for applying painted designs to objects other than pottery such as portions of the body and textiles. Certain of the stamps found outside the South Appalachian Province would produce stamped impressions not at all foreign in style to South Appalachian pottery. These include the Etowah Stamp-like paddle from Bolivia (Metraux, 1948, p. 493. Fig. 66b), cylinder stamps from Panama (Lothrop, 1942, p. 181) and other stamps from the east coast of Mexico (Weiant, 1943, pp. 62, 63, 73; Ekholm, 1944, p. 471). This leads me to suspect that the South Appalachian Province is part of a much larger, and probably older, stamping province. In our area, with pottery stamping already part of the ceramic tradition, the complicated stamp technique was abruptly shifted from the body or textiles as a medium to pottery, an application which occurs only sporadically in other parts of the total area. The size of some of the early stamps, practically too large for the vessels on which they were impressed, bears this hypothesis out to a degree.

In any event, complicated stamping as a ceramic decoration technique does appear, in the light of present knowledge, rather suddenly. Once introduced, its development in time and space can be traced.

We have been able through seriation analysis of the collections from Kolomoki to study short term changes in the stamping technique. By reviewing the data, we may be able to contribute a great deal to our understanding of total developments in the decorative style.

The complicated stamp developmental continuum at Kolomoki has been divided into four segments, with Little Kolomoki Complicated Stamp earliest, and Kolomoki Complicated Stamp as the latest major type, with Blakely Complicated Stamp just entering as a minority type toward the end of our development. A rather amorphous ware, not given type status here, is intermediate between Little Kolomoki and Kolomoki stamps. Characteristics of each, from earliest to latest, may be summarized as follows:

Little Kolomoki Complicated Stamp: Tall cylindrical convex based vessels. Stamping, covering entire

vessel exterior except for Form III rim fold or extruded rim of Form IIb, is fine, complex, employs many units formed with multiple 1-2 mm. wide lands and grooves to form each design unit.

Weeden Island I-b Period: Swift Creek II variant stamps (as is Little Kolomoki C. S.). Great variation through time, development from foregoing to following types in all characteristics. Flat or convex vessel bases, variable shapes, stamping area variable. Rim forms include III important early, replaced in importance by I late. Stamping heavier, average 3 mm. less complex than Little Kolomoki C. S. stamping on the whole.

Kolomoki Complicated Stamp: Flat based vessels, flat base either disc or square. Stamping in shoulder area only. Form I rim most important, diagnostic. Stamping, 2.5-4 mm. land width, often employs only one motif, totaled design usually not composed of more than one motif once duplicated, with minor fill elements.

Blakely Complicated Stamp: Probably both flat and convex based vessels. Flat bases similar to those of Kolomoki C. S., round bases associated with Form V flared rims, general Mississippian pot form. Stamping covers entire exterior with Form V rim, Shoulder area with Form I. Heavy bold stamping, 5-7 mm. land width. Simple snowshoes, bullseye, and scroll designs used without fill elements.

We may recapitulate by following the developments through time of the distinguishable elements.

Vessel bases on *Little Kolomoki Complicated Stamp* vessels are convex, but a change to flat bases occurs during the Weeden Island I-b period. In the Kolomoki period, convex bases are almost absent. The sample of the latest stamped type, *Blakely Complicated Stamp*, is too small to permit definite judgments, but I rather suspect that the convex unthickened bases, used on large globular jars with flaring rims, are replacing the flat Kolomoki bases (See chart III).

The major trend in rims is from a dominance of broad flat folds, Form III, to plain bands of Form I. Form III is particularly diagnostic for *Little Kolomoki Complicated Stamp*, Form I for *Kolomoki Complicated Stamp*. Variations through time in the other two major rim Form II and Form IIb, are erratic. Form V, the flared rim modified only by notching in some cases, occurs only late (See Chart II).

A definite trend in the width of the lands used to form the stamped designs was observed, a steady increase from an average 1.5 mm. early to 6 mm. in the latest units (See chart I). Correlated with this trend is an increasing simplicity and clarity of design, characterized by a consistent decrease in the number of lands used in forming an element, in the decrease of the number of major elements, and in the use of fewer, smaller, and simpler fill elements. In the earliest stages, there are usually at least two elements of major im-

portance, or one unit is repeated three or more times, using 6-8 lands to form each element, and using many smaller "fill" elements to fill out the design area.

In the latest Kolomoki Stamps, and in *Blakely Complicated Stamp*, only one motif appears, fill elements having been dropped completely. With the increase in the importance of one unit comes an increase in the size of this unit. Apparently there is something of an optimum size for stamps, so that as fewer and fewer elements are used, they increase in size to fill the entire paddle area more completely.

The post-Kolomoki stage in complicated stamp development in this area is foreshadowed by Blakely Complicated Stamp, equivalent in such characteristics as stamp size, simplicity, and over-all stamping to Savannah Complicated Stamp and Wilbanks Complicated Stamp as these are known to the east and north. The type is not completely equivalent to these temporally, since Savannah and Wilbanks follow Etowah Complicated Stamp in the Etowah Valley, as noted below. Since the Kolomoki period is believed to be pre-Etowah and pre-Southern Cult on many grounds, the continued existence of a temporal-cultural gap is obvious. Nevertheless, stamp development in the Southwest Georgia-Northwest Florida area must go through a stage stylistically equivalent, in the most general sense of the term, to the Savannah-Wilbanks duo in order to develop into one or more of the Lamar Complicated Stamp variants. Blakely Complicated Stamp is at least one representative of such a developmental stage.

Lamar Complicated Stamp, as represented at this site, is reasonably typical of the type as found in South Georgia, except for the small compact stamps, especially crosses in circles, which occur in some quantity. Otherwise the rather heavy overstamped execution of the decoration is about normal. There are some indications of continuity between Kolomoki Complicated Stamp and Lamar Complicated Stamp as found at this site, and to a degree, to the slightly different Lamar variant from the Bull Creek site near Columbus. A few sherds of the Kolomoki stamped type have been found bearing crosses in circles, a few circles with four large interior circles, and the tendency to predominance of simple scrolls and bullseyes observed in Kolomoki stamped reaches its peak in the Lamar of this area. It is probably safe to predict that sites will be found eventually giving a ceramic developmental continuum extending from the top of the Kolomoki seriation on through to Lamar.

One ceramic type, occurring at least all over Southern Georgia, which is directly ancestral to Little Kolomoki Complicated Stamp and related to Swift Creek II variants is Early Swift Creek Complicated Stamp. The original notes concerning this earliest variant in the curvilinear complicated stamp tradition by Kelly (1938) and the type description by Willey

(1949, pp. 378-383) hold true for all observed collections. The type is remarkably uniform over the entire area of occurrence. General characteristics are sand tempered vessels with only moderately well smoothed surfaces, round to slightly pointed or sub-conoidal bases which often have tetrapod feet, direct rims which may be slightly flared, and, in some cases, notched or scalloped lips. Stamps are large and complex, employing lands ranging from very fine to moderate in width and depth. Designs are made up of either a number of discrete elements with almost equally important and elaborate fill elements completing the design area, or the stamp paddle has on it one large and very complex design covering the total area without major emphasis on any one part. As noted above, changes from the Deptford series to this Early Swift Creek type involve only a change in decorative design and the addition of lip notching. There is not a change in vessel shape or decorative technique. At the type site, this ware seems to evolve directly, by loss of tetrapods and the addition of folded rims, with simplification of the stamping, into Middle Swift Creek, a definite and definable type at the type site. Middle Swift Creek, as a Swift Creek II variant, is generally equivalent to Little Kolomoki Complicated Stamp, which no doubt was produced from Early Swift Creek by a similar evolution.

A number of distinctive types in the curvilinear stamped tradition have been isolated and described outside the Georgia area, and they may be discussed here since they supply comparative data of some importance, particularly for working out chronological equivalences.

Man Complicated Stamp, found in some quantities on a site in Southern Indiana, is normal Early Swift Creek in all characteristics except for the clay tempering (Adams, W. R. 1949; Black, Glenn A., personal communication). This type is important in South Appalachian chronology since it occurs as part of a complex with the local Middle Woodland ceramics on a site with mounds which have produced rather elaborate Hopewellian artifacts. This association, plus the fact that Early Swift Creek Complicated Stamp in Northwest Florida is part of Santa Rosa-Swift Creek complex with rocker stamped pottery, and the position there demonstrated of Early Swift Creek over Deptford, establishes rather firmly Early Swift Creek Complicated Stamp as a Middle Woodland or Hopewellian time marker.

Several types isolated in Florida are representative of the Swift Creek II ware, including *Tampa Complicated Stamp* and *Old Bay Complicated Stamp* (Willey, 1949, pp. 436-437), although the latter uses curvilinear motifs in conjunction with Wakulla-like check stamping.

Pickwick Complicated Stamp, a limestone tempered Pickwick Basin type (Haag, 1939) is clearly related

to the Swift Creek II horizon on all counts. The same is true of the illustrated specimens of Candy Creek Complicated Stamp (Lewis and Kneberg, 1946, Pl. 46), and Eastern Tennessee type, although Candy Creek obviously covers a long time period, and it may be reasonable to suspect that the complicated stamp pottery occurs only toward the end of the period.

The illustrated specimens of Brewton Hill or Deptford Complicated Stamp (Caldwell and McCann, 1941, pp. 51-52, Caldwell and Waring, 1939) are also Swift Creek II variants. The lack of folded rims noted in the text (p. 42) does not fit, however. I have no doubt that this type occurs after Deptford, and possibly, although less probably, that it occurs before Wilmington. That it is a part of the Deptford complex, I seriously doubt, since this would give Deptford, with all of the evidence pointing to an Early Woodland position, a duration extending through the entire Middle Woodland period too, and even later. Possibly the sherds are better associated with the lower levels of the Wilmington period strata.

The writer has had the opportunity to inspect collections from the Evelyn plantation site, at times used as an example of a Burial Mound I period burial mound for reasons not immediately obvious to the writer (Griffin, J. B., 1946, p. 50). The complicated stamped sherds are closely related to the Weeden Island Ib period Swift Creek II variant sherds from Kolomoki, and I see no reason for assigning mounds at the site to any other period. That there may also be a Deptford occupation of the site does not seem particularly important in this case (See also Fairbanks' comments on the Evelyn collection, American Antiquity, Notes and News, October, 1953).

As the writer has had occasion to point out several times in the past (Sears, 1950b, 1952a) the foothills of the Appalachians, an area extending from just north of the Etowah Valley south to a line running between Macon and Milledgeville, generally the Fall Line, is characterized by the development of complicated stamps bearing motifs which are mainly angular rather than curvilinear in their layout. This development is on the whole independent of the southern curvilinear development, but parallels it in many respects as noted below. The parallelism results, in all probability, from continuous culture contact through time, and occasional population movements.

The earliest of the northern types is Napier Complicated Stamp. Unfortunately, a good site of the complex in which this is the major type has not yet been excavated. In fact only small thin sites have been located, and the type is known only through surface collections from these sites. These finds are of course sufficient to document the spread and importance of the type. They also indicate that we are classing two variants together, one with erratically criss-crossing

bundles of parallel lines, the other with the bundles of parallel lines arranged to form diamonds, with other lines filling the diamonds. Since these tend to mutual exclusiveness in sites in the general area, it is probable that a time difference is represented. Typologically, the erratic style should be earlier, representing a developmental stage from simple stamping on the way to the formalized version, probably formalized under influence from the southern curvilinear style of design layout, necessarily formal from its inception. The relationship in design layout of the formal Napier with the Little Kolomoki Complicated Stamp with which it is associated at Kolomoki is obvious, particularly in the motif repetition. Perhaps, unfortunately, there is known only this one intrusion of the type into a southern site.

On typological grounds again, the development of the regularized Napier into Woodstock Complicated Stamp is obvious. The development follows the same general lines as developments in stamping to the south outlined: emphasis of one unit, concomitant increase in the size of that unit, and reduction of fill units, here reduced to simple parallel bars outside the diamond. The writer follows Wauchope's original statements and photographs concerning this type (Wauchope, 1948), a formal type description not yet being available. I have also seen collections from the Etowah valley typologically intermediate between classic Napier and classic Woodstock. Unfortunately, it is my understanding that in forthcoming publications, practically all sherds from sites with a predominance of classic Woodstock will be lumped together as Woodstock Complicated Stamp, sherds from sites with a dominance of classic Napier as Napier Complicated Stamp. While this lumping treatment will be in line with methods often used in the archeology of this area, the sort of developments we all need knowledge of for comparative studies will be obscured. On the whole, the writer considers these lumping tendencies as somewhat deplorable, and feels that all recognizable variants should be described with notations of quantity and location in reports, regardless of what they are called. This would at least tend to decrease the need for future re-study of old collections, or for constant location and excavation of sites of known complexes.

Woodstock Complicated Stamp stylistically is the northern equivalent of Kolomoki Complicated Stamp of the later periods. Since the peak period at Kolomoki is considered to fall in the just pre-Southern Cult time interval as the Cult peak is represented at Etowah, Spiro, and Moundville, a subject to be discussed at some length in subsequent chapters, the Kolomoki and Woodstock stamps are also temporal equivalents.

The derivation of the now comparatively well-known *Etowah Complicated Stamp* (Wauchope, 1948, Sears, 1952a) from Woodstock rests on firm typological and stratigraphic grounds. The writer may well pause here

to point out that Etowah Complicated Stamp is here considered to include in its motif inventory only the concentric diamond variants, the line block, and the simple filfot cross which enters in the Etowah III period, plus perhaps a few odd variants, such as the fret, which have an angular basis. Motifs with a curvilinear basis other than the filfot are not Etowah Complicated Stamp. This is mentioned since there is a tendency to include all stamped designs found in the Etowah IV period in the Etowah Stamp category. Such a tendency, to the writer, violates both practical considerations and probable cultural style tenets. If nothing else, it makes the type conceptually too broad for any real use in archaeological studies.

There seems to be no doubt that in the Etowah Valley, both Wilbanks Complicated Stamp and Savannah Complicated Stamp are found as the only stamped decorated types on some sites, and are the ceramic diagnostics for specific cultural entities. It also seems to be true that in a period succeeding the one in which the filfot cross enters, certain sites have pottery of all three types. This clearly indicates cultural mixture in process, not that all three, separate stylistically in decoration, finish, paste, and vessel shape, are to be included in a common type, at least not in a type as the term is usually understood and used by American archaeologists.

Since the long term evolution to the Savannah-Wilbanks level can be and has been outlined above in this report, as known in the southern part of the state, these types which were late in appearance in the north on pure sites can only be interpreted as evidence of cultural intrusion. If only the mixed sites occurred, without any knowledge of the separate long-term developments in the two areas available, development from Etowah into the curvilinear types might be hypothesized. This would seem improbable even so, since a major style shift would be involved. Such a probability can be completely outlawed when ceramics in the Lamar style, in the next period, are studied. Many, if not most of such collections from North Georgia contain both Etowah and Savannah-Wilbanks motifs, carved and applied in the same manner on the same paste and vessel forms. Earlier, as in the Etowah IV period, not only the stamp motifs but the pastes, the finishes, and apparently even the vessel shapes continue to differ even when the three types were found together. These differences are obliterated in North Georgia Lamar style pottery, and the two styles are amalgamated. This occurrence (or appearance) stands in rather strong contrast to Lamar style ceramics from the southern part of the area where motifs continue to be curvilinear only.

In both north and south, a major distinction between Lamar style and earlier ceramics is in the use of the stamp paddle. Simultaneously with the appearance of grit temper and the notched, luted, filleted, rosetted, or what-have-you rim strips, the stamp paddle begins to be used in actually shaping the vessels. This instrument produces consistent overstamping which along with sloppy stamp carving makes study of designs difficult. All earlier stamps seem to have been applied with considerable care solely for decorative purposes, after the vessel had been shaped and smoothed. This is particularly true in the Kolomoki, Etowah, Wilbanks, and Savannah types.

A few comments on the term "Lamar" and its usage may be appropriate here. As currently used, Lamar refers to ceramic complexes containing predominantly large grit tempered jars with rather varied rim treatment including notched base rim folds, added notched or filleted rim strips, encircling row of rim rosettes, or some similar treatment. Usually a substantial portion of such pottery in a given collection is decorated with complicated stamps of a relatively simple design, heavily overstamped because of the treatments noted above. Associated with this stamped ware, or a plain ware with the same rim treatment, incised pottery is often found with rather simple incised motifs applied above the shoulder of a bowl, often the sharp-shouldered cazuela type.

A point worth noting here is that this filleted or notched rim treatment is a late time marker from the plains area to New England. The incised style, particularly the frequent guilloches and scrolls, is also a late time marker in the Southeast generally, although its apparent time depth, extending well back into prehistoric levels, is somewhat greater than that of the rim treatment. As a matter of fact, the roots of the characteristic notched rim strip go as far back, with the appearance of notched added strips on jars and bowls in the Mound E complex at this site, as one of the early occurrences. The treatment is common in Mississippian horizons to the north and west, with Dallas perhaps the best known complex (Lewis and Kneberg, 1946, Pl. 62-G).

If, as is often done, we accept the dominance of the rim form on large jars, in combination with an incised type and/or other types, as diagnostic of the entity "Lamar," the following complexes, known to exist, published and unpublished, must be so classified.

Kolomoki-Lamar: Lamar Complicated Stamp, curvilinear motifs predominant. Mercier Check Stamp. Fort Walton or related incised type.

Bull Creek-Lamar Complicated Stamp: Curvilinear motifs, but not completely identical with the Kolomoki version. Check Stamp similar to Mercier Check. Fort Walton-like incised.

Type Site: Lamar Complicated Stamp, most similar to Bull Creek. Lamar Bold Incised.

Irene: Irene Complicated Stamp, dominantly filfot cross motifs. Specialization in rim rosettes and hollow reed punctates. Irene Incised.

Tugalo (And documented early 18th century Cherokee sites in Western North Carolina): Overhill Complicated Stamp. Similar to Lamar Complicated Stamp from above sites, but heavy use of angular motifs. Simple stamp and Overhill Check Stamp present. Unnamed incised type, motifs similar to Lamar Bold Incised, execution more like Fort Walton Incised.

Athens Area: Numerous small sites, plain ware dominant with Lamar rim treatment. Unnamed incised, most similar to that associated with the documented Cherokee sites.

Pee Dee Focus: North Carolina, late protohistoric. Complicated Stamp similar to Etowah Complicated Stamp. Rim treatment absent stamped vessels, rosettes similar to Irene on plain ware.

Others: Number of sites in South Carolina and along Savannah River basin similar to Pee Dee, but with more stamping of generally later type.

From the above it is relatively obvious that "Lamar" in the South Appalachian Province, as the term has been allowed to expand beyond its original significance, is practically a synonym for "late." We have noted above complexes ranging in time from definitely protohistoric, presumably 15th-16th centuries, to a probable 1700-1725 date for the Cherokee sites. Culturally, the only definite association of Lamar style ceramics is with the Cherokee. For some years the assumption has been accepted that Lamar, using the term in its most expanded significance, could be equated with 16th century Creek culture, an equation derived from the known spread of the complex and the spread of Muskhogean, hence Creek, tribal and village names in the De Soto accounts.

This equation probably holds for a recurrent complex in the southern and central portions of the State of Georgia, a complex including *Lamar Complicated Stamp* with dominantly curvilinear motifs, some form of incised ware, and other types such as the check stamp. But, the assumption remains an assumption

even in this limited case. Simply to equate "Lamar" with its extended significance with "16th century Creek Culture" is untenable, a position made reasonably clear by Fairbanks (1952, p. 297). However, a need for additional emphasis is felt.

The brushed types of ceramics are the only types demonstrated to represent Creek culture in the South Appalachian Province: Walnut Roughened and Chattahoochee Brushed, Ocmulgee Fields Incised, and Kasita Red Filmed. Probably the Northwest Florida Jefferson complex, associated with seventh and eighteenth century Apalachee, should also be included. The brushed types often do have the generalized Lamar rim form. Ocmulgee Fields Incised is clearly descended from either Fort Walton Incised, Ocmulgee Fields Incised, or both. Kasita Red Filmed does not have a known ancestor in protohistoric complexes.

This outline and review of ceramic development in the South Appalachian tradition and area does indicate some possibilities. Reasonably complete knowledge of development is available only in a few restricted sub-areas for quite short time periods, the Kolomoki seriation developed in this report being one of the longest. But, as incomplete as our knowledge is, and even with the use of typological seriation in developing sequences at various points, a general outline of development trends appears, and hangs together. In briefest form, this is the trend in both north and south from complex stamps with many small units to simpler stamps characterized by only one large unit executed in heavy lands and grooves, both ending with the simplified stamps executed in heavily overstamped fashion through use of the stamp die as a tool in forming the pot. But even when there is a strong general trend, there is no doubt that exceptions will appear, and certainly detailed checking is needed at many points. The writer does feel, however, that the derived outline will have some value as a tool in the archaeology of this area, enabling rough chronological ordering and indicating major problem areas.

7 WEEDEN ISLAND

The totality of the long uninterrupted occupation at Kolomoki is, as noted in earlier chapters, classifiable as Weeden Island, by Willey's system of classification. The only exceptions are the definitely Kolomoki period village units. This continuous sequence, in the writer's opinion, gives us a new insight into the nature and composition of the Weeden Island complex in its variations through the total Northwest Florida-South Alabama-Southwest Georgia region. Perhaps the best way to review the problem will be to restate the characteristics of each of the periods as represented at Kolomoki. We may, then, with a general developmental and classificatory scheme established, attempt reclassification of other units.

KOLOMOKI SITE-PERIOD CHARACTERISTICS

Weeden Island I

Ceramics: Weeden Island Series, with most types present, dominant. Weeden Island Incised particularly important, all specimens the zoned variant. Plain ware 65 per cent of the sherd count. Complicated stamped, minority decorated ware, includes Little Kolomoki Complicated Stamp, a fine lined complex stamp used on cylindrical convex based vessels, and Napier Complicated Stamp.

Features: All collections from washtub shaped pits. No structures or burials known.

Weeden Island Ib

Ceramics: Importance of total Weeden Island Series decreases rapidly through the period, and importance of Weeden Island Incised decreases within the Weeden Island Series. Carabelle and Keith Incised and Carabelle Punctated increase in importance, the punctate type reaching its frequency peak in the middle of the period. Minority types, as Wakulla Check Stamp and West Florida Cord Marked appear in Weeden Island I-b. This seems to be a period of maximum cultural contact, with trade types present as the Pasco and St. Johns Series from Southern and Eastern Florida, Coles Creek and Trovville types from the Lower Mississippi Valley. The Complicated Stamped series increases in relative importance, at the expense of the Weeden Island Series and the plain ware, through the period. Characteristics of the stamped pottery are changing from the definable Little Kolomoki Complicated Stamp to those of Kolomoki Complicated Stamp. Change as manifested at this site is continuous during this period, and we do not have a large enough sample at any one point to make definition of specific types possible. Flattened vessel bases and Form I rims appear on stamped ware during the period while Form III rims decrease in importance.

Features: Collections all from midden deposits. No structures or burials known, although location of deposits indicates that plaza and temple mound usage must have begun in Weeden Island I-b times.

Kolomoki:

Ceramics, and other features, must be considered separately from burial mounds and villages as demonstrated earlier.

Village Ceramics: Weeden Island series absent, or nearly so, replaced in importance by Kolomoki Complicated Stamp, Plain ware reduced to average fifty per cent of sherd counts.

Structures: Usage of Temple Mound, plaza, and special purpose mounds (these probably a period characteristic, largely confined to this period).

Burial Mound Ceramics: Vessels which can be classified in the Weeden Island Series dominant. Kolomoki Complicated Stamp important. Special treatments and vessels forms such as effigies, perforation of vessel walls, use of pedestals, red and white painting, abstract forms, are period characteristics in the mortuary-ceremonial ware.

Construction: Multi-stage, in continuous process, centered around the mortuary ceremonies for one individual. All features of construction, deposition, and interment oriented eastward and with respect to position of main burial.

Burials: Many, primary and secondary, special tomb types, retainer sacrifice important. Study of function must be made in relationship to mound construction stages and periods of artifact deposition.

Certain inferences as to trends may be derived from this Kolomoki situation. In order to classify other sites by these stages, we may extend these inferences, and attempt to validate them by demonstrating that they hang together as an overall interrelated scheme, that they are not isolated phenomena attributable only to Kolomoki. We may make these inferences more explicit as follows:

I—That the internal development of the complicated stamped ware at Kolomoki is truly representative of developments in the total area seems reasonable, as documented in Chapter VIII, parcticularly in the larger part of the South Appalachian area to the north, where the Weeden Island Series is not involved.

Chart V

Weeden Island I-a Mounds

FOW LERS LANDING

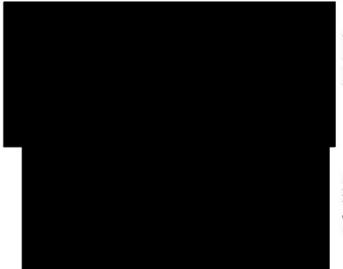
Moore '03 figs. 1, 3, 6, 7.



Vessel 6, fig. 3 and sherds figs. 6 and 7
Zoned Incised. Unusual compound vessel with flange ring base in deposit. Text mentions bird head handle and stamped sherd which may be Mound Field C.S. Site really W.I. II then?

FULLMORES
UPPER LANDING

Moore '07 figs. 18, 20, 22, 24.



All incising zoned, although type variable. Red paint in hatched areas fig. 22. No mentioned check or C.S.

KERRS LANDING

Moore '07 figs. 27, 28, 31, 32.

Zoned Weeden Island Punctate and Zoned Weeden Island Incised. One pot with faint check stamp noted.

SPRING HILL LANDING Moore'18 fig. 3

Weeden Island Incised, zoned variant.

DOUGLAS BLUFF

Moore '18 figs. 6, 7, 8.



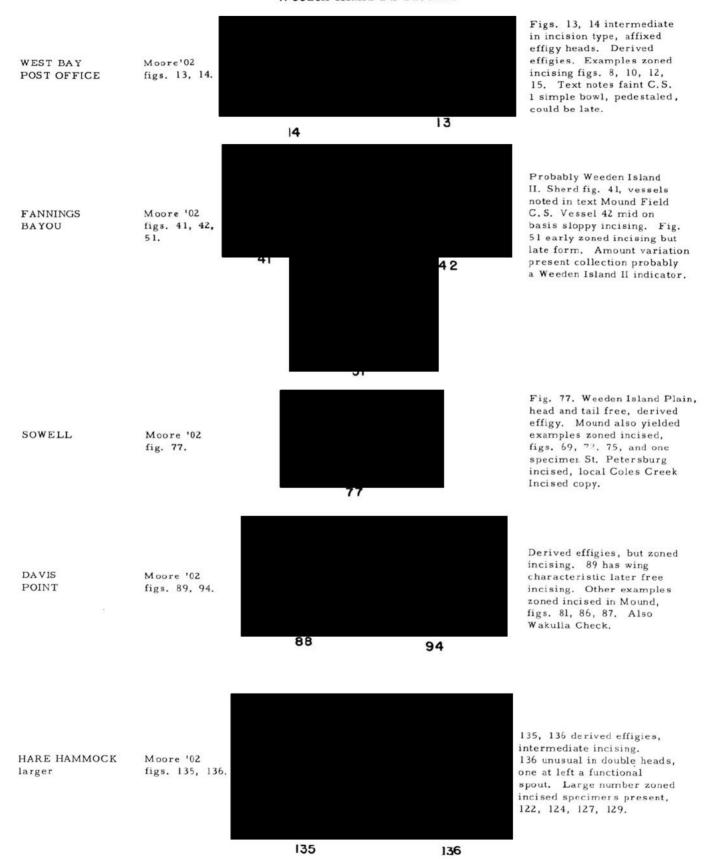
Zoned variants Weeden Island Incised and Punctate, Vessel Moores fig. 9 unknown type, probably early.

CEDAR KEYS

Moore '18 figs. 39, 40, 41.

Weeden Island Incised, zoned variant

Weeden Island I-b Mounds



Weeden Island I-b Mounds

Moore '18 Not shown. Text Mound Field C.S. described HARE HAMMOCK smaller and '02. notes Mound Field C.S. Sloppy incising 145 looks INDIAN PASS Moore''02 Weeden Island II, vessel POINT fig. 145. shape that or later. Other vessels include Indian Pass Incised. 145 Derived effigy, affixed birds ST. MARKS Moore '02 heads, mid-incising. Two good examples zoned puncfig. 311. tation, figs. 305 and 309. 311 Fig. 74 Derived effigy with BAYPORT Moore '02 intermediate style of incision. (Central W. Most sherds illustrated in Coast) report from fill and general area undependable. 74 PIPPENS Moore '18 Derived effigy, intermediate LAKE Pl. XIII incising.

PL XII

Kolomoki Period Mounds

HOLLEY PEARL BAYOU LAUGHTONS BAYOU-Mound A LAUGHTONS B

Moore '02 figs. 64, 65, 60.

Moore '02 fig. 104.

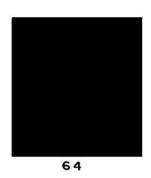
Moore '02 p. 168

LAUGHTONS Moore '02 BAYOU-Mound fig. 110, B

STRANGES LANDING

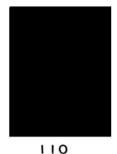
Moore '02 figs. 112,

PORTERS BAR Moore '02 pp. 238-239 Peabody Found. cat. nos. 39323, 39048 39225, 38990



104

Vessel #3, p. 168



64, 65 (sherd) typical Kolomoki C.S. Incising fig. 62 mid to late. See text for note on midden collection.

Pedestaled effigy duck, free incised.

Flat based vessel, complicated Stamp. Kolomoki C.S.?

Pedestaled effigy owl, free incised, decorative perforations.

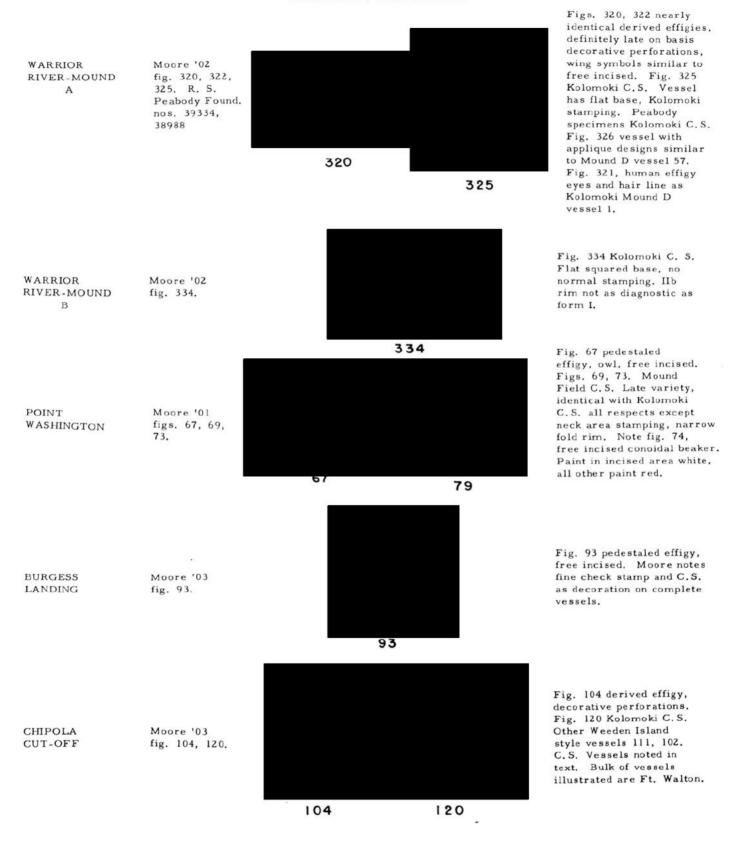
Bird effigy, trace or pedestaled effect, free incised. Fig. 112 somewhat similar. Arch incised decoration on figs. 115, 116 probably also late indication.

Latest vessels Kolomoki C.S. vessels in Peabody Foundation. Not illustrated by Moore, except one Kolomoki C.S. sherd, Moore fig. 201

Kolomoki Period Mounds

Fig. 215 Free incised TUCKER Moore '02 pedestaled effigy. Fig. pp. 257-265. 225 narrow necked jar, Fig. 215, 223, combines free incision 224, 225, R.S. and decorative perforation. Peabody Founda-Fig. 223 and all Andover tion Cat. nos. specimens Kolomoki C.S. 39031, 39107, Fig. 224 type specimen 39101, 93205, Mound Field. Complicated 39014. Stamp. Beaker, fig. 228, motifs and execution as 223 free incising usually assoc. with effigies. Fig. 243, pedestaled MARSH Moore, '02 effigy. Decorative perfig. 243. ISLAND forations, traces of free incising. Other vessels not diagnostic. 243 Figs. 254, 256, 260, 265, 266 pedestaled effigies. 265-266 owls, free incised, HALL Moore '02 decorative perforations. figs. 254, 256, Fig. 271 Mound Field 260, 265, 266, C.S., Fig. 276 Kol. C.S. 271, 276, 281. unusual in scallopped ex-Heye Annex cisions in rim area. 17/4509 Vessels in Heye Foudation 16/3350 annex Kolomoki C.S. Fig. 276 unusual vessel in overall stamping, direct 260 276 rim. Stamp closet to Savannah C.S. Figs. 287, 289, derived effigies with decorative MOUND FIELD Moore '02 perforations. 292 partial figs. 283, 289, vessel free incised decor-292, 294, 295, ation. 294 free incised 296, 298, 300, owl effigy, unusual treat-301, 302, 303, ment globular bowl as Heye Foundation pedestal. 295, 296, Mound # 17/4909. Field C.S. 298 free incised pedestaled owl effigy. 300 free incised bird effigy, pedestaled. 301 Kolomoki 301 C.S. 302 Mound Field C.S. 294 Fig. 315. Free incised AUCILLA Moore '02 derived effigy. Fig. 317 RIVER figs. 315, 317. free incised pedestaled effigy. Fig. 37 unusual Moore '18 Kolomoki C.S., typical fig. 37. stamping, rim, and base, Heye Foundation # 8/3269. but neck developed as Mound Field C.S. Heye #8/3269 typical Kolomoki C. S. 317

Kolomoki Period Mounds



Kolomoki Period Mounds

BRICKYARD Moore '03 Mound Field Complicated pp. 441-443 CREEK Stamp vessel, type Harvard Peaspecimen. body Museum # 62699. Figs. 131, 133, 134 pedestaled effigies, free incised, with decorative DAVIS Moore '03 perforations. Text notes FIELD figs. 131, 133, number C.S. vessels, all over stamp and in bands. Only case noted by Moore of Red Paint on C.S. vessel here, as Md D 47. 134 Fig. 140 derived effigy, decorative perforations. 143 Mound Field C.S., late stamping similar BRISTOL Moore '03 to Kolomoki C.S. Note fig. 140, 143. lobed vessel, fig. 142, similar to Mound D vessel 42. Small (Wakulla) check vessels 137, 139. 143 Fig. 155 Mound Field C.S. SAMPSONS Moore '03 Neck stamping and narrow LANDING Fig. 155. fold rim. Kolomoki type square base. Stamp alone could be Swift Creek II. 155 Fig. 7 unique effigy form, pedestaled, decorative perforations. Fig. 5 derived effigy, animal, HARES Moore '07 decorative perforations. LANDING Figs. 7, 8, Fig. 9 tall compressed 9, 10. bowl, perforations linear, similar to above. Fig. 10 similar to 8.

Kolomoki Period Mounds

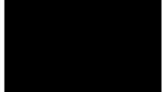


Moore '07 fig. 14.



Pedestaled owl effigy, free incised.

BURNT MILL CREEK Moore '18 Pl. XIV



PL.XIV

Free incised pedestaled owl effigy.

HARDNUT LANDING Moore '18 Fig. 29 Heye Found. nos. 17/3254, 17/5146

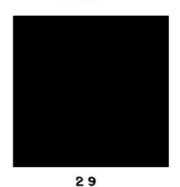


Fig. 29, Decorative perforations indicate late position, tetrapod base an anachronism. Heye specimens good Kolomoki C. S.

BIRD HAMMOCK

Moore '18 figs. 32-37, One specimen Fla. State U.



Figs. 32-33 free incised derived owl effigy, decorative perforations. 34-35 free incised pedestaled owl effigy, decorative perforations. Florida State Specimen Kolomoki C.S.

II—That the development from zoned incised vessels in the Weeden Island I period village deposits to the free incised effigy vessels of the Kolomoki period burial mounds is a safe indicator of relative position in time when incised material is found in either village deposits or burial mounds.

III—That the association of *Kolomoki Complicated Stamp* with free incised effigy forms in the late burial mounds is tight enough to allow either type to be used by itself as an indicator of late position.

IV—That the development of incised lines with terminal pits to perforations at the end of lines to perforations alone is uninterrupted and continuous, so that perforations may also indicate late, Kolomoki period position.

V—That the association of pedestals with free incised, often perforated, effigy vessels is clear, and allows the use of pedestals on other forms as a late Kolomoki period marker.

Following the lines of evidence indicated, but not in all cases completely demonstrable at Kolomoki, we may classify other sites as in the following chart. From the completed charts we may then draw certain conclusions as to the validity of the developments, through demonstrated repetitive associations, and conclusions concerning period characteristics in excess of those available from a single site.

Insofar as possible, classification is on the basis of the latest vessel type, form, or characteristic present in a given deposit. In the burial mounds, vessels of more than one period may be found associated, the result of conservatism predictable in mortuary practices as well as probable long-time retention of some vessels as parts of temple furniture.

We may then point out general developmental features indicated by the charts, noting in outline the characteristics of each period and demonstrating, at least to the writer's satisfaction, the validity of the seriation. Afterwards it will be possible to deal with broader trends in time and space through the total culture area.

Perhaps the most obvious point on these charts is the recurrent association of *Kolomoki Complicated Stamp* with the distinctively incised effigies. This consistent recurrence through a wide area in Weeden Island style mortuary mounds makes it clear that this association at Kolomoki is not an accidental or fortuitous one. It follows, then, that the free incised pedestaled and perforated effigies are as clearly Kolomoki period markers as is the complicated stamp. Even further, since free incision, pedestals, and perforations are such intimate members of the complex, they too may be used as period markers when they appear without effigy or complicated stamp associations.

To sum up for the Kolomoki period, then, Kolomoki Complicated Stamp pottery has by seriation tech-

niques, been demonstrated to be the latest stamped pottery type in the village areas at Kolomoki. It also appears in burial mounds associated with free incised effigies bearing, in many cases, decorative perforations. This association appears in similar burial mounds through a wide area in Southwestern Georgia and Northwestern Florida, indicating that the late complex has a wide distribution. It is also clear, particularly in view of any lack of negative evidence, that free incising, pedestals, and decorative perforations are period characteristics.

Inspection of the Weeden Island I-b period chart, whose sites were placed there with regard to their possession of pottery bearing incision neither quite free nor quite zoned—an intermediate type—reveals other features of some importance, several of which substantiate the lines of cultural development which have been indicated. In this period, while Moore consistently fails to illustrate them, he notes in many cases that complicated stamped vessels present in the caches are faintly or poorly stamped. The faint stamping would seem to fall either into Little Kolomoki Complicated Stamp or within the range of the Weeden Island I-b period stamping as observed in collections from Kolomoki village areas. Either of these stamps is faint and sloppy as compared with Kolomoki Complicated Stamp. This latter type, with which Moore was obviously quite familiar, fell within the range of his esthetic standards and was illustrated in many cases (See Chart V). The complicated stamp evolution as observed in the Florida Coast burial mounds, then, from faint and sloppy to the bold and clear Kolomoki type, parallels the village ware seriation of stamped pottery from Kolomoki. With the relationships demonstrated at Kolomoki, as well as on the chart, the relationships between incised type and stamped type seem to be consistent.

Both the stamping and the incising in the Weeden Island II sites may be viewed as developmental stages leading to the Kolomoki period stamping and incising. The parallel development of these two periods would then reinforce conclusions of period succession, indicating that while single stylistic seriation of either period could be in error—the result of misinterpretation of style trends—it would be difficult to misinterpret both.

All of the sites listed as early have mortuary vessels with zoned incision or punctation as the basis for classifying them. This is based on projection of style trends from the Kolomoki through the Weeden Island I-b period, with recognition of the zoned, alternate area decoration as a Hopewellian or Middle Woodland style in its inception. However, unexpectedly, these sites have no complicated stamped vessels, though theoretically, judging from the Kolomoki village seriation, Little Kolomoki Complicated Stamped vessels should be present. Certainly we have at that

level in the Kolomoki Weeden Island I period village zoned incised ware of this type. Possibly a greater divorce of church and state obtained at this period than later, with stamped vessels used only for secular functions.

This end of the seriation is the section in which I have the least confidence, and from which we can make few statements as to period characteristics. Until we understand somewhat better the Santa Rosa-Swift Creek horizon, preceding Weeden Island I, I doubt that we will be able to be certain of a great deal in the Weeden Island I period.

KOLOMOKI FOCUS

The burial mounds listed on the Kolomoki period table may also be considered as members of a Kolomoki focus since many characteristics, noted above and listed in more detail below, are uniform for all of them. The real extent of the Kolomoki focus (See map 3) is from Santa Rosa Sound on the west to Kolomoki on the north and, along the coast, to the Warrior or Aucilla rivers on the east. A concentration of particularly large and closely related sites exists in the Wakulla County portion of the Northwest Florida Coast. Collections from the village areas at the Hall, Mound Field, and Bird Hammock sites, discussed in some detail below, indicate that village ceramic assemblages associated with these burial mounds are very close to those from Kolomoki. Collections from two sites on the Altamaha, near its source at the junction of the Ocmulgee and Oconee, indicate that the complex extends along the Coastal Plain north of the Okefenokee Swamp.

We are able, then, to discuss the culture complex with some degree of confidence, and need not restrict ourselves entirely to its mortuary manifestations, although these manifestations remain particularly important and, because of the extensive work of C. B. Moore, are our best indicators of the areal extent of the Kolomoki focus.

Community Plans: Our judgments and estimations in this category are based largely on Willey's (1949) discussions and comments. Most of the Kolomoki period sites cover several acres, with middens noteworthy for depth and richness. One or more mounds, at least one of which is a burial mound, are located near the village areas. Only at Kolomoki, the northernmost known site of the complex, and consequently the one we might suspect of being most directly influenced by classic Middle Mississippian cultures, do we find a distinctive temple mound.

However, at Hall, Tucker, and Mound Field, burial mounds definitely assignable to the Kolomoki period seem to have had ramps added. Possibly such mounds were used as temple mounds, although it is doubtful that such function was intended at the time of construction. Certainly the beginning of the Kolomoki period and the latter part of the Weeden Island I-b period is the initial period of temple mound construction in the Southeast. Conversion of an extant burial mound to a substructure mound function is, then, a possibility. At other Florida Northwest Coast sites, Moore found, in addition to burial mounds, a number of mounds whose functions he could not determine. Although small mounds at Kolomoki had extremely variable functions, it is possible that at these other sites some of the small sand mounds, certainly not used for burials, functioned as small temple mounds, a suggestion made by Willey (1949, pp. 402-403).

Burial Mounds: All of the burial mounds classified as members of this period had a large cache of pottery at the eastern edge of the mound, much of the pottery obviously being ceremonial in character. Burials were predominantly secondary, with single skulls and bone bundles predominating. Moore is difficult to pin down on some points, but there does seem to be a recognizable tendency toward extended primary burials at lower levels. If so, then the Mound D situation, less distinct in Mound E, may be the norm, although Mound D is certainly larger and internally more complex than most. Several mounds, such as Lewis Place and Warrior River Mound A, possessed interior rock caps similar to those in Mound E at this site.

I cannot document here the point of burial placement in these mounds without quoting all of Moore's relevant burial descriptions. It does seem at least probable that all burial mounds of the period contained a central burial, a variable number of retainer burials, and many secondary burials in the form of single skulls, long bone bundles, and cremations.

Mortuary Ceramics: This most widely spread ceramic class is described in Chapter III, and may be briefly summarized here.

Effigy Vessels: Effigies in the round, usually pedestaled, decorated with free incising depicting anatomical features, often with decorative perforations. Derived effigies, functional vessel forms converted into effigies by the addition of heads, tails, limbs, or wings represented in some cases by lugs, originated in the Weeden Island I-b period (See Chart V) where they are decorated with intermediate or developmental incising. In the Kolomoki period, incision on such vessels is free and often clearly represents anatomical features or is clearly the bird wing symbol regardless of what animal is represented by an effigy head.

Decoration: The free incised decoration, and the decorative perforations which may be derived from terminal pits with incised decoration (See Chapter III) appear on non-effigy forms as bowls, pots, and abstract forms.

Abstract Vessel Forms: Many vessel forms in the Weeden Island style, in any period, are odd to say the least. There is, however, a definite concentration of the

most definitely non-functional forms in the Kolomoki period.

Pots-Jars: Large round-bottomed globular-bodied vessels are not common in any of the Weeden Island style, Kolomoki period mounds except for Mounds D and E at Kolomoki. In Mound E, six vessels with the globular bodies, erect rims, and some sort of rim strip development fall in the type Mercier Red on Buff and are decorated with curvilinear designs in red paint strips (Sears, 1951b, pp. 11-12). Other vessels with this form, but not the decoration, were found in Mound D, decorated with over-all red paint washes, incised designs based on four triangles with their bases at the rim, and multiple rim lugs. Mercier Red on Buff was represented in Mound D, but only one rather atypical vessel was restorable. This vessel form is rare on other sites of the culture and period, but does occur on a stamped vessel at the Mound Field site (Moore, 1902, Fig. 302; Fig. 17d).

Zoomorphic Forms: These forms are already noted under effigy forms, of course. It may be well, however, to append an additional note on the specific life forms present. In the free incised effigies, pedestaled or otherwise, the owl is by far the predominant form, eight owl effigies being present in the twenty-three effigies described or illustrated by C. B. Moore. There are also, in burial mounds of the Kolomoki period, excepting the Kolomoki mounds, six human effigies; three crested birds which are either woodpeckers or some raptorial species; three ducks and three birds of more dubious varieties. Included in this group are only full effigies, not derived ones. Kolomoki is the only site where we have recorded a deer effigy.

UTILITARIAN CERAMICS

The two pottery types which belong here, the only two, are Kolomoki Complicated Stamp and Kolomoki Plain. For emphasis, Kolomoki Plain and Weeden Island Plain are difficult to separate, although clearly the extremes in the style range of each are distinctive. Kolomoki Complicated Stamp can, however, be readily sorted from the earlier types. Lest this rather positive statement set a trap for the unwary, I have not yet been able to find any criteria for sorting all of the sherds in a mixed collection into Kolomoki Complicated Stamp and the Weeden Island I-b period Swift Creek II ware, which probably contains a number of "types" as the term is used in this report. When a collection is completely of one period or the other, it is obviously so. Mixed collections are also obviously mixed, but one cannot with certainty classify more than perhaps fifty per cent of the sherds into the two classes. This may be viewed as unfortunate in some quarters, and annoying, but since it forces us to deal, in this area, with ceramic assemblages as well as with "types," it perhaps has an advantage. To repeat, the present stage of our understanding of complicated stamped pottery often makes it impossible to assign single sherds, or small lots of sherds, to a specific pottery type.

I have had the opportunity of working with collections from the village areas of two sites possessing burial mounds excavated by C. B. Moore and classified as members of the Kolomoki focus, the Mound Field and Hall sites. In both cases, the assemblages of ceremonial ceramics from the burial mounds are closely related to the assemblages from Kolomoki Mounds D and E. Free incised effigies and Kolomoki Complicated Stamped vessels are prominent in both collections. I was allowed to see the Hall site collections through the courtesy of Dr. Hale G. Smith, Department of Anthropology, Florida State University, and the Mound Field collections through the courtesy of Dr. Gordon Willey and the National Park Service, Ocmulgee National Monument. Willey has reported on the latter collection (1949, pp. 55-64), and a very useful report on the Hall Site by Glenn T. Allen was issued in 1953.

At the Hall site, the decorated type with the highest proportional representation at any level is Kolomoki Complicated Stamp by my classification, although Allen includes many of these sherds in his sub-types of "Swift Creek Complicated Stamp" and "Swift Creek II," with some justice. There is also, at all levels, a high proportion of sherds stamped with fine designs which might be classified as a Swift Creek II variant, although they are unusually clear and well executed. In view of the careful carving and impression, and since there is present a high proportion of rim sherds with a narrow fold, I would prefer to classify these sherds as Mound Field Complicated Stamp. Unfortunately, the sample is not large enough to help greatly in defining this rather difficult type with any precision. However, it seems at present the best classification for these sherds, with some indication that the type, whether called a swift Creek II variant or Mound Field Complicated Stamp, is dominant before the Kolomoki stamp comes in.

Wakulla Check Stamp is important in the top level, and in levels II and III. Types of the Weeden Island Series are most important on a slightly lower level. In general, the assemblage of ceramics at the Hall site is quite comparable to that at Kolomoki, and seems in this stratigraphic situation to be undergoing the same sort of development. Probably this site is not as late as Kolomoki, perhaps just reaching the Unit 28-Mound E level. The major differences between the development at Hall and at Kolomoki are the high percentage of Mound Field Complicated Stamp and the importance of Wakulla Check Stamp in a full Kolomoki period level.

The vexing problem of the small check stamp in this area will be discussed in some detail at the end of this chapter. It may be well, however, to emphasize the points that the Hall site has its major representation in a period otherwise characterized by *Kolomoki Complicated Stamp* and that if it replaces anything, it is not the complicated stamped pottery but the Weeden Island Series.

The Mound Field site yielded, in C. B. Moore's excavation of the ramped burial mound, an assemblage of vessels very similar to those from the Kolomoki mounds. This assemblage again heavily emphasized the free incised pedestaled effigies and the Kolomoki Complicated Stamp. This site has also produced the type specimen of Mound Field Complicated Stamp (Moore, 1902 Figs. 295, 296).

In addition to Kolomoki stamped vessels, a few vessels which document most strongly the close relationship between the ceremonial vessel assemblages at the Hall site, and incidentally at the Tucker site, to the Mound D and E assemblages are as follows:



Fig. 17 Related Vessels from the Kolomoki, Tucker, Hall and Mound Field Sites

a—Tucker f—Hall
b—Hall g—Mound D
c—Mound D h—Mound Field
d—Mound Field i—Mound D
e—Mound E (h & i) heads only

The data from the Mound Field site are a bit more complex and confusing than those from the Hall site. Willey's excavation consisted of two three-metersquare pits, referred to as pits I and II (Willey, 1949, pp. 55-64). In his Fig. 7, it is obvious that in pit I the complicated stamped pottery is the major decorated ware below level three. From level six on down, the stamped pottery, called Swift Creek Complicated Stamp, is the only decorated pottery except for a few sherds classified as St. Andrews Complicated Stamp. In the other pit, there are higher percentages of the Weeden Island Series types and the complicated stamped pottery is of less importance at all levels.

On investigating the material, it was discovered that all of the stamped pottery from Pit I except for a few sherds from the top levels was Kolomoki Complicated Stamp. There is absolutely no doubt as to the classification of these sherds. They conform in all respects to the type known at Kolomoki, including paste, rims, flat bases, restriction of stamping to the upper one-third of the body, land and groove width, and motifs. At first glance, then, it seems as if the Kolomoki Series is being replaced by the Weeden Island Series, not at all in accord with the typological seriation worked out at Kolomoki. Closer inspection of Willey's tables and the collectives reveals that even this is not quite the case. The type which gains most at the expense of the stamp is the plain ware, ninetyfour and eighty-three per cent of the total pottery in levels one and two respectively.

On moving to Pit II, it is immediately obvious that it resembles the upper levels of Pit I. The plain ware percentages run above eighty per cent in all levels except six with seventy-nine per cent and eight with only a few sherds. A few sherds of Wakulla Check Stamp show up in the upper levels of Pit II. In both Pitt II and in the upper levels of Pit I, the plain pottery is definitely Weeden Island Plain with the characteristic thickened rims.

We might say, as Willey has done, based on the apparent stratigraphy at this site alone, that a "Swift Creek" period is followed by a Weeden Island period. There are a few confusing problems in this interpretation, such as the "Swift Creek" period possessing pottery that would be classified as Late rather than Early Swift Creek, the degeneration of the Weeden Island period into a plain ware period before the check stamp comes in, and the position of the two sherds classified as Deptford Bold Check Stamp near the top of the pit instead of the bottom. The St. Andrews Complicated Stamp in Pit I might tend to re-

inforce this interpretation, since it is considered a Santa Rosa-Swift Creek period type.

The writer feels that the apparent stratigraphy here in Pit I is reversed, and that the plain ware with the low percentage of Weeden Island types occurring in the top levels of Pit I arrived there mechanically. A glance at the profiles (pp. 58-59) reinforces this theory, since real midden is encountered uniformly only below level three. It is replaced by a brown sandy mixture above this level. The sort of material transported is clearly the same as that present in Pit II. Such areal differentiation in a site is certainly documented easily enough at Kolomoki, as is the usually uniform mixture of all periods in the plow zone. It might be suggested that the situation is further complicated at the Mound Field site by the presence of the old excavation noted on Willey's map (Fig. 4).

Finally, to continue an attempt at demonstration of reversed stratigraphy, Kolomoki Stamped occurred with low percentages of Weeden Island Series types, even without them, deep in Pit I. With the Weeden Island types and the heavy percentage of plain ware we find a complicated stamp falling entirely within the range of the Swift Creek II ware which has similar associations at Kolomoki.

The burial mound assemblage at this site contains Kolomoki Complicated Stamped vessels and in other respects is very close to the Kolomoki assemblages, a situation documented at some length above and in Chart V. Reverse stratigraphy or not, the burial mound at Mound Field, as at Kolomoki, is associated with the Kolomoki period. The parallel developments in stamping and in mortuary ceramics indicated thus far are sufficient evidence as to which end of the series is up and which end is down. In later sections, this report will give in detail the relationships of the cultures at several points in time as they relate to better known Southeastern developments, as on the Gulf Coastal Plain and in the classic Middle Mississippian area. It suffices to say here that the relationships of the Weeden Island I-Weeden Island I-b type of culture and ceramics correspond in the time chart to the Troyville-Early Coles Creek horizon generally, while the relationships of cultures in the Kolomoki focus correspond to the developing Mississippian, late Coles Creek and early Plaquemine cultures.

One fact which emerges from this welter of confusing details is that both the Hall site development, with the check stamp appearing as a part of the Kolomoki period assemblage, and the Mound Field site development, seemingly indicating that the check comes in a plain ware period immediately after the Kolomoki period, cannot be accepted. One or the other piece of evidence must be out of line, or, the check cannot be trusted as a time marker at all. Ignoring the check stamp, since the Hall site situation falls in line directly with the Kolomoki seriation, I would regard

it as valid and make the interpretations concerning reversed stratigraphy at the Mound Field site. Again, a certain fact in both cases is that the burial mounds with their assemblages of mortuary ceramics relate to the Kolomoki period. This is of some importance, since these ceremonial ceramics will be referred to again in the chapters which follow this, particularly the chapter on Kolomoki and Middle Mississippian culture.

Accepting the reverse stratigraphy at Mound Field, or even without it, accepting the relationship of the burial mounds to the Kolomoki period village assemblages, these sites indicate very clearly that in the Kolomoki period the separation of church and state in ceramics evidenced at Kolomoki is a widespread phenomenon, and is truly characteristic of the Kolomoki focus. In all three cases we have village assemblages with stamped and plain ware associated positively with mortuary assemblages of specialized vessels which can be classified in the Weeden Island series.

I might note here that those who hold the Kolomoki seriation charts upside down will be confronted with the Weeden Island Series in its most elaborated form breaking down in later periods to an everyday assortment of pottery types; with the temple mound being abandoned instead of adopted; with stamped pottery stylistically retreating from its known end point in the protohistoric types of the Lamar horizon instead of approaching them; and with Mississippian concepts in vessel forms and decoration being independently invented for use in a few specialized vessels and then dropped completely for centuries before appearing as common concepts in Mississippian culture.

Non-Ceramic Artifacts: Not a great deal is known concerning most types of non-ceramic artifacts which occur in the Kolomoki focus, even at Kolomoki.

Projectile Points: Tend to be small, elongated, with amorphous stem development, occasional triangular points.

Conch Shell Beads: In size range from 5 cm. to 1 mm. in length and are definitely a part of the cultural complex.

Conch Dippers: Definitely observed in only one case at Kolomoki. Reported by Moore from most of the Florida mounds.

Cymbal-Shaped Ornaments: Important at Kolomoki in copper, meteoric iron, and probable equivalents in mica. Detailed listing in other sites tabulated in Mound D report (Sears, 1953b, pp. 20-21).

Mica Sheets: Erratically shaped, few known which have been cut to projectile point form (Sears, '53b, p. 22). Irregular fragments common in village areas and mounds.

Quartz Crystals: Very common in village sites of all periods from Middle Woodland to protohistoric in this area. Usually present as broken flakes and chips, but clearly comes from glasslike crystalline quartz.

Pearls: Used as centers for copper cymbals, also perforated in groups, probably strung.

Bone Tools: None found at Kolomoki or other sites. Probable that cane served as substitute in this area.

House Types: None discovered at Kolomoki. Many postholes observed, but no pattern of alignment. Probable that a lightly built thatched structure, similar to the modern and recent Seminole Chekee was used. Assuming one minor repair, or superposition of one other house at one time, a thirty-foot-square structure would leave no remains archaeologically interpretable. There is some documentation for this in accounts of the De Soto journey, where it is noted that thatched houses were replaced by mud walled structures at a point which must have been well north of the Kolomoki area.

In summary, the Kolomoki period and focus (of the Weeden Island aspect) is characterized by fair-sized communities, the archaeological sites possessing deep and unusually rich middens. A burial mound is a part of, or is in the vicinity of, many villages. They appear to represent the culmination of a rather elaborate set of mortuary ceremonies revolving around the interment of a single individual with a high social position.

Evidence for contacts with other culture areas is supplied by trade sherds from Florida and the Lower Mississippi Valley, while Kolomoki sherds are known from as far north as Tennessee (Kneberg and Lewis, 1946, Pl. 472nd row from top, 2nd sherd from the left) and from as far south as Tarpon Springs, Florida (Holmes, 1903, Pl. CVIII). Less direct evidence from the Middle Mississippian culture area is evidenced by certain characteristics of the mortuary pottery, and will be considered in some detail further on. Trade, other than in pottery, is shown by the use of northern copper, the widespread use of mica which is foreign to the coastal plain, and the widespread use of conch shell.

In many characteristics, such as use of Temple Mounds, community size, burial mound size and complexity, and elaboration of ceremonial ceramics, Kolomoki is in advance of other sites of the period. This would indicate that the site was the most important socially in its culture area, and probably that the society here was in possession of the cultural leadership in this region. This assumption is in a way rather puzzling since the site is located on the northern fringe of the culture area, not anywhere near its center. It may well be that its advantageous position in regard to availability of widespread cultural contacts is in part responsible for this importance as well as—at least in contrast to other Gulf Coast sites—better soil for primitive agricultural practices.

The ceramic co-efficients of the period are *Kolomoki* Complicated Stamp to the exclusion of other decorated types in village site middens, but barely present in the caches of ceremonial pottery which are a part of

the burial mounds. In these caches, the stamped ware is replaced by many elaborate and specialized vessels with free incised, perforated and pedestaled effigies as the key style. In the development of this style, as in other characteristics, Kolomoki seems to be somewhat ahead of other sites in the focus and period, particularly in the production of the few pieces of ceramic sculpture in the round found in Mound D. Mound D ceremonial ceramics, in the light of present knowledge, seem to represent a style peak and culmination.

Tampa Focus

A number of sites in the Tampa Bay area, such as the Weeden Island site, the Thomas Mound (Willey, 1949, pp. 103-125), and the Terra Ceia site (Bullen, 1951), have burial mounds classifiable as Weeden Island style burial mounds and seem to be in the Kolomoki period. Yet they have, as a unit, characteristics which set them apart quite distinctly from sites of the Kolomoki focus.

In these mounds, complete bodies occur in lower levels with secondary burials at higher levels, a situation comparable to that in Mounds D and E. I have interpreted this as indicative of similar mortuary ceremonialism and similar social systems (Sears, 1952b, p. 6).

These mounds, all sand burial mounds, contain sherds of the Weeden Island Series plus other sherds more characteristic of the area such as the Hillsborough, Papys Bayou, and Biscayne series. There are not, however, in these mounds special caches of ceremonial vessels nor, apparently even special caches of sherds. It appears that the Weeden Island Series is represented by an assortment of sherds from the mound fill, which certainly makes these mounds different from the Northwest Florida Coast-Southwest Georgia Kolomoki focus mounds.

In excavations at the Terra Ceia site, a midden area and a temple mound, the latter oriented with respect to the midden and a possible plaza in a fashion similar to the Kolomoki orientation, were also uncovered. Here the Weeden Island Series was almost absent from the midden but was very popular in the burial mound. Since the excavated midden must be the one representing the village area of the culture which built and used the mound, I would interpret this to mean that the church and state separation in ceramics, so obvious at Kolomoki, also obtained here. The ceremonial ceramics in the two cases then are quite similar, but the secular wares are very different. It seems at least highly probable that the Terra Ceia situation is the norm for the Tampa Bay area. The Weeden Island, Thomas, and Terra Ceia sites may then be classed together as members of the Tampa

The writer feels that while it may be possible in the future to sort out more variants of Weeden Island culture at this level of classification, at least this much differentiation between Kolomoki and Tampa foci will be of some value. Clearly they represent quite different cultures. Perhaps at some levels of analysis they may well be lumped together, but at other levels, differences of this nature must be recognized and dealt with properly.

Weeden Island I and I-b

It is not possible to give any more specific characterization of culture at these levels than has been done in the preceding chapter and in Charts I and IV. Until detailed excavation of sites of the period is possible, we must continue to depend on C. B. Moore's limited information from burial mounds and Gordon Willey's survey data (1949) for information.

There are, however, a few comments which may be appropriate here. These are concerned with ceramic and, to a much lesser degree, cultural developments in the general area through which pottery in the Weeden Island Series is found.

A scheme for temporal alignment of total assemblages has been presented in the previous chapter. It depends on the independent evolutions of two pottery styles, or traditions. These two styles are the complicated stamped ware which is largely confined to village sites and the incised ware found in mounds and villages in the earlier periods, but confined to the burial mounds in its latest free incised form where it appears most significantly on effigies. Other types of the Weeden Island Series are considered significant largely in terms of their representation in an assemblage, and the importance of the total Weeden Island Series in an assemblage. At present such types as Keith Incised, Carabelle Incised, Carabelle Punctated, etc., while clearly part of the Weeden Island Series, do not seem to possess recognizable variations of temporal significance, although their proportional importance in a complex may do so to some degree.

An attempt was made to apply this seriation to Willey's data from the Northwest coast, using a simplified version based on proportional importance of the complicated stamp, the Weeden Island Series, and Plain ware. It was hoped that this would help out particularly in the ever-present problem of the small check stamp, and would indicate its true relationship as a period marker to the periods worked out at Kolomoki. Since many of the Gulf Coast sites have large quantities of Wakulla Check Stamp, and since this is considered to be the marker for the Weeden Island II period where it is believed that it replaces complicated stamping (Willey, 1949, p. 39), such a survey was a necessity. Unfortunately, neither the problems nor the seriation techniques could be reconciled.

At the Fort Walton site, the percentage representation of the Weeden Island Series in Pit I (Willey, 1949, p. 82) is comparable to that at the very base of the Kolomoki derived chart (Chart I). The high percentage of plain ware and the low percentage of complicated stamp might well be considered proper for such placement. However, Wakulla Check Stamp is heavily represented in the top levels. Once more, this evidence indicates that we might well invert the Kolomoki chart if we accept the small check as a period marker. Pit VII at this site is quite similar, except that the check is present at all levels, and the same is generally true of Pit VI.

At the Carabelle Site (Willey, '49, pp. 38-54) Pit III seems to indicate that the Weeden Island Series develops in importance at the expense of the stamped pottery, with a small amount of *Deptford Bold Check Stamp* present only in the lower levels. Pit II at the same site confuses this, however, since Weeden Island Series sherds are of negligible importance, the check stamp is rather strongly present, and the complicated stamp is quite important. Plain ware is not nearly as important as stamped pottery. This, then, looks more like the Kolomoki period, or late Weeden Island I-b, except for the check stamp.

Some attention was paid to the surface collections, and an attempt was made to seriate them on the same basis; on the importance of the check stamp; and with an east-west division based on check and then on stamped pottery, the division suggested and used by James A. Ford (1952, p. 332). This division does not work at all unless some assumptions are made.

The writer in turn would like to make one assumption: that the small check stamp is made in this general area from the end of the Deptford period until at least the beginning of Fort Walton. Such an assumption is in agreement with Willey, who, however, separates check stamped sherds into an early check, Santa Rosa-Swift Creek period, a type called Gulf Check Stamp and the later, Weeden Island II into Wakulla Check Stamp. This is not a continuum, however, since complicated stamping is held to replace check stamping during the Weeden Island I period. The major distinction between the earlier and later check stamps is stated to be a strong linear element in the early type, plus use of folded rims similar to those of "Late Swift Creek" in the Wakulla stamp. This statement does not hold, since several collections observed, including a number of large ones from sites near the junction of the Flint and the Chattahoochee, contain many sherds with the rim form of one type and the stamping of the other. Since size of body sherds is the only distinction between either of these types and Deptford Bold Check Stamp, I doubt whether this latter type can be consistently sorted, for there is a decided size overlap.

The charts worked out in the attempts to seriate Willey's Gulf Coast collections are too confused for presentation here. In essence, if seriation is worked out on the basis of presence and relative importance of check stamping, the Complicated Stamped Series and the Weeden Island Series fail to conform to any sort of pattern. They appear from top to bottom of the chart in erratic and varying amounts. There are of course sites with almost no decorated pottery except the small check stamp, sites which may then be arbitrarily placed at the top of the chart. There are many combinations such as: sites with mostly check and some complicated stamp, but few if any Weeden Island sherds; sites with mostly complicated stamp and some check and some Weeden Island; some sites with mostly Weeden Island; some sites containing each or either one of the other series; and many other combi-

nations. The reader is urged to make the experiment for himself.

If seriation is attempted on the basis used in this report for the Kolomoki site materials, it is of course possible to arrange the sites on the basis of relative proportions of the Weeden Island and Complicated Stamped Series, making allowances for those sites with only complicated stamp recognized by Willey as Early Swift Creek which must be placed at the bottom of the chart. The picture which then emerges with respect to the stamped pottery, the Weeden Island Series, and the plain ware, may be ideally represented as below in Fig. 18.

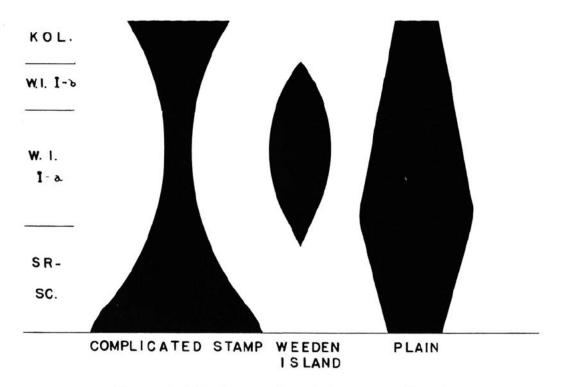


Fig. 18 Ideal development through time of Complicated Stamp, Weeden Island, and Plain Ware Series on the Florida Northwest coast, from Santa Rosa-Swift Creek through Kolomoki periods.

When the sites are arranged in this fashion, it is the small check stamp which appears erratically from top to bottom with sites having sizable percentages of sherds decorated in this style all the way through. Sites with almost no sherds other than check stamped cannot of course be handled in such a seriation. An attempt has been made to divide sites into eastern and western groups here too, without appreciably improving the situation. There is a tendency in the western end of the area for the check stamp to show up in association with Fort Walton ceramics.

Without carrying the argument to undocumentable extremes, the small check stamp in the Florida North-

west Coast area does not seem reliable as a period marker. If it were reliable, seriation with this stamp as the key style, or with it replacing the complicated stamp as the key point in ceramic development, should show complementary behavior on the part of the Weeden Island Series and the stamped ware. However, such is not the case.

The check stamp, which predominates at some sites, is definitely important in this area. The writer feels, however, that its use as a period marker has been based in some part on *a priori* assumptions, mostly assumptions that cultural developments in the Northwest coast area followed developments in the Central

Florida and Lower Mississippi Valley areas. This use of assumptions is particularly clear in J. Ford's seriation charts for the Florida Northwest coast (Ford, 1952, Figs. 4 and 5). It is clear on these charts that entire blocks of sites, with the check stamp as the predominant type, have been shifted to the top of the chart. No real continuity shows up in the charts when they have been so shifted.

In support of this reversal of assumptions, the writer has already pointed out that at the Hall site the check stamp seems to be part of the Kolomoki period assemblage. At Mound Field, similar material seems to be showing up in an early level, while at Kolomoki the few check stamped sherds appear in the middle of our sequence. Another remarkable occurrence is at Willey's Wa-6 site (1949, p. 292) stated to cover the Santa Rosa-Swift Creek, Deptford, and Weeden Island II periods. Sherds of the Weeden Island Series are not present, the Weeden Island II designation being dependent on 46 check stamped sherds. Other documented, but as yet unpublished occurrences of the small check stamp in Southwest Georgia (Kelly, A. R., Personal Communication) indicate that the ware is found alone in pits intrusive into Weeden Island I or II levels, and in one case appears above Kolomoki materials. Both cases seem to represent actual intrusion. Other sites in the Southwest Georgia-Northwest Florida Coast area, as by 6 and 24, Fr 6, Wl 6, and Wa 13 (Willey, 1949), as well as unreported sites, indicate that the small check stamp is almost the only decorated type of some continuing culture complex. If this is so, then its stratigraphic position at some one site has little or nothing to do with the development of cultures which are characterized ceramically by complicated stamping or by the Weeden Island Series.

This indicates that the small check stamp, call it Wakulla, Gulf, or what-have-you, was manufactured in this area without observable change except perhaps in vessel shape and rim form, from the Middle Woodland through to the protohistoric period. If we include Deptford check, it may start somewhat earlier. As a note of some importance, there seems to be a common belief that Deptford Bold Check Stamp as originally described (Caldwell and Waring, 1939) is the check stamped type of the Deptford site and series. Inspection of Deptford site and other collections indicates, however, that the smaller fine checks-just barely included in the lower end of the described range for the bold type—are important. This type of check stamp seems as important as the bold type at the Deptford site, and in other areas seems to be even more important.

Some sites, then, are representative of this "small check stamp" culture in its pure form. Others represent mechanical mixture on sites of quite different cultural complexes. Still other sites might represent ad-

mixture of trade sherds, low intensity culture contact, and perhaps other acculturation situations. There is even some evidence in the Jim Woodruff Basin at the head of the Apalachicola River that this culture characterized by the small check stamp to the near exclusion of other ceramic decoration was producing modified Weeden Island style ceramics for use in Weeden Island style burial mounds.

It is fully realized that this is not as economical an hypothesis as the standard one, replacement of complicated stamping by check stamping, and use of the shift to delimit Weeden Island I and II periods. However, the theory does explain more of the observed situations than does the standard hypothesis, and so is preferable from the writer's point of view. This is particularly true in the case of Kolomoki with almost no check stamped sherds, but where the major occupation falls in the time period supposedly so characterized.

Perhaps, if nothing else, this all indicates that seriation techniques based on one set of interrelated variables work only if there is actual cultural continuity, one cultural stream in the area. Such an assumption must always, presumably, be the theoretical starting point. But such assumptions require extremely careful checking in the light of all pertinent evidence. Available stratigraphic evidence has not made clear at all the relationship between the Weeden Island and the Complicated Stamped Series, let alone the relationship of either or both in a complex with the check stamp. It seems entirely possible that we have three cultural streams in this area with histories which are at least in part totally distinct.

One rather unexpected trend appearing as a result of the seriation used in this report is the indication of a tremendous increase in plain ware after the end of the Santa Rosa-Swift Creek period. Weeden Island ceramic pieces in their earliest manifestations seem to possess plain open bowls with thickened rims as the most important type, the increase at this level being at the expense of the Early Swift Creek Complicated Stamp pottery. The incised and punctated types of the Weeden Island Series really begin their development at this point. I am not at all prepared to say at present what this phenomenon means in terms of culture contact, but it does make Northwest Florida-Southwest Georgia area complexes more directly comparable to such complexes as Troyville and Coles Creek where stamping is never present.

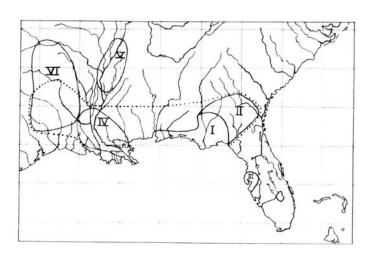
Before attempting to summarize Weeden Island culture and its time-space developments, particularly in relationship to the Kolomoki site, it may be well to discuss one more point: its relationship to Fort Walton culture. In most of the literature discussing developments in this area, as studies by Willey (1949), pp. 452-458), Griffin (1949, p. 46), and Ford (1952, Charts 4 and 5), it is accepted almost without question

that Fort Walton culture and, more specifically, Fort Walton ceramics developed directly from Weeden Island under heavy Mississippian influence. I have taken exception to this elsewhere, and may do so again here. There is obviously some connection between Fort Walton Incised and Weeden Island Incised, at least in that both are incised styles of decoration in which punctation is often used as a subsidiary technique. However, I do not see an unusually close relationship between them, particularly since the Fort Walton type of incision, use of effigy heads on bowls with this decoration, and so on, is clearly a part of the general late Mississippian tradition as it developed in the foothills of the Appalachians. The fact that in the late periods the Weeden Island style incised pottery was ceremonial only in usage makes a direct relationship between these two incised styles even more improbable. We would be required then to hypothesize that the mortuary ware of the Weeden Island Series became the utilitarian ware of the Fort Walton complex: not impossible but certainly unusual. Coupled with the differences between the free incision, usually representative of stylized anatomical features, in this latest Weeden Island style pottery, and the elaborate but formal scrolls and guilloches of the Fort Walton style, the possibility that they stand in any direct relationship is highly improbable. This does not deny that Weeden Island culture and ceramic styles have played a part in the development of Mississippian culture and ceramic styles, though such an influence would have reached Mississippian culture during its formative stages from Weeden Island I culture. Before this incision reached the Gulf Coast as part of the Fort Walton complex, it went through a long independent evolution in Mississippian culture, as a developing Mississippian style. This is not true of the Safety Harbor complex. The writer is in full agreement here with Willey (1949, p. 479), and Goggin (1949, p. 38), that Safety Harbor is such a development from Weeden Island under Mississippian influence.

Northwest Coast and Southwest Georgia: Weeden Island culture here develops from that of the Santa Rosa-Swift Creek period, which had Early Swift Creek Complicated Stamp as its major and diagnostic pottery type. In the Weeden Island I period, plain ware gains heavily at the expense of stamping, and the Weeden Island Series begins its development, reaching its peak occurrence in this period insofar as village ware is concerned. Burial mounds at this level are not well-known, but are probably characterized by Weeden Island Incised pottery of the zoned variant, also important in the village areas. The Weeden Island I-b

period may be distinguished by the progressive decline in importance of the Weeden Island Series in villages, related to constant increase in the importance of the stamped pottery. Burial mound ceramics have as their most distinctive element vessels decorated with rather involved incision which cannot be classified as either free or zoned incised, an incision often used on bowls, frequently with either one or two affixed bird effigy heads. The last period in this area which may be considered as representative of Weeden Island culture is the Kolomoki period, represented by a large number of burial mounds, with some of the village sites known and tested. Ceramics in the village areas and in the burial mounds are very distinct. In village middens, the trend toward emphasis of the complicated stamping at the expense of the Weeden Island Series reaches its inevitable end point. The only decorated pottery in village areas bears a stamped decoration, most of it Kolomoki Complicated Stamp, a distinctive type revealing strong Lower Mississippi Valley influences on vessel shape. Burial mounds of the period and culture are large; they contain many burials, but are oriented around a single central burial. A large deposit of ceremonial pottery is located on the east side, a uniform characteristic of burial mounds in this area throughout the total Weeden Island period. In this late development, the distinctive burial mound ceramics, the only ones in which the Weeden Island style is represented, have as their clearest period diagnostic free incised, perforated, and pedestaled effigy vessels. These vessels seem, in this area, to represent the end point and the esthetic peak in the development of Weeden Island style ceramics.

A development in Weeden Island culture is not available for the Florida West Coast, since the sites classified there as Weeden Island are all in the late Tampa focus. Intervening sites, such as Cedar Keys, Tarpon Springs, and others, cannot be handled currently with any confidence except for period placement. Areal differentiation appears, naturally, at the extremes. In the Tampa focus area, village ceramic assemblages contain few Weeden Island Series sherds, and are on the whole representative of ceramic traditions entirely distinct from those of the Northwest Coast. I might suggest that the Weeden Island style concepts reached this area relatively late, and were grafted on to the resident culture of the area in the form of specialized pottery. The burial mounds do not seem to use the specialized pottery caches of the Northwest Coast and while the two may be related, the Tampa focus mounds may not truly represent the same cultural tradition as those of Northwest Florida.



Map III Component Culture Areas of the Gulf Coastal Plain Area

I - Kolomoki Focus Area
II - Probable Extension-Kolomoki

IV - Lower Mississippi Valley V - Central Mississippi Valley

VI - Gibson Focus

III - Tampa Focus

VI - Gibson Focus

. Coastal Plain Culture Area Boundary

In recent years through the work of Willey (1949), Ford (1952), and Krieger (1949) it has become increasingly clear that the Gulf Coastal Plain through much of its prehistory can justifiably be treated as a culture area. That is, cultures within this area interacted more with each other than did any of them with any other cultures, and so possessed more traits in common than did any of them with cultures in any other area.

Geographically, the area is as outlined on Map 3 above; a flat sandy, low lying plain dissected by many rivers flowing down from the highlands to the north. On a physiographic basis, the area cannot be readily distinguished from the Coastal Plain which continues on west along the Texas coast, nor the Atlantic Coastal Plain from the Georgia coast north and east to Chesapeake Bay. The vegetation of the area is of a scrub pine forest-Savannah type, a characterization to which is always appended a note that the river bottomlands bear a heavy cypress-magnoliagum vegetation, distinctly sub-tropical in character. On the whole, this characterization serves to delimit the culture area except for the eastern boundary. Here we must use the Savannah River drainage as an ecologically and physiographically artificial but culturally real boundary, a role which the Savannah River plays at most points in Southeastern prehistory from the Archaic level on to the early historic period.

Before attempting to re-synthesize the prehistory of the total culture area, an area whose definition has not been made explicit although implicit in the work of Ford and Willey, a job of chronology matching is in order. Certain aspects of the relationship of Kolomoki developments to Weeden Island culture generally were discussed in the preceding chapter. To give us an anchor for a more general discussion, the Kolomoki and Lower Valley or "Red River Mouth" (Ford, '52) chronologies should be matched.

The proposed alignment will be found, along with others, on Chart VI. Actually we are here concerned only with the Weeden Island, I-b, and Kolomoki period portions of the Kolomoki-Southwest Georgia column since the others are not represented at our site.

We may consider first the few lower valley trade sherds from Kolomoki. These were found in Weeden Island I-b units and, one sherd of French Fork Incised, in a Weeden Island I unit. This latter sherd was overlooked in the first seasonal report where it was included in the count of Weeden Island Incised sherds. The types found at Kolomoki, French Fork Incised and Yokena Incised, are Troyville-Coles Creek period types (Ford, 1952, Chart 2 and elsewhere). These sherds, considered alone, would indicate an alignment of the Weeden Island I and I-b units with the Troyville-Coles Creek block, an alignment which would be substantially correct.

It seems highly probable that our dividing line between Weeden Island I and Weeden Island I-b may be correlated quite precisely with the Troyville-Coles Creek dividing line. From this point on, we will refer to this line as "Time D" using the Phillips, Ford and Griffiin (1952) chronology. While the Kolomoki chart for the behavior of Weeden Island types (Chart IV) does not contain in every instance the frequency peaks which Ford (1952, pp. 328-331) recommends for matching sequences, comparable types do seem to behave similarly through time. This similar behavior is observable although the two sets of charts were constructed on quite different bases, ours omitting both plain ware and stamped ware from the series under consideration for the purposes of chart construction.

Using Ford's latest composite chart (Ford, 1952, Fig. 2) for comparison, we can see that *Keith Incised* reaches its peak in Weeden Island I-b as *Beldeau Incised* does in Coles Creek. The point of maximum popularity for *Weeden Island Incised* is just below

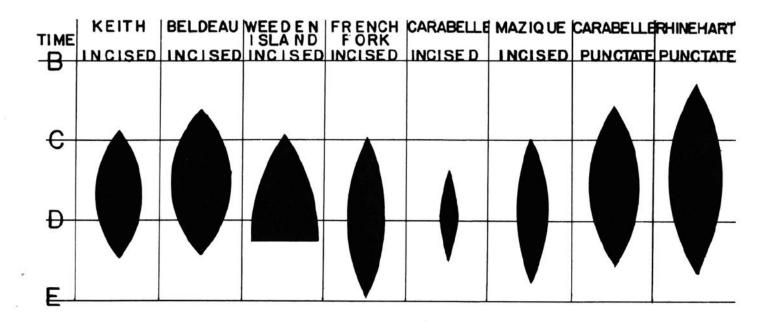


Figure 19. Behavior through time of related Weeden Island Series and Lower Valley pottery types.

Schematized.

the "D" line, the popularity of the type falling off rapidly during Weeden Island I-b. This is directly comparable to the behavior of the related French Fork Incised, which has its point of maximum frequency at the D line, but drops off rapidly during Coles Creek to fade out at the end of this period. Carabelle Punctate begins in the Weeden Island I level represented at Kolomoki, reaches a decided peak in Weeden Island I-b, and drops out early in the Kolomoki period. The related Rhinehart Punctate follows the same pattern of the Red River Mouth Troyville-Coles Creek-Early Plaquemine sequence. Approximately similar behavior patterns may be noted for the Carabelle-Mazique Incised Duo.

It is even possible—using the Kolomoki site sequence alone as representative of the Southwest Georgia-Northwest Florida area—to see a relationship in the behavior patterns of Wakulla Check Stamp and Pontchartrain Check Stamp. As indicated in the previous chapter, I would not place any reliance on the small check stamp as a time marker in the Weeden Island area.

One Weeden Island type, Weeden Island Red, which is related to Larto Red Filmed, does not fall in line. Larto is confined almost entirely to the Troyville period, whereas Weeden Island Red is important in all of the levels at Kolomoki in which Weeden Island Series ceramics appear at all. This may mean that the over-all popularity of the style was greater in the Kolomoki Focus area, and that, perhaps because of a greater total popularity the Weeden Island Red lasted longer than Larto. However, the Kolomoki

chart does not conclusively indicate this, or much else concerning the type.

Other types of the eastern area do not have western counterparts, and so are not helpful in our problems. The Western equivalent of Tucker Ridge Pinched would be grouped by Ford with Rhinehart Punctate. Lumping it at Kolomoki with Carabelle Punctate would not affect conclusions or remarks above. Indian Pass Incised might be considered as a very aberrant relative of Yokena Incised, in which case its position around line "D" would be in general accord with the predominantly Troyville period occurrence of Yokena. Though Basin Bayou Incised is supposedly the eastern relative of Yokena (Ford, 1952, p. 332 ff; Wiley, 1949, p. 376) we were not able to recognize this type at Kolomoki. Coles Creek Incised has no relatives at Kolomoki, nor have Chevalier Stamped or Woodville Red Filmed. Coles Creek Polished Plain may have its eastern reflection in the decided tendency for better surface finishing of plain ware in the Kolomoki period as opposed to the sandy finish of the Weeden Island period.

On the basis of this matching, and the trade sherds, it is felt that time "D" represents a useful dividing point aiding in correlation of chronological scales in the two areas.

It is obvious that at Kolomoki, we do not have collections representing the earlier stages of the Weeden Island I period culture since the Weeden Island Series appears full-blown. This matter will require extended discussion later in this report, but the indication here is that the line for the base of the Weeden Island I

period is placed at a level corresponding to something like the mid-point of the Troyville period. In agreement, Ford states (1952, p. 130) that the Santa-Rosa complex, precedent to Weeden Island I, equates partly with Troyville and not entirely with Marks-ville.

Tying down the upper end of the Kolomoki sequence as running into time B-C, the Plaquemine period, is more difficult. Note first that this period, while not of great length, is one of maximum culture change through the entire Southeast. For example, the formative stage of the Mississippian culture type and the peak with the Southern Cult fall in the first half of this time interval, followed by the ceremonialritual and even esthetic decline to 1500 A. D. and the rather monotonously uniform protohistoric period. We are concerned here only with the century or so after time C, just into the Plaquemine period, with some depth back into C-D, Coles Creek. The level is very late Temple Mound I or Early Mississippi in more usual terms, but also includes early Temple Mound II or Late Mississippi. This period of rapid cultural change and intense ceremonial activity may be segregated as the mature Mississippi period, which has a decided advantage in that the peak developments in Southeastern ceremonial activities are not semantically obscured by dividing them between two or more periods.

The major Kolomoki period pottery types do not help greatly in an attempt to match sequences with the lower valley. The dominant vessel forms for the decorated type, flat-based high-shouldered small jars with slightly flaring rims or barrel and beaker shaped vessels, are clearly the same forms as those of most types defined at the mouth of the Red River for the Troyville through Plaquemine periods. The same is true of the decided tendency to limit decoration to the shoulder area, although this tendency seems more pronounced post-Troyville in Louisiana. These are, however, generalized traits which indicate only style relationships. They do not serve for short term chronology correlations.

One set of facts which tends to place the Kolomoki period at about time "C" has already been presented. That is, if the correlation of the Weeden Island Series of sherds with the lower valley sequence takes us up to about time "C," then the Kolomoki period in which they have been dropped is time "C" and later. This is probably the most definite piece of evidence we have from the village area at Kolomoki. It does not, of course give us an upper date, since we have in these facts no basis for estimating the length of the Kolomoki period. As noted in Chapter VI, some estimation of this upper date can be worked out by shifting gears and considering the relationship of the Kolomoki stamped type to the total complicated stamp series. Although there is a stylistic overlap in

this definitely pre-Savannah stamp, the Kolomoki period can extend no later than does the Etowah period in which the Southern Cult (as manifested at Etowah) falls. This is based on stratigraphy at CK-5 and elsewhere in the Etowah Valley, including recent work at the Etowah site. Savannah Complicated Stamp and the related Wilbanks Complicated Stamp are post-Etowah culture everywhere in the valley (Sears, 1950 c, nd b, Caldwell, MS).

The dating of the Temple Mound and the moundplaza community plan in the Kolomoki period is of some help in tying in the upper end of the sequence with the lower valley chronology. A study of site plan analyses in the Central Valley survey report (Phillips, Ford and Griffin, 1952, pp. 309-343), yields a sequence which, while tentative, seems applicable to the lower valley too. Kolomoki, with its rather formal community plan, large temple mound at one end of the village, and thick rich middens, could be classed only with the "Large Rectangular Village Sites with temple mounds." The Ford-Phillips-Griffin study indicates that these sites have their initial appearance in period C-B (p. 343), which is substantially in accord with our data.

It should be possible at this point to make use of Ford's recent (Ford, 1952) attempt to correlate the Red River Mouth and Florida chronologies. Unfortunately, this cannot be done except in very limited fashion. Earlier we presented our version of Kolomoki-Red River Mouth chronology matching, using Ford's Red River chronology (Ford, 1952, Fig. 3). There is little doubt concerning the validity of the Red River Mouth chronology, carefully and painstakingly worked out over a long period, with a great deal of documentation and adequate stratigraphy at many points. Unfortunately, it does not appear that the same is true of the extension to Florida.

Before entering into a detailed discussion of Ford's chronology, his basic charts, Figs. 4 and 5, and their relationship to our sequence, there are three points which might be considered.

First: If agreed that Ford's chronologies and those in this report are both approximately correct, perhaps Ford's chronology might be interpretated as being substantially in accordance with ours. Ford's Weeden Island II, with Wakulla Check Stamp, centers around time "D" and apparently runs out before time "C," our Kolomoki period mid-point. Nevertheless, there are points of conflict.

Second: Stemming in part from necessary acceptance of Willey's 1949 typology, all complicated stamped sherds are lumped together as Swift Creek Complicated Stamp. This is even greater lumping than is employed by Willey, who separated complicated stamps into two major types, early and late, with several names for minor variants outside the "Swift Creek" nomenclature. Such lumping seems to be a

vital error, particularly in areas where the stamped ware is the majority pottery. This is apparent even though, after the lumping is performed, there is nothing in any of Willey's strata pits to indicate the possible late re-emergence of complicated stamping.

Third: The charts imply, to the writer, complete acceptance of *Wakulla Check Stamp* as a Weeden Island II period marker without re-examination of the evidence.

We may then re-examine these points in some detail, dealing with each chart separately, but commenting on relationships or discrepancies between the western "Gulf Breeze" chronology and the eastern "Carabelle" chronology where appropriate. The comparison of the two areas, based directly on the charts produced by Ford, is particularly important for it reveals a number of marked inconsistencies.

There is not much point in quarreling with Ford's Chart 4 for the western area chronology. Santa Rosa Stamped and Alligator Bayou Stamped are as undoubtedly Hopewellian or Middle Woodland types as Weeden Island Incised and Carabelle Punctated are post-Hopewell. Since the complicated stamped sherds are almost consistently associated with the Hopewellian types, they are, in all probability, Early Swift Creek Complicated Stamp. Allowing for difficulties of matching, chart construction, etc., there is no level on this chart at which complicated stamping is associated with the Weeden Island Series and consequently to Weeden Island I period as defined in this report or by Willey. There are a few levels which seem to be the beginning or the end of developments, but they are extremely inconsistent and might best be viewed as the results of chart construction. On the other hand, there is a clear association in this area of Wakulla Check Stamp and the Weeden Island Series, although even here, if the chart is checked by sites rather than by blocks, the assemblages seem oddly inconsistent. There is certainly a Weeden Island period present, defined on the basis of presence of the Weeden Island Series. However, this period, with Wakulla Check Stamp, seems to follow a Santa Rosa-Swift Creek period, so that I would doubt the presence of a full stratigraphic column. The continuities indicate that the culture in the period called Weeden Island II, according to Ford's chart, developed from the earlier period on that chart. However, since the earlier period is Santa Rosa-Swift Creek, it would seem proper on chronological grounds to call the next period Weeden Island I rather than II, even with the check stamp. In spite of such oddities, inherent in the seriation method, as the Deptford Series extending nearly to the top of the chart and the historic Leon Check Stamp nearly to the bottom, it is possible that Ford's alignment of excavated units is perfectly correct. If so, it should all be compressed within the boundaries of Santa Rosa-Swift Creek and Weeden

Island I. To use Fordian skepticism, there is not nearly enough change in his Weeden Island I and II periods to justify the division.

On almost completely arbitrary grounds, Ford's second chart, Fig. 5, has evidently been forced even more into the complicated stamp before check stamp mold. The first point has already been discussed, that the complicated stamped pottery from the Mound Field site pits, lumped in Ford's chart with the Carabelle pits, is not Early Swift Creek Complicated Stamp by any stretch of the imagination. Consequently, it is not a Hopewell or Santa Rosa-Swift Creek marker, which is where it has been placed. All of the stamped pottery from one of these pits is Kolomoki Complicated Stamp which is never associated with the zone decorated and rocker stamped Hopewellian types. The sherds from the other pit can best be classified as members of the Swift Creek II class, also never found in Hopewellian context. A relevant comment here is that the Santa Rosa Series, as definite a Hopewellian marker as is Early Swift Creek stamp, is almost missing in Willey's collections from this area. ·It is not missing completely from the area, however, since the burial mounds excavated by C. B. Moore which are most clearly of the Hopewellian period are from this part of the coast, the Green Point Mound (Moore, 1902, pp. 249-257), Huckleberry Landing (Ibid., pp. 234-238), and the Yent Mound (Ibid., pp. 265-274).

A careful inspection of Ford's alignments will indicate that one block of sites and levels is largely Deptford, particularly the lower levels of the Carabelle pits. Another block is predominantly complicated stamp, most importantly the Mound Field pits, and a third block is characterized by the Weeden Island Series, especially Mound Field Pit II. Still a fourth block, all from Sowell Pits 3 and 4, has predominantly Wakulla Check Stamped, Fort Walton Incised, and, rather sporadically, Weeden Island Incised. The forcible placement of this last block on top of the others is obvious since there is even a gap between the site and unit bars on the left edge of the graph. Except for the sporadic and unpatterned occurrence of Weeden Island Incised from the middle of the Santa Rosa-Swift Creek level to the top of the chart, there is no demonstration of cultural continuity with change and replacement. There is a block of two units with check stamp at all levels from one site hoisted on top of blocks with other sorts of ceramics from two sites.

Except that the Deptford sherds are at the bottom of the chart, and even here it is unbelievable that Deptford sherds are ever important culturally rather than mechanically as part of a Hopewell period ceramic assemblage, I cannot see that any real cultural change is outlined by this chart.

The fact that Ford's chronology and the chronology

developed in this report differ in so many respects is decidedly unfortunate. Certainly the differences are in some part due to the nature of the deposits excavated by Willey, on which Ford's chronology is necessarily based, and on the nature of the Kolomoki deposits and their lack of physical stratigraphy. Certainly both outlines cannot be right, and it is probable that neither is completely accurate. However, this report may approximate reality somewhat more accurately, for Ford has not taken into account that there are three seemingly independent variables in the ceramics of the Florida Gulf Coast. One is complicated stamping, one the Weeden Island Series, and the other the small check stamp. Their independence is attested to some degree by the apparent fact that seriation on the basis of all three is difficult, if not impossible. Seriation using the check and complicated stamps does not seem to work, and seriation based on the internal developments within the Weeden Island Series and within complicated stamping does seem to work for some part of the area. On the whole, through using Kolomoki Complicated Stamp, the associated specialized mortuary wares, and early Swift Creek Stamp as time markers for rather clear and discrete cultural and temporal units, it is impossible to confidently do a great deal of seriation or trace developments generally in the long interval between Kolomoki and Early Swift Creek. At Kolomoki, we have been able to indicate some of the probable changes for part of the period.

It is reasonably certain that this seriation works for sites with the complicated stamp and the Weeden Island Series on the eastern end of the Northwest coast. It definitely does not serve to place sites with the small check stamp as the major pottery style, and quite possibly is not overly accurate for any sites on the western end of the coast.

It appears that Willey's test pit data are not adequate for the massive cultural-historical reconstructions. Certainly this last chart of Ford's as well as

PERIOD	DATE	LOWER_	CENTRA I	KOLOMOKI		SAVANNA-	NORTH GEORGIA	EAST TENNESSEE	CENTRAL GULF COAST	ST. JOHNS	GIBSON AND FULTON ASPEC	
L	1700			CREEK	CREEK	?		MOUSE	SEMINOLE	SEMINOLE	12.11	-A
LATE		NATCHEZ	LATE MISSISSI PPI	W M	L M A R	SPANISH INDIAN	L A MAR		SAFETY	SPANISH INDIAN ST. JOHNS	A S _P E	
s _{PPI}	S ₁ _{S-} 1500	P		, L	K	IRENE	WILBANKS		H R B	IIc ST. JOHNS		-в
M _{A-T}		Α	EARLY	?-	??	SAVANNAH	ETOWAH #	DALLAS -	⁰ R-	- II •	SPIRO	٥ _{٧,,}
SIS	1200	UE NE	MISSISSIPPI	когомокі	M A C O N PLAT E A U	w	W O O D-	HIWASSEE	TAMPA	STJOHNS	DAVIS-	PR E
EARLY			LAJE.	WEEDEN		M	STOCK	- ISLAND	FOCUS WEEDEN	11.4	CATINGAN	<u>د</u> ل
ISSISSIPP OODLAND		CREEK	BAYTOWN	ISLAND	SWIFT	G			ISLAND	et loune		-D
IISSIS- IPPI RANSI- TION	700	TROYVILLE	MIDDLE BAY TOWN	ISLAND I-a SANTA	CREEK	0 N	N _A _P	C	ISLAND	ST. JOHNS		
IIDDLE OOOLAND	DLE	MARKSVILLE	E ARLY BAYTOWN	ROSA- SWIFT CREEK	EARLY SWIFT CREEK		ER	D Y	SANTA E ROSA- SWIFT I CREEK S	ST. JOHNS IA LATE		-E
ARLY	0	TCHEFUNCTE	TCHULA	DEPTFORD	DEPTFORD	DEPTFORD	DEPTFORD	C E E K		ST-JOHNS IA EARLY		-F
LAND				PLAIN FIBER TE MPER	FABRIC MARKED COMPLEX	STALLINGS FIBER TEMPER	MARKED		ORANGE	ORANGE		-G

Chart VI—Cultural Developments in Southeastern United States

Willey's original data indicates that Wakulla Check Stamp is, if anything, predominantly a Fort Walton period type. This is an entirely different concept from the original one of either Fort Walton or of the Wakulla type, and certainly should neither be accepted casually nor used without further checking. Again, it is apparent that this small check stamp—call it Wakulla, Gulf, or Deptford Bold—can and does appear in all time periods without bearing any particular relationship to other major types and series of the area. Also if this concept is valid, Indians of this area were among the least trustworthy of any in eastern North America; anything they seem to have done should be regarded with the greatest possible suspicion.

Columns on Chart VI include an outline of the chronological arrangement of such cultural units on the Gulf Coast Plain as seems warranted by currently available evidence. The discussion following is intended as an attempt to validate the placements largely in terms of style trends in ceramics, other artifacts, and socio-religious trends. The degree of confidence in the placements is admittedly, and I hope clearly, markedly variable, ranging from near certainty to sheer guesswork.

Since we have no evidence from Southwest Georgia and little from the Florida Northwest coast for periods preceding Deptford, there is little point in becoming involved with them here. Quite clearly the archaic levels, although little known, are culturally related and temporally roughly equivalent. The fabric marked and fiber tempered horizons are believed to be coeval for reasons set forth elsewhere by J. B. Griffin and the writer (Sears and Griffin, 1950). I am admittedly more than a little puzzled by lack of evidence for a fiber tempered horizon preceding Tchefuncte, since this period appears to be a temporal and regional equivalent of Deptford.

This equivalence seems nearly obvious. Probably ancestors for both exist in the several fiber tempered series, they share a style of vessel form which includes tetrapod supports, and both develop into ceramic styles of the Hopewellian horizon. The Mc-Leod Deptford of South Alabama (De Jarnette, 1952, pp. 275-276) extends the Deptford range nearly to the lower valley. Judging by the brief published account, the South Alabama ware varies no more from that on which the type description is based than does that of the Florida Northwest coast or that of North Georgia. Indicative of a more widespread culture than Tchefuncte, the great areal spread of the relatively uniform Deptford Series may mean that the culture it represents is somewhat more important in the developing culture of the Costal Plain, and the Piedmont for that matter, than the culture represented by the Tchefuncte Series. In any event, Deptford and Tchefuncte are temporal-cultural equivalents, and a

contact area for the two styles should be present in South Mississippi.

The development of the Tchefuncte Series ceramics into those of the Marksville Series, Hopewellian markers for the Lower Valley, has been very adequately and thoroughly documented by Ford in a number of reports so that comment here is entirely unnecessary.

The similar development of Early Swift Creek Complicated Stamp from the Deptford Series has not generally been so handled, perhaps because of the markedly different appearance of the two types of ceramics in sherd form. Though adequately described in Chapter VI, it may be well to repeat the major point, that the only real change from Deptford to Early Swift Creek is in the designs carved into the stamps. Vessel forms and appendages, paste, firing, and decorative techniques remain constant.

Precise alignment of eastern Santa Rosa-Swift Creek and western Marksville-Troyville is more difficult. While Early Swift Creek Complicated Stamp is clearly a Hopewellian period marker (See Chapter VI and Sears, 1952a, pp. 113-116), there are sites on the Florida Northwest coast with quantities of the stamped type, in fact with it as the only decorated ware. Nevertheless, they lack the more distinctly Hopewellian Rocker Stamped and incised wares. Other sites, particularly burial mounds, possess both series. In still other cases the Santa Rosa Series appears to come up into Weeden Island I.

Although the point cannot be tightly documented at present, generally speaking, Ford's opinion that Florida Santa Rosa-Swift Creek is at least a partial equivalent of the Troyville period is correct. However, there is no good reason for doubting approximate simultaneity for the initial appearance of Marksville and Santa Rosa-Swift Creek, as indicated in Chart VI. Placement of the lower end of Weeden Island I opposite mid-Troyville is based on this agreement and on the appearance of the Hopewellian types with Weeden Island I types at certain sites.

The relationship of Weeden Island I and I-b—as those periods have been defined in this report—to the latter part of the Troyville and the first part of the Coles Creek periods has been adequately discussed in the earlier part of this chapter. There does not seem to be a great deal to add to this discussion concerning the transitional Woodland-Mississippi period on the Gulf Coastal Plain. Something is known of ceramic developments in this period in peninsular Florida with Goggin's St. Johns I-b and Glade's II-a periods falling here (Goggin, 1949, Fig. 2). Since these cultures seem to have few relationships outside peninsular Florida except to Weeden Island, current knowledge of them does not help greatly with non-Floridian problems.

A Kolomoki period-Late Coles Creek through early Plaquemine temporal and cultural alignment is suggested and the evidence for it is presented in the first sections of this chapter. On the chronological chart, the Davis site or component of the Alto focus (Krieger, 1949), the Gahagan Mound (Moore, 1912; Webb and Dodd, 1939), and the Grant Mound (Moore 1894, 1895), are placed as complete temporal equivalents of the Kolomoki period.

As has often been pointed out the Gahagan-Grant parallelism is well documented by the occurrence of the Long Nosed God masks in each of these mounds. So placed in time and in cultural development, they also fit into a wider developmental pattern. Gahagan and Davis seem to be but two aspects of the same culture, the village-secular and the mortuary-sacred. Or, somewhat differently phrased, the Gahagan Mound may be an Alto focus (Davis site level) burial mound. This view seems entirely in agreement with that of Ford (1951) pp. 125 ff).

The ceramic relationships between these various units should be clear, except for the Grant Mound. Here the Weeden Island tinge to the St. Johns tradition ceramics in the Grant Mound and the occurrence of Weeden Island Series sherds in St. Johns II-a sites have caused Goggin to place the site and period as regionally equivalent to Weeden Island II. This placement is based largely on the occurrence of the small check stamp, but the other types of ceramics, Weeden Island and St. Johns, are considered to be related. Since our Kolomoki period is within the Weeden Island II time span as used by Willey and Goggin, the alignment seems adequate.

A general relationship between Alto focus and late Weeden Island ceramics has been recognized for some time, and has been made explicit by Ford (1952) among others.

There may be some argument as to whether this period should be classified as Early Mississippi, Late Mississippi, or, my own term, Mature Mississippi. This is, of course, assuming that classification is necessary at all and classification of data suitable for solving common problems is a necessity in any research. Consequently, and following a trend to attempt classification by culture type when evidence is available, the Kolomoki-Grant-Gahagan level represents the earlier stages of the mature Mississippian period. This is the period of greatest ceremonial and aesthetic development in Southeastern United States, including in the latter part of the period the Southern Cult in its major manifestations. Wherever recognized, this earlier level seems to be leading the Cult level or period type of culture.

In the East Texas-Oklahoma region, Krieger has been able to document very well the point that culture of the earlier levels of the Alto focus, with cult paraphernalia incipient in the Gahagan spuds and the kaolin carving with the forked eye from the Davis site, leads directly into culture of the Spiro variety (Krieger, 1949, p. 194ff). Ceramics develop from the Davis site types through Spiro variants into the later Haley and Sanders focus variants without any breaks in continuity. Disregarding Krieger's placement of the early end of this continuum pro tem, there is absolutely no reason to doubt its validity as a sequence. Ford has pointed out that the Davis site, and consequently the Gahagan, equate with the Louisiana Plaquemine, an alignment in accord with the data in this report if the early part of Plaquemine is specified. It may be well to point out here to some of Krieger's critics that this does not alter the position of the Davis site, and consequently Spiro and the Southern Cult, up to just pre-contact levels. Nor, just as clearly, does it put Gahagan, Davis and Spiro on the same temporal and cultural level. It is fairly obvious from Krieger's sequence, supported by the tie-in of the Northwest Florida and Southwest Georgia materials through Louisiana, and more recently by work in North Georgia, that Plaquemine is a long period in terms of sequences in other areas. Cultures changed rapidly outside the lower valley during the centuries assigned to the Plaquemine period. In fact, recent reports by Quimby (1951) and Cotter (1951, 1952) indicate that Plaquemine itself underwent considerable change through the length of the period, that it is something more than a collection of uniform sherds in a restricted range of ceramic types. Ford's warning that: "Southeastern archaeology has reached the point where the one for one alignment of time periods that has been customary and necessary in the past can now be improved" (Ford, 1951, p. 130) may be particularly valid and applicable here.

At the other end of the Costal Plain, the Grant Mound and the St. Johns II-a period lead directly to the St. Johns II-b period and culture type. As Goggin has pointed out (1952, p. 54) this period is certainly coeval with and related to Spiro as indicated by the Mt. Royal copper plate (Moore, 1894, frontispiece) which is a near duplicate of one from Spiro (Burnett and Clements, 1945, Pl. LXXVI). Once again the culture at the Cult level, very clearly in the case of ceramics, develops directly with very little change in other categories than ceremonial from that of the preceding horizon.

In Southwest Georgia and Northwest Florida, unfortunately, we are not at all certain what culture or ceramic complex develops from Kolomoki. In northern Florida, and certainly in our area, both Fort Walton and a Lamar variant are post Kolomoki but are still protohistoric. Current knowledge of development in the complicated stamp tradition, as well as the certainty that the Lamar tradition is as definitely post-Cult peak as Kolomoki is pre-peak, indicates a missing link in the Kolomoki to Lamar development which Fort Walton cannot fill. Cultures in a developmental line between the South Georgia Lamar variants

and those characterized by the Kolomoki ceramic series should possess a complicated stamped pottery type similar to *Savannah Complicated Stamp*. This culture and ceramic type have not been located although I have seen sherds which would fill the bill.

This Northwest Florida-Southwest Georgia area seems to be the only segment of the Coastal Plain in which we lack a continuity, in ceramics at least, from the just pre-Cult level to the late protohistoric level. The Florida sequence has been well worked out (Goggin, 1949, 1952); the lower valley development through Plaquemine to Natchez is clear (Ford, 1952 and elsewhere), and the sequence in the East Texas-Oklahoma region has been worked out in some detail (Krieger, 1949, 1946,).

The one point that is certain in the Georgia-Northwest Florida section of the Coastal Plain is that the Fort Walton culture is not a direct descendant of Weeden Island II, either generally or in the specific area of ceramics. Consequently, while it probably does, for a large part of the area, fill the temporal gap between Kolomoki and regional variants of Lamar, it does not fill out the developmental sequence for the single family line. Nor, does it seem to have anything to do with culture of the type characterizing the Coastal Plain from at least Early Woodland times on to the protohistoric period. Fort Walton should only be regarded as an intrusive culture, although a case for the opposite point of view has been made by James B. Griffin (1946, p. 77), John Griffin (1949, p. 46), and others.

Perhaps the clearest case for this lack of continuity can be made through our evidence that the Weeden Island ceramic style, supposedly ancestral to the Fort Walton, is used only for ceremonial pottery in the latest periods characterized by the use of that style in unaltered form. For other purposes, it is replaced by complicated stamped ware. The culture developing from the late Weeden Island culture of the Kolomoki type must be characterized by stamped pottery. A reversal here is, I suppose, possible. That is, the complicated stamped mode of decoration, after reaching a popularity peak in the Kolomoki period, could have declined and a return been made to plain and incised pottery. However, this would not happen overnight, and there is no available evidence indicating such a development.

Equally important, while it may well be true that the Weeden Island style played a part in the ancestry of Fort Walton ceramics, those Fort Walton elements believed to have been so derived need not have, and do not appear to have, undergone their evolution in place on the Gulf coast. The incised styles, effigy heads which are usually of the flat type, and vessel forms are all shared with many other classic Middle Mississippian cultures in the Cumberland and in the Central Mississippi Valley. This point is obvious when Fort Walton ceramics are compared to those

illustrated in such reports as the Central Valley Survey (Phillips, Ford, and Griffin, 1952), Hiwassee Island (Lewis and Kneberg 1946), and even, practically in the far north, the Kincaid report (Cole, 1951). The various Bureau of American Ethnology and University of Kentucky reports on sites in the area are also relevant.

Generally speaking, Fort Walton ceramics and culture would appear far more at home in Central and Northern Alabama than they do on the Gulf coast. In view of all this, Weeden Island culture played no greater part in the ancestry of Fort Walton than it did in the ancestry of the classic Middle Mississippi culture and ceramic tradition as a whole. It appears that Fort Walton represents a cultural intrusion, actual population replacement, in its known location. J. B. Griffin's suggestion (Griffin, 1946, p. 77) of the area around Montgomery, Alabama, may well be valid, but as a source for a population, for a culture, not for influence alone.

There also appears to be enough variation within Fort Walton to allow for a long-term occupancy on the coast with some internal development and change during that occupancy. Certainly its immediate protohistoric and early historic position has been adequately documented (Willey, 1949, p. 469; Griffin, 1946, p. 77). It seems entirely possible, even probable, that the culture type and period also cover the earlier just post-Kolomoki level, that this intrusive culture, probably representative of Muskhogean expansion in the form of ancestral Choctaw, replaced the indigenous Kolomoki type of culture.

Some slight overlap of Kolomoki and Fort Walton is possible, since such things rarely happen overnight. The Chipola Cut-Off Site (Moore, 1903b, pp. 445-466) seems to demonstrate contact between the two cultures. Certainly the historic graves in this mound are intrusive, but that the Fort Walton vessels too are intrusive into a Kolomoki period-Weeden Island type burial mound seems an unnecessarily complicated hypothesis. Moore's discussion and description of the mound are admittedly inadequate, but suggest to me that the Fort Walton and Kolomoki period stamped and Weeden Island type vessels were found in the same mass deposit.

Cultural continuity then seems to obtain over most of the Gulf Coastal Plain, with the only major break occurring in the area of the Kolomoki focus. The developments into historic Caddoan groups in Texas and Oklahoma, into Natchez in Louisiana, and into Timucua in the northern part of the Florida Peninsula, are all reasonably clear.

Actually, there is little reason to doubt that Kolomoki culture, as traceable ceramically, develops through Lamar style variants into the culture of some branch of the Muskhogean speaking peoples. Probably the Apalachee would be a good bet, but the point cannot be demonstrated now and will not be pursued further.

9 KOLOMOKI AND SOUTHEAST

Most comparisons thus far have been made with the cultures most closely related to Kolomoki, those on the Gulf Coastal Plain. It has been demonstrated in the preceding chapter that Kolomoki is but one specific culture representative of a relatively uniform culture type characterizing the Coastal Plain, a culture whose variation through time was in part directed by trends also affecting the development of other cultures in the area.

Kolomoki specifically, and the Coastal Plain culture area generally, shared in widespread Southeastern developments. These would include the Southern Cult ceremonialism and that type of ceremonialism noted in the preceding chapter, with Kolomoki as a major contributor and participant, precedent and ancestral to the Cult. Thus it may be well to point out here certain of the more widespread developments participated in by our subject culture during the period in which it is most adequately understood from the type site.

To borrow the time scale of the Central Valley survey again, this is from time E-D to time B, a period estimated to cover some seven centuries, extending from what has been called the "Woodland-Mississippi interegnum" well into the period characterized by the development of the late Mississippi culture type.

We noted in the preceding chapter that we were able to correlate our Kolomoki cultural-chronological development with that of the lower Valley, This correlation can be accomplished largely through the relationships of specificially Coastal Plain incised, punctated, and red painted styles of pottery decoration appearing on beakers and small high shouldered jars with flat disc or square bases. This relationship automatically gives us a correlation with relevant time periods in the Central Mississippi Valley through the work of the Central Valley survey. In turn, then, we may take advantage of certain of the correlations concerning relationships between cultural developments in the Central Valley and cultures to the north up the Mississippi Valley and to the east up the drainages of the Ohio and Tennessee Rivers. This "U" can then be closed through comparisons of Kolomoki culture with the Etowah Valley cultural sequence, a topic which was discussed in Chapter VI, and Macon Plateau culture. The Etowah Valley developments in turn tie back into Tennessee through the back door.

Two comments are in order at this point—comments concerning the treatment and nomenclature of culture periods in the Central Mississippi Valley Archaeological Survey report (Phillips, Ford and

Griffin, 1952). First, comparisons of the two reports will be consistently confused in the Central Valley report, by the use of the term "Early Mississippi" for a period covering time "B" to time "C." The confusion results from the use of the term in that report for local cultural developments between Late Baytown and Late Mississippi. It does not refer to the developmental Early Mississippi cultural stage as generally understood. The contrast is made apparent by Phillips on p. 288 (Phillips, Ford and Griffin, 1951) where he points out that a certain distinctive collection represents "not only Early Mississippi in the purely chronological sense in which we use the term, it is typologically Early Mississippi or early Middle Mississippi as it is more often called, although only in a generalized way." Whether period B-C represents a transition in some part from Baytown ceramics to Mississippian ceramics or not, there seems to be little doubt that "typologically" Early Mississippi, the Early Mississippi culture stage as used and understood by Griffin (J. B., 1946; Ford and Willey 1941), and many others, is culturally and temporally equivalent to at least a large segment of the latter portion of the Baytown period. Since the latter is defined by the authors of the report as "the time span during which the trait of shell tempering became prominent in the ceramic complex" (p. 443) and since there seems little doubt that shell tempering came into the Central Valley from somewhere else, this overlap is not particularly surprising nor puzzling.

Second, as mentioned in the preceding chapter, I am in agreement with Ford's placement of the Davis and Gahagan sites in the early part of the Plaquemine period (Ford, 1952, p. 127), although a slight extension back into late Coles Creek would seem probable. Also correct is Ford's lineup of Plaquemine as entirely within time C-B (Phillips, Ford and Griffin, 1951, p. 455, note 61). However, while a base with "Early Mississippian" on time C is more useful, the Plaquemine period extension past time B, overlapping with Late Mississippi, seems necessary.

In addition to the tie-across at the time D-E to B-C apparent from a comparison of ceramic development in the Weeden Island style at Kolomoki to the development in the Marksville-Coles Creek style in the Lower Valley, certain mortuary vessels and decorative styles from Kolomoki are also related to what had perhaps best be called "typologically Mississippian" vessels and decorative styles. They then may be profitably compared to such vessels. The Mercier Red on Buff vessels from Mound E, in jar and bowl forms,

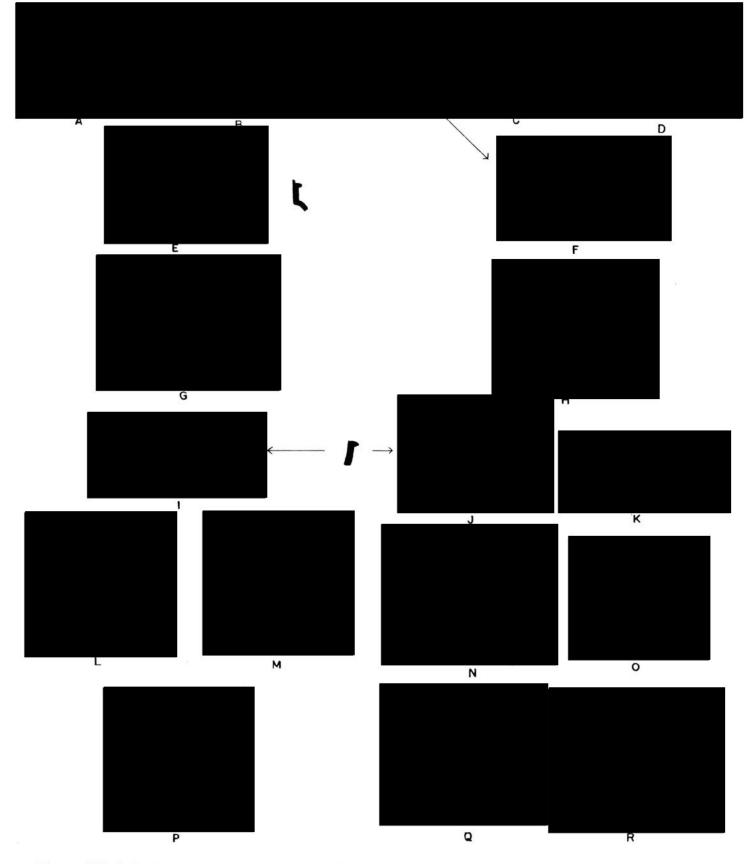


Fig. 20. Mississippian-influenced vessels from Kolomoki and their counterparts in shell tempered Mississippian pottery.

A, B, E, G, I, L, M, P Mounds D and E-Kolomoki. C, D, F, H, K, R-Phillips, Ford and Griffin, 1952. Plates 96-0, 99d, 98L, 95h, 100L, 99e respectively.

J-Lewis and Kneberg, 1946. Fig. 62-d. O-N-Myers, 1924. Pl. 104-c. 105. Q-Cole, 1951. Fig. 6-J.

as well as certain plain, red painted, red and white painted, and even complicated stamped vessels from Mounds D and E, find their closest relationships not on the Coastal Plain, but with vessels from cultures and areas classified as "typologically Mississippian." Fig. 20 above illustrates this point, with Kolomoki vessels illustrated opposite the most directly similar Mississippian vessels available.

Total vessel forms and rim features are the most significantly similar elements since archaic decorative styles appear on some of the Kolomoki vessels. As indicated, most of the vessels representing Middle Mississippian culture are from the Central Valley. Certain others are from just as definitely Mississippian cultures in the northern and eastern drainages of the Mississippi.

Fig. 20 makes it reasonably clear that the Kolomoki culture was in contact with developed Mississippian culture, even late Mississippian in terms of the dual division, since the vessels most directly comparable to our Kolomoki specimens are of types which may possess strap handles. The lack of straps, or any handles except lugs, at Kolomoki should not be a deterrent to recognition of the relationship. As Phillips, Ford, and Griffin make quite clear (1951, pp. 150-153) handles of the loop and strap variety appear to be a northern development, and are not common even in the specificially Mississippian cultures of the Central Valley. They are not present at all at Kolomoki and, in the lower valley and in East Texas until post-Alto focus times, they are extremely rare. In Georgia generally, excepting the intrusive Macon Plateau culture, they appear commonly only on late, protohistoric and early historic ceramics. Their maximum frequency on complicated stamped vessels, before the appearance of vessels in the Lamar tradition, is in collections made on sites of the Etowah culture which has rather intensive contacts with the Tennessee area. Even here, handles appeared only on a tiny fraction of the total number of vessels represented in a collection. Most of these specimens are Etowah Incised, a minority type which is a direct copy in everything except temper of vessels made in the Tennessee area with shell temper-

I should emphasize that these Mississippian forms in the Kolomoki focus appear predominantly on the esoteric non-utilitarian vessels made for mortuary and other ceremonial usage. A very few vessels in these forms were made for everyday purposes and were decorated with complicated stamped designs. The contact between Kolomoki culture and culture of the classic Middle Mississippian type is clear, and it is also clear that the foreign ceramic tradition affected importantly only that area of the culture where diversity of vessel form was an accepted value.

These Mississippian styles occur more commonly in the Kolomoki burial mound deposits than they do in other related sites, but they have appeared in a few other sites, judging by C. B. Moore's illustrations and available collections. Vessel 55 from the Mound Field site (Fig 17-d) is a case in point (Moore, 1902, p. 319, Fig. 302). The position of Kolomoki at the northern, and to some degree, western, periphery of the Kolomoki culture area may be significant here in that more intensive contact with "typologically Mississippian" cultures might be expected. This position may also serve in part to explain the presence of the only large temple mound in sites of the complex at Kolomoki.

There are a number of other ceramic features, present in the mortuary ceramics of the Kolomoki focus, which appear to indicate relationship and contemporaneity with cultures of classic Middle Mississippian type. Included in these are certain of the incised styles; painting in red stripes; red and white painting; the prominence of owl and human effigies; the presence of the cat, bird, and serpent in effigy form; bird head effigies on bowl rims facing inward; the use of added rim strips, often notched; and the intensive use of lug handles. These are all traits of Middle Mississippian or Temple Mound horizon ceramics and culture. Many of them, as detailed below, appear in the Late Mississippian or Temple Mound II context, emphasizing the rather ambigious position of Kolomoki and the Grant-Alto-Gahagan ceremonial level astraddle the dual division dividing line.

Mississippian styles almost never appear in undiluted form in the Kolomoki area. Vessel shapes are distorted, rim forms are used in odd ways, and the combination of these elements with indigenous and often much older elements is confusing. Their appearance is further confused by the local habit of embellishing all sorts of vessels with perforations, extra incision, modeled units, and appliques of all sorts. In the Kolomoki focus area as perhaps nowhere else in North America, individual styles in vessel shapes, rim forms, appendages, and decorative styles must be traced as individual elements. Combinations appear ad infinitum, producing such complexity that even the originators of specific styles might fail to recognize them in their Kolomoki-Weeden Island context.

Certain of the relevant incised styles appearing at Kolomoki are the collar decoration on vessel 22 from Mound E, similar arches but with cutouts on vessel 41 from Mound D, and the incised triangles on vessel 39 from Mound D. Comparable styles are found on vessels of the type Barton Incised (Phillips, Ford and Griffin, 1951, Fig. 95. See especially h for comparison to Mound D 39), and Kent Incised (Ibid., Fig. 96. Compare o to Mound E vessels 22 and 13) Although it does not appear in the Kolomoki mortuary complex, comparisons of such Indian Pass Incised vessels as those illustrated by Willey (1949, Fig. 42, a and b)

with vessels of the types *Rhodes Incised* (Phillips, Ford and Griffin, 1951, Fig. 98) are instructive. Also relevant here are the pendant triangles on vessels 36, 37, 38 and 40 from Mound D (See Fig. 12), comparable to unnamed Western Tennessee types such as the vessels from the Gordon and Fewkes sites, (Myers, 1924, pl. 104-c, 116) to Fort Walton vessels of the type *Pinellas Incised* (Willey, 1949, pl. 51-f), (Bullen, 1952, Fig. 24-r), and to Kincaid vessels such as the lobed variant illustrated by Orr (1950, Fig. 6) where the arched incision accentuates the lobes. Vessels from Moundville are also pertinent, such as the one illustrated by Moore (1905, Fig. 14-d) although the style appears much more commonly on sherds from the village area of that site.

Painting in red stripes would appear to have its earliest appearance in the Lower Mississippi valley in Ford's Woodville Red Filmed and Larto Red Filmed types. In both of these, the painting is confined to bowl interiors, and in the first type is used between incised lines. The Kolomoki use of red painted stripes on jars and bowls in the type Mercier Red on Buff would seem to find its closest relatives on such Mississippian

painted types as Carson Red on Buff (Phillips, Ford, and Griffin, 1951, pp. 132-133 and Fig. 112). Although detailed similarities do not exist between our Kolomoki painted type and Carson Red on Buff or any other definitely Mississippian type, it can scarcely be coincidence that our only use of the Mississippian style of painting is on our only vessels using Mississippian styles in vessel form, rim shapes, and lug handles.

Red and white painting has been accepted as a Late Mississippian, Temple Mound II diagnostic at least since the appearance of the Ford and Willey monograph (1941). Certain variants, as Nodena Red on White and Avenue Polychrome have been given type status (Phillips, Ford and Griffin, pp. 133-134). The Kolomoki vessels with red and white paint neither particularly resemble vessels in these two types, nor even each other. Nevertheless, a generic relationship may be presumed to exist between the red and white styles as in the case of the red on buff styles.

Table 12 below lists and classifies the effigy types and forms from sites with Weeden Island style mortuary ceramics.

TABLE XII

CLASSIFICATION-EFFIGY VESSELS FROM SITES EXCAVATED BY C. B. MOORE

FREE EFFIGIES Mound Field-A-297 Human Burnt Mill Creek Larger-A-Fig. 22 DERIVED EFFIGIES Burnt Mill Creek Smaller-A-Figs. 32 and 33 Bird Warrior River Mound A-A-Fig. 321 Burnt Mill Creek, larger A-Fig. 23 Aspalaga-C-Fig. 150 Sowell-A-Fig. 77 Basin Bayou-B-Figs. 49-50. Davis Point-A-Figs. 89, 94 Stranges Landing-A- Figs. 112, 114 PEDESTALED EFFIGIES Hare Hammock, Larger-A-Fig. 136 Human Tucker-A-Fig. 214, 220 Lewis Place-D-Fig. 38 and Pl. XVI Hall-A-Fig. 281 Bird Mound Field-A-287, 288, 289, 291 Pearl Bayou-A-Fig. 104 St. Marks-A-Fig. 311 Tucker-A-Fig. 215 Aucilla River, Mound A-A-Figs. 315, 317 Marsh Island-A-Fig. 243 Warrior River, Mound A-A-Figs. 320, 322 Hall, A-Fig. 300 Bayport-C-Fig. 74 Mound Field-A-Fig. 300 Chipola Cut Off-C-Fig. 104 Burgess Landing-C-Fig. 93 Bristol-C-140, 141 Davis Field-C-131, 134 McLaney Place-D-Pl. XII-2 Owl Bird Hammock-D-Figs. 32-33. Laughtons Bayou, Mound B-A-Fig. 110 Animal Hall-A-Fig. 265 and 256 West Bay Post Office, A-Fig. 13 Mound Field-A-294, 298, 299 Tucker-A-Fig. 216 Davis Field-C-Fig. 133 Point Washington-B-Fig. 68 Point Washington-B-Fig. 67 References-A-Moore, C. B. 1902. B-Moore, C. B. 1901 Burnt Mill Creek No. 3-D-Pl. XIV Bird Hammock-D-34-35. C-Moore, C. B. 1903. D-Moore, C. B. 1918.

Table 12. Effigy Forms from Weeden Island type mounds of the Kolomoki Period

In the class of effigies in the round, a feature which catches one's attention immediately is the prominence of owls among the bird effigies, seven out of a total of sixteen at sites outside Kolomoki, ten of twentyeight including the Kolomoki specimens. The remainder are about equally divided between ducks and raptorial birds-eagles, hawks, or buzzards. This prominence of the owl is another feature indicative of relationship with, perhaps influence from, "typologically" Mississippian cultures. Full effigies in the round, as classified for the Central Valley by J. B. Griffin (Phillips, Ford and Griffin, 1951, p. 162) appear only once in the Central Valley collections. However, a survey of the available literature concerned with Middle Mississippian sites and complexes—the Central Valley report, the Kincaid report (Cole 1951), the Macon Plateau pottery descriptions (Jennings and Fairbanks, 1939), as well as older reports-indicates that the owl, most often represented in sketchy form as a rim Effigy or hooded water bottle, is a distinctive feature of Mississippian ceramics. Orr (Cole, 1951, Figs. 8 and 11) indicates that on Kincaid bottles owls appear early and a shift to simple globular heads takes place later, while on the rim effigy bowls the well modeled three dimensional heads are replaced by profile birds' heads. Both of these shifts and placements are in accord with our data and our placement of Kolomoki in the Mississippian developmental scale. Certainly these owls are a Mississippian and not an earlier feature, a fact which is also true of pottery effigies as a class.

On the whole, except for the trend toward owls, and in the class of rim effigies noted below, the Kolomoki focus effigies do not greatly resemble the few from Mississippian context. The styles are too distinct.

One more exception to this rule of general distinctiveness, however, is in the class of human effigies, a class within which we can make some direct comparisons between Weeden Island and Mississippian styles. The two Kolomoki effigies, vessels one and seven from Mound D, relate closely to others in Weeden Island style mortuary deposits, and may be grouped with them in J. B. Griffin's class of "Aspalaga Effigies." A complete listing of the Florida Northwest coast effigies is given by Griffin, and need not be repeated here (Griffin, J. B. in Phillips, Ford and Griffin, 1951, pp. 164-165). I would, however, disagree with Griffin on two points. First, most of the effigies are not from Weeden Island sites but are from Kolomoki period deposits, the remainder from the mid-period in the mortuary development probably equatable ceramic Weeden Island I-b as the term has been defined earlier in this report. Griffin's statement that "they are quite different from the Mississippian forms" seems too strong. Certainly they are different from the bloated, yet skeletonized, often humpbacked effigies of the New Madrid-Memphis areas. However, the general style, depiction of positions with hands on knees and knees under bodies, as well as details including forelocks, roaches, and occipital and parietal hair knots, are quite similar to many effigies from definitely Mississippian context. Some of the most directly comparable examples are from the eastern part of the Middle Mississippian area, as specimens in the Thurston collection (Holmes, 1933, Plates XXVI, XXVIII, XLIV, LXV). Human effigies quite similar to the Kolomoki and related specimens from the Florida Northwest coast may be found in the Central Valley survey report (Phillips, Ford and Griffin, 1951, Fig. 107-c), on a water bottle head from Kincaid (Cole, 1951, Pl. XXIII B, p.), and elsewhere in the literature. To me the Kolomoki and Mississippian human effigy styles are more closely related than other styles in the two cultures. This relationship indicates cultural contact of some intensity. It does not of course demonstrate cultural identity. Kolomoki cannot be placed in a focus or phase with any Mississippian site nor are there any trade sherds in Kolomoki focus sites which were made by Mississippians. But influences need not move only in the form of physical artifacts.

Reference was made above to the presence of the cat, bird, and serpent as a link with Mississippian culture. Griffin (J. B. Griffin, 1946, p. 73), in referring to Phillips, 1943, points out that while this trinity is present in Hopewellian culture, their use is "accentuated in Mississippian art." Since all three appear at one site only in Mound D at Kolomoki, of all the Kolomoki focus sites, the linkage is clearly tenuous. However, it may be significant that the only serpents (Sears, 1953b, Pl. XIX, a) and the only cats (*Ibid.*, vessels 3, 6, and 15) appear at a site which is also the only one to possess such other definitely Mississippian features as those noted above in site plan, mound type, and ceramics.

Rim effigies on bowls seem indicative of a rather strong Kolomoki-Middle Mississippi linkage. There are two of these from Mound D, vessels 20 and 21, plus an assortment of effigy heads, some of which appear to have come from bowls. Mound E produced five complete specimens and two bowls from which the heads had been broken. Others appear in sites of the Kolomoki focus reported by C. B. Moore, and, as far as discernible, only in the later Weeden Island style mounds which are in this focus to the exclusion of other Weeden Island sites. Examples are West Bay Post Office (Moore, 1902, Fig. 10), Tucker (Ibid., Fig. 220) Mound Field (Ibid., Fig. 228), and, as a complete little bird facing into the bowl, from this last site (Ibid., Fig. 291). Included in this assortment from all sites, all birds' heads excepting vessel 20 from Mound D, a quadruped, and the deer from Mound E, we have three-dimensional heads, profile heads, crude or sketchy profiles, and heads abstracted to mere wedges. All of them face inward except the deer head from vessel 27 in Mound E which faces fore and aft along the side of the bowl.

The significance of rim effigy bowls in "typologically Mississippian" ceramics has been often and adequately handled, most recently by J. B. Griffin (Ford, Phillips and Griffin, 1951, pp. 160-162). To quote Griffin: "The rim effigy bowl is one of the most constant features of the Middle Mississippi vessel complex, as it is found throughout the Southeast and is found in both the early levels and the late." Certainly it is possible that the Kolomoki focus rim effigies represent independent invention, or the beginning of the concept in the Southeast. But, with all the available evidence for relationship, the odds are heavily in favor of Mississippi to Kolomoki cultural influence. There is just a hint in the sketchy profile head from Mound D, Vessel 21, and in the blocky profile head of a duck from Burgess Landing (Moore, 1903b, Fig. 93) that this influence runs into typologically "late" Mississippi, Temple Mound II times. These profile heads, block and sketch, seem to appear only late in Mississippi ceramics, although there obviously is a regional significance to their distribution too. Reference has already been made to this development at Kincaid (Orr, 1951 in Cole, 1951. Fig. 11, pp. 342-342).

Another feature which seems limited in its appearance to the Kolomoki site and to classic Middle Mississippi sites is the notched added rim strip. It appears on Vessels 19 and 31 from Mound E, Mercier Red on Buff bowls; on Mound E, Vessel 24, a deep slightly squared bowl with incised decoration; on Mound E, Vessel 13, a large Mercier Red on Buff jar; and on Vessel 52 from this same mound, a rather small red filmed jar.

Griffin points out (Phillips, Ford and Griffin, 1951, p. 158) that the notched added strip below the rim, as on Vessel 13 from Mound E, is extremely common in the Nashville area, and occurs elsewhere. I believe that he means here a variant with a rather characteristic profile as on Fig. 20 above, which has a thin verticle edge protruding from the inner lip. This precise profile appears on vessels from many parts of the Mississippian area, but seems most common in the Nashville region, as Griffin indicates

Other variants of the notched added rim strip, duplicating all of those from Kolomoki, often on the same vessel form, will be found in illustrations of the major Central Mississippi Valley pottery types (Phillips, Ford and Griffin, 1951, Figs. 94, 96, and 98), in the Kincaid report (Cole, 1951, Fig. 10), and in the Hiwassee Island report (Lewis and Kneberg, 1946, Pl 54, top. Pl. 62, B, D, G), and other relevant literature.

Lug handles of several different types are also a

characteristic of the Kolomoki mortuary assemblages. Not too surprisingly, these appendages in perforated and solid semi-lunar, comma-shaped, and triangular shaped, all flat and horizontally attached excepting the solid three-dimensional triangles on Mound E, Vessel 15, appear most consistently on vessels with other characteristics indicative of Middle Mississippian influence. This would include the decoration with red paint stripes, red and white painting, incised pendant triangles, the full bodied Mississippian pot form with vertical neck, and added rim strips.

Once more we discover that a feature characteristic of Mississippian ceramics appears in Weeden Island context most significantly at Kolomoki. Flat lugs are found here, on vessels with other Mississippian features, on Vessels 31, 36, 37, 40, 48, 60, and 61 from Mound D, plus one small lug on a complicated stamped vessel rim from the midden beneath this mound. Mound E contributed four vessels with lug handles, Vessel 15, 19, 23, and 26.

Such handles appear elsewhere almost entirely in Middle Mississippian ceramic assemblages, a point made quite clear by Phillips, Ford and Griffin (1951, see especially pp. 131, 117, 113, 107). In this area lug handles are of more frequent occurrence on the native shell tempered pottery than are either strap or loop handles.

Lugs of this type do not appear in other sites of the Kolomoki focus, although a few small triangular lugs do, a distribution in accordance with that of other Mississippian ceramic features in the focus.

Obviously the appearance of this rather random assortment of Mississippian features in the ceremonial ceramic assemblages at Kolomoki can mean only that influence is reaching the site from well developed classic Middle Mississippian cultures. The only alternative to this point of view is that these features developed from the Weeden Island style only at Kolomoki. Here then they were used only on a few ceremonial vessels, and yet somehow these style developments, limited in occurrence and use to the nth degree, influenced the total development of Middle Mississippian ceramics. We note that while the assortment of Mississippian ceramic features at Kolomoki is somewhat random, they are not combined into distinctly Mississippian ceramic types and tend to appear in combination on specific vessels.

It is far simpler to point to the eclecticism of the mortuary assemblages at Kolomoki as an explanation for the odd combinations of ceramic features, and for the use of foreign styles at all, than it is to explain how the notched added rim strip used only a few times at Kolomoki in special context influenced ceramics through most of the rest of the Southeast.

There are several ways of relating our Kolomoki area and focus cultural and ceramic sequence to the sequence which has been worked out for the Etowah Valley. The most useful tools in working out such a correlation are the complicated stamped pottery types, characterized by parallel developments in the styles distinctive of the two areas. This development has been outlined in Chapter VI of this report as well as in other places (Sears, 1952a) and need not be repeated in detail here. Generally speaking the Kolomoki period is the temporal and cultural equivalent of the Woodstock culture, the northern, Piedmont, Early Mississippi period culture, with a probable slight overlap into Etowah I, the earliest of the Etowah periods.

The sequence in the Etowah Valley is now known in some detail, and can be correlated with the sequence in the Tennessee area, most clearly with developments on Hiwassee Island (Lewis and Kneberg, 1946). In this correlation, Etowah periods II to IV are the cultural and chronological equivalents of very Late Hiwassee Island and of the Dallas focus. Etowah I is not well enough known for close correlation, but cannot reach further back in time than perhaps the middle of the Hiwassee Island period (Sears, 1950).

As the Hiwassee focus is a type specimen of "typologically Early Mississippi" and Dallas of "typologically Late Mississippi," our correlation of the Kolomoki period with the Late Woodstock-Early Etowah level again places us close to the Early-Late Mississippi dividing line. Since the Southern Cult at Hiwassee Island seems to be a very Late Hiwassee period-Early Dallas phenomenon in its maximum classic expression-we find ourselves in time just under the Cult again, this time at the northern and eastern periphery of its range. This is the same position indicated by our correlation to the west with respect to Spiro. Recent excavations at the Etowah site have substantiated this, since it is probable that Mounds A, B, and C, the latter the one which produced the Cult artifacts, were in use in Etowah periods II—IV, not earlier nor later in the Wilbanks period. Perhaps it would be well to emphasize that this position of the Cult at Etowah is separated from the Lamar period by the total duration of the Wilbanks and Savannah periods, a fact which demonstrates quite clearly here that the Southern Cult has absolutely nothing to do with the protohistoric period or white contact of any form.

This relationship of the Kolomoki culture and period to Mississippian cultures of the Tennessee area, worked out via the Etowah Valley, completes our circuit of the Southeast. It seems clear that no matter in which direction we pursue the evidence for the temporal-cultural position of Kolomoki, we arrive at an answer indicative of relationship to developed Mississippian culture at a level near the Early Mississippi-Late Mississippi or Temple Mound I-Temple Mound II dividing line. Each time we seem

to find ourselves in a period of cultural development, or stage of cultural development if that term is preferable, just precedent to the Southern Cult. That is, we are in a period and stage just prior to the maximum development of the ceremonial paraphernalia and art styles recognized as indicative of the peak development of that Southeastern religious phenomenon

In terms of specific units described and defined by various workers in Southeastern United States, Kolomoki finds its relationships with the St. Johns IIa period, including the Grant Mound in Florida; Late Coles Creek and Early Plaquemine in the lower Mississippi Valley; the Gahagan and Davis components of the Alto focus in the Caddoan area; Late Baytown and Central Valley "Early Mississippi"; Late Woodstock and perhaps Etowah I in North Georgia; Hiwassee Island and, through it and other evidence discussed below, the "typologically Early Middle Mississippi" units as Small Log Town House, Macon Plateau, Old Village, and Aztalan.

A net of relationships between these various individual units as such has been presented in this and earlier chapters. There have been available for some time studies indicating the relationships between these units other than Kolomoki, studies presenting evidence only reviewed briefly here. It may be well to emphasize, however, that insofar as is possible, the place of Kolomoki in this horizon has been determined by relationships worked out individually to the several discrete units, not to the horizon as a whole.

Griffin (J. B. Griffin, 1946, pp. 88-89) has pointed to the Grant-Gahagan-Aztalan-Old village linkage, based on common possession of such specific artifact types as the "Long Nosed God" masks, bi-conical copper covered wooden ear ornaments in two pieces, stone ear spools of specific types, and the long ceremonial spud. The same long spud appears at Macon where a forked eye, classical cult diagnostic, was also placed on the eagle platform in the council chamber (Fairbanks, 1946, pp. 95-96). The same nascent cult level is evidenced by the forked eye on the small kaolin figure from the Davis site (Krieger, 1949, p. 160, Fig. 55).

Kolomoki can be tied into this system at the ceremonial level through the relationship of Kolomoki focus burial mounds with others, most specifically Gahagan, as noted in the last chapter. The relationship lies not so much in detailed similarity of artifacts or mound construction processes as it does in the evidence for common possession of strongly class stratified social organization, each mound in its way representing a system of dominant burials, retainer burial with attendant sacrifice, and mass mortuary offerings. The use of shaft tombs, a detailed similarity, is dominant at Gahagan and occurred in Mound D at Kolomoki.

Through a series of linked traits, then, ranging from distribution of identical artifacts such as the "Long Nosed God" masks, certainly demonstrating cultural contact within a limited time range, through comparison of pottery seriations to the less specific evidence for shared social type, we emerge with a common level in time for a cultural horizon. Representative of the horizon are the Kolomoki focus, the Grant Mound, Gahagan and Davis, Hiwassee Island, Macon Plateau, the Old Village at Cahokia, and Aztalan.

I would suggest that we have here not simply an assortment of sites, with some documentation for position within a common and limited span of years, but a cultural horizon which can be defined as such. This horizon would represent, socially, ceremonially, and economically, the first fruits of the increases in population and leisure time resulting from the development of the Mississippian complex of advanced agriculture, usually with accompanying temple mounds and the socio-religious complex implied by them

In one way, then, this horizon might be considered as a subdivision of Early Mississippi. After the complex had developed in the Middle Woodland-Mississippian interregnum, a period given class status only in the Lower Valley as the Troyville period, although it is known elsewhere, the Early Mississippi culture type emerges. Continued development of the complex in the various regionally definable cultural settings then results, late in Early Mississippi, in this complex ceremonially antecedent to the Southern Cult. Actually, as indicated by our placement of Kolomoki with respect to the Central Valley time scale and the Lower Valley periods, this horizon corresponds with the classic Early-Late Mississippi or Temple Mound I-Temple Mound II dividing line. This uncomfortable division cannot, however, be ascribed to the Indians, but to the development currently reached in classification of American Indian cultural types.

This is probably not the best place to become involved in the often esoteric arguments concerning the Southern Cult, but certain comments must be made for the sake of consistency. Perhaps first is that most of the major manifestations of the Southern Cult seems to fall in a rather restricted time span. The tremendous consistency of art styles alone is indicative of this. When one notes the cases of near duplication of artifacts, as between the square copper plates with central concentric circles and four encircling forked eyes from Spiro (Burnett and Clements, 1945, Pl. LXXVI) and Mount Royal (Moore, 1894, Pl. XVI); the Etowah Eagle (Moorehead, 1932) and the one from Spiro (Hamilton, 1952, Pl. 76); the Etowah copper plates with human figures (Moorehead, 1932) and the Spiro fragment (Burnett and Clements, 1945, Pl. LXXIV); the near duplication of monolithic axes from many sites; detailed similarities in the costumes

depicted in conch shell engraving; and many other items so similar, only close cultural contact which probably involved a great deal of trade can possibly serve as an explanation. Space aside, close cultural contact cannot take place across a gap in time. Too, when long distances are involved, no answer makes sense culturally except a short span in time for the total complex. It is, of course, perfectly true that the cult has a developmental period, the one just discussed. It is equally true that it passed through a period of artistic, and probably, ceremonial, decline which lasted until the historic period. Waring and Holder (1945) made most of this clear, and Waring carries the definition of this decline considerably further (Waring, A. J. Jr., n. d.).

To return to the developmental cult level, our concern here, the sites and complexes we have discussed fall, in their respective areas, in the periods immediately precedent to those characterized at certain sites by the elaborate paraphernalia of the Southern Cult. In every case, it is possible to demonstrate through ceramics that the developments were direct and in place, that the total cultures, and consequently populations, of one period are directly ancestral to those of the next. Specific cases are:

Florida	Mount Royal—St. Johns II-b Grant St. Johns II-a	Goggin J. 1952, pp. 53-55
Caddoan	Spiro	Krieger, 1949
Area	Davis-Gahagan	p.234
North	Etowah Periods	Sears, 1950, n.db
Georgia	Woodstock, Etowah I	Wauchope, 1948
Tennessee	Dallas Hiwassee Island	Kneberg and Lewis

The situation, then admitting such gaps in our structure as knowledge of post-Kolomoki and pre-Moundville developments, is one in which we have first a horizon characterized by elaborate ceremonialism and a developed social structure of some complexity at a common time level. Included under one heading or the other are temple mounds, temple furniture, retainer sacrifice, and conspicuous consumption in mortuary practices. Artifacts which are more characteristic of the Cult level make their appearance in some sites at this time, such as the spuds at Gahagan and Macon and the Forked Eye at Macon and Davis. Developing from cultures in this horizon, in which the pre-requisite types of social and ceremonial organization, even specific artifact types, developed, we have the horizon marked by the Cult itself. Again, each horizon can be defined alone by trait linkages indicative of existence in a limited time span and relatively intense culture

contact. The two horizons can then be demonstrated to stand in direct relationship to each other temporally and culturally on the basis of evidence available through the Southeast generally, as well as in each specific area.

It is these two interrelated cultural horizons I would class together as the Mature Mississippi cultural stage and period, thus abstracting a unit from the center of the usual two-part division of Mississippian cultural development and establishing the normal scientific trinity. Dates, the usual "uncontrolled guess dates," would give a range from 1,000 to 1400 A. D. with normal plus or minus values. Perhaps this is belaboring a point unduly, but the North Georgia Etowah Valley sequence with the typologically distinctive Wilbanks level clearly falling between the Etowah culture levels with the Southern Cult and the Lamar horizon demonstrates the futility of constant attempts to push the Cult up to the De Soto level or even up to the late fifteenth-early sixteenth centuries. Such late dating does not appear possible in North Georgia or in other areas except in those where cultural classification systems manage, through intimation of lack of cultural change during one long late period, to make it look possible for the major cult manifestations to fall as late as 1600.

This period is not to be considered the cultural nor temporal equivalent of the "Mississippian Climax" proposed by the authors of the Central Mississippi

Valley Survey report. As they point out, "5-At certain points in the histories of various culture areas there have been sudden florescences which never fail to impress students of history. These Kroeber has called 'Cultural Climaxes.' The latter part of the Mississippi Period was such a climax" (Phillips, Ford and Griffin, 1951, p. 453). The point of disagreement may be as to what constitutes a "florescence." It is clear that these authors mean by "the latter part of the Mississippi Period" time A-B on their time scale. In all probability, in this late period, sites were larger than they had been earlier; there were more people, and more pots were made which produced more sherds. The florescence seems to be the period of formulation and stabilization of cultural elements, particularly the economic, social, and ceremonial ones, occurring through the Southeast in the period we have defined as Mature Mississippi. On the Central Valley time scale, this period runs from just before time C to just before time B. Events after this represent perfection of and cultural utilization of the newly developed and integrated cultural forms, producing population expansion and larger sites through exploitation of patterns developed during the florescent period. This is as obvious in Georgia as anywhere else, with sites bearing the various types of immediately protohistoric and historic period pottery loosely lumped as "Lamar" occurring more commonly than any other type of site throughout the state.

10 THE KOLOMOKI CULTURE

The purpose of this final report is to present concrete facts in semi-digestible form, involving classification and the application of analytical techniques designed to wring cultural information from the artifacts. Also whenever possible, this report has gone beyond the artifacts to the people and their culture.

The responsibility of any science, or scientist, is to present organized data in comprehensible form as a contribution to knowledge. Archaeologists also feel that it is the responsibility of a science to interpret this data insofar as this can be accomplished with the knowledge and techniques available at the time. Whenever possible this report has obtained extra-artifactual information from artifact contexts and associations, and has revealed something about social, economic, and religious forms and processes.

This chapter will obviously be the least concrete one in the report since it is based on extensions of interpretations of observed phenomena, and attempts to pull these scattered threads of extra-artifactual interpretation together. In this way, it may be possible to develop some picture of the Kolomoki culture during its period of existence, and something more of its history. In some areas of the total culture, almost nothing can be ventured; in others, a surprising amount can be worked out.

Perhaps the first problem is to make an estimate of the number of people dealt with in the subject societies. Such near-accurate methods of estimation as counting houses or rooms cannot be used since such information is not available. It seems fair, however, to suppose that since the three-hundred-acre Kolomoki site was the largest in Southern Georgia during the latter part of site history, the Kolomoki period, it may have had a population comparable to that of sites in this region during the sixteenth through eighteenth century contact period. Some of these sites are as follows:

Talimeco: Five hundred houses in 1540 (Swanton, 1911, p. 169). Total population then may be estimated as 2,500.

Kasita: One hundred and sixty to three hundred warriors in 1799 (*Ibid.*, p. 223). This was after some difficulty with the Spaniards and movement of some part of the population to Florida. Population then would be from seven hundred to fifteen hundred persons.

Yuchi Town: Population in 1788 one thousand to fifteen hundred (Swanton, 1911).

Other towns in the area are known to have been as large in the sixteenth to eighteenth centuries, but no

further bases for population estimates are available. Those listed above are at least representative of the larger towns, and give some support in estimating the Kolomoki period population in the neighborhood of fifteen hundred to two thousand people.

There is some evidence in support of this estimate on the Kolomoki site, although it should be remembered that there are many closely related sites nearby and their populations may have been drawn on for some social tasks.

The amount of tough Georgia red clay in the last six-foot-thick cap on the temple mound is apropos here. Profiles showing basket loading indicate clearly that it was built in a continuous operation, an operation which could not have extended over too long a period, or gullying and load flattening from winter rains would be apparent. Assuming, then, that not over two months were spent in building this last addition, a laboring force in the neighborhood of a thousand people would be required. This force would naturally be drawn from a total population including a normal number of children, aged persons, and those otherwise incapacitated.

Mound D, built during this final cultural period as a product of a continuous set of mortuary ceremonies, also provides support for this population estimate. The ceremonies cannot, as the physical structure of the mound with its contents is interpreted (See Chapter II), have gone on for more than a few weeks. During this period enough earth was deposited, with at least half of its bulk in special clays from deposits half a mile away and thirty feet down a steep bluff, to erect a mound over one hundred feet in diameter and twenty feet high. Again, a minimum laboring force of close to a thousand persons would be required, including those persons engaged in the ceremonial activities such as retainer sacrifice and partial cremation which were clearly going on concurrently with earth deposition.

The population size for earlier periods must remain even more conjectural. Our only basis for estimates is community size, on which basis it would seem that the earliest Weeden Island I community probably held at any one time no more than a few hundred people in a few dozen houses. From this time, the ninth or the tenth centuries, population growth may be presumed to have been steady until our thirteenth century peak of two thousand was reached.

Populations for other sites in the Kolomoki focus and those related to earlier levels of the Kolomoki development may be estimated similarly, although data are generally lacking for those sites excavated by C. B. Moore. Generally speaking, certain of the sites in the Kolomoki focus with rather large burial mounds, as Hall, Tucker, and Mound Field, must have had associated villages of some size with populations well up in the hundreds.

Only negative evidence for houses is available. Lacking any structural detail, only the scattered postholes and the tremendously thick, rich, and extensive middens are applicable evidence. It seems highly probable that the dwellings were rather large, were relatively permanent, but were lightly constructed. The recent and modern thatched Seminole Chekee dwellings compare in structure. Two to six poles firmly placed in the ground can support a considerable structure whose other components would be light poles, grass thatch, and split cane mats. Outlines for such a structure would be almost impossible to detect archaeologically since supports for one structure, indistinguishable from other postmolds, would be twenty to thirty feet apart.

The spatial organization or community plan is reasonably definite in the Kolomoki period, almost as certain for the Weeden Island I period, but, as with everything else, nearly indeterminate for the Weeden Island I-b cultural level. In our major and latest important period, the community plan includes houses, plaza, temple mound, two burial mounds with a ceremonially secondary mound for each, a special position for the erection of very large posts, and a small mound of indefinite function. Figure 21 gives a rough diagram of the city plan (See Map I for more explicit locations).

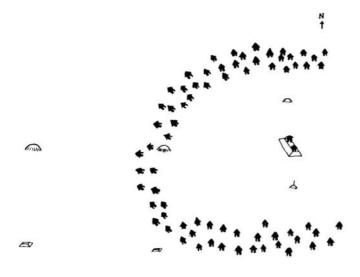


Fig. 21 Community Plan During the Kolomoki Period.

Very clearly, this plan was motivated far more by the ceremonial aspects of community life than by any such practical considerations as inter-house communication. Locations for dwellings seem to have been predetermined by the formal arrangement involving the temple mound, its ceremonially accessory smaller flanking mounds, and, we may presume, a ceremonially necessary plaza. Accessibility of the economically vital gardens, located to the west or south, does not seem to have been taken into account, but rather the location of spring-fed streams, parallel to but some hundreds of yards from the northern boundary of the community and adjacent to part of the southern boundary, may have affected the choice of the site. On the whole the community plan gives the impression of organization for a theatrical performance with the inhabitants of the houses as the audience, the temple mound as the stage, and the plaza as the orchestra pit.

The two smaller mounds flanking the temple mound may clearly be considered as adjuncts to the stage, presumably serving as necessary ceremonially as the great pyramid itself. The small mound to the south was actually a mound by accident. What was in existence there at any one point in time was a single huge post two to three feet in diameter. This post may have served several functions, such as the central pole for busk ceremonies (Swanton, 1922, p. 224) or a goal in some version of a ball game such as the variant played by the Timucua (Lorant, 1946, p. 107). A single pole game is believed to have been older than the more recent two pole type by Swanton (1946, p. 673).

The function of the small mound at the other (north) end of the temple mound is uncertain. With its extremely variable composition it may represent an accumulation of trash from plaza sweepings, or it may simply have served as a foundation for small temporary shelters, litters, or platforms of some type.

The general line-up of the two burial mounds makes reasonable sense, inasmuch as both of them are due west of the temple mound on a line through the middle of the plaza. Ceremonies taking place during burial mound construction, then, would be spatially oriented in accordance with the east-west ceremonial alignment of the temple mound and plaza. The accessory mounds are at variance with the east-west organization of other units, an orientation also characterizing the internal organization of burial mounds, the implication of the accessory mounds being that some of the movement in burial mound ceremonialism was at right angles to what seems to have been the predominant axis.

I am completely at a loss to explain the variation in location of the two burial mounds with respect to the village area. Mound E, presumably slightly earlier than D, is outside the village area and Mound D is in or inside the area. With this exception, the two occupy functionally identical positions with respect to the total village plan.

To sum up, the Kolomoki period community was large, in terms of both population and area and was

complex, including special purpose structures, the mounds, and the plaza in addition to dwellings placed in a formal arrangement. The organization of the several distinct units in space seems to have been in accordance with the function of the major ceremonial units, mundane affairs receiving secondary consideration.

Any specific reason for the linear shape of the Weeden Island I period village is not apparent. The orientation is east-west, but there seems to be no particular purpose in this strung-out plan in place of a compact cluster of dwellings. It is possible that two low rises some distance south of the center of this line are mounds, and may explain the arrangement. Since the rises are not in State Park property, we have not been able to determine their function to date.

The form of the Weeden Island I-b period village is completely uncertain, perhaps because this is a period of constant change and because the movement from the earlier, Weeden Island I to the later, Kolomoki period, villages took place gradually during this period. There is some midden classifiable as Weeden Island I-b in each of the more definite village areas. Presumably the scattered middens are representative of a growing population in the throes of developing the specific ceremonial and social organizations which, in their developed form, were characteristic of the Kolomoki period village and culture.

I do not think we need pick a quarrel here with the acceptance of advanced agriculture as the economic basis for Mississippian type culture in the Mississippian periods. Obviously then such agriculture is acceptable for the Kolomoki site and period, even with the lack of such direct evidence as charred vegetal specimens. By a sort of reverse Marxian economic determinism, here as elsewhere, a population of this size concentrated in a limited area can be supported in an ecological area such as that of the Southeastern States only by well developed and extensively and intensively exploited agriculture.

Descriptions of the agriculture in this region during the early contact period are at least indicative of crops and methods. Relevant sources which may be quoted here are as follows:

Province of Apalachen: "The province of Apalachen is very fertile and abundantly provided with supplies, with much corn, kidney beans, pumpkins, various fruits—." (Swanton, 1911, p. 116.)

Timucua: "They sow their maize twice a year—to wit in March and June—and all in one and the same soil. . . . They also have very fine pumpkins and very good beans. They never dung their land, only when they sow they set weeds on fire, which grow up in the six months, and burn them all. They dig their ground with an instrument of wood, which is fashioned like a broad matock—. They put two grains of maize together—." (*Ibid.*, p. 359.)

This agricultural economic base was of course heavily supplemented by hunting, rather importantly supplemented if we may judge by the bone content of midden deposits. Rather oddly, the analyzed bone samples (see appendix) consist almost entirely of deer and turkey bones. This seems a remarkably narrow selection from the available wild animals. No fish bones at all having been recognized in any of the collections, fishing does not seem to have been at all important.

The economic bases for the earlier cultural levels at this site can be determined only by reverse reasoning. That is, smaller population units imply less economic efficiency and consequently less effective and/or less utilized agricultural practices.

There are a number of things we can say concerning the socio-religious organization of the Kolomoki period culture. Part of this possible statement is based directly on phenomena observed archaeologically, part of it through this evidence on inferences from other societies.

I think it is clear from the record of comparative ethnology that a social unit of this size must have a social organization of some complexity and rigidity. With the generally available knowledge of historic Indian tribes and other primitive cultures at this social and economic level, it is also nearly certain that this organization will be based on kinship and almost as definite that a clan system will be the organizing principle. I think it is also obvious that such a society must be classified as Folk rather than Urban, (Redfield, R. 1947) and consequently will not have proceeded too far along the road to secularization. The religious and political systems and their functions may then be expected to be identical in many respects.

Some of the clearest indications of a well organized social system are afforded by the mounds themselves. Here, and at thousands of other Southeastern sites, as many writers have pointed out, it is obvious that the mounds, and particularly the great temple mounds, could have been constructed only by societies with large, well organized, controlled, and directed laboring forces. The economic basis for such societies necessarily must be such as to make available a considerable amount of free, economically non-productive time from a large portion of the population.

Specific evidence for the type of social organization at Kolomoki was provided by features of the two burial mounds, D and E. Since these features and certain of their implications have been discussed in considerable detail elsewhere (Sears, 1952b, 1953a, 1953b) we may review them only in general fashion here, referring the reader to the seasonal reports or the summaries in Chapter II for documentation.

Construction of each of the burial mounds was initiated at the death of a single individual whose

monument the completed mound was to be. In Mound E, this person was cremated and his ashes, accompanied by personal ornaments consisting of conch shell beads and copper cymbal shaped ornaments, were placed in a large deep pit at a point to be beneath the center of the completed mound. The pit was then filled in with rocks ranging in size from three or four inches in diameter to one slab five feet long, two and a half feet wide, and eighteen inches thick. In Mound D the paramount individual was placed in a special tomb made of rock slabs and logs, cut into the ground surface just south of center in the completed mound. In both cases we have clear evidence for retainer sacrifice with deposition of the bodies near that of the paramount person, and, in both mounds the archaeological record demonstrates conclusively that the mounds were built in a continuous operation, not halted at any point for any lengthy period of time. This, then, demonstrates that the mounds were built during, really as a product of, involved, lengthy, and costly ceremonies.

In Mound E, the simpler and probably the earlier of the two (See ceramic seriation, Chapter IV), after the retainers' bodies were laid out a primary mound was built with a single trophy head placed at its peak. Along the eastern edge of the primary mound, a deposit of fifty-four complete pottery vessels and a great many sherds was made, including some particularly well made specimens of the stamped utility ware as well as a large number of vessels made specifically for ceremonial function as indicated by kill holes cut through their bases during manufacture. A final mantle of earth was then added to cover both the primary mound and the deposit. In Mound E, then, the archeological picture is indicative of a class structured society, implied by:

- 1—Retainer sacrifice.
- 2-Conspicuous consumption of costly goods.
- 3—Major community effort at the death of a single individual.

This interpretation is greatly strengthened, and is amplified in many details, by the Mound D data. Retainer sacrifice in this mound took place before as well as after the main burial, five individuals having been simultaneously interred in such a fashion as to make it apparent that their sacrifice and interment ceremonially paved the way for erection of a large scaffold or platform. Burials of the key man, and of two females, took place after this platform was completed and before any other ceremonial or constructional features. Since the burial of the two females, almost certainly the only two females in the mound, took place only after completion of the platform and since they were the only two bodies in the mound interred in rock slab tombs except for the dominant male, we may suppose that the women, pre- or postmortem, participated with him in the ceremonies on the scaffold. The probability of wife sacrifice in the Natchez fashion is apparent; retainer sacrifice, wives or not, completely certain. The two females were laid out in their separate tombs side by side on the ground below the eastern edge of the scaffold, toward the temple mound. The body of the more important personage was placed in a tomb adjacent to the southern edge of the mound, toward the ceremonially accessory Mound H.

Immediately after these burials had been made, and a litter, another Natchez parallel, had been placed over the filled-in grave of the paramount individual, a great deal of yellow-white clay was brought in from considerable distance and a miniature temple mound, perhaps a small replica of the big one across the plaza, was erected over all of these burials. The scaffolding protruded through its top, and an extra high circular eminence was fashioned over the main grave.

The story from here resembles that given us by Mound E in outline, but is again richer in detail. Another huge deposit of pottery was placed along the eastern margin of the flat topped mound, a deposit containing over a hundred vessels. This time few, if any, of the vessels were of utilitarian varieties. The ceremonial vessels included specimens which may, judging by the presence of pre-cut kill holes, have been manufactured specifically for the mortuary ceremonies. Other pieces, ceramic sculpture rather than effigy vessels, may well have been items of temple furniture. A number of trophy heads, complete with ornaments, were added to this pile.

From this point on, the Mound D story is one of further retainer sacrifice and burial, more deposits of trophy heads, of long bone bundles, and even of baskets of cremated human remains. Altogether, a minimum of seventeen retainer burials was made. Again, these are classified as retainer burials because the total ceremonialism was short-term and I am sure that all seventeen, including the two females, did not conveniently die natural deaths simultaneously. They must have been killed at the appropriate points in the mortuary ceremonies.

Mound D, then, in specific detail and in sequence of events confirms our hypothesis, based on Mound E, for the existence at Kolomoki of a heavily class structured society. Clearly when extremely elaborate and, in the economy of the culture, costly ceremonialism which involves the labor and economic resources of a large population is initiated at the death of a single individual, he occupies a position at the top of the social order. Total community participation in the mortuary rites has already been pointed out, demonstrated by the sheer bulk of the burial mounds built in a short period. Sacrifice of retainers in large numbers is clearly corroborative evidence for this exalted

social position. It is of course possible that they were slaves rather than persons occupying special positions in the class structure. If so, however, we may then add a bottom class of slaves to the total social structure. I would regard this as improbable and elevate the persons whose heads, arms, and legs were deposited in the mounds to the position of slaves rather than the individuals sacrificed during the mortuary events. It also seems that the two persons, probably female, who were placed in rock slab tombs similar to that of the key figure and who shared in the use of the platform with him, stood in some clearly defined relationship to this personage and were thus probably members of his social class. Such special concessions of near-equality in portions of the rites indicate this, and suggest, with Natchez ceremonies in mind, that the females were probably wives of the key figure.

A possibility we must consider here is that this clearly dominant individual, political leader or shaman, was the sole person in the top social level, perhaps contaminating only his wives with his power and sanctity. This is of course a distinct possibility, and if valid renders the hypothesis for a strongly class structured society less probable since it would place only one person in the top bracket and every one else in a class below him. Evidence on this point is afforded by the extreme elaboration in organization and structure of the burial mounds. I feel strongly that such elements, with their existence rendered highly probable if not documented in a completely watertight fashion by such archaeological evidence as processions, retainer sacrifice, construction of tombs, erection of platforms, crematory fires, mass pottery and trophy head deposits, and proper placement of large amounts of special types of earth, all related into a coherent whole in an organized series of events, would require the services of a large supervisory corps. All of these persons would have to be trained in, and be thoroughly familiar with, the large body of esoteric lore guiding the proper performance of such ceremonies, ceremonies which might occur only once in a lifetime. Proper performance of all the detailed tasks necessitated, then, the existence of a supervisory force large enough to handle a laboring force approaching a thousand. This direction must have come from a considerable class of politico-religious specialists. It is this group in its entirety, with the key figures in the burial mounds and their successors in office, which would form the upper social class.

A strong element of conspicuous consumption, so often associated with validation of prestige and social position, is very apparent in the two mounds, particularly Mound D. We have here not only the routine burial of particularly fine pieces of pottery and ornaments, the products of well trained specialists, but also the burial and consequent social loss of certain objects which seem to indicate that the community

temple was, to some degree, cleaned out and a large part of its contents added to the offerings. Certain pieces of pottery are so well made, in accordance with the clearly rigid style dictates for ceremonial ware, that their function is obviously esoteric. Yet, particularly in the case of certain effigy pieces, they were not made with the kill holes cut before firing, indicative of mortuary function, but were "killed" by having their heads knocked off after placement in the deposits. Other elaborate pieces were broken before they reached the deposit, and all of the fragments did not reach the mounds. The original function of pieces from either of these classes could well have been that of temple furniture, the sort of objects noted in Southeastern temples by the De Soto chroniclers and documented for the Natchez.

I would think that the trophy heads, bundles of arm and leg bones, and baskets of cremated ashes must have been taken from some central storage place, in all probability the community temple, at the time of the mortuary rites. The skulls, particularly those with ornaments in place which sometimes had a few strands of hair preserved on their backs by copper salts, must have been dried or other wise preserved heads when deposited in the mounds. Arrangements of long bones demonstrate that they were placed as bundles, while several lots of cremated bone appear to have been deposited in baskets. Taking all of these specimens into account, fourteen bone bundles including several partially cremated in place, four baskets of cremated remains, and forty skulls, seven of which were accompanied by forearms, a long-term accumulation in the temple must be represented. The identity, cultural or otherwise, of the persons whose bodies these parts came from must remain uncertain. War trophies, such as those taken by the Timucua (Lorant, 1946, p. 65) or bones from dead members of the upper classes are possibilities. It may well be that the several different classes of remains indicate that both are represented. Perhaps more to the point here, deposition of community temple furniture at the death of an individual supports rather strongly the thesis that he occupied the peak of his social heap. Since these objects from the temple must have had something of a sacred character, the position of this exalted personage may have also been extremely sacred, so much so that he had in his near divinity a personal claim to the temple furniture.

These direct inferences are very strongly supported by comparisons of the mortuary ceremonialism of the Natchez, our type example of a class stratified society in the historic period, with that inferred from the Mound D and E data. A basic assumption here, which I do not believe needs documentation, is that mortuary ceremonialism is a concrete demonstration of the extant social order in that it makes explicit, in concrete and archaeologically observable form,

organization normally observable only directly in "living" societies.

Point to point comparisons between the Kolomoki and Natchez burial ceremonies have been offered elsewhere (Sears, 1952b), so that full detail is not necessary here. Essential features common to both types of mortuary ceremonialism are:

- I—Initiation of elaborate and costly rites at the death of a single individual.
- 2-Use of a litter.
- 3—Procession (implied in D and E by litter), presence of temple furnishings, and distance across plaza to the temple mound.
- 4-Erection of platform for mortuary rites.
- 5-Retainer sacrifice.
- 6—Wife sacrifice (Not completely proven in Mound D).
- 7—Definite patterned orientation of retainer burials with relationship to key burial.
- 8—Temple furnishings as offering (Indirectly implied in case of Natchez).
- 9-Burial in Mounds.

While there are many reasons for mistrusting trait lists generally, of which this is a variety, the details here are so specific, with resemblance between the total organizations as well as between specific elements, that I feel rather confident of interpretations based on the comparison. Definite similarity between Natchez and Kolomoki socio-religious organizations, and consequently total social systems, is implied. This interpretation is in complete accordance with that made more directly from the Kolomoki situation alone.

It seems rather clear that the Kolomoki upper class was dominant in both the political and religious areas of Kolomoki culture; or, perhaps more specifically, that the two areas and their functionaries at Kolomoki were inseparable both formally and functionally. Documentation for this state of affairs, if any is needed, is afforded through the comparison drawn with the Natchez. While it may be impolitic to tread on the tails of sacred cows, I would suggest again that the Natchez socio-religious structure, elaborate though it may have seemed to contemporary observers, was but a late watered down version of a once more widespread and elaborate sort of structure. Supporting evidence is also offered by the clear link between political dominance and religious affairs in the construction and organization of the temple mound and, finally but most conclusively, by the generally available knowledge of Southeastern Indian culture.

This gives us a picture of a social organization segmented into two classes; granting the possibility of slaves, into three. Duties and privileges would of course be clearly defined for each of the classes, with physical demonstration of superior rank afforded by special ornaments as the extremely large conch shell

beads associated with major burials, copper cymbalshaped ornaments, movement in litters, and special dwelling places, quite possibly on mounds. The upper class would consist of the priest chief-at the top of the internal organization of this class-and an assortment of lesser politico-religious dignitaries. In the next class, containing the bulk of the population, we find the economically rather than politically or spiritually productive class. Some segmentation or ranking within this category is entirely possible, particularly since specialists must have been present, the persons with ultra-thorough training in the techniques and style canons of sacred pottery manufacture, of copper and iron ornament production, and doubtless in the production of other paraphernalia not recoverable archaeologically. These specialists then may well have fitted into the larger class, perhaps as a unit.

It is probably superfluous here to point out that this hypothetical social organization is not in conflict at all with the basic concept of a social structure based on kinship. If anything, the two complement each other. I have little doubt that a functional clan system existed at Kolomoki, and it is even possible that the animal effigies in the burial mounds—deer. panther, wildcat, opossum, snake, and bird—are clan symbols to some extent. Such a system might correlate directly with, and reinforce the clan structure, with the upper class and some one clan being in whole or part identical, or the class system might cross-cut the clan system, upper class members being drawn from the top level of each clan. Swanton comments that this latter alternative must have been used by the Timucua (Swanton, J. R. 1922, p. 370). Instances of both types are known to have existed in the Southeast. I see no basis for a decision between the two with the evidence now available.

Very decidedly the upper class could not have been a caste, conquering or otherwise, unless we re-define caste and make it synonymous with class. It is well known that the Natchez system required class exogamy, incompatible with a caste system. Nor does it seem at all necessary, functionally or otherwise, for the upper class to be representative of a conquering group either among the Natchez or here at Kolomoki. In the case of the Natchez, if the social system is the ultimate decayed remnant of a once more complex and widespread type, the necessity of introducing a caste of conquerors to explain an apparent impossibility of long term existence falls apart, as does a need to add population to the lower class by assimilation of other populations. More probably the potentially unstable character of the Natchez social organization can be explained by the remnant theory, a system developed for a large society which had dwindled to too few survivors to support and perpetuate it. This would be somewhat analogous to

the artificial perpetuation of clans for ceremonial purposes known in some Pueblo groups.

Presumably inspired by other interpretations of the Natchez data, Fairbanks has suggested a caste system, symbolized by the two major pottery styles at Kolomoki, a suggestion made with the "conquerors" idea in mind. If anything, the ideas of either a caste, or of an intrusive conquering population, are more out of place here than they were when applied to the Natchez. First, the concept of "separation of church and state" in ceramics which I have advanced (Sears, 1953a, 1953b) was intended to be, and is, specifically applicable only to ceramics, not to the social order generally. Quite obviously at this cultural level the two contexts are indistinguishable in general culture. Perhaps "sacred" and "secular" ceramics would have been a better choice of terms and less susceptible to mis-interpretation. The point is that everyday ceramics in the Kolomoki perod were the same for everyone. A few fine pieces of secular ceramics ended up in mortuary deposits, with broken rather than pre-cut kill holes to indicate their originally plebeian function. It is only the ceremonial vessels, quite obviously never used by anyone for domestic tasks, even functionally incapable of being so used, which can definitely be associated with one social class. Even here the usage would be in sacred context, associated only with performance of sacred tasks. A second point is that no conquering population, producing an upper class, is demonstrated to have an existence by these ceramics or by any other interpretation of anything else that I can see in the archeology of either Kolomoki or the Coastal Plain culture area generally. The sacred and secular, or Weeden Island and Kolomoki styles with the Weeden Island style sacred only in the latest period, are very obviously the products of in-place growth and specialization within a tradition which contained both styles. In the earlier period there is no evidence whatsoever for any specialization in function as between the two styles except possibly as containers for different sorts of substances in domestic use. The development of the sacred style, and of the secular style, is made from culturally available resources by the available population. There is absolutely no evidence for intrusion of a new culture, let alone a new people, at any point in the development. This is not to deny that both styles reached their final known peaks or developmental levels through the incorporation of foreign ideas, under the impact of a great deal of outside cultural influence. This is particularly true, admittedly, of the sacred style whose esoteric characteristics seem to demand diversity of form and decoration, a demand satisfied through drawing on all resources, native and foreign. But continuity with constant change is clear, not the introduction of a completely new special purpose brand of pottery which would demonstrate the arrival on the

Kolomoki scene of a new population, one which might be able to forcibly elevate itself to the top of the Kolomoki social order.

The specific form of the religion which was so important a feature of the Kolomoki culture cannot of course be determined. Since the ceremonial level here seems to be that immediately ancestral to that of the Southern Cult, which in turn leads to the Green Corn-Busk ceremonialism of the Southeast as Waring (n. d.) and Holder (1945) have so well shown, some earlier form of the widespread southeastern religious concepts and their associated ceremonialism, based on agricultural fertility rites with maize agriculture as the dominant theme, is almost certain. As almost every worker in the Southeast has indicated at one time or another, there is a long time association of maize agriculture and religious concepts involving use of a temple mound, an association with roots well back into the past and extending far to the south. Some form of this ceremonial-agricultural complex may have been, when introduced, the spark which led to the final developments at Kolomoki. In turn, the Kolomoki brand of ceremonies in another three centuries or so of development may have led to the busk ceremonies of some specific historic Southeastern group.

I might add here as a final note that I cannot say that the Kolomoki culture as we know it archaeologically is the thirteenth century representative of any specific tribe. There is considerable basis for doubting the validity of most, if not all, of the identifications of historic tribal units with prehistoric archaeological complexes now in the literature. On the whole, they appear to be undocumented assertions that since one tribe was in the area in 1700, and the archeological complex being dealt with is the only one in the blank century, identification is certain; or, that we have two, three, or four historic tribes and two, three, or four archaeological complexes. We then proceed to align them on some psychic basis. Little is gained by these dubious identifications, no matter how much they may be accepted by the credulous. Nor is their validity reinforced by dubious interpretations of tribal myths and legends which may or may not have some basis in fact somewhere at some time.

Since our major ceramic type must, stylistically, lead to some variant of Lamar pottery, most variants of which in Southern Georgia were probably used by the many cultures and tribes speaking Muskhogean languages, we may venture a feeble guess, even after the preceding paragraph, that the inhabitants of Kolomoki spoke a language which would be classified as a member of that great stock. Further than this we cannot go until we have traced our Kolomoki culture to a specific historic culture occupying definitely documented site, tracing which must be accomplished through detailed study and analysis of artifact style developments. Such study of style development in

materials properly excavated and whose contexts and associations are certain is our major tool in the task of research into cultural prehistory. If there are any short cuts, the writer has yet to be informed.

That some version of the Kolomoki-Natchez type of socio-religious structure must have obtained throughout the Kolomoki culture area is immediately obvious. Rather certainly though, Kolomoki was a special site and its culture a special case. The dominant social class here may well have ranked in the total Southwest Georgian or Coastal Plan social structure, above such a class in lesser villages. I might suggest that the Kolomoki focus represents a tribal unit with political and religious authority centered at Kolomoki and in the hands of the dominant class there.

As I have suggested elsewhere (Sears, 1954), a similar system probably obtained through the entire Gulf Coastal Plain culture area. This hypothesis is based on: first, the probability that a type of social organization will be reasonably uniform through a culture area at any specific point in time; second, on evidence for class differentiation at other sites in the area, such as Gahagan. Some general support for this thesis is afforded by observations made in the historic period, collected by Swanton (1046). In general, even though no one group may have possessed all of these characteristics, it is on the Coastal Plain to the exclusion of other areas that we find autocratic chieftains, obvious class structure, retainer sacrifice, sacredness of the chief's person, movement in litters, and other similarily indicative traits.

Earlier conditions at Kolomoki before the Kolomoki period, can only be guessed at. Probably in the earliest level, chiefs and priests, perhaps even the combined in one person, were present. But the smaller villages and lack of evidence for organization of major community efforts lead us to believe that a strong class structure had not developed.

There are, as I have suggested (Sears, 1954), two possible explanations for the growth of this type of social organization on the Gulf Coastal Plain, a type absent from other parts of the Eastern North American area.

- I—That it is an in-place development, the historical outgrowth of indigenous features, with its roots at least as far back as the Hopewell period.
- 2—That, since the area shares a type of social organization as well as many more specific features with the Circum-Caribbean area, the 14th century cultural type on the Coastal Plain results from Circum-Caribbean influence on indigenous culture.

The many features shared as between the two areas, in such strength as to cause Steward to classify the lower Southeast in his Circum-Caribbean province, cannot, I think, be ignored. For this reason I would feel that while in-place growth is obvious and there is no population movement from the South into the Coastal Plain, a great deal of influence from the South must be postulated. Precisely how and when are subjects for future research.

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APPENDIX

ARCHAEOZOOLOGY AT KOLOMOKI

One product of almost every archaeological excavation is a certain amount of unmodified non-human bone. Analysis and interpretation of this less spectacular facet frequently give the archaeologist additional valuable information concerning the problem he is working on. Sometimes, however, they raise new questions. The determination of the Kolomoki bones raised new questions but answers practically none.

In an examination of the material recovered by Sears from the Kolomoki site one is impressed by the limited number of species represented. This may be seen in Table I in which the gross numbers are given for each species and the distribution by archaeological units. Such lack of diversity is quite unusual in samples of this size and is difficult to explain. The peoples of the southeastern area during this time period tended to use many species of fauna. An idea of representative sites may be gathered from Table II. Although these were an agricultural people it is unlikely that their food habits were so restricted as the archeozoological picture would indicate. On the other hand this does not appear to be the result of a preservation phenomenon, as one might think. Materials from the submound midden and from Unit I were pretty well preserved and although these did not contain more variety than other areas, they fell far short of what we could reasonably expect for that degree of bone preservation.

A further apparent aberration lies in the prominence of wild turkey bones in the sub-mound midden and their complete absence in Unit 28 which immediately preceded it in time, and in the Lamar feature which followed many years later. There is a trace of turkey in a refuse pit of the early period; then they are absent until the late Kolomoki period when they appear to have been used in substantial numbers. The significance of this is not clear at the present time. The three bones found in Unit 4 pit I could possibly represent an intrusion via rodent disturbance or the like. The absence of turkey bone may be the result of nonuse of the species because of religious beliefs, the relative non-availability due to local environmental conditions, or an aversion to leaving the remains of certain species within the village confines. Deer were apparently available and utilized in some quantity throughout all the habitation periods. Bear bones appeared in trace quantities and turtle bone was absent until quite late.

Unit I Feature 12 is a manifestation of the Lamar period and is separated from the last stage of Kolomoki occupation by 150 years or more. The bear bones shown in this latest period consisted of four phalanges which appear to have come from the same limb of one individual. These might suggest the use of some bear paw ornament or of a paw left attached to a skin robe. Following this line of thought we might attribute the presence here of a number of box turtle shell fragments to the use of that species for ornamental or ceremonial artifacts. This was a very common and widespread Indian custom but since none of the fragments examined bore any evidence of perforation or abrasion, we should probably consider them as a food source residue.

In summation we can say that the archaeozoological picture presented at Kolomoki is a meager one, apparently characteristized by the use of an extremely limited number of species. The significance of this data is not clear and no real conclusions can be drawn in regard to the food habits of these people.

William R. Adams.

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Table II ARCHAEOZOOLOGY AT KOLOMOKI

Random Sites in Ohio Valley and Southeastern States

						Kolo- moki
Opossum	67	74	30		x	112
Black bear	9	311	12	285	x	9
Raccoon	182	18	420	794	x	_
Otter	_	-	7	18		_
Mink	-	1	1	8	_	_
Skunk	7		4	4 —		_
Grey Fox	2	5	65	12	-	_
Wolf	1		8	-	****	-
Domestic Dog	12	-	33	95		-
Mountain Lion	34	74	-	1 —		_
Wildcat	10	13	30	47	x	_
Groundhog	3		86	6	-	-
Grey and Fox Squirrels	446	62	33	150	x	
Beaver	35	2	40	304	x	
Rice Rat	19		3		_	-
Muskrat	1	9	14	4	-	-
Rabbit	47	34	52	8	x	_
Wapiti (Elk)	20	15	20	324	-	-
Virginia Deer	3609	5000	'bushels'	1160	x	1327
Birds	837	633	x	x	x	112
Fish	222	212	x	x	x	-
Reptiles	388	285	x	x	x	32

Table I

			1			1		
		Virginia deer (Odocoileus virginianus)	Wild turkey (Meleagris gallapavo)	Black bear (Euarctos americanum)	Terrepene sp.	Pond Turtle (species ?)	Unidentified Turtle	Combined Turtle
LATE (Lamar)	Unit 1 Northwest Area Feature 12	9 55		(4)	24		3	27
LATE	Sub-mound midden—Mound D Unit 28 Level 2, Section 5 Level 2, Section 6 Level 3, Section 4 Level 3, Section 5 Level 3, Section 16 Level 4, Section 5 Level 7, Section 6 Northwest Area, Pit No. 1	459 13 101 21 98 11 39 9	109	2	1	1	3	5
MIDDLE	Unit 28 Level 2, Section 5 Unit 4 Refuse Pit No. 1 Refuse Pit No. 2 Refuse Pit No. 2 & 3 mixed	303 96 19	3	1 1				
	Section 8 (Humus) TOTAL OF EACH SPECIES	1327	112	9	25	1	3	32

