

1966 EXCAVATIONS AT THE DICKSON MOUND: A SEPO-
SPOON RIVER BURIAL MOUND IN THE CENTRAL
ILLINOIS RIVER VALLEY

by

Lawrence Allan Conrad

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PREFACE

In 1959 the Illinois State Museum began a program of excavation in the area of the confluence of the Spoon and Illinois rivers. A major problem concerning the several investigators directing the fieldwork has been an understanding of the cultural manifestation which Cole and Deuel (1937) called the Spoon River focus. The best known site of what is now called the Spoon River Culture is the Dickson Mound. In order to gather information on Spoon River burial customs in general and the Dickson Mound in particular Joseph R. Caldwell, who was then Head Curator of Anthropology at the Illinois State Museum, decided to excavate a portion of the mound during the summer of 1966. Specifically, he hoped to partially delimit the burial area, to reveal the structure of the mound and to determine whether or not the mound contained burials older than those in the Dicksons' excavations. As this report shows, some information was gathered on each of these problems as well as others.

The author supervised those excavations during the summer and during the following December and January wrote a brief report on the work entitled 1966 Excavations at the Dickson Mound for the Illinois State Museum. This report was almost entirely descriptive in nature and concerned itself with the mound structure and burials, but noted, among other things, the mutually exclusive artifact categories.

At that time Caldwell was planning a volume of papers dealing with the archaeology of the area and suggested the report be expanded for inclusion. The report under the same

title was expanded to include an analysis of the artifacts and an interpretation of the cultural significance of the material. By the time Caldwell left the Museum at the end of 1968 the proposed volume had not been compiled and the plan was dropped. However, since the approximately 700 burials recovered from the mound since 1966 have so strongly supported much of the model advanced, it has been decided to publish the 1966 material in this way in order to make it available for use and criticism without interfering with possible future plans of the Illinois State Museum.

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INTRODUCTION

Acknowledgments

When a site report is presented, it usually bears one name and ensuing bibliographies credit the work to the person of that name. Most site reports are the result of varying amounts of work by many people and this report is no exception. We should like to take this opportunity to acknowledge some of those people who made this report possible.

We wish to thank Dr. Milton Thompson, Director of the Illinois State Museum, and Professor Joseph R. Caldwell, former Head Curator of Anthropology of the Illinois State Museum and director of the excavations reported herein, for making the material available to us, and also for financial and logistical support provided us by that institution through its Department of Anthropology while we were supervising the excavations and writing the preliminary report on them. We also wish to thank Mr. Wayne Shields, Associate Curator of Anthropology at the Dickson Mounds branch of the Illinois State Museum, for permission to use the material for this thesis.

We gratefully acknowledge the hospitality and facilities provided during the excavation and subsequent analysis and research by the staff of the Dickson Mounds branch of the Illinois State Museum. Specifically we want to thank: Mr. Charles DeBusk, Deputy Director of the Illinois State Museum,

for his volunteer assistance with the excavations, his photographs of the excavations and the ceramics and his cheerful cooperation during all phases of the project; Mr. Alan D. Harn, senior technician at Dickson Mound, for his volunteer assistance during the excavations, for handling the complete job of scrupulously mapping the excavations and drawing all of the burials, for serving as an ever-present encyclopedia on the material recovered from excavations carried out before and after 1966, and for handling numerous details while we were in Madison; Mr. Wayne Shields for granting complete access to the material from the excavation after it came under his custodianship in 1968 and for extending every possible assistance and consideration to us while we were preparing this final report; and last but certainly not least, Mrs. Don F. Dickson and Mr. and Mrs. Marion H. Dickson for a thousand professional and personal kindnesses before, during and after the project.

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We deeply appreciate the fine and accurate drawings of the artifacts by Mrs. Gloria Schroeder, formerly on the staff of the Illinois State Museum.

Thanks are due Messrs. Stanley Riggle and Robert Alex of the Department of Anthropology of the University of Wisconsin for their help in preparing the final illustrations for this report.

Though he was not directly involved in the project, we owe a debt of gratitude to Professor Lewis R. Binford for suggesting through his report on the Galley Pond site and in stimulating discussions, how much information can and should be gleaned from a group of burials.

Before, during and after the preparation of the initial version of this report we received and profited from many detailed and constructive comments and criticisms from Professors Joseph R. Caldwell, Howard D. Winters and David A. Baerreis, and Mr. Alan D. Harn. With the help and guidance of Professor Baerreis we have made use of many of these criticisms in this final version.

We are grateful to the National Science Foundation for a traineeship providing support during the time in which a portion of this final version was written.

Naturally, any misapplication of any of this assistance is wholly our responsibility.

Methodology

Analysis of the artifacts and records recovered during the excavation began three months after the completion of the dig. The first step in this analysis, as in most, was to describe the data. After completion of the description of the burials, patterns were sought concerning significant correlations among their various attributes. Taking cues from Melby's (1963) analysis of the Kane burial mounds where he found mutually-exclusive categories correlating with burial orientation and Binford's (1964) discussion of different categories of mortuary furniture, the artifacts were divided into categories as it was thought the Indians might have viewed them and each category compared with the others in search of patterns of association. Associations were sought between and among the physical attributes of the individual himself, his orientation, position in the mound and interment procedure and our artifact categories. The literature was then searched for parallels, but the only site which was found to have had a situation closely resembling but not duplicating the Dickson Mound was the Kane burial site upon which the examination of the material had largely been structured.

However, Alan Harn was in the same room at the time working with the approximately 230 burials in the Dicksons' in situ exhibit. When the analysis of the 1966 material began we suggested that each work independently in hopes of doubling the number of independent ideas brought to bear on

the material and to reserve each set of data as a check on the other. Thankful for the precaution, we began comparing our material with Harn's and found virtually no similarity in patterning. Examination of his material suggested to both of us that it covered a considerably longer time period than the 1966 material. Since this conclusion was based in part on the lack of comparability between the facets under consideration, an element of circularity would have been added had the in situ samples been discarded without further evidence. It was at this time that a manuscript fragment (Wray and MacNeish, n.d.) dealing with Spoon River culture burials at the Weaver-Betts site, about ten miles up river from the Dickson Mound, was discovered. The 106 burials from the site yielded artifacts identical to those recovered in 1966 and the burial patterns were duplicated. These new data suggested that these were, indeed, legitimate reflections of facets of aboriginal culture and an attempt was made to determine what they indicated. Since the model explaining these phenomena was originally proposed approximately 700 more burials have been excavated from the mound and field observations with this model in mind seem to support it.

For reasons detailed in the text, it is postulated that many of the patterns were reflections of the kinship and political systems of the group. Ideally this decision would have been reached in complete ignorance of the ethnology of the area and a search would have been made for a group fitting the general outline of the model. This was not

exactly the case, however, and after the model began to take form we found ourselves asking if there was evidence for specific traits of the Natchez social organization. The finding of evidence of retainer sacrifice at the Dickson Mound and Cahokia and the recognition of a probable case at Kingston Lake after the completion of the model seem to bolster the argument for a Natchez-like social system.

THE CENTRAL ILLINOIS VALLEY

The central Illinois Valley¹ is well within the temperate climatic zone and the climate is humid and continental. The mean annual temperature at Peoria, near the northern edge of the area, is 49.8° F. and at Rushville, near the southern edge, is 53°. At Havana, four miles southeast of the Dickson Mounds, the mean monthly temperature ranges from 26.6° in January to 77.5° in July. The frost free season averages 177 days. The average annual precipitation is 34 inches and the unmelted snowfall averages 20.9 inches.

The dominant physiographic feature of the area is, of course, the Illinois Valley and its bodies of water, both the river and the numerous lakes along its course. The valley ranges from six to twelve miles wide in the area. Geographers divide it into a zone of bottom lands and narrow terraces which is 3 to 4.5 miles wide on the right side of the river and a zone of 10-80 foot high terraces on the east. The eastern terraces are occasionally covered with sand dunes up to 80 feet high. The floodplain averages between 3 and 4 miles wide and features numerous natural levees, alluvial fans of tributary streams and shallow lakes occupying old channels. Three major rivers, the Spoon, the Sangamon, and the Mackinaw and several large creeks enter the valley in the area under consideration. The Spoon enters just below the Dickson Mound. The stretch of the Spoon River

¹ For our purposes the central Illinois River Valley will be that stretch of river between Peoria and Beardstown or from about 40° N to about 40°45' N.

Valley evidencing permanent Mississippian settlement ranges from one-half to 2.5 miles wide. The river meanders for most of this stretch. It is bordered by natural levees in this area and has only a few small associated ox-bow lakes.

The east side of the Illinois Valley is bounded by sand terraces and low rolling sandy country with many dunes. The west side is bounded by steep bluffs ranging from 80 to 200 feet high with some of the lowest being in the immediate area of the Dickson Mounds. The uplands range from approximately 620 to 550 feet above sea level. The uplands are gently rolling plains dissected by a very complex dendritic drainage pattern (Wanless, 1957:15-19).

The Illinois Valley and its tributaries bring ribbons of oak-hickory forest into the long-grassland of the Prairie Peninsula. These trees extend only a short distance back from the bluff and along tributaries. In addition to the tremendous quantities of food produced by these forests and their marginal areas, the local aborigines drew upon the rich and varied floral and faunal resources of the lakes and swamps between the bluffs and the main channel and from the main channel itself.

THE ARCHAEOLOGICAL SEQUENCE IN THE CENTRAL ILLINOIS VALLEY

Despite the fact that more fieldwork has been carried out in the central Illinois Valley than any other area of Illinois except Cahokia and the southern Illinois Valley, it has been only recently that the archaeological sequence has really begun to fill in. The most recent summary (Wray, 1952) contained many avoidable errors to begin with and must be greatly modified in light of the massive evidence accumulated in the twenty years since it was drafted. This sketch is not an attempt to present a complete resume of the available information. Rather it is meant to outline briefly the culture history of the area in which the Spoon River Culture arose.

Paleo Indian

As is frequently the case, the beginning and the end of the archaeological sequence in the area are the most cloudy segments. A fragment of a large chert flake object of undoubtable human workmanship was found imbedded in the Roxana loess just above the mouth of the Spoon River. This loess was deposited during the Altonian Substage of the Pleistocene and is well dated by C¹⁴ at 35,000 to 40,000 B.P. Since the artifact was found in the side of a road cut, nothing more can be said about the site itself (Munson and Frye, 1965).

The picture is blank for the next 13,000 to 18,000 years or so. Our next glimpse of man comes with the

appearance of fluted points characteristic of at least the Great Plains from ca. 12,000 to 10,000 B.P. Most of the fluted points from the area seem to be Clovis but a very small portion of them are true Folsom points (P. J. Munson, personal communication). Though no fluted points have been excavated under controlled circumstances, several sites have produced more than one such point and a Clovis and a Dalton point were found by an amateur in a deep washout in what appeared to him to be associated with human bones.

Other point types found in the area which are usually considered Paleo Indian include Midland, Plainview, Browns Valley, Agate Basin and Hi-Lo. Paleo Indian points are found on the bluff tops and on the talus slopes at the base of the bluffs on the west side of the river and on the high terraces on the east side of the river where there are no bluffs (Patrick J. Munson, personal communication).

Since our "studies" of these artifacts have been confined almost entirely to cursory observation and the referral of their locations to Patrick J. Munson, who along with Howard D. Winters, is carrying out an extensive and intensive study of Paleo Indian points, and since no studies of such materials are yet available, there is little more we can say at this time. We should like to stress, however, that our use of the term "Paleo Indian" is not meant to suggest that the appearance of these projectile point types in the area indicates a lifeway identical to or even similar to that of presumably contemporary big game hunters on the

plains. As yet we know nothing of the manufacturers of these points other than they tended to drop their points on high ground.

Archaic

The Early and Middle Archaic materials have been almost completely neglected by archaeologists working in the central Illinois Valley. We have noticed small thin scatterings of Archaic materials all across the area. They are found on ridges and alluvial fans in the bottoms, on river terraces, along the edges of the river bluffs and along all branches of the river drainage including the most intermittent streams. Wray (1952:152-53) half-heartedly suggested the term "Speight focus" for a potpourri of projectile points and the fully-grooved axe. The name has never caught on and it is now obvious that it was an oversimplification.

Early Archaic projectile point types from the area include Hardin Barbed, Thebes Diagonal Notched, St. Charles or Dove Tail and Dalton. Both Munson (1967) and Luchterhand (1970:9-10) have argued that the Hardin Barbed points which they studied were nearly identical to Scotts Bluff Type 1 as described by Wormington (1957:25). Though some might argue that these points as well as Dalton points should be termed Paleo Indian, the dates for these points on the Plains are well within the time range of Early Archaic in the East. Conversely, arguments can be presented for classifying Agate

Basin points as Early Archaic as Luchterhand (1970) did. These questions serve to emphasize the fact that no clear breaks are yet apparent in the Illinois Valley and a situation of blending of Eastern Archaic and plains Paleo Indian as suggested by Willey (1966:63) seems to be reflected.

To our knowledge published work concerning Middle Archaic is confined to Munson and Harn's (1966) study of three surface collections from sand ridge remnants of a low terrace along the Illinois River. All of the collections contained materials ranging in time from Early Archaic through Woodland. The assignment of the point types to time periods was based largely on comparison with materials from stratified rock shelters in southern Wisconsin and southwestern Illinois. The high percentage of side-notched points on the sites does seem to suggest a Middle Archaic age. It seems, however, to be an open question whether fully-grooved axes should be assigned to the Middle Archaic and three-quarters grooved ones should be assigned to the Late Archaic as they suggest (p. 158). It is probably safe to assume that ground stone axes and gouges appeared in the area during the Middle Archaic along with slate and quartzite atlatl weights.

The earliest known ceramics and burial mounds in the Illinois Valley are associated with what Munson (1966a:9) has called the Marion Culture which seems to be the Red Ocher focus viewed from the occupation sites rather than the

mortuary sites. The ceramics of this culture are Marion Thick as described by Helman (1951:4-5) and Griffin (1952:97-98) and the characteristic point is the Kramer point, a lanceolate-bladed, long, straight-stemmed point with grinding along the side of the stem (Munson, 1966a, 1966b; and Munson and Hall, 1966). Because of the similarities between this burial complex and the Late Archaic complexes in the southern Illinois Valley and the differences in settlement patterns between Marion and Black Sand we are placing the Marion culture in the Late Archaic rather than Early Woodland.

Habitation sites all seem to be small camps of short duration and are almost always located on the edges of bluffs. The burial complex is a localized expression of the Red Ocher/Glacial Kame complex of the Great Lakes region (Ritzenthaler and Quimby, 1962). Corpses were normally interred in graves near the edge of river bluffs and mounds were frequently erected over these graves. By far the most common burial position was fully flexed. Ornaments of copper, shell or ground stone are fairly common on the corpses and caches of preforms, turkey tail blades or long-handled flint knives are characteristic of these burial areas. Copper tools and weapons occur less often. Of particular importance is the occurrence for the first time of large quantities of copper, marine shell and southern cherts. Didier (1967) has presented typological evidence suggesting that the inhabitants of the central Illinois Valley were acting as middle men in the movement of copper from the

north and chert and marine shells from the south. Another tradition formulated at this time was the orientation of corpses with regard to the solstices and equinoxes. The mutually-exclusive artifact categories distinguishing Glacial Kame and Red Ocher might be comparable to those described below for Spoon River. In the central Illinois valley no distinction is made between the two. An examination of other variables including burial orientations might shed more light on this question.

Woodland

The next archaeological manifestation to appear in the area is known as the Black Sand Culture. It is the first culture which is generally held to be Woodland. In the central Illinois Valley it is known from small settlements on ridges in the river valley and from a group of 33 semi-flexed burials beneath a Havana Mound on an ancient sand bar. Though several projectile points were found in the graves, the excavators felt it possible that they originated in the surrounding midden (Cole and Deuel, 1937:126-133). In the southern part of the valley another site, Peisker, yielded twelve burials and a cremation. Features were isolated in the midden. The Dickson Broad Blade was the only point type recovered (Perino, 1966).

In the central Illinois Valley the ceramic hallmark of Black Sand is a grit-tempered cordmarked ware with or without carelessly-applied trailed, straight or oblique horizontal

lines and occasional nodes below the lip (Griffin, 1952: 98-100). At the Peisker site Perino found these types as well as a pinched and a punctated variety similar to those of the Tammany series of the Lower Valley (Phillips, Ford and Griffin, 1951). This, along with the use of grog tempering and the radical differences between its antecedent and partial contemporary, the Marion culture, suggests an intrusion of southern peoples into the area.

The ceramic link between Black Sand and Havana is known as the Morton complex. It is composed of Morton Incised, which is usually decorated with straight trailed lines in bands of left or right oblique groups or a herring bone design, either of which might have nodes in addition, and of Sister Creeks Punctated which is cordmarked with overlying solid or hollow cylinder or fingernail punctates or pinches, occasionally set off in zones by incised lines (Griffin, 1952: 100-103).

Possessors of the Havana Tradition occupied the area between about 400 B.C. and 300 A.D. The earliest unmixed Havana component known from the central Illinois Valley is from the Dickson Mound property less than a half mile from our excavations. The most common ceramic surface treatment from this midden is smoothed-over cordmarking. Unsmoothed-over cordmarking is rare. Stamped pottery appears at this site with crescent and ovoid elements predominating over straight-line stamping. The trailed herringbone design still appears and there are a few rim nodes. Stamping is confined

to bands around the rim and is often set off by trailed lines (Struever, 1964:93). Projectile points from the site include Dickson Contracting-stemmed, corner-notched points, including an ovate blade of either the Snyders or Norton type and a high percentage (slightly more than half) of subrectangular-stemmed points. Tools include convex-ended scrapers and blades, light scrapers, cutting tools and a few choppers and denticulates. This midden yielded the earliest conical cores from the area (White, 1968:111-114).

Though no specific burial areas can be assigned to the early Havana phase, it seems probable that at least some of the less elaborate mounds from the area which yield Havana material without Hopewellian Interaction Sphere material date from this time.

The Hopewellian phase of the Havana tradition is considerably better known than the earlier phase. Struever (1964:93) equates the beginning of the Hopewellian phase with the appearance of Hopewell Ware, and sees its appearance as coeval or nearly so with the appearance of zoned body decorations on ceramics and the predominance of straight dentate stamping and cordmarking. He sees rim nodding as becoming much more important at this time. Griffin (1952:126) and White (1968:9) argue that Havana Zoned pottery appears in Illinois earlier than Hopewell Ware. Support for this thesis might be seen in Havana Mound 6 which yielded several complete Havana Zoned vessels of several types as well as numerous preforms of Cobden chert, bladelets, copper

axes, split and whole bear teeth, cut human and animal jaws, reel-shaped gorgets and a copper head plate but apparently no Hopewell Ware or recognized log tombs (Taylor, 1929: 160-162). If this mound does actually predate the appearance of Hopewell Ware it indicates much of what we consider diagnostic of Hopewellian burial furniture also predates it. Soon after the appearance of Havana Zoned pottery Snyders notched points gained predominance and continued in quantity until near the end of the Havana Tradition when Baehr and Weaver sherds begin to appear along with Havana Ware (White, 1968:75). The rest of the assemblage seems to have been quite stable.

The elaborate tombs for which Havana in the Illinois Valley is so well known are characteristic of the Hopewellian phase. The typical tomb was a roofed log crib with several extended burials and perhaps some bundle burials with varying quantities of tools, weapons, ornaments, cut jaws, ceramics and/or raw materials of chert, copper, marine shells, animal teeth and bone. These tombs covered with earthen mounds are scattered across the lowlands along the Illinois and the Spoon rivers and on the Illinois River bluffs in the southern part of the region.

Evidence of a large oval building of this period found under Havana Mound 9 (McGregor, 1952:50-51) seems to be the remains of a domestic structure. Habitation was confined almost exclusively to the lowlands. The economy seems to

have been based almost entirely on hunting, fishing and gathering with the cultivation of maize of minimal importance.

The descendants of the possessors of the Havana Tradition in the area left the archaeological material we now assign to the Weaver Culture. Weaver Ware may be divided into vertically cordmarked and plain. Ornamentation is restricted to occasional lip notching or cord-wrapped stick or paddle impressing on the edge of the lip. The characteristic vessel is a vertical-sided, conical-based jar with a vertical, slightly insloping or slight outsloping rim. Toward the end of the Havana period projectile points grew continually smaller until by Weaver times they seldom, if ever, exceeded five centimeters in length. The techniques of manufacture remained unchanged but careless selection of raw materials and sloppy workmanship resulted in products inferior to those of the preceding Havana period (Wray and MacNeish, 1961; White, 1968). Weaver middens overlay the older Havana middens in the area and seem comparable in area, suggesting no appreciable change in the settlement pattern from one time to the other. Burial mounds are low and relatively small with burials or cremations localized in the center on or below the original ground surface. The rare burial furniture is confined to a few simple tools or weapons with the latter being more common.

The heir to the Weaver culture in the central Illinois Valley appears to be the Sepo Culture which is best known from burials at the Dickson Mound and from several hundred pit features from the adjoining Meyer-Dickson village site. Sepo Ware vessels were often of the same shapes as Weaver Ware vessels, but while Weaver Ware was tempered with crushed rock, Sepo Ware was tempered with sand and fine gravel. The major decorative difference between Weaver and Sepo wares is that Sepo Ware does not have decorative nodes around the neck and Weaver Ware often does. Cord-wrapped-stick impressions on the interior and the exterior of vessel lips are common on both. Complete Weaver vessels have been found in pits with Sepo Ware. Sepo projectile points were small corner-notched flake arrow heads. Burials were flexed and frequently had associated furniture, including ceramics as well as tools, weapons and ornaments. Burial vessels show Mississippi, Maples Mills and Plains influence. The time span of the Sepo Culture is not yet known and it may be that these traits first appear relatively late in its history. The Sepo Culture merged with that of the invading Cahokians to form the Spoon River Culture.

A contemporary of the Sepo Culture, at least during its terminal phase, was the Maples Mills or Tampico Culture. This culture seems to represent an intrusion of people bringing Lake Michigan Ware from the north. Excavations to date suggest the Tampico people lived in very temporary

small camps and the complete lack of architectural evidence suggests very flimsy structures were the rule. Burials were in mounds and cemeteries with bodies interred in a flexed position, as a secondary burial or as a cremation. Non-perishable burial furniture was the exception and was never abundant with a single individual. The most common offerings were jars, shell spoons and Anculosa shell beads.

The most characteristic artifact of the Maples Mills culture is a grit-tempered, flattened-globular jar with fairly sharp soulders and a high everted or slightly flared, occasionally castellated rim. The mouth is often squared. The body is almost always cordmarked and the rim is frequently decorated with geometric cordmarked designs. Stemmed and notched projectile points similar to those of the Weaver Culture occur and are supplemented by crude notched and un-notched triangular points.

Mississippian

At some time during the tenth century A.D. some of the inhabitants of the East St. Louis area crossed the threshold of Middle Mississippian culture. At this time we do not know the mechanism leading to the appearance of such Mississippian traits as platform mounds, shell-tempered pottery, discoidals and wall-trench houses. Nor do we know whether they came upon the scene serially over an extended period or at essentially the same time. At any rate by some time

well before 1050 the Cahokia site was well on its way to becoming the largest and most influential aboriginal American settlement north of Tula. The site plan was laid out and the biggest pyramid as well as others in the central area was completed; a state level of organization was achieved and an all-powerful king ruled with powers which must have been on the same order as those of the Natchez suns (see Swanton, 1911), to judge from the large numbers of retainers and grave goods buried in Mound 72 during this period. The size of the main site is not known for this or any other phase, and probably never will be unless more archaeologists shift their attention from the more spectacular features within Cahokia Mounds State Park and begin working on the site's rapidly-disappearing edges. According to Hall (1966 and 1967:179) the ceramic complex of this phase is characterized by a high percentage of limestone-tempered Monks Mound Red, by Powell Plain extruded lip variety and an absence of Ramey Incised. As of this writing there are no collections from the Illinois Valley which fit this description.

Around 1050 Hall sees Ramey Incised appearing and Monks Mound Red gradually declining from its peak occurrence of approximately 25% down to 10-15%. This marks the beginning of his Old Village Phase at Cahokia. This period was one of great construction activity when the western and northern-most pyramids were built and others seem to have been crowded into the previously well-ordered plan of

downtown Cahokia. At least two of the outlying towns, Mitchell and Pulcher were occupied during this period, but very few other sites in the American Bottoms seem to have been (Harn, 1971:36 and James W. Porter, personal communication). It was during this period that immigrants from Cahokia moved into the Illinois Valley, possibly as an alternative to moving to the larger towns.

The results of this incursion, the Spoon River Culture, have been discussed in some detail elsewhere (Conrad and Harn, 1972) and it will be but briefly treated here.

The first phase of the Spoon River Culture, the Eveland Phase, was the period of peaceful amalgamation of the Cahokian invaders with the indigenous Sepo and Maples Mills peoples. The foreigners were of Muskogid physical type while the Sepo people were Illinid and the Maples Mills people were Illinid with a slight Dakotid admixture (Robert Blakely, personal communication).

As of this time no major occupation areas of the Eveland Phase have been excavated, but individual structures excavated at the Eveland and Garren sites indicate the wall-trench buildings characteristic of the Cahokia area appeared in the central Illinois Valley at this time (Dickson Mounds in situ exhibits and Wray, 1952:156). The appearance of platform mounds at Aztalan (Barrett, 1933) and northwestern Illinois (Bennett, 1945:127, 158) at this

time suggests some of those in the Illinois Valley were built at this time but this has not been demonstrated. Such Cahokia traits as discoidals, notched triangular points and several ceramic types including Powell Plain, Ramey Incised, St. Clair Plain and, rarely Monks Mound Red (types described by Griffin, 1949, and by Vogel, 1965) are known in the area. Vessel forms include jars, beakers, plates, bowls and water bottles. The most common type of projectile point was probably the unnotched triangle but tri- and multi-notched specimens frequently occur. Maize was definitely present and a bison (Bison bison) scapula hoe was found at the Eveland site.

Corpses were usually buried in an extended or semi-flexed position in pits in cemeteries or in or under mounds. Burial furniture representing most types of tools, weapons, ornaments and socio-technic items was often interred with them, occasionally in profuse quantities. Though there seems to have been no differences in the non-ceramic artifacts buried with representatives of the two distinct physical types interred in the Dickson Mound, shell tempered Mississippian pottery was found almost exclusively with Muskogid burials and Sepo pottery was found almost exclusively with Illinids. Pottery combining traits of both wares was found with individuals of mixed phenotypic traits (Robert Blakely, personal communication). Retainer burials are occasionally found.

The variability in burial furniture and the occurrence of retainer burials indicate a non-egalitarian society. The mutually exclusive artifact categories which are discussed in detail in the body of this paper began taking shape during this period. Long Nosed God maskettes and a number of elements of the Southeastern Ceremonial Complex (Waring and Holder, 1945) are known from sites of this period. Several traits demonstrate that the artifact inventory was benefiting from Cahokia's connections with the Caddoan area. Great Oasis sherds and bison scapula hoes indicate contact with the Great Plains.

The beginning of the Larson Phase is marked by the appearance of shell-tempered cordmarked pottery and the almost complete disappearance of jars of the Old Village types. The finer notched points become less common as do semi-flexed burials. The Illinid physical elements all but disappear and the cultural elements show less internal variability. Platform mounds can be assigned to this phase with confidence. All buildings known from this phase are rectangular wall-trench structures excepting a circular sweat lodge from the Larson site. Material assignable to this phase shows a stronger link with the Caddoan area and its version of the Southeastern Ceremonial Complex than does the material assignable to any other phase. This phase is discussed in greater detail in the body of the paper.

The Larson Phase is followed by the Dickson Phase. This phase is known only from a group of about forty burials from the Dickson Mound. These graves are characterized by relatively few or no grave goods. The characteristic burial jar is cord-marked and has an everted rim. This is the time of the greatest abundance of long-necked water bottles. The mutually-exclusive categories of the Larson Phase seem to have broken down and shell bead necklaces are found with adults in the Dickson Mound for the first time. The characteristic projectile point of this phase is an unnotched triangle, often poorly made. No houses are known for this phase but they were doubtless wall-trench structures. The general cultural decline of this phase may be a result of the climatic shift of A.D. 1200 (see Baerreis and Bryson, 1965).

The movement of Oneota people into the area at this time was probably the result of this climatic deterioration and the ensuing population decline. The origin of the Oneota people is unclear since their ceramic assemblage includes a high proportion of jars with curvilinear designs.

Spoon River Culture sites receiving influence from the Oneota intruders have a Mississippian assemblage with Oneota ceramic motifs, pipes and antler projectile points. The Crable site, from which the phase takes its name, yields a unique plate type with a broad rim rising at a 45° angle from a nearly flat bottom. This form is not found in

significant percentages on any other site. Only one Oneota site and two and possibly three Crable Phase sites are known from the area. There are major differences in the assemblages from each of these sites. The most striking difference is the complete absence of beakers and water bottles on the Sleeth site. This site is presumed to be the latest prehistoric site yet located in the area.

Despite historically documented occupation of the area, no early historic Indian sites have been located in the central Illinois River Valley.

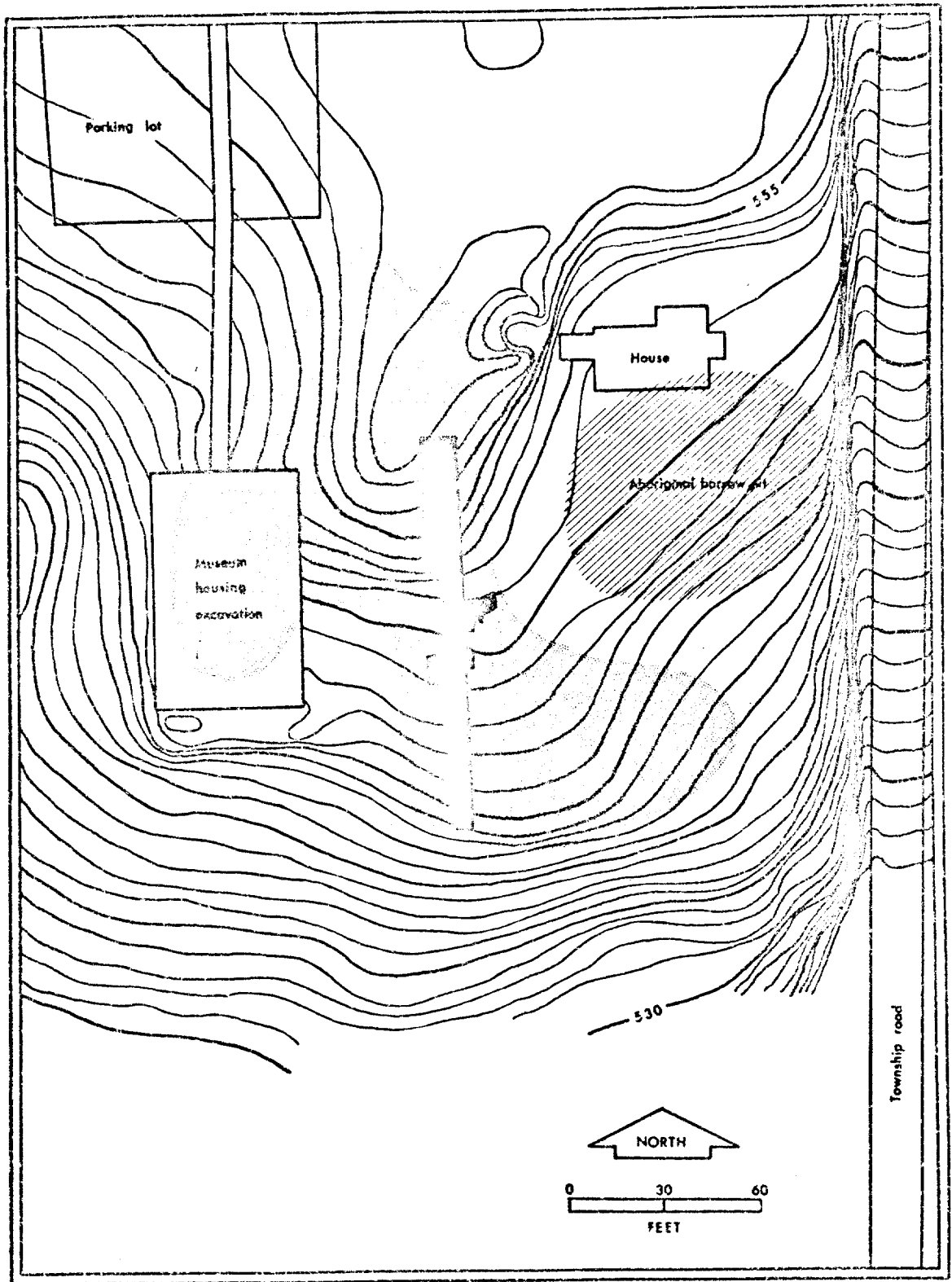
PLATE 1

Contour Map of the Dickson Mound and Its Immediate Surroundings as They Appeared in 1966.

The shaded area is the estimated extent of the burials. The black area is the area excavated in 1966. The contour interval is one foot. (Modified after Harn, 1971: fig. 2)



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THE DICKSON MOUND

The Dickson Mound (F° 34) is a large irregularly-shaped Sepo and Spoon River burial mound located in Section One of Waterford Township, Fulton County, Illinois. It is located on the edge of the right bluff of the Illinois River, approximately eighty feet above the river and approximately 550 feet above sea level, and overlooks the confluence of the Spoon and the Illinois Rivers. Due to the extensive modern modification of the mound and its immediate surroundings, excavations are required to delimit the edges of the mound. As a result of excavations already carried out it has become apparent that across its widest dimension it is at least 200 feet.

These excavations which were carried out during 1966, 1967 and 1968 have made it clear that at least six small burial mounds and a small pyramidal platform were incorporated into the Dickson Mound. As we predicted in 1966, these district burial areas were built up at different times. Much of the soil for these mounds was dug from a borrow pit adjoining them. In 1900 soil was dragged from the mound and used to refill the pit. It is now impossible to ascertain the original height of the mound but Harn (personal communication) feels four feet would be a generous estimate. Including the 234 burials in the Dicksons' in situ exhibit excavations have yielded 1043 complete or partial burials. Probably as many burials were represented by the disturbed bones recovered during the excavations. Harn feels the mound may have originally contained as many as 3,000 burials.

Method of Excavation

Before beginning actual excavations at the site, four ten-foot squares were laid out on a line 5° east of true north. A north-south line would have intersected a row of ornamental trees. The northwest corner of the northern-most square was designated point 0-0. The squares to the east of this line were designated with an L for left (nLn) while those to the west of the line were designated with an R for right (nRn). Using this system a square with its northwest corner forty feet south and five feet west of the northwest corner of Square 0-0 would be square 40L5 and its northwest corner would be point 40L5.

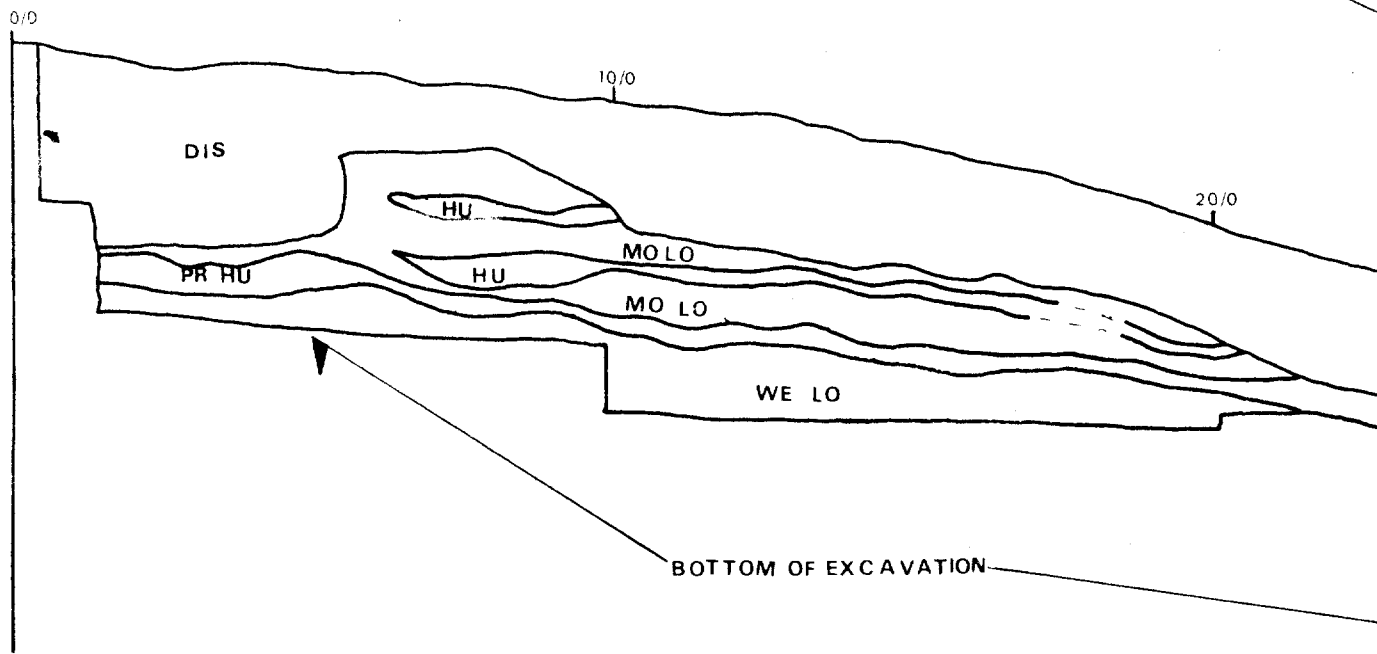
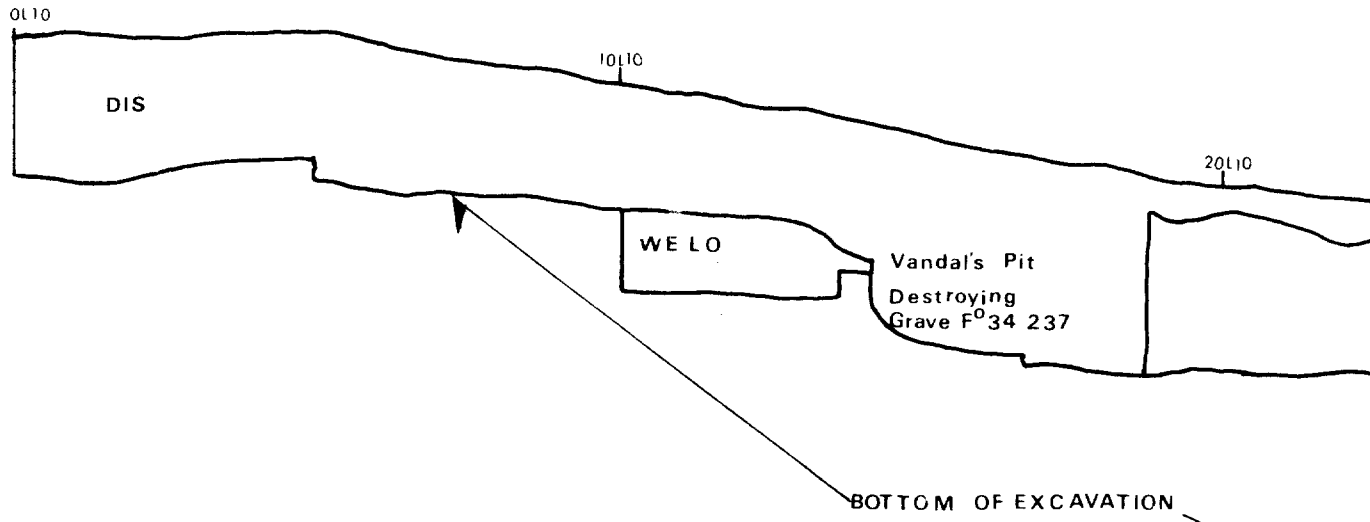
Immediately below the sod large numbers of disturbed bones were encountered, both in the plow zone and in the pits of previous investigators. These pits were often quite extensive and contained the bones of numerous individuals. They were redug as units and the material packed accordingly. After these pits were cleaned out the squares were leveled off and scraped down to below the base of the mound. Burials were left in situ and special attention was paid to stratigraphic implications. Though leaving the burials in situ caused considerable inconvenience, it allowed for the checking and correction of several conclusions after a better understanding of the badly disturbed and often quite vague stratigraphy of the mound had been gained.

After the excavation of the four ten-foot squares, seventeen five-foot squares from point 40L5 to 125L5 were

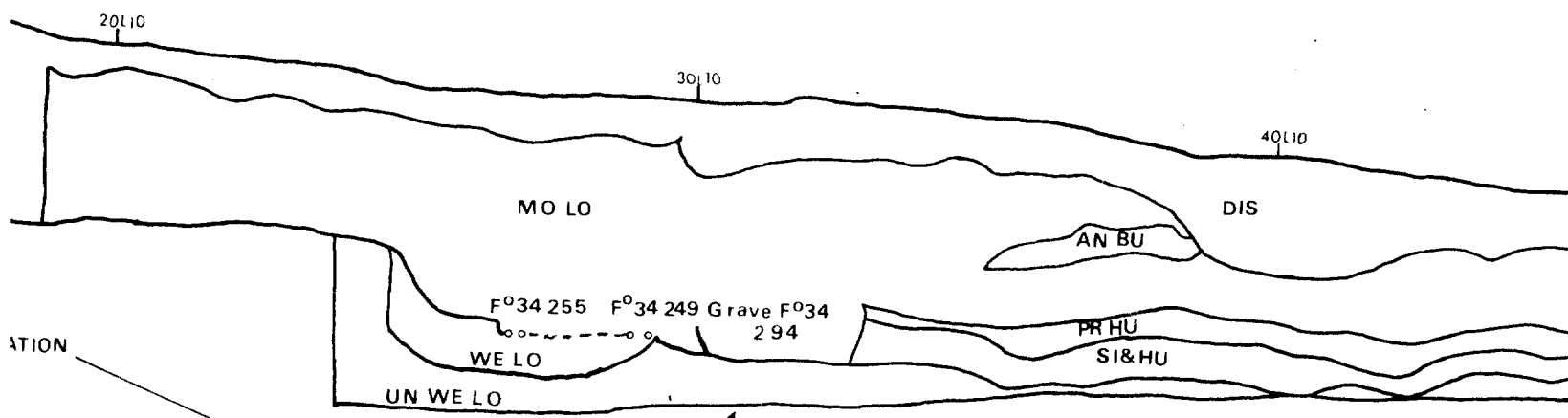
excavated. Lateral extensions were opened between points 55L10 and 62.5L10, points 67.5L10 and 72.5L10 and 70-0 and 77.5-0 in order to work out burials of special interest which extended beyond the original profiles. With the exception of the area between points 55L10 and 62.5L10 the extensions were ten feet wide. Since limitations of time permitted widening the trench only to examine burials of particular interest, other partially-excavated burials were recorded, photographed and reburied with the exception of those of which all but the legs were within the excavated area. In the latter cases all bones except those beyond the edge of the trench were removed. With the exception of the extension between points 55L10 and 62.5L10 and those areas below the bones reburied in situ all excavated areas were carried well below the humus line to insure that no midden areas or pre-mound graves were overlooked.

PLATE 2

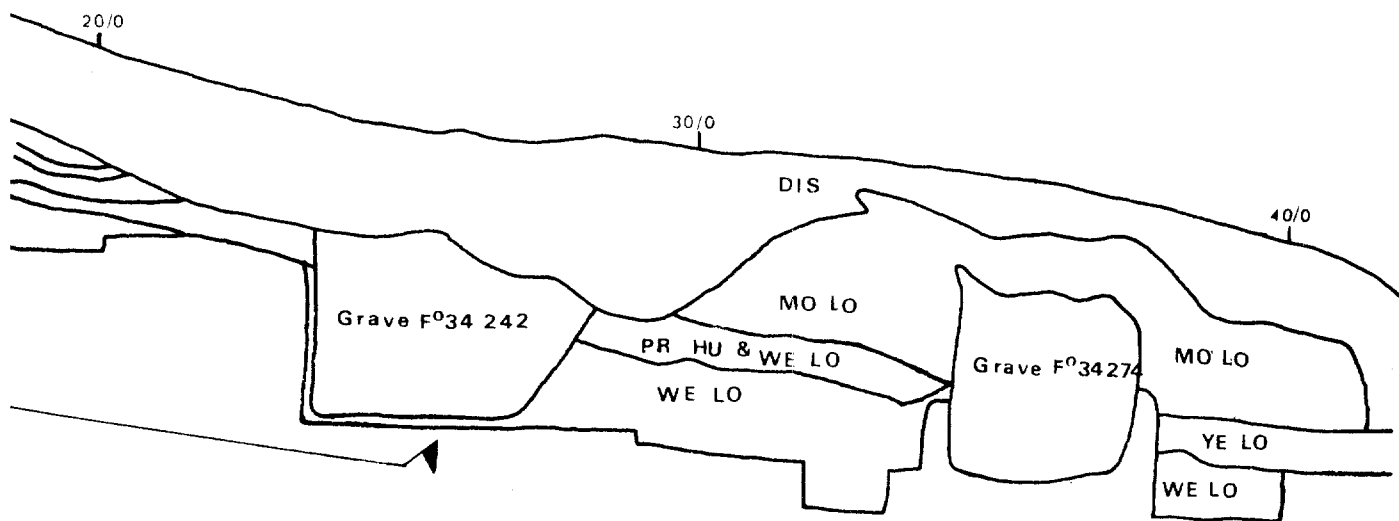
North Ends of the East-West Profiles of the 1966 Excavations
at the Dickson Mound.



NORTH ENDS OF NORTH-SOUTH PROFILES OF 1966 EXCAVATION

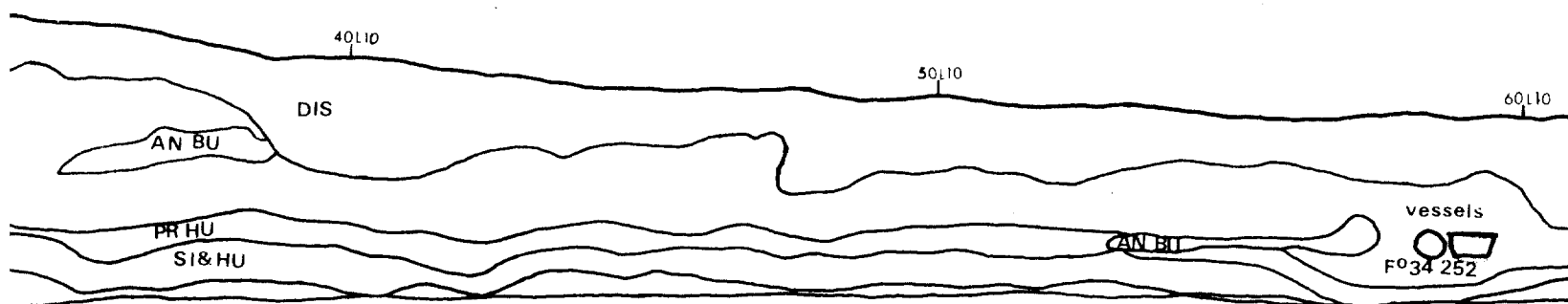


EAST PROFILE

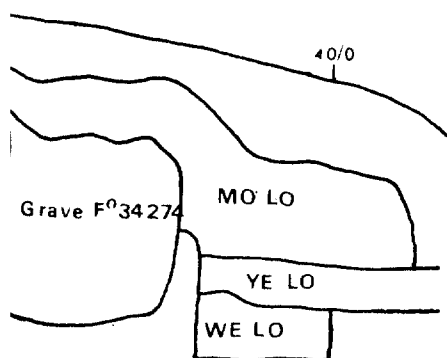


WEST PROFILE

SOUTH PROFILES OF 1966 EXCAVATIONS AT THE DICKSON MOUND

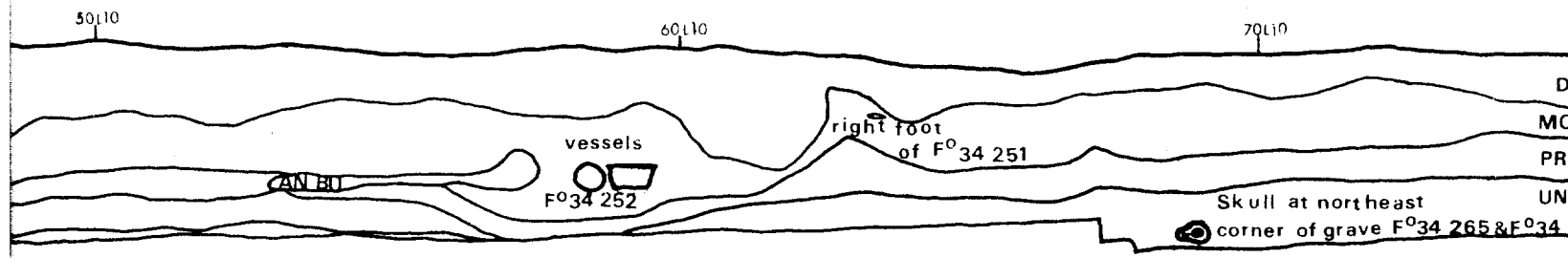


EAST PROFILE



- AN BU ANIMAL BURROW
- DIS DISTURBED
- HU HUMUS
- MO LO MOTTLED LOESS

DICKSON MOUND



LEGEND

AN BU ANIMAL BURROW
 DIS DISTURBED
 HU HUMUS
 MO LO MOTTLED LOESS

PR HU PREMOUND HUMUS
 SI & HU SILT and HUMUS LINES
 UN WE LO UNWEATHERED LOESS
 WE LO WEATHERED LOESS

80110

DIS

MO LO

PR HU

UNWELO

northeast
of grave F^o34 265 & F^o34 266

Structure

Due to the extensive damage to the mound, few definitive statements can be made concerning the construction of the section excavated during 1966. It is certain, however, that the repeated placement of corpses on the surface and the subsequent covering of them with fill added little, if any, mass to the mound. With the exception of two sections on the 0-Line totalling fifteen feet long and one twenty-foot section on the L10-Line, virtually all of the supra-structure cut by our profiles had been destroyed by earlier digging or leveling operations.

The evidence recovered in 1966 indicated the mound had been built in definite stages with few, if any, inclusive burials. There are indications that the original humus was covered, at least in the areas of slight inclination, with a layer of loess from two to nine inches thick. Between points 37.5-0 and 42-0 it appeared as a brilliant yellow deposit from seven to nine inches thick capped by a layer of mottled loess.

At 6-0 two lines of humus appeared in the profile. The lower of the two was from two to nine inches above the premound humus line and was from 2 to 7 inches thick. This

line extended to 20-0 where it was intersected by a disturbance from the surface. The second line, which began 5 to 7 inches above the first, was from 1 to 4 inches thick and followed the contour of the original surface. Excavations since 1966 have made it clear that we cut the southeast corner of a pyramidal platform built during the Eveland Phase. Harn (personal communication) feels the humus lines represent stabilizing caps placed over the loess fill. It was obvious in 1966 that these lines did not represent natural accumulations of humus. It is now clear that the humus deposit under F°34-235 is a portion of this platform. Since the deposits cut by the northern profile of our excavations were completely disturbed, we do not have an east-west profile of this structure. Harn informs us that this structure was built during the Eveland Phase and later graves cut through it.

Due to the extensive pitting of the site we were unable to isolate the different layers from above during our excavations. There was no indication of the postulated first stage in the undisturbed section of the L-10 Line or in the undisturbed section of the 41 feet South Line profile, but it is entirely possible that the fill from the same source was used for the construction of both the first and second stages in the area. The brilliant yellow loess was noted in Square 30-0 during the excavation of burials F° 34-271, F° 34-273, F° 34-74 and F° 34-290.

Burial F° 34-290 seemed to have been interred after the deposition of the yellow loess but before the deposition of mottled loess. The situation concerning the placement of F° 34-294 was unclear since the profile above the grave was uniform. After the interment of a few corpses in graves dug into the first stage a second stage, consisting of a minimum of three feet of fill in the area for which we have profiles, was erected. There were few, if any, inclusive burials in this stage, but shafts more than three feet deep were sunk for the interment of adults and shallower shafts were sunk for the interment of children. Burials which were probably interred in graves dug through this stage include F° 34-244, F° 34-249, F° 34-255, F° 34-257, F° 34-271, F° 34-273 and F° 34-274. This mottled fill may have been deposited in order to bring the area up to the level of the area immediately to the north of it. The profusion of disturbed bones in the disturbed upper levels may indicate a third stage which was completely destroyed by cultivation, construction and earlier excavations.

This reconstruction is based largely upon evidence recovered between 24L10 and 47L10 and between 30-0 and 41-0 (see Plate 2). The evidence was preserved as a result of the rather sharp angle of the pre-mound slope starting at about twenty feet south which put a large portion of 30-0 and 40-0 out of reach of most of the pits of the earlier diggers. Land leveling, the construction of a poultry house and the original shallowness of the mound exposed

almost all of the burials south of the 40 feet South line to relic hunters. Almost all of the burials recovered by the Museum excavations south of that line were in fairly deep graves.

Though it has been commonly held by most students of the archaeology of the area (including the author) that Spoon River mounds were built up by repeatedly placing corpses on the surface and covering them with earth, a survey of the published systematically excavated Spoon River burial mounds excavated in the area indicates this was seldom, if ever, the case. Systematically excavated Spoon River mounds have been reported from four other sites in Fulton County. Cole and Deuel (1937:88-89) concluded that, at the Morton site, "...it seems probable that, in general, the mound [F° 14] grew by the addition of soil over successive burials." However, they also state, "All [extended Mississippian] burials lay in the area made up of the mixed humus-loess and camp refuse or were directly covered by it." Of the 75 burials assigned to the Mississippian component only four are noted as having been interred in pits, though Mississippian pit burials were noted in the other mounds tested in the group. Based upon our difficulty in isolating graves, even though several people familiar with the archaeology of the area attempted to solve the problem, and the fact that the Morton site was investigated more than 40 years ago, it seems probable that more graves may have been present and fewer individual burials covered over.

All but one of the 22 burials reported from the Fiedler site (Morse, Shoenbeck, and Morse, 1953) were either on the pre mound humus or in subterranean graves and the mounds were built in single stages.

None of the burials from the Crable Mounds reported by Smith (1951:8-14) were in the suprastructure.

About 35 years ago Donald Wray excavated most of F° 228. The feature was interpreted as having been built up by piling fill over individual corpses (Wray and MacNeish, n.d.). There seems to be evidence that this was not the case. Nine of the 106 burials are listed as being in graves and one was on the pre mound surface. Twenty-seven of the other graves are listed as "disturbed". No doubt some of the disturbance was due to modern vandalism but much of it seems to have been due to aboriginal grave digging, since there was often an undisturbed skeleton among the disturbed bones.

At every site there is good evidence that either some of the burials were inhumed in pit graves or that the mound was built as a single stage over bodies lying on the surface. Those many burials which were not in obvious pits can probably be explained by the inability of the excavators to delineate the pits when the vertical and horizontal positions of the individual skeletons in the Dickson Mound are studied. It is rather hard to envision a large mound resulting from the covering of corpses by little mounds one after another.

Stratigraphy

In many instances stratigraphic relationships among burials, middens and/or mound stages were clear but these relationships usually offered little information in themselves. We were able to determine the relative ages of two middens and an emptied grave through an analysis of their stratigraphic relationship, and were able to assign burials F° 34-269 and F° 34-270 to the Eveland phase on the basis of a Sepo pottery bearing midden which overlay their grave. We were also able to make statements of near contemporaneity on the basis of slumpage due to the settling of graves after the placement of overlying corpses. Other than this we can add nothing to the geologic axiom: "All things being equal, the older deposits are deeper than the newer deposits." We have no datable artifacts or natural deposits to tell us how much older.

Pre-Spoon River Occupation of the Site

A Havana and a Sepo component are in evidence in the premound deposits in the area excavated in 1966. A Havana component is represented by a single Havana Smoothed-Over-Cordmarked sherd from the premound humus in Square 30-0. This is not surprising in view of the extensive Havana occupations to the south and southwest of the site.

A Sepo component was represented by midden deposits of varying intensity across the premound surface. Though these

midden deposits were badly damaged by pits of previous excavators, some information was gathered. In squares 0-0 and 10-0 the midden was about seven inches deep and yielded relatively small quantities of very small fragments of camp refuse including small Sepo body sherds. The soil was stained black. A circular pit measuring six inches in diameter was found in the same area. Since it was isolated only one inch above the rounded bottom, we were unable to determine its depth. The only material found in it was a layer of burned faggots which produced a C¹⁴ assay (GX 0924) of 1705± 85 B.P. (letter to Robert L. Hall from Geochron Laboratories, Inc., dated 26 April 1967). If the pit is a Sepo feature, the date is much too early.

Eveland Phase Utilization of the Site

A midden attributable to the Eveland phase of the Spoon River culture was sectioned at the base of the mound in squares 0-20 and 0-30. Two lines of evidence suggest this midden is later than the Sepo midden. It is demonstrably later than an emptied grave yielding fragments of a Powell Plain jar (Plate 5A) which cuts through the Sepo midden, because the Eveland midden is located on an artificially leveled floor which was formed by cutting an irregular notch into the hillside, and through the grave, at about the 25 feet South Line. This excavation cut through about three feet of undisturbed loess and must have cut through two to

four feet of fill above the bottom of the grave which extended only six inches into the pre-mound loess. Thinly scattered above this floor and for eleven inches above it were hearths, post and/or stake holes, fresh-water mussel shells, human and animal bones, cracked rock, chert flakes and pieces and Early Mississippian and Sepo sherds.

No pattern was apparent in the distribution of the debris and features and it was often impossible to tell whether or not the post and/or stake holes were actually cultural features. The few faunal remains included pocket-book (Lampsilis ventricosa) and elephant's ear (Elliptic crassidens) shells, and dog or coyote (Canis sp.), prairie chicken (Tympanuchus americanus) and human (Homo sapiens) bones. The human remains consisted of a left tibia with the distal portion missing, an axis vertebra and a rib fragment. It is quite possible that these bones came from the grave destroyed in the above-described leveling operation.

Five Sepo and five Early Mississippian sherds were found in the area. All of the Mississippian sherds were of shell-tempered plain ware with two apparently being from the same Powell Plain variety extruded lip (Vogel, 1965) jar while another was a fragment of a round-shouldered jar. The others were body sherds. The presence of the Mississippian sherds suggests this deposit post-dates the Sepo midden.

The types of activities carried out in this area were not made apparent by the small sample recovered in our

excavations. It is possible this excavation is the borrow pit for the pyramidal platform. A more detailed report of this midden written by Mr. Charles DeBusk is on file at the Dickson Mounds Branch of the Illinois State Museum.

Four burials and an emptied grave are assigned to the Eveland utilization of the site. As explained above, the emptied grave was demonstrably stratigraphically earlier than the Eveland midden. In the case of the two adult male burials, F° 34-267 and F° 34-278, the assignment is made on the basis of physical type and burial position supported by their location at the bottom of the mound and, in the case of the latter, by the occurrence of Sepo sherds in the grave fill. It is possible that these burials predated the Mississippian intrusion and should be assigned to the Sepo period. Two infants, F° 34-269 and F° 34-270, were in a double grave which was overlapped by a Sepo-pottery-bearing midden. The number of sherds recovered was too small to say that Mississippian sherds were not present and a Mississippian jar was found in the grave.

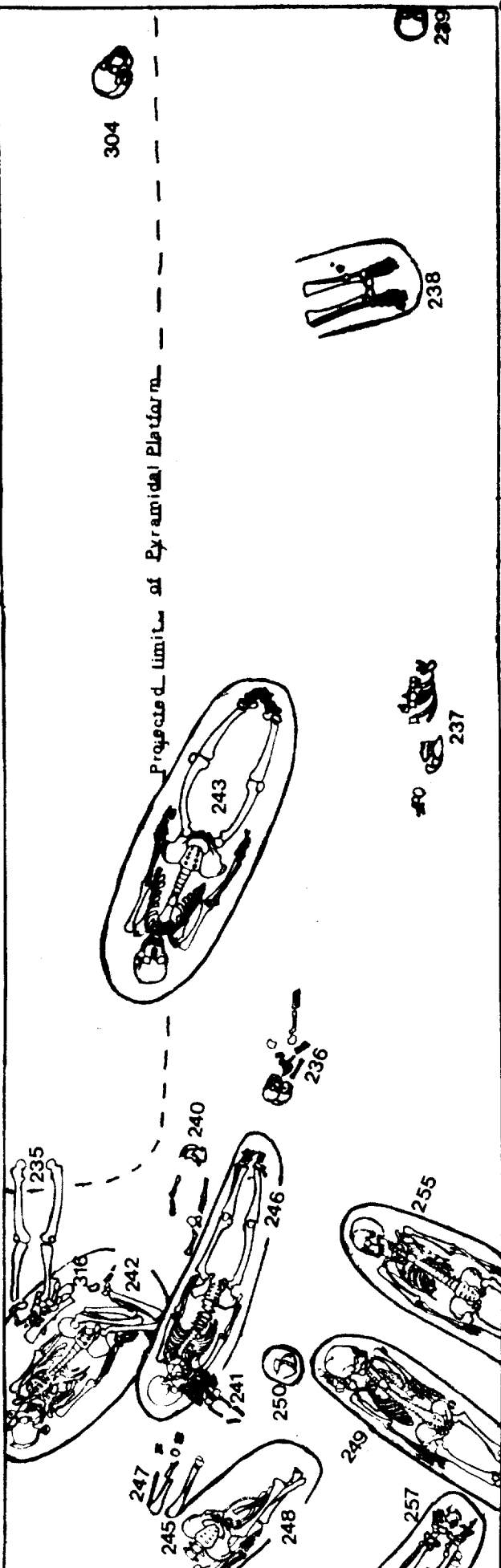
All other burials were assigned to the Larson Phase because the artifacts recovered in the area were consistently what we would expect from such a component and diagnostic Eveland phase ceramics and projectile points were absent, as were those of the Dickson phase. As we will discuss at length below, most of the burials seem to have been interred within a very short time period and seemed to have been

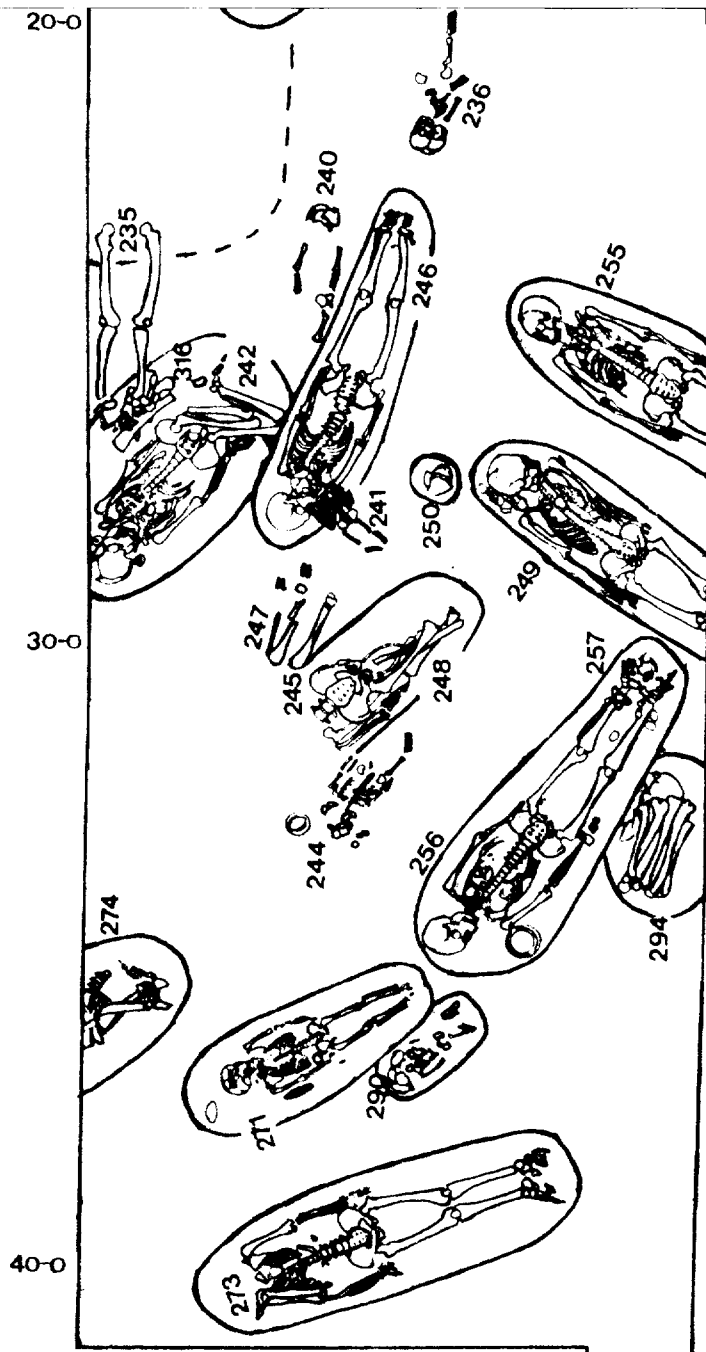
PLATE 3

Plan of the 1966 Excavations at the Dickson Mound.

0-0
10-0
20-0
30-0

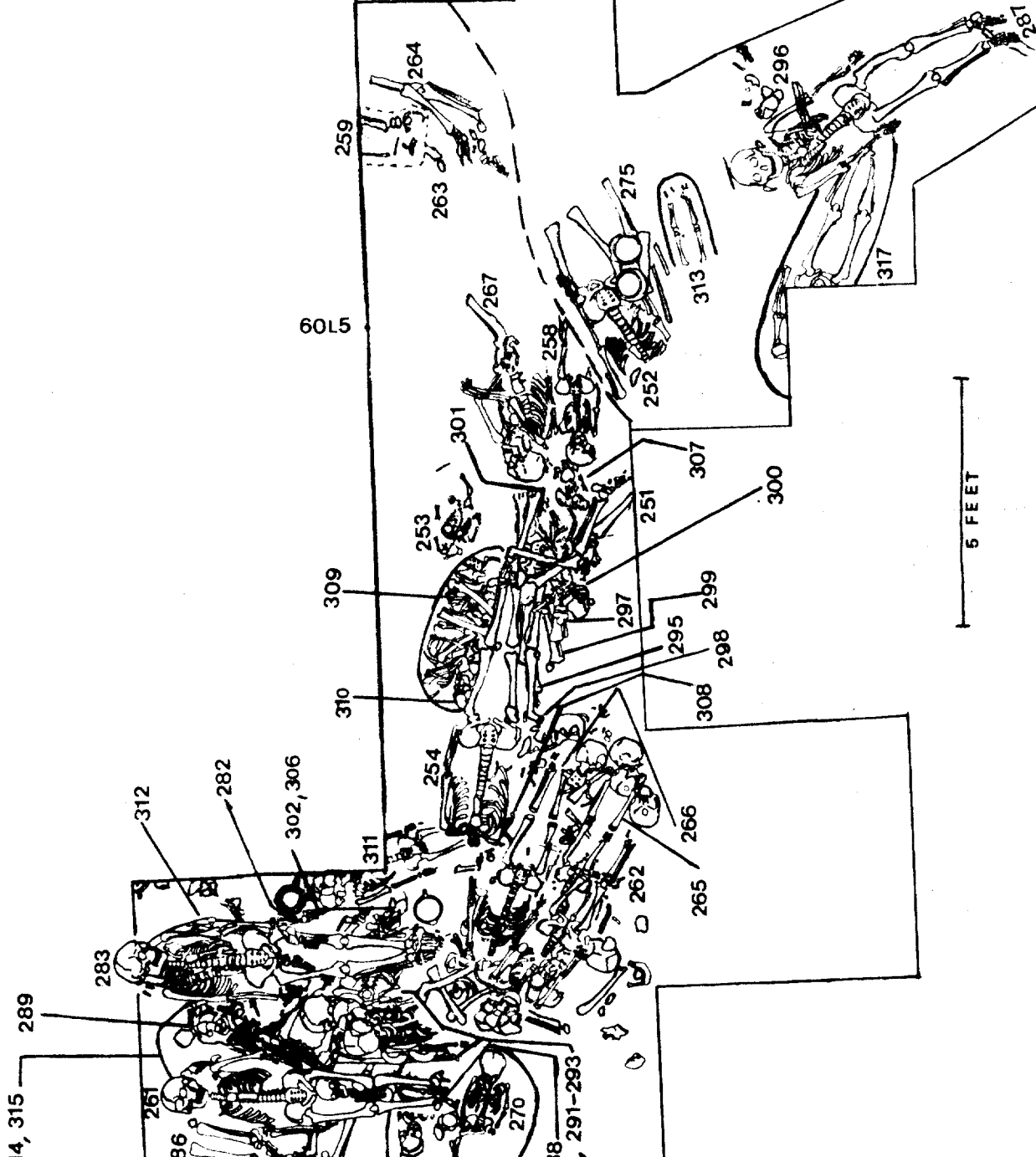
Projected limit of Pyramidal Platform

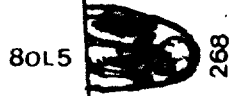
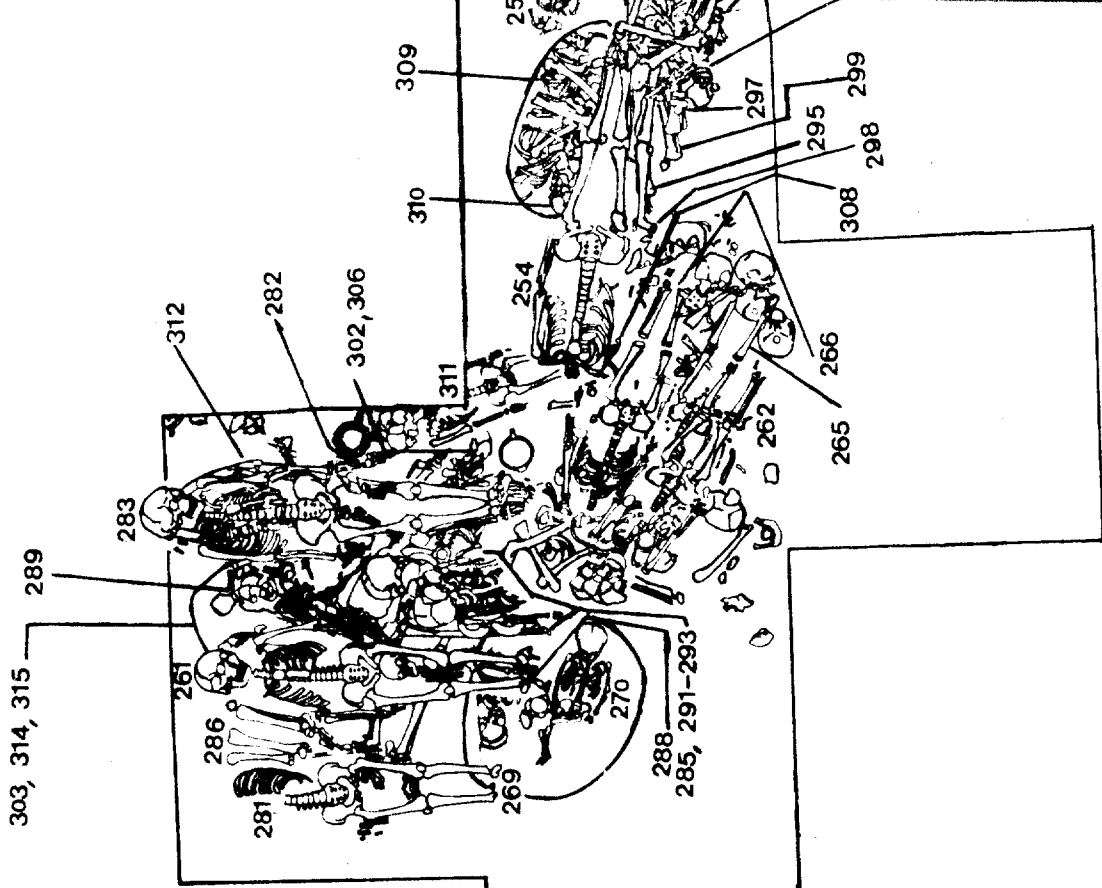




POULTRY HOUSE FLOOR

POULTRY HOUSE FLOOR



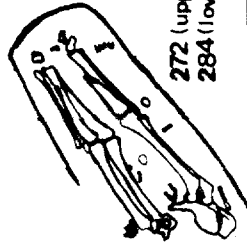


COMPLETELY DISTURBED

2 (upper)
34 (lower)

COMPLETELY

100L5



278



279

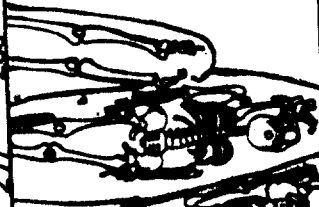


110L5

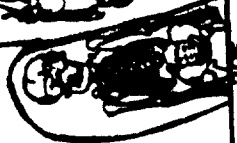
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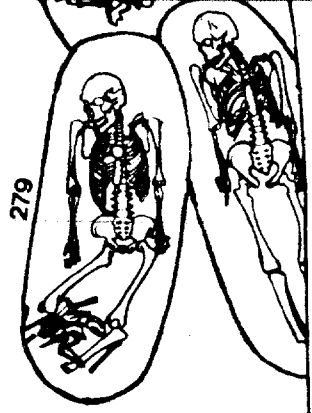
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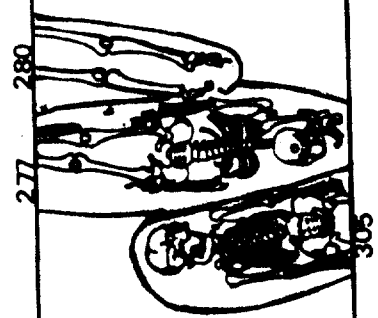
305

120L5

110L5



120L5



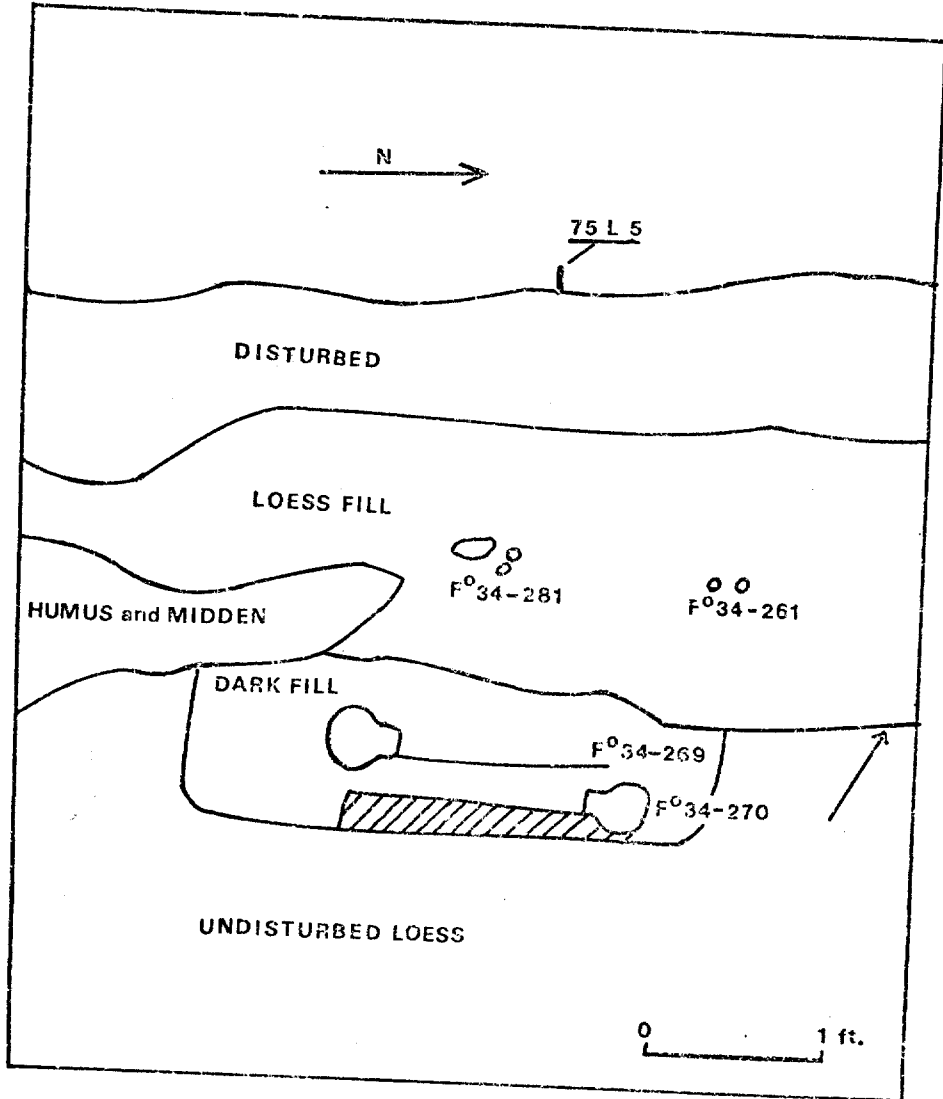
125L5

related to those immediately preceding them. For these reasons as well as stratigraphic ones in the cases of burials overlying those with diagnostic burial furniture, we felt confident in assigning most of the burials to the Larson phase of the Spoon River Culture.

We worried about some, such as those with many Illinid physical characteristics or a partially flexed burial position and some of those at the bottom of the mound but did not feel these suggestions were strong enough to exclude an individual from the Larson phase group. We have noted those about which we have doubts and may see a time when they are shifted to the Eveland component.

Before we begin describing the burials recovered a few notes are in order. Ages given are close approximations of the stage of development of the skeleton but may not truly indicate the life span of the individual. Though the angles of orientation were carefully measured, a tolerance of perhaps two degrees should be allowed, since the skeletons were seldom arrow straight. Finally, we are aware that many physical anthropologists feel sexual determination is not possible on prepubescent skeletal material. Blakely and Walker made their determinations on the basis of the angle of the sciatic notch and are confident of those cases for which a determination is offered.

A square burial pit with straight sides and rounded corners was found below a Sepo-pottery-bearing midden at



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PLATE 4

Profile of Grave of F^o34-269 and F^o34-270 Showing Overlying
Sepo-Pottery-Bearing Midden.

point 75L5 (Plate 4). The pit measured 2.9 feet wide and one foot deep and had a flat bottom which sloped slightly eastward and joined the sides at rounded corners. The southern-most 1.17 feet of the grave was overlain by as much as six inches of midden-bearing humus. One of the skeletons, F° 34-269, was the dorsally semi-flexed burial of an infant about seventeen months old with the head oriented 194° east and the knees oriented about 100° east. A poorly-made, shell-tempered jar (Plate 5 B and B') and an unworked valve of a pocketbook mussel lay at the right shoulder. The fairly-well preserved skeleton lay 3.25 feet below the surface.

The other skeleton in the grave was the semi-flexed dorsal burial of a thirty-month old female buried to the right of F° 34-269. This burial was designated F° 34-270. Its head was oriented 13° east. Lesions, probably attributable to Eosinophili granuloma, a condition characterized by a granulomatous proliferation of reticulum cells resulting in the localized destruction of bone cells, were noted on the twelfth thoracic and first lumbar vertebrae and the left ilium (Morse, 1969:23, 120, Pl. 20 C, D). No furniture was found with this individual. Except that F° 34-270 was slightly lower than F° 34-269, the stratigraphic situation was identical.

F° 34-267 was the burial of a forty-five year old male, apparently buried on his left side in a semi-flexed position

with the head oriented 181° east and the face over the left shoulder. The right side of the pelvis, the right leg and foot, the lower left leg, the left foot and the distal end of the left femur had been removed by previous excavators. He was buried in a grave which must have been about 4.5 feet long and measured two feet wide and at least a foot deep. The skeleton displayed evidence of healed compressed fractures of two lumbar vertebrae (Morse, 1969: 6, Pl. 3 E, F). The right humerus shows damage from a fracture or other trauma and there are indications of a possible shoulder dislocations or acromioclavicular separation (Morse, 1969: 92, Pl. 6, G). The skeleton was of the Illinid physical type (Robert L. Blakely, personal communication dated 1 December 1970). The grave had been dug into the natural hill and predated burials F° 34-252 and F° 34-258. The well-preserved skeleton was 3.17 feet below the surface. The combination of his physical type, his burial position and his position at the bottom of the mound leads us to assign him to the Eveland component.

For the same reasons we have assigned F° 34-278 to the Eveland component. This was the tightly flexed burial of a forty-eight year old male in an ovoid grave measuring 3.2 feet long, 2.7 feet wide and extending at least one foot into the undisturbed soil. Since the bones were located 3.2 feet below the surface, it is probable that the grave was originally considerably more than one foot deep but, due to

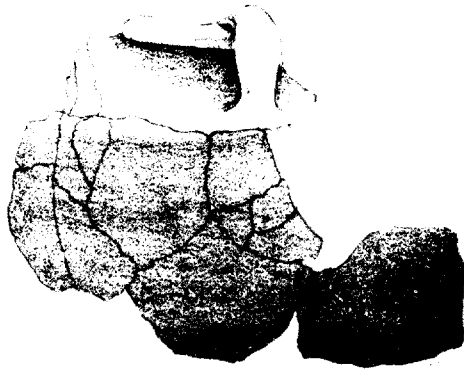
the thoroughness of the previous excavations in the area, this point is unclear. The skeleton was in a tightly flexed dorsal position with the skull oriented 155° east. However, there appears to have been some displacement of the upper axial skeleton, without which the axis of the burial would have been approximately 25° to 30° further east or ca. 186°. Ethnographic observations of historic groups in the area suggest such burials may have hung in bags for a period of time before interment (Margry 1878-1888, Vol. 2: 504). The dislocation of the upper vertebrae seems to suggest this practice.

PLATE 5

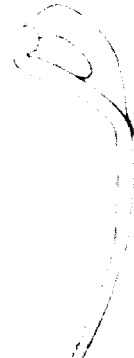
Eveland Phase Jars

A and A' are two views of fragment of Powell Plain vessel from an emptied grave.

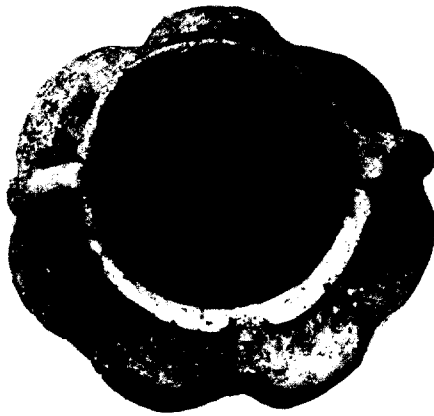
B and B' are two views of lobed "squash pot" associated with F^o34-269.



A



A'

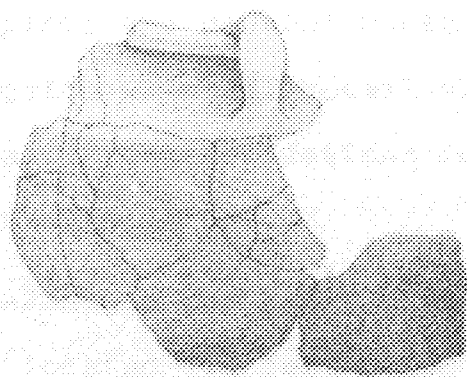


B



B'

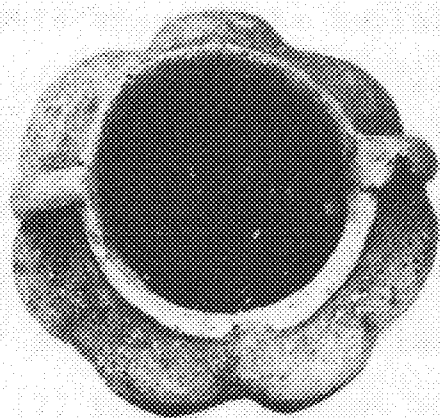




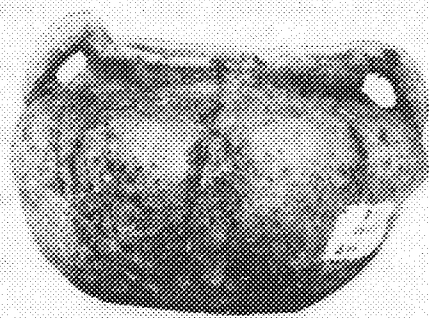
A



A*



B



B*



LARSON PHASE UTILIZATION OF THE SITE

The Larson Phase is by far the best represented component at the site. Our excavations produced as many as eighty complete and partial burials attributable to it. In this section we shall detail the attributes of each of these burials. Generalizations concerning them will be found in later sections.

F° 34-235 was the badly disturbed burial of a young adult male located 1.4 feet below the surface. All bones except the articulated right hand, both legs and the feet were removed by earlier diggers. Since the legs were dorsally extended and the right hand was in the pelvic region, it appears the burial must have been dorsally extended with the head oriented 9° east. The burial was underlain by a humus deposit which probably represents part of the Eveland Phase pyramidal platform. This burial overlay F° 34-242. No furniture was found with it.

F° 34-236 was the burial of a fourteen-month-old female (?) buried 1.2 feet beneath the present surface in a dorsally extended position with the head oriented 188° east and the face turned slightly to the left. A small piece of slightly retouched Avon chert had been placed on the left breast. No evidence of a grave was noted.

F° 34-237 was the burial of an adult female about thirty-five years old lying on her right side in a flexed position with the head oriented 185° east. The burial had

been located in the past and had been badly damaged by earlier diggers. Inferences concerning the position of the burial were made from the position of the proximal end of the left humerus and the position of the feet. We were able to locate both ends of the aboriginal grave which measured 4.4 feet from north to south and cut one foot below mound base. This may have been an Eveland Phase grave.

F° 34-238 was the badly disturbed burial of an adult female (?). All bones except the articulated feet and lower legs had been removed by earlier investigators. Since the legs were dorsally extended, the corpse must have been extended. The portion of the grave pit which was located extended three inches into the premound humus and was filled with loess. The head must have been oriented about 258° east. A black, shell-tempered rim sherd lay near the left leg. It bore a segment of a thickened lip which had somewhat of a rolled appearance. The well-preserved skeleton lay 2.15 feet below the present surface.

F° 34-239 was one of a group of semiflexed burials excavated and displayed by Dr. Dickson in 1927 and reburied in situ without disturbance. Only that part of the skull above the maxilla was visible in our excavations. But on the basis of the development of the supraorbital ridges, the skeleton was judged to be that of an adult male. The head was oriented 135° east. This skull was below the sod line and must have been in a grave. It was located 2.75

feet below the present surface. The bones were not removed. This may have been an Eveland phase interment.

F° 34-240 was the burial of a twenty-month-old female (?) which appeared to its excavator to have had its right side disturbed by an unknown agency. The burial was dorsally extended with the skull 315° east. A small Busvcon perversum shell pendant with a deep groove for suspension was buried on the left hand. No evidence of a grave was detected. The well-preserved skeleton lay two feet below the present surface and 1.4 feet above F° 34-246.

F° 34-241 was the dorsally extended burial of an eight month old infant oriented with the head 317° east. The well preserved skeleton lay 2.1 feet below the surface and 1.4 feet above F° 34-246. There was no evidence of a grave.

F° 34-242 was the semi-flexed burial of a twelve to thirteen year old female in an ellipsoid grave measuring 5.25 feet in length, 2.83 feet in width and at least 3.08 feet in depth. The head was oriented 230° east while the flexed knees were oriented ca. 90° east. There was evidence of undercutting near the bottom of the grave. The burial directly underlay F° 34-235 and F° 34-236 and indirectly underlay F° 34-241. The corpse had been adorned with copper-coated-stone ear plugs at the ears and single strands of small disc beads of marine shell at the throat and the left wrist. The skull showed occipital flattening. The well-preserved bones lay 4.75 feet below the present

surface. Burial F° 34-316, a bundle, lay to the left of this burial in the same grave. This may have been an Eveland Phase grave.

F° 34-243 was the dorsally extended burial of a male about sixty-five years old in an ellipsoid grave measuring 6.1 feet long, 1.9 feet wide and extending 1.9 feet below the base of the mound. The head was oriented 210° east. The teeth of this individual were extremely poor and were certainly very troublesome to him (Morse, personal communication); the ninth and tenth left ribs evidenced healed fractures (Morse, 1969:6). No grave furniture was found with this well-preserved skeleton. The grave was first noted at mound base, 2.4 feet below the present surface, and the skeleton was located 4.2 feet below the present surface.

F° 34-244 was the dorsally-extended burial of a seven month old infant with the head oriented 217° east and the face over the right shoulder. The skeleton was 2.6 feet below the present surface. No evidence of a grave was noted. A small jar with a pocketbook shell spoon on top was behind the head.

F° 34-245 consisted of the dorsally extended feet and lower legs of the burial of an adult oriented as if the head were 216° east. These well-preserved bones lay 2.41 feet below the present surface and directly above F° 34-247. This burial had been almost completely removed by the

excavators of a privy pit. Parts of the skeleton were probably in the collection of bones in the bottom of the privy pit. The feet showed heavy involvement with osteoarthritis (Morse, 1969:104, Pl. 12D). No furniture was discovered with this burial.

F° 34-246 was the dorsally extended burial of a male about sixty-five years old in a grave measuring 5.75 feet long, 1.75 feet wide and at least .83 feet deep. The head was oriented 210° east. This burial overlay the grave of F° 34-242 and F° 34-316 and was overlain by F° 34-240 and F° 34-241. No grave furniture was found with this burial which lay 3.5 feet below the present surface.

F° 34-247 consisted of the dorsally extended feet and lower legs of a fourteen year old individual oriented as if the head were 216°. The burial lay directly below and in contact with F° 34-245 but four inches further south. This burial was almost completely removed by the excavators of the privy pit. Parts of the skeleton were probably in the collection of bones removed from the bottom of the privy pit. No grave furniture was discovered with this burial. The well-preserved bones lay 2.4 feet below the present surface.

F° 34-248 was the partially disarticulated burial of a twenty-one year old female buried in a grave of unknown length measuring 2.25 feet wide and at least 1.95 feet deep. The skeleton above the fourth lumbar vertebra had

been removed by the excavators of the privy pit. Articulated portions recovered included the fourth and fifth lumbar vertebrae, the pelvis and the right femur. The right radius, ulna and hand were articulated and located in a position indicating they had been articulated with the humerus before it was removed by the excavators of the pit. The left femur and tibia were articulated but not with the foot, pelvis or fibula. Part of the skeleton is probably in our collection from the bottom of the pit. The head of this burial was probably oriented 231° east. The bones were well-preserved and located 4.55 feet below the present surface.

F^o 34-249 was the dorsally extended burial of an eighteen year old male with the head oriented 307° east and with the face over the right shoulder. The skeleton extended into the east profile at the knees. The individual was buried in a grave of undetermined length measuring 1.9 feet in width and at least three feet in depth. This grave cut through the latest observable stage in the area and the bottom was 4.1 feet below the present surface. No burial furniture was associated with this individual but the floor of the grave was covered with ground green limonite from the area of the hips to the upper ends of the scapulae with a slightly heavier concentration on the right side. All of the well-preserved bones except the lower legs and the feet were removed.

F° 34-250 consisted of two isolated ilia of a twelve year old male buried in a roughly circular pit cut into the weathered loess and filled with unweathered loess. The pit was not as well defined as might have been hoped but it seemed to measure eight inches in diameter and six inches in depth. The bones lay three inches above the bottom and 3.32 feet below the present surface.

F° 34-251 consisted of the legs, right hand and pelvic fragments of a partially flexed adult female(?) oriented on an undetermined axis. The remainder of the burial had been removed by a previous excavator's pit. The left leg was slightly flexed over the right which was extended with the proximal end 275° east. The position of the right hand indicated the right arm was extended. No grave was apparent. No grave furniture was discovered with the burial. The well-preserved burial lay ten inches below the surface.

F° 34-252 was the badly disturbed burial of a young adult female with the head oriented 155° east. One previous excavator's pit had removed the lower legs and feet while another had removed the skull, upper ribs and vertebrae as well as the proximal end of the humerus. The burial had been placed in a grave of undetermined dimensions which extended slightly into the pre-mound humus and damaged Burial F° 34-258. The soil directly above the burial was mottled. The well-preserved skeleton lay two feet below the present surface. A bird-effigy bowl and a large jar with a pocketbook

shell spoon inside, but above the bottom, lay on the right forearm, while an Avon chert flake lay under the left hand.

F° 34-253 was the dorsally extended burial of a two year old infant with the head oriented 204° east. A large previous excavator's pit above the burial obscured the stratigraphic situation but it appeared to be about three inches below mound base. It was definitely below the pre-mound humus, No grave was isolated but, as the burial was discovered while excavating the above-mentioned previous excavators pit, it is possible that the grave was destroyed under the assumption that it was part of the later disturbance. No furniture was found with this burial. The fairly well-preserved bones were located 2.5 feet below the present surface.

F° 34-254 was the dorsally extended burial of a twenty-nine year old male with the head oriented 197° east. The right fibula evidenced a healed fracture (Morse, 1969:6). The corpse had apparently been buried in an ellipsoid grave which was later destroyed by the diggers of the grave for F° 34-265 and F° 34-266. We were able to isolate only the lower one-quarter of the pit which we were able to follow down for one foot. A pocketbook shell spoon found four inches above the proximal end of the right femur may or may not have been intentionally associated with this skeleton. A fragment of a fetus skull was in the grave fill. The lower end of the grave of F° 34-311 underlay the upper torso of this individual while the grave of F° 34-309 and F° 34-310

underlay the legs. As these graves settled the torso and legs of F° 34-254 settled, leaving the pelvis the highest part of the burial. Presumably this indicated these graves were filled shortly before F° 34-254 was interred. The people digging this grave almost completely destroyed F° 34-308. The grave of F° 34-254 was overlain directly by F° 34-251, F° 34-299, and F° 34-301 and stratigraphically by F° 34-295, F° 34-297, F° 34-298 and F° 34-300. All of these burials except F° 34-251 and F° 34-299 sloped downward toward the south, indicating they must have been buried over a relatively short period of time as the slope was caused by the slumpage of earlier graves. F° 34-295, F° 34-297, F° 34-298 and F° 34-299 were almost completely removed by the diggers of the grave of F° 34-265 and F° 34-266 who also removed the skull, mandible, cervical vertebrae and right scapula, arm and hand of F° 34-254, the well-preserved skeleton of which lay 2.8 feet below the surface. The skull of this burial was probably among those found at the feet of F° 34-265 and F° 34-266.

F° 34-255 was the dorsally extended burial of a male(?) at least sixty-five years old with the head oriented 309° east and the face over the left shoulder. The burial extended into the east profile at the knees. The corpse was interred in a grave of undetermined length measuring 1.25 feet in width and at least one foot in depth. This grave seems to cut through the latest observable stage in the area.

What was apparently a bone worker's tool kit had been buried behind the head. The well-preserved bones were 4.1 feet below the surface.

F° 34-256 was the dorsally extended burial of a sixteen year old female oriented with the head 223° east and the face over the right shoulder. She was in an ellipsoid grave measuring six feet long, 1.7 feet wide and at least a foot deep. Soil texture above this grave indicated it probably extended from the bottom of the disturbed soil and cut through the latest observable stage in the area. An engraved bone bracelet was found on the right wrist; four sets of anklets, each consisting of two dually-perforated immature mucket (Actinonaias carinata) shells, were on each ankle; and a medium-sized, rounded shouldered jar with a pocketbook shell spoon inside, but above the bottom, was at the right side of the skull. The well-preserved bones lay 3.7 feet below the present surface.

F° 34-257 consisted of the bones of a two week old infant scattered over the skeleton of F° 34-256. Most of the bones were on the feet of F° 34-256 but a few were on the torso. It is not apparent whether these bones represent the selected bones of an exposed corpse or bones collected from a disturbed grave, but the latter seems more likely since the bones were scattered.

F° 34-258 was the dorsally-extended burial of a six year old child oriented with the head 189° east. Though

a definite grave outline was not detected, a soil difference which appears to have been grave fill was followed down to the bones which were located two feet below the surface on the pre-mound humus. The burial directly overlies F° 34-267 and was overlain by F° 34-307 and the grave pit of F° 34-252. The diggers of the latter grave removed both feet and the lower right leg of F° 34-258. No grave furniture was found with this burial.

F° 34-259 consisted of the lower legs of an adult with the proximal ends oriented 285° east. The left femur had been removed by previous excavators. It was not determined whether or not the right femur was present. The well-preserved bones were 2.6 feet below the present surface, below F° 34 and above F° 34-263. As the skeleton extended into the west profile which bore much evidence of disturbance, it was not investigated further and the bones were not removed.

The designation F° 34-260 was assigned to an articulated adult female's right humerus, radius and ulna found nine inches above F° 34-254. This arm almost certainly belonged to one of the aboriginally-disturbed corpses in the immediate area.

F° 34-261 was the dorsally-extended burial of a thirty-year old female oriented with the head 276° east and the face over the left shoulder. The well-preserved skeleton lay 1.6 feet below the surface. The skeleton lay beside

F° 34-281 on the same level. No grave was evident. It underlay F° 34-286 and overlay F° 34-269, F° 34-270, F° 34-288, F° 34-289, F° 34-102, F° 34-303, F° 34-306, F° 34-314 and F° 34-315 directly and F° 34-304 and F° 34-312 indirectly. An Avon chert graver was discovered while cleaning the skeleton in the laboratory.

F° 34-262 was the dorsally-extended burial of a female about nine years old with the head oriented 222° east. As this skeleton was completely within the limits of the grave of F° 34-265 and F° 34-266, its grave could not be delineated through soil differences, but damage to the above-mentioned burials clearly indicates one was dug. The dimensions were apparently about 5.33 feet long, 1.67 feet wide and at least 2.15 feet deep. The skeleton was 2.15 feet below the present surface and lay directly on the above-mentioned skeletons. A significant ensemble of marine-shell beads was found on this skeleton. Three sub-spherical beads were found at either temple; a double or triple strand of sub-spherical beads was found around the right wrist; a single strand was found below each knee; and single barrel-shaped bead and a cylindrical bead were found on the frontal. The resemblance between this ensemble and those pictured in the art of the Southeastern Ceremonial Complex will be discussed below. A flake knife of Avon chert lay at the right hand. With the exception of the serious crushing of the skull and the decomposition in

the thoracic region and of the hands and feet, the skeleton was fairly well preserved. The burial directly overlay F° 34-265, F° 34-266 and stratigraphically overlay F° 34-251, F° 34-282, F° 34-291, F° 34-293, F° 34-295, F° 34-297, F° 34-298, F° 34-299, F° 34-300, F° 34-301, F° 34-302, F° 34-306, F° 34-309, F° 34-310 and F° 34-311.

F° 34-263 consisted of the left tibia, fibula and foot as well as the right fibula and part of the right foot of an adult. The well-preserved bones were 1.8 feet below the surface. As only the legs of the skeleton were in the trench and there was extensive recent digging in the west profile into which the skeleton extended, the bones were not removed and further investigations were not conducted on it. This burial overlay F° 34-259 and F° 34-264.

F° 34-264 consisted of the distal half of the left femur, the left tibia and fibula and part of the left foot of an adult. The right leg was not exposed but the right foot was. The well-preserved bones were 3.3 feet below the surface. Since only the legs of the skeleton were in the trench and there was extensive evidence of recent digging in the west profile into which the skeleton extended, the bones were not removed and further investigations were not conducted on it. The burial underlay F° 34-259 and F° 34-263.

F° 34-265 and F° 34-266 were the dorsally extended burials of adolescents with their heads oriented 209° east

and the faces over the right shoulders. The corpses were placed with F° 34-265 on the right and F° 34-266 on the left in a single grave which apparently measured 8.33 feet long and three feet wide. These figures were reached through a study of skeletons disturbed during the aboriginal excavation of the grave and the area of the mass of disarticulated bones placed on the grave floor. Fragments of a crushed skull, a humerus, pot sherds and a pocketbook shell spoon were beyond these limits. An explanation for this is not immediately apparent. The grave extended at least 1.92 feet below the base of the mound and cut through at least ten inches of fill. The flat floor of the grave was 3.91 feet below the present surface and, since it cut through burials within ten inches of the surface, the grave must have originally have been at least four feet deep.

F° 34-265 was a twelve year old female with a flake of Avon chert under the left wrist and two sub-spherical marine shell beads in the skull cavity. The beads were doubtlessly part of the bracelet of F° 34-262. Several sherds of a plain, black, shell-tempered, loop-handled jar and a shell spoon were located to the right of this skeleton but could not be definitely associated. F° 34-266 was an eleven year old male with no burial furniture in association. Its skull evidenced occipital flattening.

The aboriginal of this grave diggers almost completely removed F° 34-295, F° 34-297 and F° 34-299 and damaged F° 34-254

and F° 34-291. Some of the bones from these burials (except F° 34-299) were segregated from the fill and placed without regard to orientation or arrangement on the floor of the grave. Five skulls, almost certainly including those of F° 34-297 and F° 34-298, were placed at the foot of the grave and the feet of F° 34-265 were propped up on one of them. The cranial vault of a sixty skull was located near the right shoulder of F° 34-265. Fragments of this skull were mentioned above as being outside of our grave outline. Three other individuals: a female 28 to 30 years old; a male 28 years old; and a male 30 years old were represented by skulls and perhaps other bones in the large mass. Other individuals were represented by: the frontal of an eight year old child; bones of a two year old child and the mandible of an elderly adult. This was one of only two mandibles found in the mass. The graves of these individuals must have either been completely destroyed by the double grave or partially destroyed by that grave and the remainder disturbed by later excavators.

F° 34-268 was the burial of an adolescent with the head oriented 103° east over the left shoulder. The skeleton extended into the west profile just above the pelvis. It was clear, however, that the torso and probably arms were extended. The skeleton was buried in an ellipsoid grave, the bottom of which was 3.17 feet below the present surface. The well-preserved bones were not removed.

F° 34-271 was the dorsally-extended burial of a child about three-and-one-half years of age with the head oriented 247° east and the face over the left shoulder. The corpse was interred in a grave measuring 4.5 feet long and 1.4 feet wide. Since the grave was isolated just above the bottom, the depth is unknown. The well-preserved burial was three feet below the present surface. The burial wore a double strand of marine-shell disc beads which appeared to be much too long to have been worn by a child. A paper mussel (Leptodea cf. fragilis) shell spoon was located behind the skull and apparently three inches above the bottom of the grave. A Kaolin chert knife was buried along the upper right arm and a stone discoidal was under the right wrist. This grave overlapped that of F° 34-290.

F° 34-272 was the dorsally extended burial of a thirty-three year old female interred with the head apparently oriented 150° east. Earlier excavators had removed all of this burial above the pelvis. The corpse was buried in a grave which measured more than four feet in length and two feet in width and which cut at least five inches into the pre-mound loess. This burial lay directly above and in the same grave as F° 34-284. The well-preserved bones were 2.25 feet below the present surface.

F° 34-273 was the dorsally extended burial of a thirty-eight year old female with the head oriented 250° east. The corpse had been interred in a grave which measured 6.3

feet long, 1.75 feet wide and at least a foot deep. It apparently cut into the loess below mound base. No grave furniture was found with this individual. The head of the grave as well as the skull and upper cervical vertebrae had been removed during the construction of a modern poultry house. The left side of the burial had been slightly disturbed by a large tree root which had grown along the side of the grave. The well-preserved skeleton lay 1.5 feet below the poultry house floor level.

F° 34-274 was the partially excavated burial of an adolescent interred in an undetermined position in an apparently ellipsoid grave oriented 230° east. The torso of the individual must have been in a rather advanced state of decomposition, as several articulated lumbar vertebrae were located on the lower legs with the anterior oriented toward the feet and the posterior and covered by a pile of disarticulated ribs which rested upon them. An alternative possibility is that these bones belonged to a second individual. The well-preserved bones extended into the profile just above the knees at a depth of 4.91 feet. The grave was at least 3.3 feet deep and, if our interpretation of the profile is correct, it was at least 3.3 feet deep. It certainly cuts through artificially-deposited soil into the subsoil. The bones were not removed but were reinterred in situ with a one cent piece.

The designation F° 34-275 was assigned to a group of adult long bones which had apparently been disturbed by the diggers of the grave for F° 34-318, which has not, as yet, been excavated. As these bones seemed to be related to that grave, they were left in situ until such time as F° 34-318 is excavated.

F° 34-276 was the dorsally extended burial of a male about twenty-seven years old buried in an ellipsoid grave measuring 5.5 feet long, 1.75 feet wide and which cut at least five inches into the brilliant yellow unweathered pre-mound loess. The head was oriented 347° east with the face over the right shoulder. The well-preserved skeleton lay 2.91 feet below the present surface. This grave cut through that of F° 34-278 and contained several small Late Woodland (Sepo ?) sherds and bits of charcoal and burned clay. The lower left leg and the left foot ran into the east profile and were not removed. We do not see the two graves as being related but believe F° 34-276, F° 34-272, F° 34-279 and F° 34-284 may be related and form a plot for a specific social unit. This hypothesis is based upon similarities in orientation.

F° 34-277 was the dorsally extended burial of a twenty-eight year old male buried in a grave approximately six feet long, 1.67 feet wide and of unknown depth. The head of the grave was oriented 92° east. This grave overlies the edge of the grave of F° 34-280 and was overlain by the grave of

F° 34-305. The diggers of the latter grave had removed the skull, mandible, left humerus, left scapula and several of the upper left ribs and piled them together where the head had been. There was an unreduced dislocation of the right hip which would have caused a shortening and inward angulation of the leg (Morse, 1969: Pl. 6A). The well-preserved bones were located 2.83 feet below the surface. A scraper of Avon chert lay at the right hand and an un-notched triangular point of the same material lay to the right of the distal end of the right femur. The lower legs of the burial extended into the east profile and were re-buried in situ.

F° 34-279 was the dorsally extended burial of a forty-five year old male with slightly flexed legs buried in a grave measuring 4.75 feet in length and two feet in width with the head oriented 02° east and the face over the right shoulder. The well-preserved bones were three feet below the present surface. The grave had cut through the grave of F° 34-278 and contained a small, shell-tempered, cordmarked sherd. The skeleton of a raccoon (Procyon lotor) lay on the lower legs but was almost certainly a later intrusion.

F° 34-280 was the burial of an adult with the legs extended and the feet oriented 106° east. The corpse had apparently been interred in an ellipsoid grave. Though the skeleton extended into the east profile just below the proximal ends of the femora, the skeleton was judged to be

that of a female due to the lightness of the bones. The well-preserved bones, which lay 2.91 feet below the present surface, were reinterred in situ. The grave was superimposed by that of F° 34-277 which was in turn superimposed by that of F° 34-305.

F° 34-281 was the dorsally extended burial of a forty-nine year old female with the head oriented 270° east. The well-preserved bones were 2.08 feet below the surface. Earlier excavators had removed the skull and mandible, right ribs, right arm and the thoracic and cervical vertebrae. This burial was overlain by F° 34-302 and F° 34-306. It may have been interred with F° 34-261, as it lay on exactly the same level and beside her. There was no evidence of a grave. This burial overlay F° 34-302 and F° 34-306.

F° 34-282 consisted of the bones of the feet of an adult located 2.75 feet below the present surface. The remainder of the skeleton had been removed by previous excavators. The distal ends of the bones were oriented ca. 270° east. A handled beaker with a constricted midsection stood just to the left of the feet.

F° 34-283 was the dorsally extended burial of a forty-one year old male in an ellipsoid grave measuring 6.41 feet long, 2.08 feet wide and at least a foot deep with the head oriented 273° east. The face was over the left shoulder. The well-preserved skeleton was located 3.25 feet below the present surface. In the fill immediately above the rib cage

a fine side-notched triangular point was found. A second such point was found in the right side of the rib cage and a third cruder point which was broken at the notches was found below the right scapula. An unworked right valve of a pocketbook shell lay at the skull. The grave was directly overlain by F° 34-281, F° 34-282, F° 34-283, F° 34-288, F° 34-291 and F° 34-292 and was indirectly overlain by F° 34-261, F° 34-262, F° 34-265, F° 34-266, F° 34-285 and F° 34-286.

F° 34-284 was the badly vandalized burial of an adult buried in the same grave as and below F° 34-272. The proximal ends of the leg bones were oriented 150° east. A single small shell disc bead located at the right ankle was probably an accidental inclusion. The well-preserved bones present showed evidence of multiple periostitis (Morse, 1969:17). The skeleton was 2.67 feet below the present surface.

F° 34-285 was the dorsally extended burial of a thirteen month old infant with the torso oriented 270° east and the face over the right shoulder. The lower half of the burial was damaged while trimming the west profile of the initial trench. This burial was five inches above burial F° 34-291 but apparently not directly associated with it. As this grave was completely within the limits of the earlier grave, we were not able to define it. A crude miniature

lobed jar lay behind the head. A recent pit cut just behind the head and might have removed other furniture. Sherds of two other vessels may have been either in the fill of this pit or placed behind the head of this burial. The well-preserved skeleton lay 2.25 feet below the present surface. It overlay burials F° 34-291, F° 34-292, F° 34-293, F° 34-302 and F° 34-306 directly and F° 34-283 and F° 34-312 indirectly.

F° 34-286 consisted of the feet and dorsally extended lower legs of a female thirty to thirty-five years old with the proximal ends of the bones present oriented 290° east. A recent pit extended from the knees to the edge of the excavation. The well-preserved bones were 2.1 feet below the surface.

F° 34-287 was the dorsally extended burial of a male about thirty years old with the head oriented 262° east and the anterior end of the torso oriented about 247° east. Though the fill around the burial was mottled, no firm evidence of a grave was discerned. The well-preserved skeleton was 1.58 feet below the present surface. The bones of the right lower leg were shorter than those of the left, probably as a result of a nerve injury during the growth period. Paralysis was probably present (Morse, 1969: 126, Pl. 23A). Burial furniture included two copper-coated, wooden imitation canine teeth found in the region of the ears, a bone hair pin at the top of the skull and a paint

pallette with adhering red pigment beneath the mandible. A shattered unnotched triangular point was found between the first and second ribs. This burial overlay F° 34-316.

F° 34-288 was the dorsally extended burial of a twenty-two month old infant with the head oriented 276° east with the face over the left shoulder. The limbs were so tightly compressed that wrapping was suspected. There was no evidence of a grave. The well-preserved burial was 3.5 feet below the present surface. A necklace of Jasper dwarf olive (Olivella jaspides) and Marginella (Marginella apicinum) shells extended half-way down the torso, while a fresh water pearl pendant and a galena cube pendant were found one-quarter-way down the torso. An infant occiput lay above the chest of this burial. Though it shows no sign of modification, it seems to have been interred with this individual. This burial overlay burials F° 34-302 and F° 34-306 and underlay F° 34-261 and F° 34-289.

F° 34-289 was the dorsally extended burial of a male (?) about thirty months old with the head oriented 298° east. There were hints of an ellipsoid burial pit but no definite limits were isolated. The fairly well-preserved burial lay 2.6 feet below the present surface. The left arm was missing. No furniture was found with this burial. This burial was overlain by burials F° 34-261, F° 34-286 and F° 34-288 and overlay burials F° 34-302, F° 34-303, F° 34-306, F° 34-314 and F° 34-315.

F° 34-290 was the dorsally extended burial of a month old infant with the head oriented 237° east buried in an ellipsoid grave measuring 2.67 feet long, 1.1 feet wide and at least 1.33 feet deep. The knees were drawn up. An apparently unworked valve of a pocketbook shell was placed between the left shoulder and the side of the head. This grave was dug through mound fill to the underlying Eveland Phase midden and was overlain by F° 34-271. The well-preserved burial was 4.33 feet below the present surface.

F° 34-291 was the skeleton of an eight year old child buried in an extended dorsal position with the skull oriented 260° east. This burial shared a grave measuring about 6.2 feet long, 1.75 feet wide and at least nine inches deep with F° 34-292 and F° 34-293. The well-preserved bones were 2.5 feet below the present surface of the mound. The bones from the dorsal vertebrae to the tibia were removed by the excavators of the grave for F° 34-265 and F° 34-266 and were found in that grave. This burial was post-dated by these burials as well as F° 34-262 and F° 34-285. It was predated by F° 34-302, F° 34-303, F° 34-306, F° 34-314 and F° 34-315.

F° 34-292 was the dorsally extended burial of a three year old child buried below F° 34-271 and above F° 34-293 in the same grave. The skull was oriented 271° east over the right shoulder. The compressed position of the limbs suggested the burial had been wrapped. The skull evidenced

occipital flattening. The well-preserved skeleton lay 2.9 feet below the present surface. Burial furniture included a worked marine conch shell (B. perversum) placed in front of the face, a short necklace consisting of eleven Jasper dwarf olive shells and a single tubular marine-shell bead, a sparsely-engraved bone bracelet on the right arm, an unengraved bone bracelet on the chest and a bone comb behind the occiput. The teeth of the comb pointed to the left side of the head. The bone bracelets seem to be too large to be worn by a child so must have been placed by mourners at wrapping time.

F° 34-293 was the dorsally extended burial of a male about twenty years old oriented 271° east with the face over the left shoulder. The position of this burial relative to the others in the mound has already been described. The skull bore the effects of osteomyelitis which probably developed as a result of an injury which also probably caused death. The right tibia and the left femur were effected by a disease resembling a non-supportive chronic osteomyelitis (Morse, 1969:114, Pl. 17). A cambered-rimmed, loop-handled jar with a handled spoon manufactured from the left valve of a pocketbook shell, and a Barrel-shaped Beaker were buried on the left arm, and an Avon chert flake scraper was above the right wrist. The well-preserved skeleton was 3.25 feet below the present mound surface.

F° 34-294 a and F° 34-294 b consisted of the skull and mandible of a thirty-six year old (?) female and parts of the post cranial skeletons of two adults buried in a circular pit measuring 2.67 feet in diameter and at least nine inches deep. The bones were in a very tight bundle with the skull at the northernly end of the bundle and the proximal ends of the long bones 205° east. The skull and the upper third of the left tibia of the same person showed a periosteal reaction (Morse, 1969:110, Pl. 15 D-F). On the edge of the bundle very near the bottom were two paired perforated cougar (Felis concolor) upper canines. This grave cut into the prefound surface and was overlain by F° 34-256. The bones were 4.25 feet below the present surface.

F° 34-295 consisted of the left foot, tibia and fibula and part of the right foot of a dorsally-extended burial of a young adult male (?) with the head oriented 189° east. Only the foot of an apparently ellipsoid grave was discernable since the digging of the grave for F° 34-265 and F° 34-266 and the grave for F° 34-298 destroyed the edges of the grave. The former grave produced many of the bones of this individual but not the skull. The bones sloped slightly south, apparently due to the settling of the grave of F° 34-254. The well-preserved bones lay 2.75 feet below the present surface.

F° 34-296 was the burial of a young child with the head oriented 167° east. The portion excavated indicated the

corpse had been dorsally extended. The bones were 1.21 feet below the present surface and showed no evidence of having been interred in a grave. The skeleton overlay F° 34-287 and F° 34-317. The bones were not removed as the skeleton extended into the north profile of the northernmost of the eastern extensions.

F° 34-297 consisted of the ephiphyseal caps of the tibiae and femora as well as the patellae of a female about eighteen years old buried with the legs, at least, dorsally extended with the proximal ends oriented 198° east. This burial was directly above burials F° 34-298 and F° 34-299 and below F° 34-251. The bones slumped slightly to the south - probably due to the settling of one or more of the graves below them. We are unable to explain the absence of the lower legs of the burial, since the remaining bones overlay or are overlain by burials occupying the area presumably once occupied by the missing lower legs. The femora were pulled out laterally by the diggers of the grave of the grave for F° 34-265 and F° 34-266. This grave produced many of these bones including the skull. The undisturbed bones were ten inches below the present mound surface.

F° 34-298 consisted of the bones of the left leg, the lower right leg and part of the left hand of a thirty-five year old female who had been buried in an extended dorsal position with the head apparently 167° east. The slumpage of 20° indicates the corpse must have been interred before

the underlying corpses had completely decomposed and their graves had settled. These bones lay above those of F° 34-297 and below those of F° 34-299 and were apparently buried with them in the same grave. The missing bones were removed by the diggers of the grave of F° 34-265 and F° 34-266 which produced many of them, including the skull. The north end of the well-preserved bones was eleven inches below the present surface and the south ends were 1.8 feet below.

F° 34-299 consisted of the bones of the feet and lower legs and the patellae of an adult. The legs, at least, were dorsally extended with the proximal ends oriented 197° east. Though no definite grave outline was discernable, the skeleton intruded slightly into the prefound humus layer. There was some evidence of slumping, indicating that the grave of Burial F° 34-254 had not completely settled before the burial was made. The torso and upper legs of this skeleton were apparently removed by the diggers of the grave for F° 34-265 and F° 34-266 but none of the bones could be isolated in the mass of disarticulated bones from the floor of that double grave. The well-preserved bones were 1.1 feet below the present surface.

F° 34-300 was the dorsally extended burial of an eight month old infant interred with slightly flexed knees in a round to oval grave (only the east side was isolated) at least three inches deep and filled with a mixture of loess and humus. The head was oriented 173° east. A conch

(B. perversum) shell pendant with a groove for suspension lay at the right elbow with the apex pointed 173° east. The torso slumped six inches between the skull and the dorsal vertebrae, apparently indicating the corpse had been interred before the grave of F° 34-298 had settled. This articulated skeleton lay among the bones of F° 34-301 and was certainly buried at the same time. The well-preserved bones lay 1.8 feet below the present surface.

F° 34-301 was the reburial of a fifty-five year old female consisting of the skull and mandible as well as both femora, an ulna, pelvis and a number of ribs and vertebrae. There was no apparent order or orientation to the bones. The skull was on its left side near the southwest corner of the mass which measured 1.25 feet north to south and one foot east to west.

F° 34-302 was the dorsally extended burial of a thirty year old male with the head oriented 20° east interred in an ellipsoid grave measuring 6.25 feet long, 2.25 feet wide and at least as deep as the ten inches which it extended into the pre mound surface. The face was turned slightly over the right shoulder. This burial is of interest from a physical point of view because it is one of only two from the excavation which appeared to be phenotypically Illinid with Muskogid admixture. The other was F° 34-309 (Robert Blakely, personal communication, dated 1 Dec. 1970). As the physical anthropology of these people becomes better known

this burial may later be classified as Eveland. A handled beaker was found at the left side of the head, a notched triangular projectile point lay beside the upper right rib cage and the wing bones of a turkey (Meleagris gallopavo) lay on the right side of the lower right forearm. The turkey bones are probably the remains of a fan or similar object. Limonite had been spread on the floor of the grave from the area of the hips to the shoulders. The well-preserved bones were 4.17 feet below the present mound surface. The burial was overlain by burials F° 34-261, F° 34-281, F° 34-288, F° 34-291, F° 34-292, F° 34-293 and F° 34-306.

F° 34-303 was the badly disarranged dorsally extended burial with bent knees of a one month old infant in a grave measuring 2.75 feet long, 1.58 feet wide and at least six inches deep. The head was oriented 255° east. The skeleton lay along the south wall of the grave which it shared with F° 34-314 and F° 34-315. F° 34-314 and F° 34-315 consisted of bones of the trunk and skull of an infant of nineteen months and the right frontal, left tibia, femur and fibula as well as the right humerus of an eight month fetus respectively, buried in a pile. The well-preserved bones lay four feet below the present surface. They were overlain by burials F° 34-302, F° 34-306, F° 34-283 and F° 34-289.

F° 34-304 consisted of the skull and upper cervical vertebrae of an adult male (?) buried in a grave with the skull oriented 215° east with the face over the left shoulder.

The rest of the burial and all of the graves except that part immediately under the skull had been destroyed by previous investigators. The grave had intruded into the pre-mound hilltop. The well-preserved bones lay 1.5 feet below the present surface.

F° 34-305 was the dorsally extended burial of an adult female about thirty-five years old buried in an ellipsoid grave of undetermined length and depth and about 1.6 feet wide with the head oriented 266° east and the face over the left shoulder. The mandible had dropped and the lower lumbar vertebrae were disarticulated. The grave cut through the grave of F°34-280 and caused the disturbances previously described. Due to the extremely thorough recent digging in the area, we were able to say only that this burial post-dated F° 34-277 and F° 34-280 and that it lay 3.2 feet below the present surface. Since the femora extended into the west wall, the legs were not excavated.

F° 34-306 was the dorsally extended burial of a fifty year old male with the head oriented 218° east, buried in an ellipsoid grave measuring 6.67 feet long, 1.54 feet wide and at least eight inches deep. The upper part of this grave cut into the natural hill and the lower part overlapped the grave of F° 34-302. The left ribs were disarranged by an unknown agency. Limonite was sparsely scattered on the grave floor from the area of the hips to the shoulders. The well-preserved skeleton was 3.75 feet below the mound surface.

The burial was directly overlain by burials F° 34-261, F° 34-281, F° 34-282, F° 34-283, F° 34-286, F° 34-288, F° 34-289, F° 34-291, F° 34-292 and F° 34-293.

F° 34-307 was the semi-flexed burial of a six weeks old infant with the head oriented 162° east and with the face over the left shoulder. The knees were drawn up. Since it was nine inches below the pre-mound humus line, the corpse must have been interred in a grave. An unworked valve of a pocketbook mussel lay at the left shoulder. The fairly well-preserved skeleton was 2.2 feet below the present surface. The burial overlay F° 34-258 which in turn overlay F° 34-265. It was overlain by F° 34-300 and F° 34-301.

F° 34-308 was the very badly disturbed burial of an adult which, judging from the few bones present - a few right ribs and the right clavical - was oriented on a north-south axis with the head to the north. The skeleton had been almost completely removed by the excavators of the graves for burial F° 34-254 and F° 34-265 and F° 34-266. A deer (Odocoileus virginianus) ulna awl found under the ribs had apparently been buried with this individual. The well-preserved bones lay three feet below the present surface.

F° 34-309 was the partial burial of a male between forty-five and fifty years old buried above burial F° 34-310 in a pear-shaped pit measuring 2.67 feet long, two feet wide and at least two feet deep. The corpse was in an

almost complete state of decomposition at the time of burial. The right limbs as well as many ribs, vertebrae and hand and foot bones were missing. The left leg, pelvis, lumbar vertebrae and the thirteenth thoracic vertebra were articulated with the leg flexed at the knee and placed on top of the pile. The left scapula and arm were articulated and flexed. The atlas, axis and third cervical vertebra were articulated. The skull and mandible were disarticulated. The posterior arch of the atlas displayed a congenital failure of fusion (Morse, 1969:37). A 1.5 cm. hole at the juncture of the left temporal and parietal may have caused the death of this individual (Dr. Dan Morse, personal communication). This is the only burial other than F° 34-302 recovered from the 1966 excavations which seemed to be of the Illinid type with Muskogid admixture (Robert L. Blakely, personal communication, dated 1 Dec. '70), but again we note that the significance of this fact, if any, is yet to be determined. This grave was directly overlain by that of F° 34-254.

F° 34-310 was the well-preserved, semi-flexed burial of a four year old child with its head oriented 214° east in the same grave as F° 34-310. The corpse lay on its back with the left arm extended and the right arm and the legs flexed. An unengraved, bell-shaped pendant cut from conch shell and with notches for suspension was found on the chest with the concave side up. The bones lay 3.3 feet below

the present surface.

F° 34-311 was the dorsally extended burial of a child buried in an ellipsoid grave measuring 4.67 feet in length, 1.42 feet wide and at least 1.67 feet deep with the head oriented 255° east. The well-preserved bones lay three feet below the present surface. Since part of the left side of this skeleton extended into the wall of the excavation and was not excavated, the burial was not removed.

F° 34-312 was the partially-excavated burial of an adult male, apparently extended with the head probably oriented 270° east. Only that part of the skeleton from the pubes down and part of the fingers were excavated. The skeleton was in a grave of unknown length that was at least 1.42 feet wide and at least two feet deep. The well-preserved bones were 4.33 feet below the present surface. The bones were not removed.

F° 34-313 was the badly disturbed burial of a thirty month old child in an ellipsoid grave. Only the feet and legs were recovered. The proximal ends of the dorsally extended legs were 171° east. The length of the grave is unknown but it was at least eight inches wide and more than three inches deep. The well-preserved bones were two feet below the surface.

F° 34-314 and F° 315 are described with F° 34-303.

F° 34-316 consisted of the long bones, both scapulae and the right clavical of a forty-two year old male buried at the left side of Burial F° 34-242 in the same grave.

Though the bones were not all Parallel, the pile was generally oriented 230° east - the same axis as F° 34-242.

F° 34-317 was the partially disturbed, dorsally extended burial of an adult female (?) which was partially excavated. The head was oriented 206° east. The corpse lay in an ellipsoid grave of unknown length measuring at least 1.7 feet wide and six inches deep. A flake scraper of Avon chert lay at the left hand. The well-preserved skeleton lay two feet below the present surface. The bones were not removed.

F° 34-318 was assigned to an unexcavated burial pit which lay below F° 34-252.

TABLE I

Summary of Data on Spoon River Burials from the 1966 Excavations at the Dickson Mound

<u>Burial</u>	<u>Age</u>	<u>Sex</u>	<u>Head Orientation</u>	<u>Position</u>	<u>Furniture</u>	<u>Notations</u>
235	Adult	M	09°	Extended	?	Only legs remain
236	14 mo.	F	188°	Extended	Retouched flake	
237	ca. 35	F	355°	Flexed	?	Badly vandalized
238	Adult	F?	258°	Extended	Sherd?	Only legs remain
239	Adult	M	185°	Semi-flexed	None	Originally excavated and displayed by D.F. Dickson
240	20 mo.	F	15°	Extended	<u>Busycon shell</u>	
241	8 mo.	?	317°	Extended	None	
242	12.5	F	230°	Semi-flexed	Copper-coated ear plugs, bead necklace and bracelet	316 in same grave. Occipital flattening.
243	65	M	210°	Extended	None	
244	7 mo.	?	217°	Extended	Jar and shell spoon	
245	Adult	?	216°	Extended	?	Only legs remain. In grave with 247.
246	65	M	210°	Extended	None	
247	14	?	216°	Extended	?	Only legs remain. In grave with 249.
248	21	F	231°	Partially disarticulated	?	Lower half remains.
249	18	M	307°	Extended	Limonite	
250	12	M	-	Reburial	None	Two ilia.

<u>Burial</u>	<u>Age</u>	<u>Sex</u>	<u>Head Orien- tation</u>	<u>Position</u>	<u>Furniture</u>	<u>Notations</u>
251	Adult	F	?	Extended	?	Disturbed.
252	Adult	F	155 ^o	Extended	Bowl, jar, spoon, flake	Disturbed.
253	2 wks.	?	204 ^o	Extended	None	
254	29	M	197 ^o	Extended	Shell spoon?	Spoon above pelvis. Skull found in grave of 265 and 266.
255	65+	M	309 ^o	Extended	Bone worker's kit	
256	16.5	F	223 ^o	Extended	Engraved bra- celet, shell rattles, jar, shell spoon	In grave with 257.
257	2 wks.	?	-	Reburial	None	In grave with 256.
258	6.5	?	189 ^o	Extended	None	
259	Adult	?	285 ^o	Extended	?	Only legs excavated.
261	30	F	276 ^o	Extended	None	
262	9	F	222 ^o	Extended	Bead ensemble, flake knife	
263	Adult	?	?	?	?	Only legs remain.
264	Adult	?	?	?	?	Badly vandalized, partially excavated.
265	12.3	F	209 ^o	Extended	Jar, shell spoon, flake	
266	11	M	209 ^o	Extended	None	Cranial deformation.
267	45	M	181 ^o	Semi-flexed	?	Partially disturbed.
268	Adoles- cent	?	103 ^o	Extended	?	Partially excavated.
271	3.5	?	247 ^o	Extended	Knife, adult's necklace of disc beads, dis- coidal, shell spoon.	
272	33	F	150 ^o	Extended	?	Everything above pelvis vandalized. In grave with 284.

<u>Burial</u>	<u>Age</u>	<u>Sex</u>	<u>Head Ori- en- tation</u>	<u>Position</u>	<u>Furniture</u>	<u>Notations</u>
273	38	F	250	Extended	?	Skull missing.
274	Adoles- cent	?	?	Semi-flexed	?	Partially exca- vated.
276	27	M	347	Extended	None	
277	28	M	92	Extended	Point, scraper	Head disturbed.
279	45	M	02	Extended	None	
280	Adult	?	286	?	?	Partially exca- vated.
281	49	F	270	Extended	?	Upper torso van- dalized.
282	Adult	?	?	?	Beaker	Only feet remain.
283	41	M	273	Extended	3 points, un- worked L. ven- triosa valve	
284	Adult	?	150	Extended	?	Badly vandalized. In grave with 272.
285	13 mo.	?	270	Extended	Miniature vessel + sherds(?)	
286	30-35	F	290	Extended		Badly vandalized.
287	30	M	247	Extended	Copper coated wood teeth, hair pin, paint palette	Point imbedded in chest.
288	22 mo.	?	276	Extended	Olivella & Mar- ginella shell necklace, pearl slug & galena pen- dant	
289	2.5	?	298	Extended		
290	1 mo.	?	237	Extended	Unworked L. ven- triosa valve	
291	8	?	260	Extended		292 & 293 in same grave.

<u>Burial</u>	<u>Age</u>	<u>Sex</u>	<u>Head Orien- tation</u>	<u>Position</u>	<u>Furniture</u>	<u>Notations</u>
292	3	?	271	Extended	Busycon shell, Olivella and cut beads, 2 bone wrapped bracelets, bone comb	Cranial deforma- tion.
293	20	M	271	Extended	Jar, shell spoon, beaker, flake scraper	
294a	24	F	25	Bundle		
294b	Adoles- cent	M	25	Bundle	Cougar teeth	a and b in same grave.
295	21	M	189	Extended	?	Aboriginally dis- turbed, part in grave of 265 & 266.
296	Child	?	167	Extended	?	Partially excavated.
297	18	F	198	?	?	Aboriginally dis- turbed, part in grave of 265 & 266.
298	35	F	192	Extended	?	Aboriginally dis- turbed, part in grave of 265 & 266.
299	Adult	?	197	Extended	?	Aboriginally dis- turbed, part in grave of 265 & 266.
300	8 mo.	?	173	Extended	Busycon shell	In grave with 301.
301	55	F	-	Pile	None	In grave with 300.
302	30	M	20	Extended	Beaker, fan, point, limonite	
303	1 mo.	?	255	P. disar- ticulated	None	314 & 315 in same grave.
304	Adult	M?	215	?	?	Badly vandalized.
305	35?	F	266	Extended	None	
306	50	M	218	Extended	Limonite	
307	1.5 mo.	?	162	Semi-flexed	Unworked L. ventricosa valve	

<u>Burial</u>	<u>Age</u>	<u>Sex</u>	<u>Head Ori- en- tation</u>	<u>Position</u>	<u>Furniture</u>	<u>Notations</u>
308	28+	?	ca. 220	?	Deer ulna awl	Almost completely destroyed aboriginally.
309	45-50	M	-	P. disarticulated	None	In grave with 310.
310	4	?	214	Semi-flexed	Cut marine shell pendant	in grave with 309.
311	Child	?	255	Extended	None	
312	Adult	M	270	Extended	?	Partially excavated.
313	2.5	?	171	Extended	?	Only legs remain.
314	19 mo.	?	-	Pile	None	314 & 315 in pile in grave with 303.
315	8 mo. fetus	?	-	Pile	None	314 & 315 in pile in grave with 303.
316	42	M	230	Bundle	None	In grave with 242.
317	Adult	F	206	Extended	Flake knife	Partially excavated.

Summary of Larson Phase Burials

Of the 69 Larson Phase burials concerning which we were able to make even tentative decisions as to whether or not they were interred in grave pits, all but eight (11%) apparently had been and some or all of the remainder may have been. In the ten remaining instances there was not enough evidence to make even a tentative decision.

Without exception the graves containing single extended individuals or extended individuals piled one above the other were ellipsoid with slightly rounded bottoms and straight sides. Graves for flexed burials were wider in proportion to their length and in one case (F^o 34-310) was made pear-shaped to accommodate the knees. The measurements for the Larson Phase graves are detailed in Table III. The bottoms of these graves were slightly rounded. Excluding the four articulated burials accompanied by bundle burials, only one grave contained two burials lying side by side.

Mass graves so characteristic of the Dickson excavation were non-existent in ours. We had two graves which contained three articulated individuals, two which contained two articulated individuals and four which contained a single articulated infant, child or adolescent and a reburial - other than those composed of bones recovered while digging the grave through earlier interments. In one case two reburials were interred with a single infant. Reburials

occurred alone once and as a pair once. Fifty-five or 68.75% of the burials assigned to the Larson Phase were extended; eight or 10.0% were reburials; three or 3.75% were partially disarticulated; eight or 10.0% were flexed or semi-flexed and the original positions of six or 7.5% were undeterminable. Orientations are illustrated in plate 7.

Most of the figures for the depths of the graves are certainly too low, as we were seldom able to detect them until we had reached or nearly reached the skeleton or the base of the mound. Though every attempt was made to isolate graves at the top, several factors united to largely negate our efforts. The most serious obstacles were the Mississippian practice of filling the graves with the original fill and loess' tendency to "heal its wounds". We were also greatly hampered by the activities of previous excavators which often obliterated the upper levels of graves, even though they did not always reach the skeletons. A third factor was the preference of the Mississippians for certain restricted burial areas, which results in complex situations of multiple superimposition. Despite careful scrutiny, the profiles seldom yielded information concerning the depths of sectioned graves. However, observations on root concentrations and soil texture and color yielded valuable data concerning the depth of two graves (F° 34-249 and F° 34-274) which, particularly when added to

TABLE II

Grave Statistics for Larson Phase Burials from the Dickson Mound,
1966 Excavations.

<u>Burial Number</u>	<u>Evidence of Grave</u>	<u>Length</u>	<u>Width</u>	<u>Minimum Depth</u>	<u>W/L Ratio</u>
235	No	-	-	-	
236	No	-	-	-	
237	Yes	4.4'	?	1'	
238	Yes	?		.23'	
239	Yes	?	?	?	
240	No	-	-	-	
241	No	-	-	-	
242 & 316	Yes	5.25'	2.83'	3.08'	.538
243	Yes	6.1'	1.9'	1.9'	.311
244	No	-	-	-	
245 & 247	?	-	-	-	
246	Yes	5.75'	at least 1.75'	.83'	.304
248	Yes	?	2.25'	4.95'	
249	Yes	?	1.9'	3'	
250	Yes	.7'	.7'	.5'	1.000
251	No	-	-	-	
252	Yes	?	?	?	
253	Yes	?	?	.4'	
254	Yes	?	?	1'	
255	Yes	?	1.25'	1.5'	
256 & 257	Yes	6'	1.7'	1'	.283
258	Yes(?)	?	?	?	
259	?	-	-	-	

Table II (cont.)

<u>Burial Number</u>	<u>Evidence of Grave</u>	<u>Length</u>	<u>Width</u>	<u>Minimum Depth</u>	<u>W/L Ratio</u>
261	No	-	-	-	
262	Yes	5.33	1.67'	2.83'	.313
263	?				
264	?				
265 & 266	Yes	8.33'	3'	3.08'	.364
267	Yes	4.5'	2'	1'	.444
268	Yes	?	?	?	
271	Yes	4.5'	1.4'	?	.311
272 & 284	Yes	?	?	.42'	
273	Yes	6.3'	1.75'	1'	.278
274	Yes	?	3'	3.3'	
276	Yes	5.5'	1.75	.42'	.318
277	Yes	ca. 6'	1.67'	?	ca. .278
279	Yes	4.75'	2'	?	.422
280	Yes	?	?	?	
281	No	-	-	-	
282	?				
283	Yes	6.41'	2.08'	1'	.324
285	Yes	?	?	?	
286	No	-	-	-	
287	?				
288	No	-	-	-	
289	Yes(?)	?	?	?	
290	Yes	2.67'	1.1'	1.33'	.434
291, 292, 293	Yes	6.2'	1.7'	1.75'	.274

Table No. 11 (cont.)

<u>Burial Number</u>	<u>Evidence of Grave</u>	<u>Length</u>	<u>Width</u>	<u>Minimum Depth</u>	<u>W/L Ratio</u>
294	Yes	2.67'	2.67'	.83'	1.000
295	Yes	?	?	?	
296	No(?)	-	-	-	
297,298,299	Yes	?	?	.27'	
300, 301	Yes	?	?	.25'	
302	Yes	6.25'	2.25'	2.83'	.360
303,314,315	Yes	2.75'	1.58'	.5'	.575
304	Yes	?	?	?	
305	Yes	?	1.58'	?	
306	Yes	6.67'	1.54'	.67'	.231
307	Yes	?	?	.75'	
308	Yes	?	?	?	
309-310	Yes	2.67'	2'	2'	.749
311	Yes	4.67'	1.42'	1.67'	.304
312	Yes	?	1.42'	2.08'	
313	Yes	?	.67'	?	
317	Yes	?	1.7'	.5'	
<hr/>					
Sum X		108.04'	52.48		
\bar{X}		4.87	1.81		

Graves dug to accomodate single extended adults.

	<u>Length</u>	<u>Width</u>	<u>W/L Ratio</u>
Sum X	64.58	28.78	
\bar{X}	5.38	1.59	.296

the data from the grave of F° 34-242 and F° 34-316 and of F° 34-265 and F° 34-266, indicated that some, if not all, of the graves of adults and adolescents were from three to four feet deep. The single well-preserved infant grave we isolated was only 1.33 feet deep.

Table III deals with the percentages of burials with non-perishable grave furniture, with considerations given to age class and sex. Individuals in our sample between 2 weeks and 2 years old were classed as infants; those between 2.5 and 13 years were considered children and older individuals were considered adults. It is difficult to determine where the Indians involved drew lines among age classes and how many they recognized. The lack of marine-shell objects with individuals over 13 years old seems to suggest there is some validity to our boundary between children and adults.

In selecting our sample for Table III we tried to eliminate those individuals which were so badly damaged after burial that there was no way of deciding whether or not they had had non-perishable grave furniture. We eliminated two males because the skull had been removed and the surrounding area disturbed. We also eliminated two fragmentary burials with which artifacts had been found. We felt this was necessary in order to be consistent and to avoid weighting the sample toward burials with artifacts.

TABLE III: Percentages of Burials with Non-Perishable Grave Furniture

Age Class	Furniture	Male	Female	Indeterminate	TOTAL
Fetus	With	-	-	0	0
	%	-	-	0%	0%
	Without	-	-	1	1
Infant	With	-	2	7	9
	%	-	100%	64%	69%
	Without	-	0	4	4
Child	With	0	3	3	6
	%	0%	100%	43%	50%
	Without	2	0	4	6
Adult	With	5	3	-	8
	%	33%	50%	-	39%
	Without	10	3	-	13
TOTAL	With	5	8	10	23
	%	29%	73%	53%	49%
	Without	12	3	9	24

Burials of which only a small portion had been excavated were eliminated as were two bundle burials associated with a single pair of cougar canine pendants. This left us with 47 usable burials which were assumed to be from the Larson Phase. In this tabulation neither limonite nor retainers were considered burial furniture.

As Table III shows, infants were the most likely to have associated non-perishable burial furniture, with a

rate of 69%, while adults were least likely, with a rate of 39%. Children, with a rate of 50%, came very close to the population norm of 49%. Females in all age groups with the possible exception of the fetal group seem to have had a much better chance of being buried with non-perishable furniture than did males.

ANALYSIS OF LARSON PHASE BURIAL PRACTICES

In an attempt to move closer to a reconstruction of Larson Phase society we must attempt to utilize every recognizably variable characteristic of each burial. Or, as Binford (1964:90) puts it, "We want to analyze and describe the attributes of excavated burials which will inform about the social ritual afforded individuals (1) after death and prior to final interment, and (2) during the interment procedure." Recognizable variables noted include age, sex, orientation, position, pre-interment treatment, relative location, associations and health. We were able to detect patterns concerning each of these variables except health.

Pre-interment treatment appears to be reflected only in the burial mode. Burials are of three types: articulated and in the flesh; partially decomposed and partially disarticulated and fully decomposed and disarticulated with the bones either placed in neat bundles or in unoriented piles. Articulated, in the flesh burials were occasionally re-excavated and some of the bones presumably reburied as bundles or piles.

Partially disarticulated burials seem to indicate an accessible exposure on a scaffold, in a tree or in a charnel house such as the one at the Orendorf site (Conrad, 1970). Only two such burials were found in our excavation but the practice of exposure was common historically throughout the

Eastern Woodlands. The reasons for what superficially appears to be a haphazard treatment of a corpse are not clear, but it is likely that rituals requiring some time to perform are involved.

Bundle and pile burials might be explained in one or both of two ways. They must be the remains of individuals whose bones were cleaned with or without the aid of prolonged exposure or who were buried and later disinterred by their own people. Either or both is possible. The pre-historic recovery of bones from graves in the area has been demonstrated. The existence of scaffold burials is harder to demonstrate but they were quite common throughout the East at contact.

With the exception of two isolated ilia in a small pit (F° 34-250, no disarticulated burial was interred alone. All were either sub-adults or were buried with sub-adults. Specifically: the isolated reburial (F° 34-250) was composed of selected bones of a child of about twelve; selected bones of an adolescent male (F° 34-294b) were buried with selected bones of an adult female (F° 34-294a); selected bones of an adult male (F° 34-316) were interred with the articulated corpse of a female (F° 34-242) of twelve or thirteen; selected bones of an adult female (F° 34-301) were interred with the corpse of an eight month old infant (F° 34-300); selected bones of a 19 month old infant (F° 34-314) and an eight month fetus (F° 34-315) were buried with

most of the skeleton of a partially disarticulated, one month old infant's skeleton (F° 34-303); and the bones of a two week old infant (F° 34-257) were scattered over the extended burial of an adult female (F° 34-256). The last case seems to represent bones from a grave disturbed while digging the woman's grave and will not be considered further.

In the two cases where only sub-adults are represented no burial furniture was found. In the remaining three cases objects interpreted as status items were found. These objects consisted of ear plugs, marine-shell beads, a broken conch shell pendant (raw material?) and a pair of perforated cougar teeth. In both cases where an articulated sub-adult was represented the furniture was in direct contact with its skeleton.

If we consider the disarticulated sub-adults as a distinct burial category characterized by immaturity, disarticulation, lack of burial furniture and absence of adult association, the remaining cases hang together very well. These remaining cases are characterized as disarticulated skeletal components of adults accompanied by articulated skeletons or disarticulated skeletal components of sub-adults accompanied by status-indicating items. One might argue for this as being indicative of the remains of an adult which had died sometime earlier being buried with the corpse of a child in order that the spirit of the adult might look after the spirit of the child in the afterlife.

A second alternative - that of child sacrifice - must be considered. Swanton (1911, 1922) has gathered together numerous ethnohistoric accounts of human sacrifice among three Indian societies in the Southeastern United States. Groups recorded as sacrificing members of their societies as attendants to deceased members of their ruling families include the Taensa of Louisiana (Swanton 1911:259-269), the Natchez of Mississippi (Swanton, 1911: 93, 138-158) and the Calusa of Florida (Swanton, 1922:389). We have no eye-witness accounts of retainer immolation among the Taensa or Calusa but there are numerous accounts of several funerals of Natchez aristocrats at which retainers were sacrificed.

Tonti (quoted in Swanton, 1911:260) tells us, "when he [the Taensa chief] dies they sacrifice his youngest wife, his house steward, and a hundred (sic) men..." La Source (quoted in Swanton, 1911:264) states, "...They told us they had put to death 13 on the death of the one [chief] who died last." Margry (in Swanton, 1911:265) says 12 were killed and in another place says six (more?) were killed on his grave. Iberville (in Swanton, 1911:267) reports, "They had the custom, at the death of their chief, of killing 15 or 20 men or women to accompany him..." He spoke in the past tense because the French had prevented retainer sacrifice at the funeral of the chief who died shortly before his visit in March of 1700. As mentioned above, the

French witnessed no retainer immolation at Taensa funerals but they say they were killed with tomahawks.

We have descriptions of four funerals of Natchez aristocrats. At the first, which took place in 1699 or earlier, De Montigny says 30 people were immolated, while Gravier says seven were killed (Swanton, 1911:139). No Europeans witnessed these immolations because they had been tricked into leaving the town after attempting to prevent them.

A French youth left with the Natchez in 1700 witnessed a chief's funeral. In this case they strangled three men, two women and three children (Gravier, quoted in Swanton, 1911:139).

In 1704 Penicaut (quoted in Swanton, 1911:140) witnessed the funeral of a "queen mother" at which her husband, twelve infants and fourteen other men were strangled.

The final elaborate funeral of a Natchez aristocrat of which we have accounts was that of the head war chief and Natchez ruler's brother which was held in 1725. The detailed eye-witness accounts supplied by Du Pratz and Dumont compliment each other (see Swanton, 1911:145-157). Eighteen people including his two wives, his "chancellor", doctor, head servant and pipe bearer, the head servant's wife, two volunteer female aristocrats, his nurse (as a child), seven other women and an infant were sacrificed.

In cases where order was recorded infants always appeared on the scene relatively early and had already been

strangled. Several statements throughout the accounts make clear that other family members, adults or sub-adults, could be substituted for people whose societal role called for their immolation. It is equally clear that family members gained status when a close relative was immolated, even if it was as their substitute.

Dumont tells us, "...four young people who guarded the temple ... were strangled in ten months [after the funeral] when the bones of the... [Great Sun]... were taken from the earth." (quoted in Swanton, 1911:156).

Retainer sacrifice is recorded among the Calusa by Velasco (quoted in Swanton, 1922:389) who tells us that when a ruler or ruler's wife died that person's servants were put to death. He does not mention the immolation of the spouse and it is not likely that it occurred. He also tells us, "Every time that the son of a casique dies, each neighbor sacrifices his sons or daughters who have accompanied the dead body of the casique's son".

The sacrifice of in-group members by the Taensa for non-mortuary purposes is recorded by Iberville and Penicaut who passed through the area later in the same year (Swanton, 1911:266-268). In 1700 the Taensa temple was destroyed by a lightning bolt. A man whom the french called the high priest called for mothers to bring their infants to be sacrificed in order to appease the "Spirit". Five women brought their children and the priest threw them into

the flames. Penicaut says they were strangled beforehand but he also says seventeen children were killed so his account must be read with caution. It is agreed that the mothers involved gained great prestige. The French all agree that other children would have died had they not intervened. The priest told Iberville (quoted in Swanton, 1911:267) that the temple had been struck because the French had prevented immolations at the death of their chief a year before.

Concerning the Natchez suns, St. Cosme tells us, "If they feel ill, infants were usually immolated to appease the Spirits" (quoted in Swanton, 1911:93).

As Swanton (1911:382) says, "If we are to believe Le Moyne", Timucua families customarily sacrificed their first-born son in honor of the chief. The fact that Le Moyne says seven relatives and an eighth person (possibly a relative) performed the sacrifice adds credence to the report since it closely parallels the Natchez situation where eight relatives immolated the retainers.

Let us now summarize the ethnohistoric material to emphasize the points which may be pertinent to our problem. Three and possibly four groups in the southeastern United States are recorded as having made a practice of sacrificing their own members (as opposed to captives and/or slaves) at different stages in the disposition of the remains of deceased members of the ruling families, at times of community

crises and/or possibly as a sign of respect for a ruler. In some cases, people occupying certain high societal positions were obligated to be immolated at the death of their royal patron, but could substitute family members and gain prestige in so doing. Infants were frequent victims, offered by their families in the stead of people slated for immolation or simply to raise the social position of the surviving members of the family.

Retainer immolation is postulated on the basis of data from south Georgia (Sears, 1953) and southern Illinois (Caldwell, 1958:30) in Weeden Island and Middle Woodland contexts respectively. There are strong suggestions of the practice from Caddoan Tradition sites and unquestionable evidence from Cahokia on the same time level. At the latter site massive burial pits with rows of retainers have been excavated in recent years and another was excavated at the satellite St. Louis site a century ago. So far as could be determined, some of the pits at Cahokia contained exclusively young adult females. One pit contained a number of burials on litters, bringing to mind the use of litters at Natchez funerals. A third type of burial was a group of four headless, handless males buried with arms interlocked.

A virtually identical but slightly later group of burials was found on the bottom layer of a rectangular burial pit at Dickson Mound. The major difference seems to be that the Dickson burials were each associated with a ceramic

vessel and some of them had arrow points in the body cavity.

Two elaborate graves at the Kingston Lake site, located about twenty air miles up river from the Dickson Mound may have contained retainers. One was a bark-lined-and-covered pit containing three extended burials, two of which were headless. The skeletons lay in a row with the complete one at one end with two notched triangular arrowheads in association. A copper-covered wooden ear ornament lay between it and the skeleton beside it and an elaborate stone discoidal was in the upper right-hand corner of the grave. Three hammer stones were cached against the right-hand wall.

The other grave contained two extended burials. One wore a sleevelet of marine-shell beads, against which rested a 12-inch (30.5 cm.) chert blade. A one-inch (2.5 cm.) fluorite bead was found at the left elbow and a cache of 24 notched triangular arrow heads was found at the feet. Between the heads of the two individuals were four copper hemispheres measuring .5 inches (2.2 cm.) wide. The other burial had a slot abrader and a ceramic vessel at the head and two vessels at the feet. These vessels included the only Monks Mound Red vessel recorded from the area and an elaborate Ramey Incised jar (Simpson, 1930, and personal observation of the artifacts). Both of these graves were apparently under the same mound (Wray, n.d., 7).

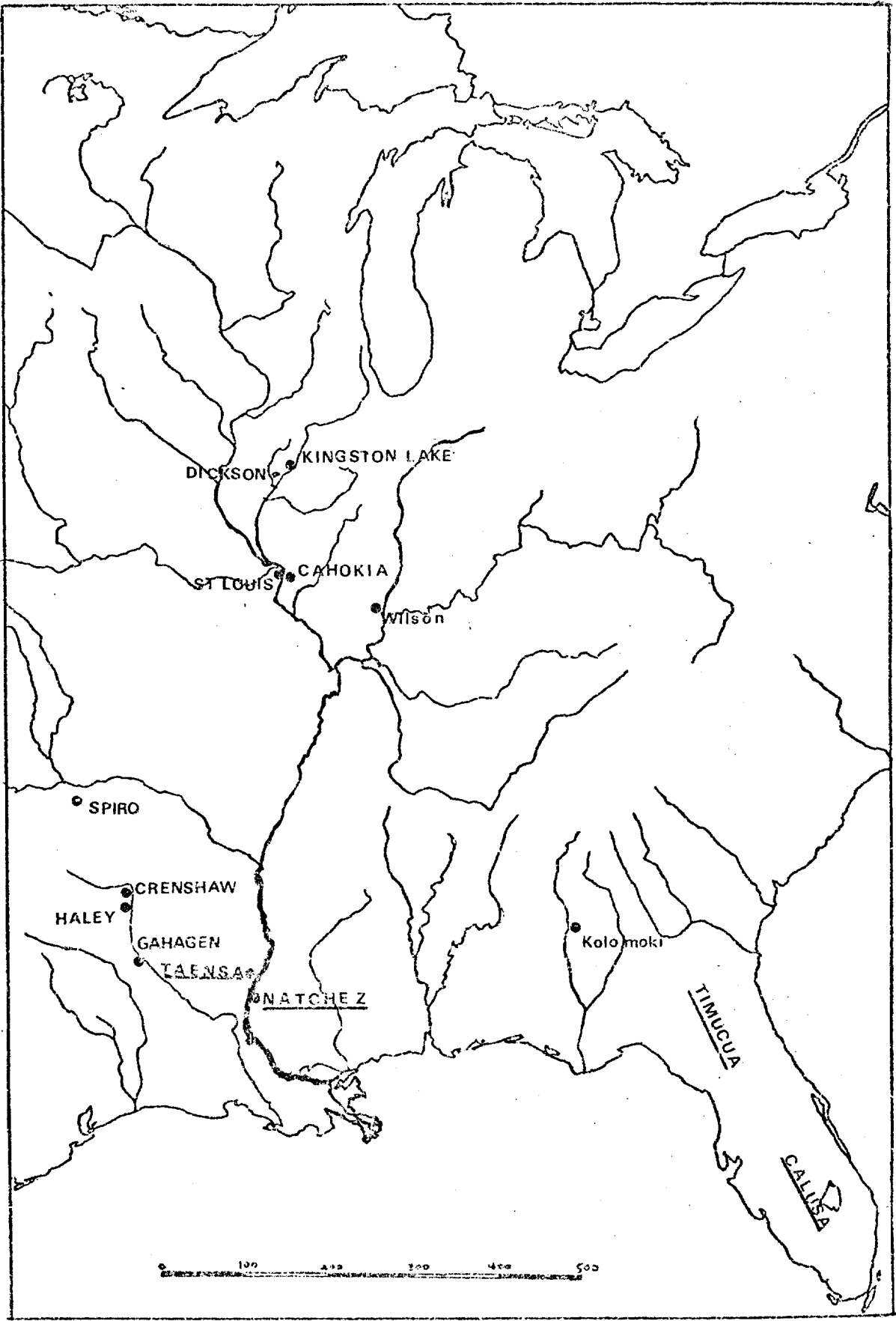
The strongest suggestion of ritual sacrifice at the site is to be found in the occurrence of two decapitated burials in the first grave. The evidence for the presence of a retainer in the second grave is not as strong and all elements of the feature must be considered if a reasonable argument is to be presented. 1) Two corpses were interred side by side in the same pit. This is unusual for Middle Mississippians except in situations where immolation is suggested. 2) One of the two burials has all of the ritualistic and/or status items, i.e. marine shell and fluorite beads, a chert "sword" and a cache of fine points, while the other has only ceramics. 3) The grave was apparently under the same mound as the grave with the decapitated burials. 4) Finally, there seems to be a high correlation, at least in the Mississippi Valley, between rectangular pits with multiple burials and evidence for retainer sacrifice. This last point raises the possibility that burials F° 34-265 and/or F° 34-266 had been immolated.

We realize we have not proved that human sacrifice was practiced at the Dickson Mound. But let us recapitulate what we have presented above before presenting our hypothesis which can be tested with the approximately 700 burials excavated at the site since our excavations were carried out. From the ethnohistoric record we learn: 1) human sacrifice in connection with times of public crisis,

PLATE 6

Map showing selected sites yielding evidence suggesting, and ethnic groups practicing, Retainer Immolation in the Eastern United States.

Underlined names are of historic groups. Names written in upper case letters are Mississippian period sites. Names written in upper and lower case letters are of Middle Woodland period sites.



including illness, death and burial of members of the elite class, was practiced historically among some Mississippian groups; 2) high status individuals were expected to accompany their dead patrons to the grave but could substitute kinsmen; 3) infants were frequently offered for immolation by their kinsmen; 4) some immolations were carried out at the time of the exhumation of the bones of the elite. The archaeological record tells us the practice of human immolation has a history of more than 1500 years in the greater Southeast and was practiced in western Illinois during Mississippian times.

On the basis of the facts presented above, we suggest the sub-adults associated with reburials and possibly those associated with primary burials in the 1966 Dickson Mound excavation were relatives of high-ranking retainers, and were sent instead of the actual servants to accompany the bones of high-ranking individuals to their final resting place.

Other models, such as the dressing of a social non-entity in the regalia of a high-status servant and symbolically sacrificing him, might be suggested but we find no ethnographic support for such an explanation.

All of the disarticulated burials and associated articulated burials excavated in 1966 were at the bottom of the mound without temporally diagnostic artifacts and might actually date from the Eveland Phase rather than the Larson

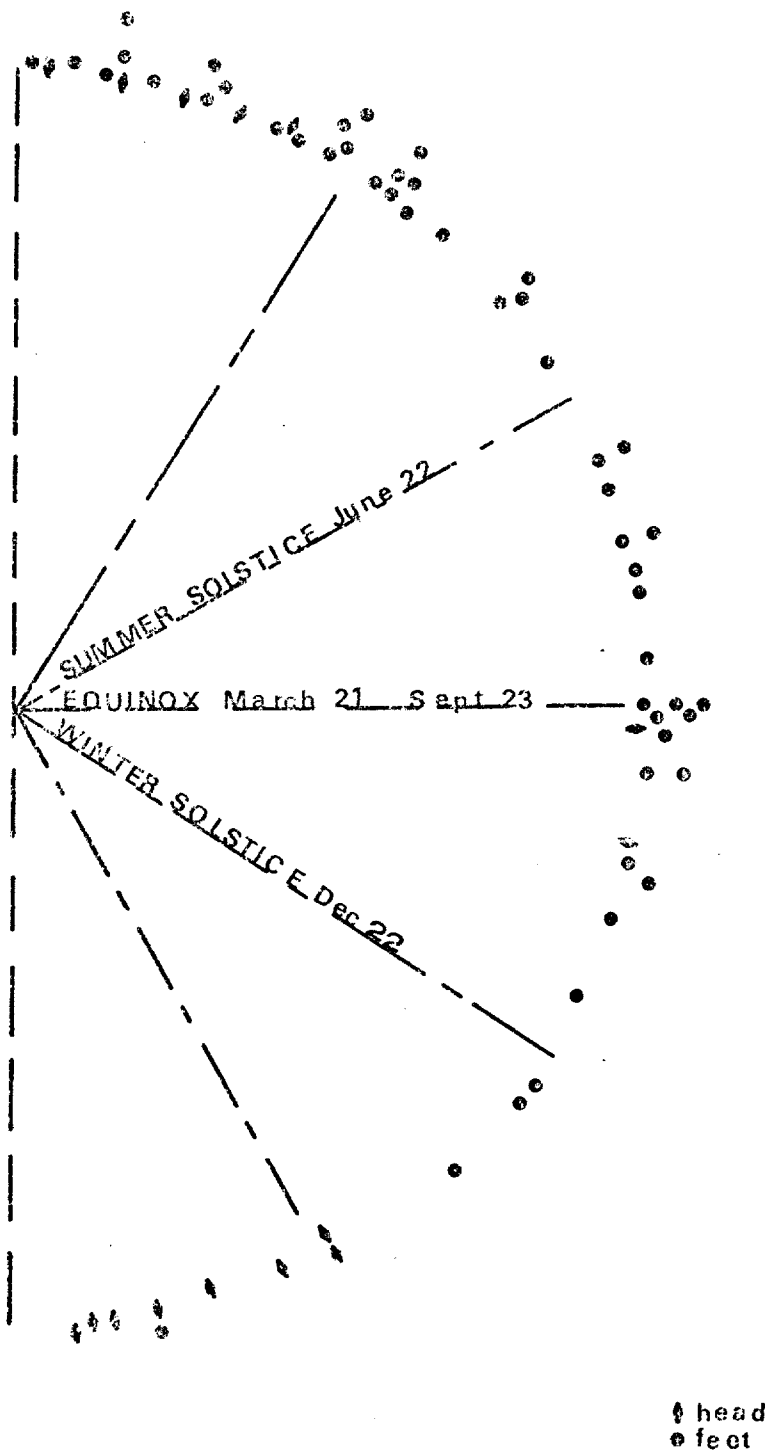
Phase. Therefore, we must leave this problem with the suggestion that infant sacrifice may have been practiced at the interment of the disarticulated bones and possibly articulated and partially disarticulated corpses of members of the elite class, and that this may have been done during the Eveland and/or Larson phases. Hopefully, analysis of the burials excavated subsequent to 1966 will shed some light on this question.

Another point of interest concerning the burial mode is the lack of skulls with either of the post-pubescent male reburials and their presence with both of the reburials of women and three of the four infants and children. The fourth child was represented by two ilia. Wray's (Wray and MacNeish, n.d.) reported finding of two polished human skulls in houses on F^V237 may explain the reasons for the absence of the adult male skulls in this case and in others. Perhaps these skulls were retained as ritualistic objects to be employed within houses for a long enough period and in such a manner that they acquired a polish. We are unable to say much more about this practice. These are the only reported human skulls from the more than 100 Spoon River Culture houses excavated in central Illinois. Extra skulls are a rare occurrence in mortuary sites of this culture.

Since we have been unable to find any possible explanation for this phenomenon in the ethnographic record, any explanation we might offer would be merely unfounded speculation.

PLATE 7

Sunrise Angles and Orientations of Larson Phase Burials.



SUNRISE ANGLES AND BURIAL ORIENTATIONS

A comparison of Plate 7 with Harn's (1971) Fig. 57 reveals close similarities between his sample and ours. Similarities include concentrations on north-northeast - south-southwest, northeast - southwest and east - west axes and the lack of concentrations on the azimuth of the summer solstice and the angle between 90° off this azimuth and the north-south axis.

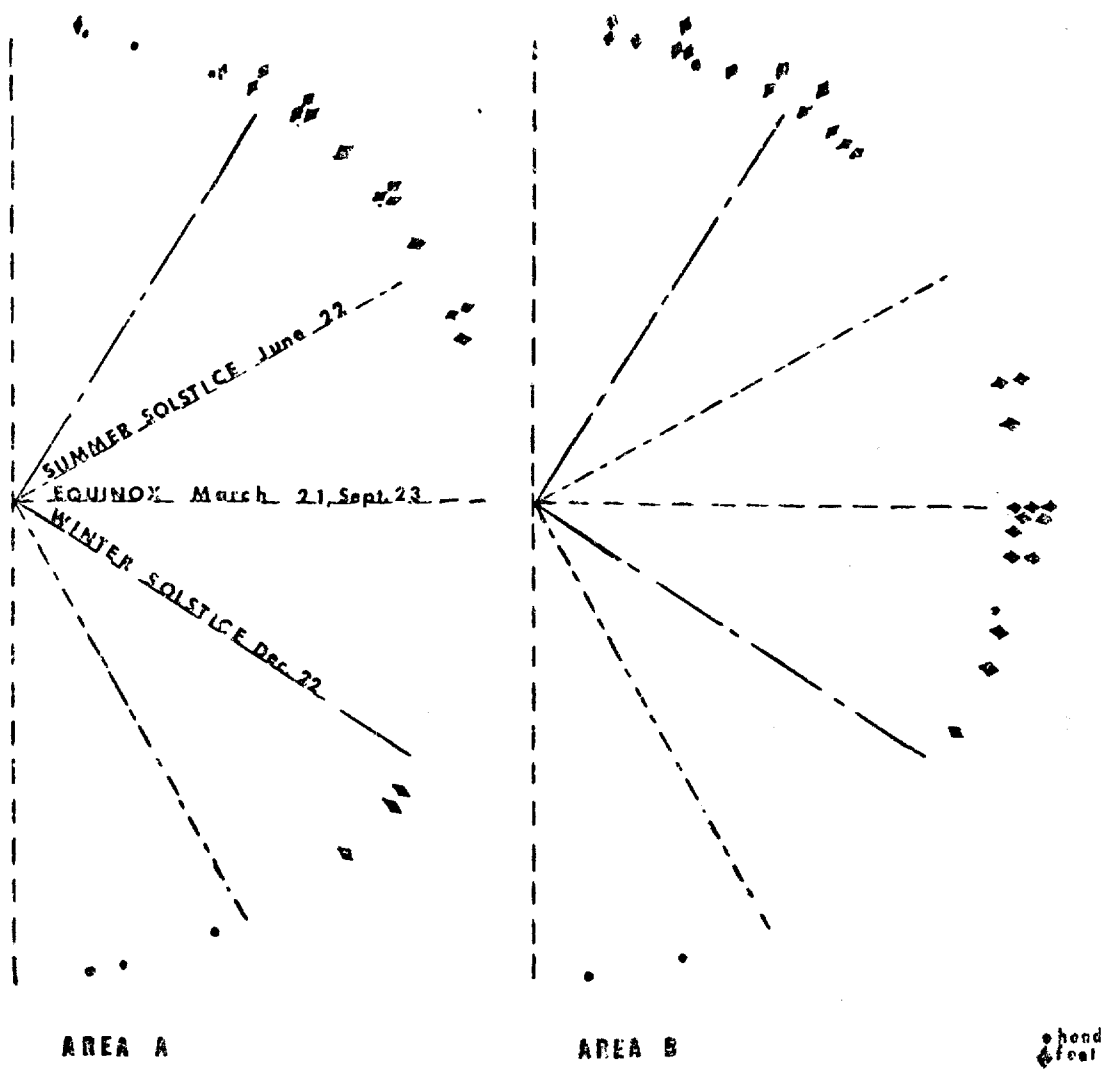
A major difference is a heavy concentration (the second largest group) of the burials in the Dicksons' excavations in the area of the winter solstice and a quite noticeable paucity of the 1966 burials in the area. We will offer a suggestion below which may explain these differences. As Binford et al. (1966:141) and Harn (1971:59) point out, clusters or absences of burials occur near important solar azimuths in a manner indicating these azimuths were taken into consideration at burial.

During the course of our excavations it became apparent that small, spatially localized groups were buried on the same or almost the same azimuths and that the burials within these areas were quite often disturbed by the excavation of later graves on similar azimuths. Frequently these interments were made before the earlier graves had completely settled and apparently without regard to damage done to earlier remains. We suggest, as has Binford (1964:108; 1966:141), that these similarities in orientation indicate familial relationships.

After noticing these "family plots" we wondered if larger spatially defined units might be isolated. An examination of the excavation with this thought in mind revealed two distinct contiguous groups which were large enough to be used. The northerly group, Group A, consisted of 27 burials (24 of which were useable) between 20 feet south and 60 feet south. Both sexes and all ages were represented in the group. Of these only three (12%) were oriented through the approximately 60° angle between the azimuths of the summer and winter solstices.

Area B, which includes 40 burials (32 of which were useable) between 55 feet and 80 feet south, presents a rather different picture. Again, both sexes and all age groups are represented but, rather than being unused, the angle between the summer and winter solstices has within it the azimuths of 15 (47%) of the useable burials within the group.

It is true that these groups are not truly dichotomous since there is considerable overlap in the axes employed other than in those sections of the compass mentioned above. We are unable to find any significant differences between the two areas concerning age, sex, pre-interment treatment, burial position or furniture. While it is true projectile points, beakers and univalve beads were found in Area B but not in area A, it is also true that all of the burials concerned occupied the same portion ("family plot") of the



ORIENTATIONS OF BURIALS IN AREAS A AND B

Sun
in

PLATE 8

Sunrise Angles and Orientations of Larson Phase Burials
in Areas A and B.

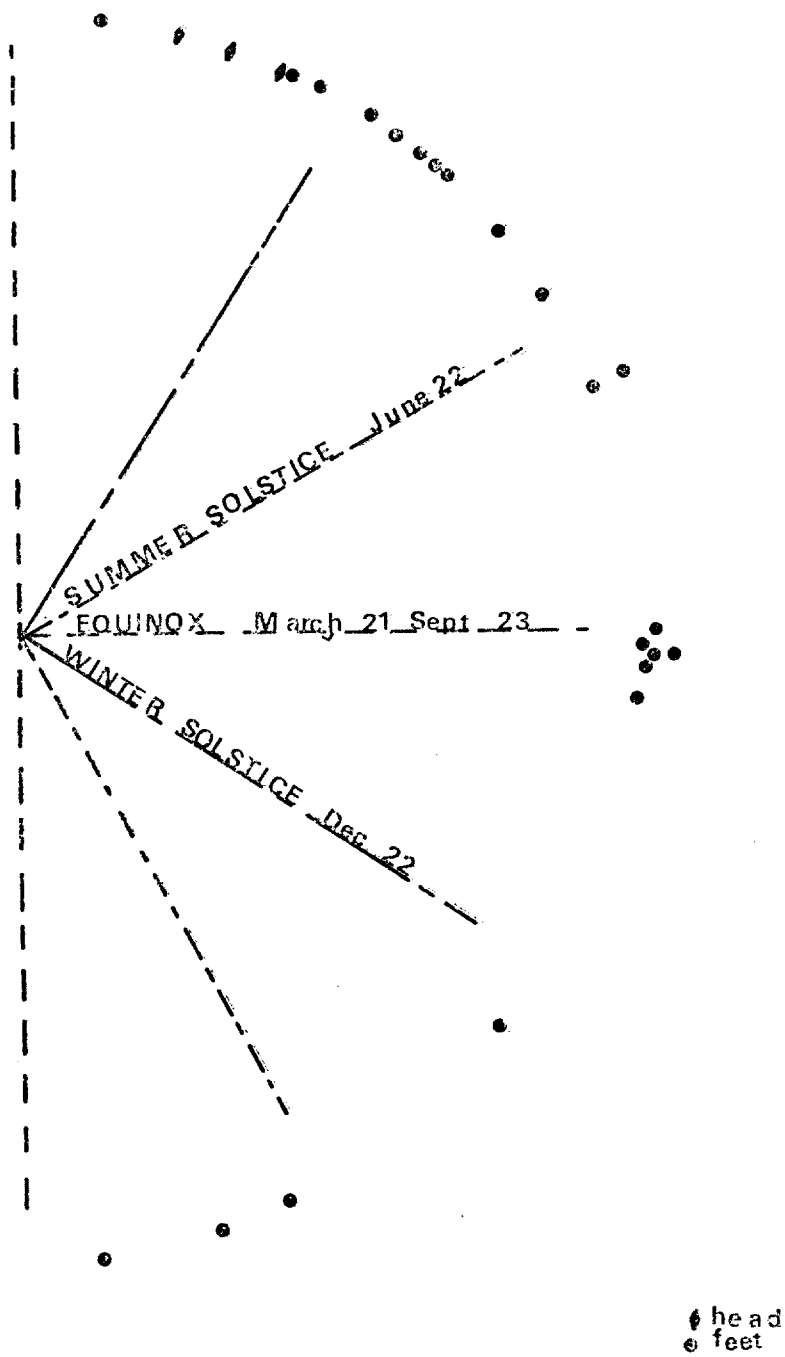
head
feet

area. This seems to suggest that these items may have been preferred by or restricted to a smaller socially-defined group. At any rate, these occurrences are too infrequent to be statistically evaluated.

The orientation of the latest burials in area A within the preferred range of those in area B suggests the difference may be a function of time. Sudden and comprehensive shifts in the orientation of structures on the western edge of the Cahokia site and on the Larson site have been noted but not explained (Baerreis, 1964:6; Harn, personal communication). We may have a mortuary expression of the same phenomenon.

Our sample does not include the total population of either area. Many of the uppermost burials were destroyed by previous excavators. Those immediately north of our area A and south of area B were completely destroyed. Of course, burials from both areas are to be expected on either side of the trench. Another factor to be considered is that a small proportion of the burials in each area may be considerably older than the majority.

It appears that the burials in the Dicksons' excavation would lend themselves to areally-based grouping. If so, this might explain the lack of correspondence between the orientations in the Dicksons' excavations and ours when viewed as wholes.



SUNRISE ANGLES AND ORIENTATION OF BURIALS WITH NON-PERISHABLE FURNITURE

Su
wi

PLATE 9

Sunrise Angles and Orientations of Larson Phase Burials
with Non-perishable Burial Furniture.

To sum up our discussion of the spatial variability of preferred burial axes let us say: there appear to be numerous small plots within the mound which were reused time and again by people burying on the same or nearly the same axes over a very limited period of time; we feel these small areas are family plots; we were able to delimit two larger areas in which noticeably different patterns of orientation prevailed and have suggested that, since all other significant variables seem to cross cut the boundary between these two groups, that the difference is a function of the preferred burial area shifting with time and of a sudden shift in preferred burial orientations which may be related to documented sudden shifts in preferred building orientations for Larson Phase structures.

We noted several patterns of interment procedure as regards burial furniture. See Table III for age and sex distribution of non-perishable furniture. We broke the recovered furniture down into five categories based upon our ideas of the way it was viewed by the people burying it. Our categories were ceramics, ritualistic equipment (excluding beads), utility objects, goods contributed for the purpose of validating status and beads. These categories were defined before any patterns except the mutual exclusiveness of beads and ceramics were noted.

Ceramics are categorized separately from utility objects due to their failure to overlap with beads in our sample

(see Table IV), in the Kane mounds (Melby 1963:17) and at F° 228 and F° 914 (Wray and MacNeish, n.d.) while other utility objects do overlap except at F° 228 and F° 914. Beads are categorized separately from other ritualistic objects due to their failure to overlap with ceramics while other ritualistic objects do in our sample and that from Kane. Ceramics consist of jars, beakers, an effigy bowl and a miniature jar. Vessels are associated with representatives of both sexes and all age groups and with objects from each of the other categories except beads and contributed goods. Presumably these vessels contained food. This is almost certain in the case of the jars associated with F° 34-252 and F° 34-256 because the shell spoons were found above their bottoms. It may be that the food was the important thing.

Materials considered to be ritualistic equipment includes copper-covered stone ear plugs, copper-covered imitation canine teeth, engraved bone bracelets, shell rattle-anklets, a turkey wing fan, a paint palette and a bead ensemble.

Beads (and probably other ornaments) are apparently a sub-group of ritualistic equipment but, as explained above, seem to have some special significance, as none of the five burials with beads (including the one contributed necklace) overlap the six useable burials with ceramics.

As mentioned above, the arrangement of beads on Burial F° 34-262 is similar to those on copper plates from the Southeastern United States which are usually associated with the Southeastern Ceremonial Complex (Waring and Holder, 1945). We note that the oldest individual wearing beads (F° 34-242) is just pubescent and the remainder are very young children. This apparently represents a socially-recognized categorization based on age which extends from birth or shortly thereafter until about puberty. We know from the finding of a necklace that had obviously been worn by an adult, that beads were worn in life by adults among the people represented in this section of the mound, but they apparently seldom, if ever, wore them to their graves.

With the exception of a set of mussel shell rattle-anklets and an engraved bone bracelet buried with F° 34-256, ornaments were never associated with pottery. The single occurrence of both ceramics and ornaments in the same grave while fourteen relatively intact individuals were associated with one or the other (six with ceramics and nine with ornaments) might be explained as an individual violation of the norm. Another strong possibility is that the aborigines had different parameters for their artifact categories than those we have suggested. Perhaps the important item to them was marine shell in any form - not items of an ornamental nature. Winters (1968) has presented material suggesting

a position of special importance for marine shell over a large area of the Eastern United States from late Archaic times until the historic period. In no instance in our sample were marine shell and ceramics buried with the same individual.

TABLE IV

Relationships Among the Occurrences of Beads,
Ornaments and Ceramics

	Beads	Ceramics	Ornaments	Total
Burials with Beads	5	0	3	8
Burials with Ceramics	0	6	1	7
Burials with Ornaments	3	1	8	12
Total	8	7	12	27

The occurrence of ceremonial objects with children leads us to suggest that leadership positions were consanguineously based. On the basis of the burial of ritualistic equipment with women and children at Etowah, Waring (1968: 47) reached the same conclusion concerning the inhabitants of that site. Though it was the norm in the Southeastern United States and quite common throughout the Northeast and the Plains, the best known and one of the most extreme

examples of the inheritance of religious and political rank was found among the Natchez of Mississippi. It is also noteworthy that the children of the Natchez aristocracy wore pearls taken from a necklace kept in the tribal temple until they were ten years old (pubescent?), when the pearls were returned to the temple (Swanton, 1911:56). This may be related to our situation of beads being buried only with children.

While status seems to have been indicated for living children of the high ranking families by the possession of ornaments, it was often validated at funerals by the placement of various other status-indicating objects. Items which seemed to have served this function were those which seemed to have belonged to people other than those with whom they were buried, or ornaments in a position which indicates they were not actually worn by the corpse at interment. Material in this category included two bone bracelets, a necklace of cut shell beads, all three Busycon shells, a large Kaolin chert blade and a discoidal. The bracelets and the necklace were assumed not to have been worn in life by the people with whom they were buried because the ornaments were too big for them. One of the Busycon shells lay on the left hand while the other two were broken and were apparently actually considered as raw materials for the manufacture of beads or small ornaments. It is unlikely that either of the children with whom they

were associated were shell workers. A knife blade more than six inches long and a discoidal do not seem to be logical possessions for a three year old child. Both of these objects and the adult necklace were found with F° 34-271. Obviously all vessels are placed in graves separately from the corpse but we have reason to suspect only one of them of being out of context. That is the jar with F° 34-256. This suspicion is based solely upon its occurrence with an individual wearing ornaments, since this does not occur in any other case in our excavation. It is entirely possible, however, that the lack of marine shell is the important factor and the jar is not out of place. If it is not out of place, all of the recognized contributed goods were found with children.

Strictly speaking, immolation retainers should be considered contributed burial items. We have it from no less an authority than the leader of the Natchez that status validation was a major function of retainers among that group. He said to Dumont (quoted in Swanton, 1911:154),

"After all, is not my brother precious?
Is he a stinkard? And what will the chief
of the spirits say if he sees him come en-
tirely alone? He will say this is not a
chief and he will drive him from before his
face."

Utility objects consist of tools, weapons and raw materials. We find this material with both sexes and all age groups and overlapping all other categories. As would be

expected, projectile points are found only with males.

The two variables associated with age are the placement of the remains of sub-adults with bundle burials, and the placement of extra status items and valuable ornaments with children in order to affirm the status of these people who had accomplished nothing in their own right during their short life times.

Limonite in Graves

Limonite was found on the floors of three graves during 1966. Each of the graves held the extended skeleton of a male adult. Two were in area B. The third was one of the three latest burials in area A and was on an axis usually associated with area B. This suggests again that the differences in orientation between the burials in areas A and B may be a function of time. We do not know the reason for covering the grave floors with limonite. We do not even know whether the intent was to cover them with limonite or to make them green. Color symbolism was of great importance among many groups in aboriginal America, but we have been unable to find an explanation in the ethnographic record for this particular practice.

Occipital Flattening

The physical anthropologists examining our sample found evidence of occipital flattening in 3.75% of all of the

Larson Phase burials excavated in 1966. Harn (1971:63) reports this characteristic for almost 10% of the burials in the Dicksons' excavation. Since both samples were examined by the same parties this difference may have cultural or chronological significance.

Each of our three individuals exhibiting occipital flattening was associated with at least one other individual in the same grave and, in two cases, with what are presumed to be status-indicating ornaments. The three individuals exhibiting this characteristic were F°34-242, a 12- to 13-year old girl, F° 34-265, a twelve year old female and F° 34-292, a three year old child of undetermined sex. We have suggested F° 34-242 might have been a retainer and, with less conviction that F° 34-265 might also have been. Under the circumstances it should be pointed out that it is not impossible that F° 34-292 and the other child (F° 34-291) with F° 34-293 might have been retainers for him.

Again our sample is so small that explanations verge on sheer speculation. We will say that this facet deserves either more or less attention than it is usually given. It contributes little to speculate that occipital flattening is an indicator of assigned status and to leave it at that. What is needed is a careful survey of the available archaeological and ethnological material in search of an explanation.

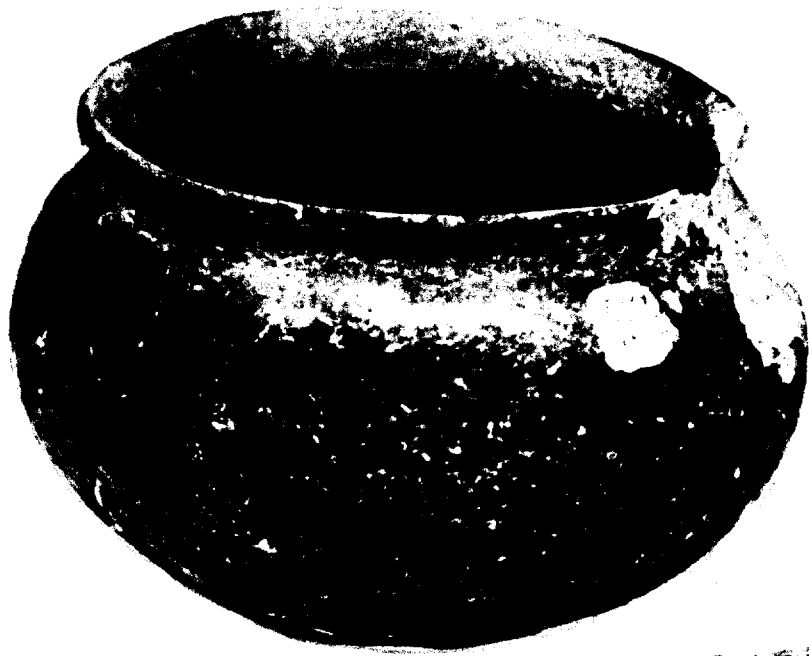
Analysis of Larson Phase Burial Associations

Of all the variables associated with burials, no other is so consistently described in site reports or can do so consistently be recovered from collections made without the controls of modern archaeological field techniques as burial associations or furniture. The use of such data by no means assures a clear or even very accurate picture of the social implications of the physical objects under consideration. Analysis of burial associations is hampered by several factors. A major obstacle is the loss of perishable objects, many of which were doubtlessly of great importance in the society under consideration. Another is our ignorance of pre-Columbian value systems. These factors seriously limit the value of statements concerning the relative richness of burial furnishings or the percentage of a certain sample with or without furniture. Comparisons with other published sites are often hampered by selective descriptions or misidentification of artifacts by the authors. Still another limitation is the difficulty of determining whether a certain piece of furniture was a possession of the person being considered or was contributed at the funeral. We have tried to tailor our considerations of burial furniture with these limitations in mind. In preceding pages we categorized artifacts in groups based upon the way we felt they were considered at the funeral, but in this section we will attempt to discuss them in groups delineated by their day-to-day functions.

PLATE 10

Larson Phase Jars

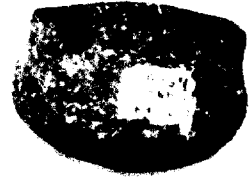
- A. Plain jar found with F^o34-252.
- B. Six-lobed miniature jar found with F^o34-285.
- C. Cambered-rimmed jar found with F^o34-293.
- D.Handled jar found with F^o34-256.
- E. Plain jar found with F^o34-244.
- F.&F'. Two views of a jar handle associated (?) with F^o34-256.



A



B



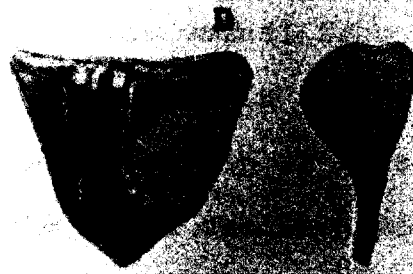
B'



C



E

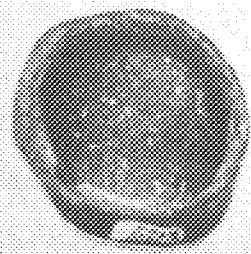


F

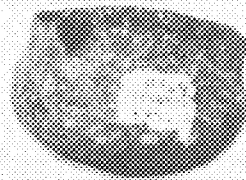




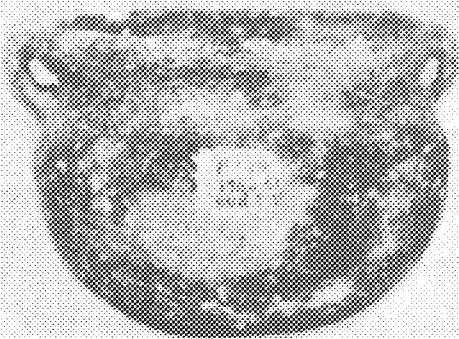
A



B



B'



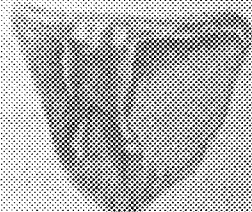
C



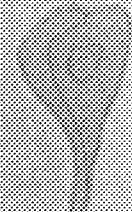
D



E



F



F'



Larson Phase Ceramics

A wide variety of forms are represented in the nine complete and one fragmentary vessel recovered from the Larson Phase graves during the 1966 excavations. The attributes of the nine complete vessels are listed in Table V. All are shell tempered.

Jars constitute 60% of these vessels. Of the six, three have loop handles, one is a miniature lobed vessel and the other two are simple, plain, wide-mouthed globular jars. In all cases the handles are slightly higher than the lip and all are slightly flattened from the sides. The handles on the cambered-rimmed vessel overlap the lip and are riveted into position on the lower end. One of the handles on the other unbroken handled jar may be riveted. In both cases the handles are rather carelessly attached.

Two unbroken jars are worthy of special mention. One is the cambered-rimmed one from the grave of F^O34-293 (Plate 10C). A fragment of cambered-rimmed jar which seems to be a local imitation of a Forman series vessel from western Iowa (see Ives, 1962, Figs. 7-9) was found in a pit on F^V33 about 1,000 feet east of the mound. The lip of this vessel is more incurvate than that of the mound specimen and the shoulders are decorated with line-filled triangles and three incised "toes" radiating from the handle. A vessel which was virtually identical to the Dickson Mound specimen was found at the Orendorf site which also yielded a tridactyle-

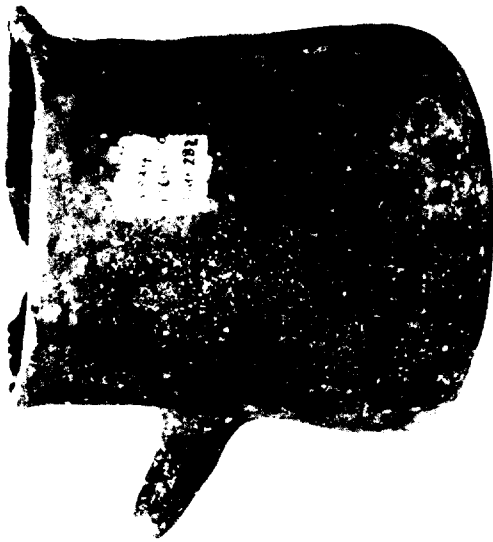
PLATE 11

Larson Phase Beakers and Effigy Bowl

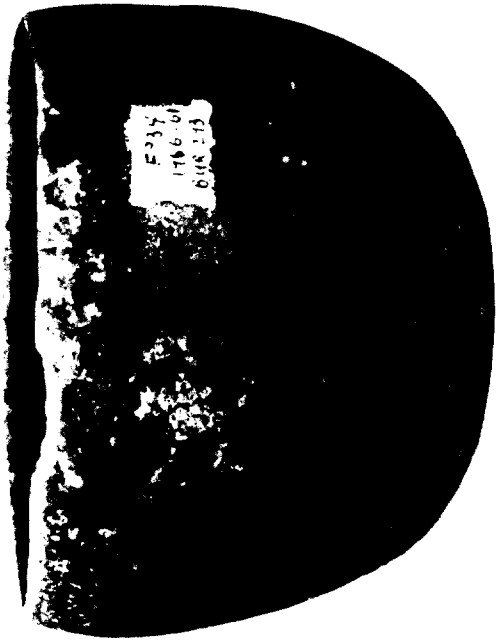
- A. Tippits Bean Pot associated with F^o34-282.
- B. Barrel-Shaped Beaker associated with F^o34-293.
- C. Spoon River Beaker associated with F^o34-302.
- D. Bird effigy bowl associated with F^o34-252. Head is broken off.



A



C



B

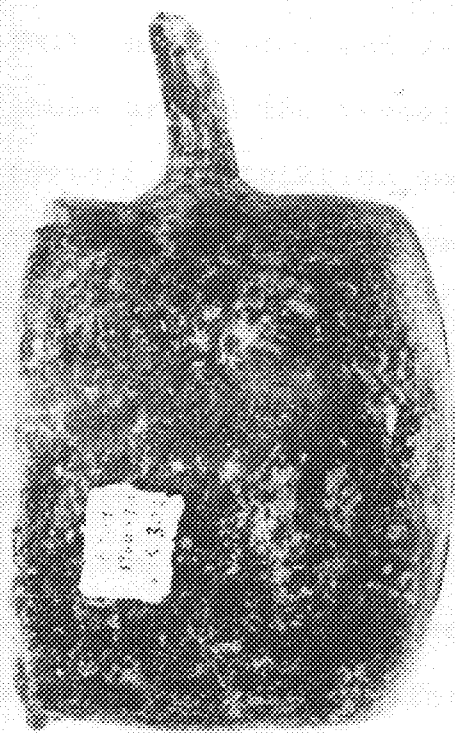


D



off.

ken off.



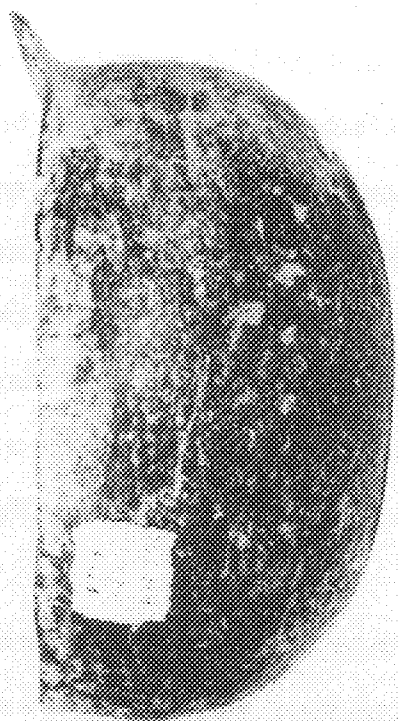
A



C



B



D



handled vessel (Conrad, n.d.). Another nearly identical vessel without decorated handles was found in the Weaver-Betts group in a mound (F^O228) which also yielded Plains-type bracelets of bison(?) bone and a tridactyle-handled vessel. Fragments of cambered rims were found in a second pit on F^V33 and on the Garren focus habitation area on F^V290. The finding of these vessels in two mounds which produced bone bracelets (in the Dickson Mound they were found in the same grave) seems to strengthen the case for a relationship between Spoon River cambered-rimmed vessels and the Foreman series.

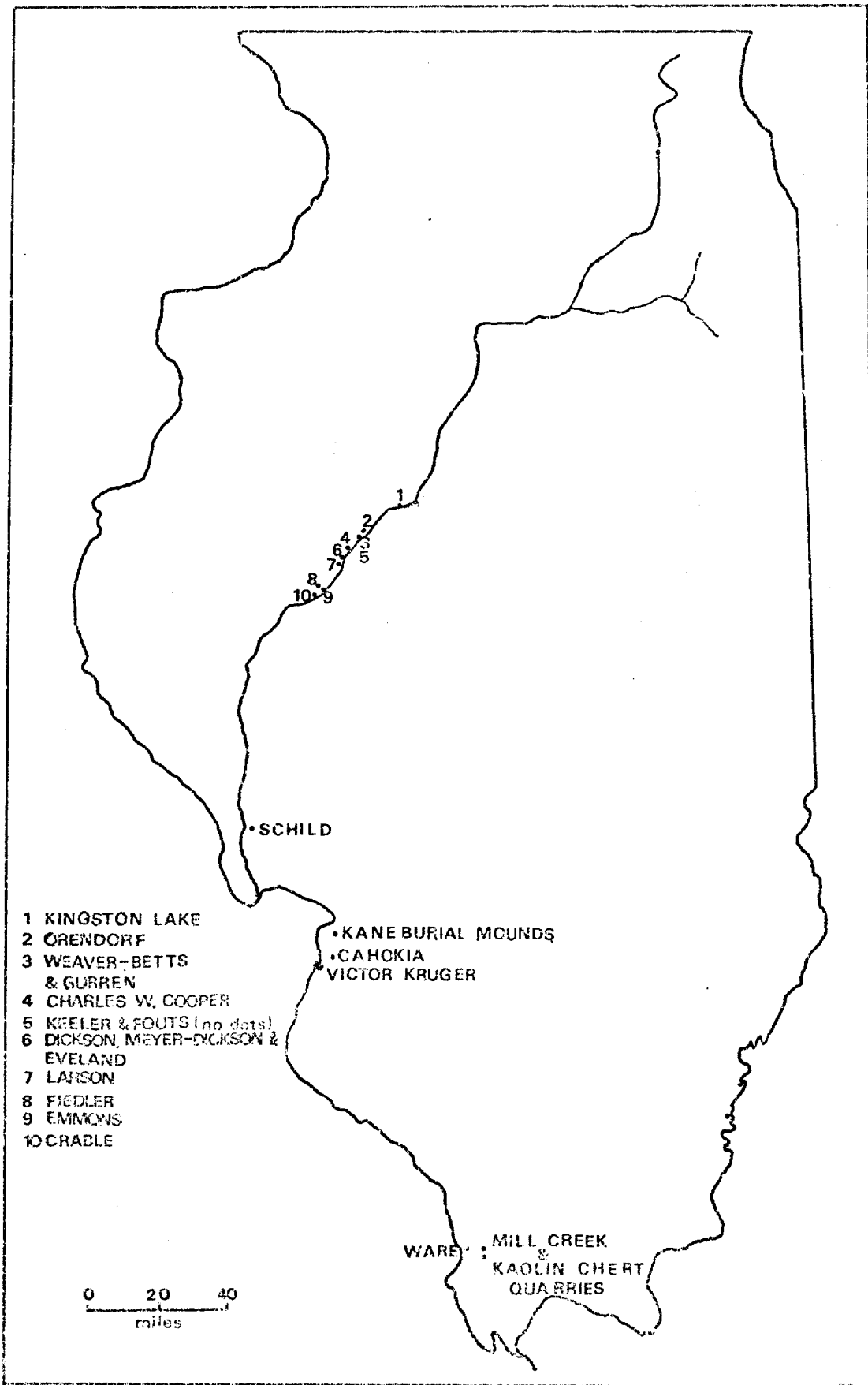
The second jar worthy of special mention is a miniature lobed vessel (Plate 10 Band B') measuring three inches (7.62 cm.) in diameter and 2-1/2 inches (6.35 cm.) high. The six lobes around the vessel were made by pressing a finger against the interior and forcing out each lobe. Miniature vessels are not infrequent in Spoon River cemeteries. Six, including five jars and a water bottle, were found in the Dickson excavation (Harn, 1971:19). Lobed vessels are a minor but consistent component of the Spoon River assemblage and are often associated with child burials.

The broken jar thought to have been associated with F^O34-265 was represented by six sherds, one of which included a handle which was bifurcated at top and bottom (Plate 10 F and F'). It is possible this handle represents a highly

PLATE 12

Map of Illinois Sites Mentioned in the Body of the Text.

1
2
3
4
5
6
7
8
9
10



stylized frog. The jar had been about six inches (15.24 cm.) in diameter and had had a flaring rim.

Beakers constitute 30% of our ceramic sample. Each of these three beakers is of a different variety of the general form. The lower-most example (from the grave of F^O34-302) falls within the range of Griffin's (1949:57) Tippits Bean Pot (Plate 1A). This variety is quite common throughout the area of the Cahokia Tradition. It appears during the Eveland Phase in the Illinois Valley and disappears before the end of the Crable Phase of the Spoon River Culture. Directly overlying the grave with the Tippits Bean Pot was that of F^O34-293 which produced a Barrel-Shaped Beaker (Plate 11B). This variety is characterized by a general barrel-shape without angles. The widest point is never at the lip or the base. Handles have not been noted but lugs have. The Barrel-Shaped Beaker is apparently not a common variety and is thought to have been made only during the Eveland Phase and the early part of the Larson Phase. We have noted this variety at several sites in Fulton County but not elsewhere except the lower Mississippi Valley on Coles Creek sites (see Ford, 1952: Fig. 2). We do not suggest that the occurrence of the form in the two areas indicates a relationship between them, though there may be one. Nor do we feel it is likely that the form does not have a wider range in the Midwest than we have noted.

The uppermost beaker (Plate 11C) was associated with F^o34-282 which lay directly above F^o34-293. This beaker falls well within the range of Harn's (1971:21) Spoon River variety. The salient characteristics of this form are a constricted midsection and its relatively great height in relation to its width. Harn suggests a time range of from before 1200 to until possibly well into the 14th century. In the Illinois Valley this form occurs at least as far north as the Orendorf site and as far south as Brown County (see Stephens, 1958: Fig. 48, bottom row).

The single effigy wide-mouthed bowl (Plate 11D) constitutes 10% of the collection of vessels from the Larson phase graves excavated during 1966. It is similar to the effigy bowls in the Dicksons' excavation (Harn, 1971:19) but is slightly finer. The head of the effigy had been broken off before burial. It is apparent that the head was modeled separately and welded on.

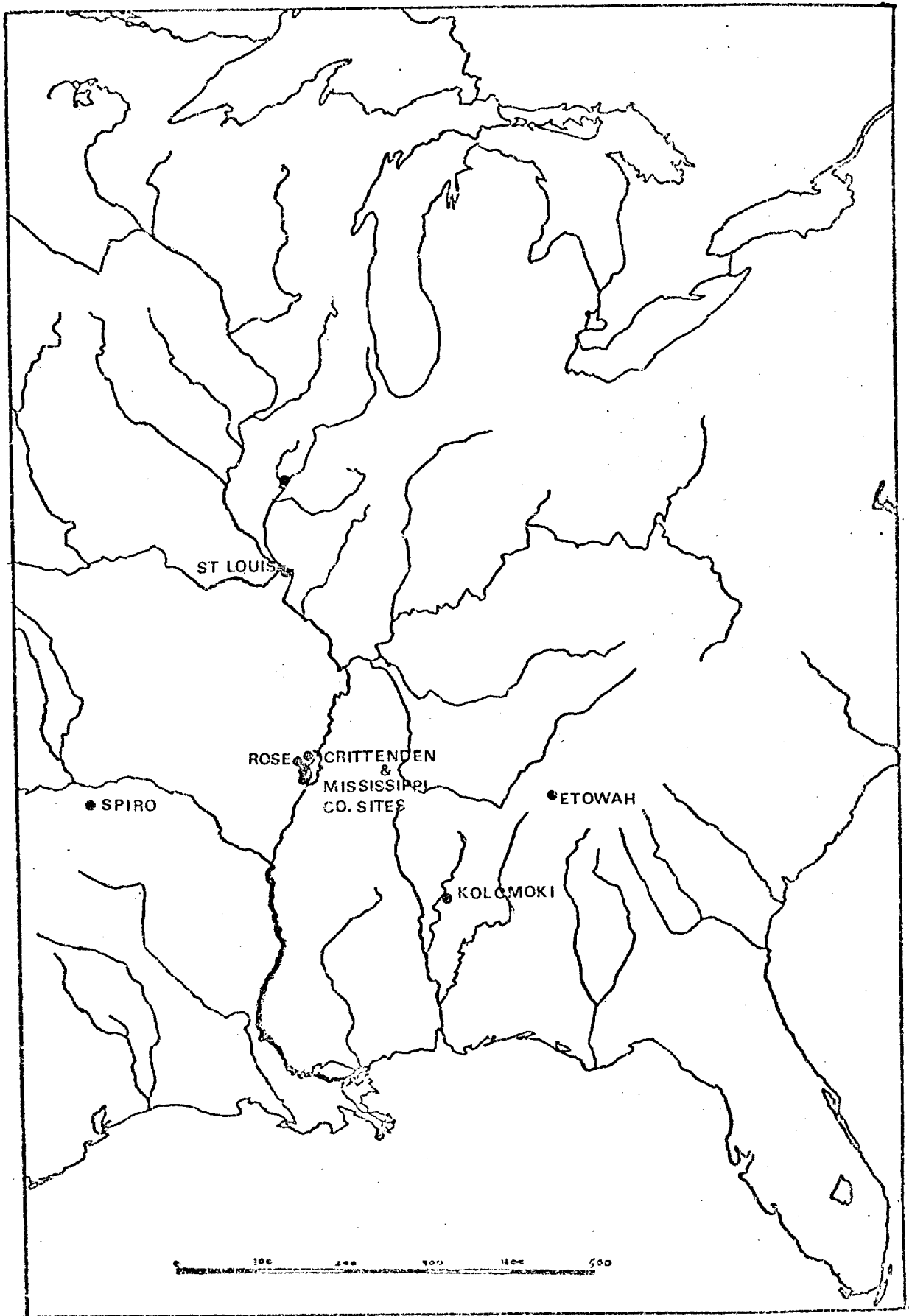
The ceramics discovered during 1966 are valuable in dating many of the burials, in linking these burials with other sites and in reinforcing previously drawn conclusions concerning the chronological placement of projectile point types. The almost complete lack of Sepo Ware and Powell Plain and the complete lack of Ramey Incised in our sample suggest our excavations were outside of the major burial area used during the Eveland Phase. With the exception of the Powell Plain sherds discussed above no angular shouldered

vessels were found in 1966. None of the jars had incising on the shoulders. This suggests a time gap between the disappearance of Ramey Incised in the area and the manufacture of the Larson vessels in our sample. The occurrence of Barrel-Shaped Beaker in early contexts at Keeler and Larson, the occurrence of cambered-rimmed vessels in early contexts at Orendorf and Weaver-Betts and on the Plains seem to indicate a rather early position within the Larson phase for the grave of F^O34-291 - F^O34-293 and the other burials in the plot. The bifurcation exhibited by the handle from the jar associated with F^O34-265 appears on burial jars from the Keeler site and from several Eveland phase burial grounds. On these grounds we suggest this jar is probably a representative of an early Larson type. At this time none of the other vessels can be assigned to a specific time period within the Spoon River Culture on its own attributes. On the basis of its association with a bone bracelet we have assigned the jar with F^O34-256 to the Larson phase. Since this grave cuts through a stage which apparently postdates F^O34-244, the jar associated with the latter must be at least slightly earlier.

Fragments of effigy vessels similar to the one associated with F^O34-252 occur in Eveland phase pits on the Charles W. Cooper site (F^V47) but, since their chronological range is not known, we cannot assign this vessel to a narrowly defined time period.

PLATE 13

Map of Non-Illinois Sites Mentioned in the Body of the Text.



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PLATE 14.

Map Showing Location at Contact of Ethnic Groups Mentioned
in the Text.

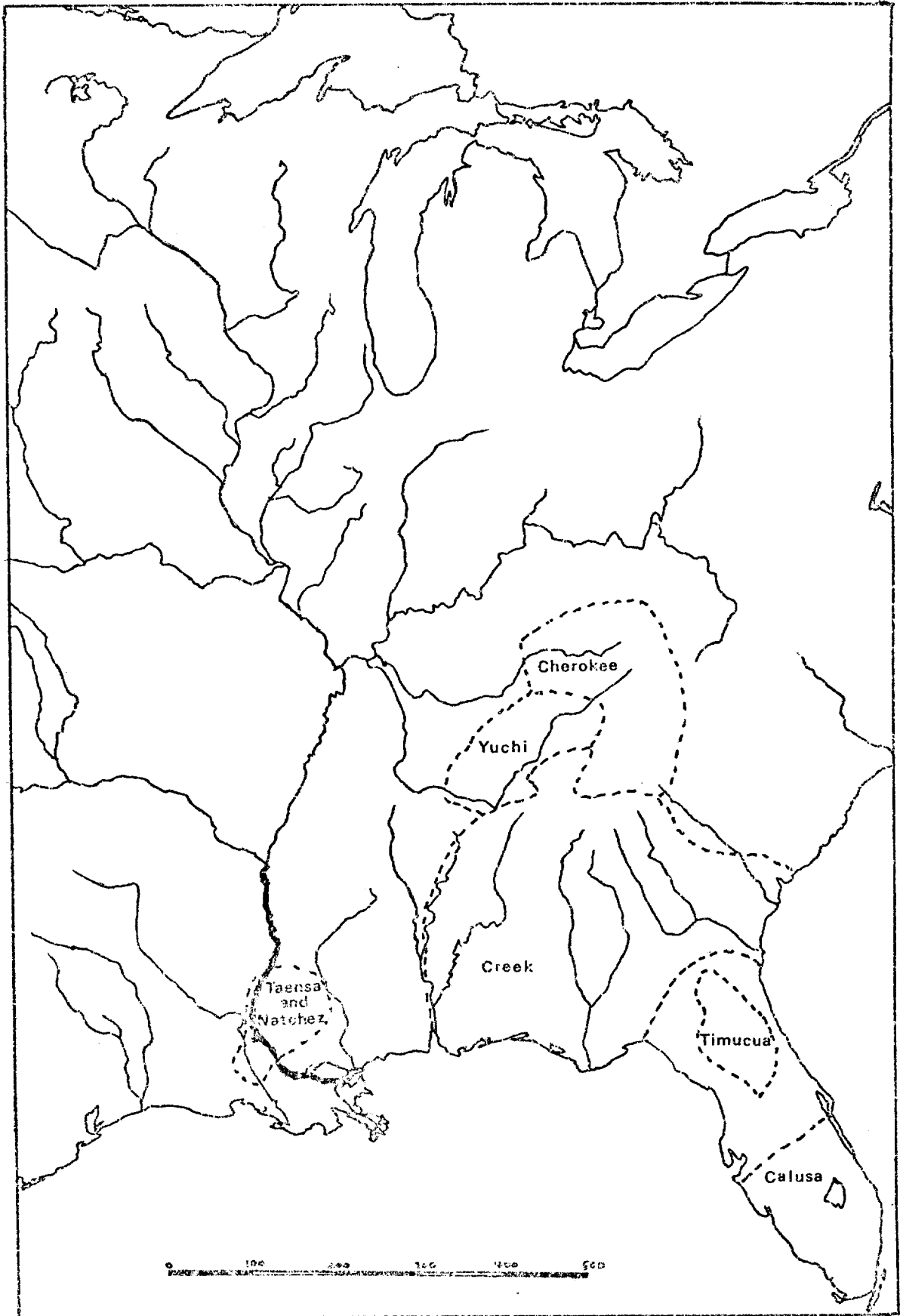


TABLE 5

Summary of Data on Larson
Ceramics

Burial	Plate	Vessel Form	Diameter		Height	Thick- ness	Color	Temper	Finish	Rim
			Shoulder	Rim						
244	10 E	Jar	4.12"	3.75"	3"	.19"	brown and black	fine to medium	slightly polished	everted slightl flared
252	11 D	Effigy bowl	-	6.19"	3.12"	.25"	black	fine to medium	slightly polished	-
252	10 A	Jar	7.19"	6.57"	4.5"	.25"	brown and black	fine to medium	black slip bur- ned off	slight flared
256	10 D	Jar	6.38"	5.25"	4.5"	.19"	brown and black	fine to medium	black slip bur- ned off slightly polished	flared
282	11 A	"Tippits Bean Pot" (bot- tom)	4.5"	4.06"	5"	.19"	brown and black	fine	slip bur- ned off	-
285	10 B	6-lobed jar	3"	2.5"	1.6"	.19"	black	fine to medium	smoothed	everted slightl flared
293	10 C	Jar	4.5"	4.31"	3.5"	.13"	red- brown, black	fine to medium	slipped	cambered
293	11 B	Barrel- shaped beaker	-	6.25"	4.5"	.19"	black & brown	fine	slip bur- ned off	-
302	11 C	Spoon River beaker	-	5.6"	4.06"	.19"	black	fine to medium	polished black slip	-

TABLE 5

Summary of Data on Larson Phase
Ceramics

<u>Height</u>	<u>Thick- ness</u>	<u>Color</u>	<u>Temper</u>	<u>Finish</u>	<u>Rim</u>	<u>Rim Height</u>	<u>Lip</u>	<u>Handles</u>	<u>Shoulder</u>	<u>Remarks</u>
.3"	.19"	brown and black	fine to medium	slightly polished	everted slightly flared	.31"	rounded	none	rounded	Asymmetrical
.12"	.25"	black	fine to medium	slightly polished	-	-	flat- tened	effigy head missing, sli- ghtly ever- ted triangu- loid tail	-	Shows evidence of being used on fire
.5"	.25"	brown and black	fine to medium	black slip bur- ned off	slightly flared	.62"	roun- ded	none	rounded	-
.5"	.19"	brown and black	fine to medium	black slip bur- ned off slightly polished	flared	.5"	roun- ded	flattened loops	rounded	Slightly asym- metrical, red wash inside
.5"	.19"	brown and black	fine	slip bur- ned off	-	-	flat	conical slightly everted & pouring lip	-	-
.6"	.19"	black	fine to medium	smoothed	everted slightly flared	.56"	flat	none	rounded	Crude
.5"	.13"	red- brown, black	fine to medium	slipped	cambered	1"	roun- ded	flattened loops	angular	-
.5"	.19"	black & brown	fine	slip bur- ned off	-	-	flat- tened	none	none	Very hard and well made
.06"	.19"	black	fine to medium	polished black slip	-	-	roun- ded	conical slightly everted & broken lip	none	Red wash inside

It does appear that the majority of the ceramics would be best placed shortly after A.D. 1200.

Ornaments

This term, under which we have grouped all objects of metal, stone, shell and teeth which were worn on the person, has functional connotations which limit its usefulness to us. The objects which we are discussing were not simply for the beautification of the individual but were also often, and principally, a means of showing wealth and/or status.

Hair Ornaments

Three burials were interred with hair ornaments including a pin, a comb and beads. The bone hair pin (Plate 15A) was found lying laterally at the crown of the skull of F^o34-287. This pin measured 7.3 inches (18.54 cm.) long but was broken at the butt. It was round in cross section, slightly curved and apparently had had a fine uniform polish but was badly corroded in some areas. Harn (1971:17) reports two such objects from the site and others were recovered since the 1966 excavations. They occur at most Middle Mississippian burial sites, often with what are apparently status burials.

A comb (Plate 15C) made of cancellous material of either a large flat bone or antler was found with the teeth to the left in occipital region of F^o34-292. It measured 2.4 inches

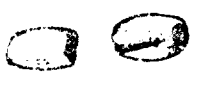
PLATE 15

Head and Neck Ornaments from Larson Phase Burials.

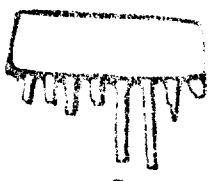
- A. Bone hair pin associated with F^o34-287.
- B. Marine-shell forelock beads associated with F^o34-262.
- C. Bone comb associated with F^o34-292.
- D. Copper-faced stone ear plugs associated with F^o34-242.
- E. Perforated cougar canine ear pendants associated with F^o34-294.
- F. Broken Busycon perversum pendant associated with F^o34-300.
- G. Broken B. perversum pendant associated with F^o34-292.
- H. Two views of B. perversum, a shell pendant found in a disturbed area of the mound.
- I. Two views of a pendant of an immature B. perversum shell associated with F^o34-240.
- J. Cut marine-shell pendant associated with F^o34-310.
- K. Galena crystal pendant associated with F^o34-288.
- L. Fresh water pearl or baroque pendant associated with F^o34-288.



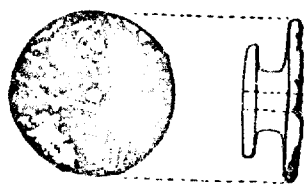
A



B



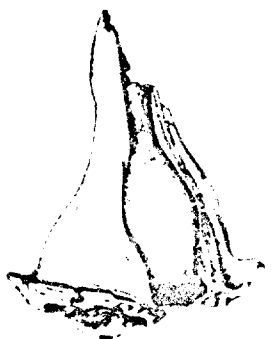
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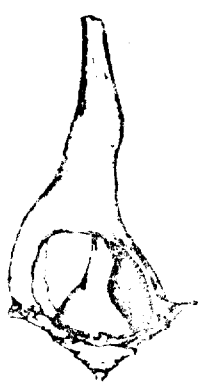
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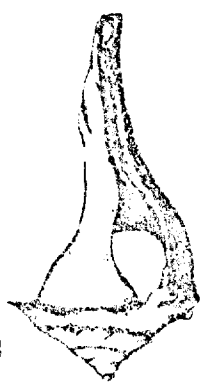
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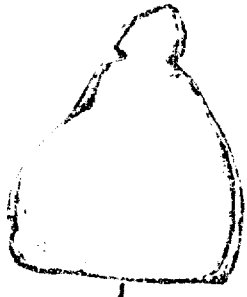
G



H



I



J



K



L



(6.10 cm.) wide and .25 inches (.64 cm.) thick. Since all nine of its teeth were broken, the length was not apparent. The base or handle was .5 inches (1.27 cm.) long and only slightly thicker than the base of the teeth. All edges of the base were cut sharp and ground and polished smooth. The only similar comb from a Mississippian site with which we are familiar is one found with a child's burial by Moore in the "Rose Mound" in Cross County, Arkansas (Moore, 1910: 285, fig. 14).

The above-mentioned beads will be described under "Bead Ensemble".

Ear Ornaments

A pair of copper-covered polished limestone ear plugs and a pair of copper-covered wood imitation carnivore canine tooth ear pendants were found during the 1966 field season. A pair of perforated matched upper canines of a cougar (Felis concolor) which were probably ear pendants were found with a bundle burial.

The ear plugs (Plate 15D) were found in position at the skull of F^o34-242. The outer faces were 1.75 inches (4.45 cm.) in diameter and from .1 to .2 inches (.25 to .50 cm.) thick. The inner faces were 1.25 inches (3.18 cm.) in diameter. The cores were .75 inches (1.91 cm.) in diameter. A single cylindrical perforation ran through the center of each face and the core. The objects total .7 inches (1.78 cm.)

thick. The outer faces were covered with a very thin copper foil which had been wrapped around the outer flanges to very slightly lap in the back. Fragments and impressions of fiber - possibly hair - were preserved on these faces. As yet unidentified fibers were wrapped around the cores. Copper-covered ear plugs of wood or stone occur consistently in major Mississippian burial grounds in the area.

The copper-coated imitation carnivore teeth ear pendants were found in position at the skull of F^O34-287. Since the wooden cores of the teeth had completely decomposed and the thin copper sheeting had collapsed and fragmented by the time of their discovery, an illustration is not available and the dimensions are approximations. They were about four inches (10.16 cm.) long and about one inch (2.54 cm.) in diameter. We were unable to determine the method of attachment but a similar pair from F^O228 at the Weaver site bore perforations at the "roots" which probably served this function.

In regard to this burial Wray and MacNeish (n.d) say,

"One of the shaft or pit burials extended down five feet or three feet below the artificial mound construction and contained the skeleton of an adult male. Beneath the right shoulder were two finely-made side-notched triangular points and at each side of the head was an ear pendant of copper covered wood made in the shape of bear tusks. A similar pair of ear pendants was found in a pit outside of House 2 in the Betts Village F^V237, across Duck Creek." (Judging from their curvature and cross-section, the effigies represent cougar, rather than bear, teeth.)

The depth of the grave may indicate an individual of some importance and the projectile points probably indicate a hunter and/or warrior. These facts combine with the shattered projectile point imbedded in the chest of F^O34-284 and the palette with red paint (the color symbolizing war in the Southeast) lead us to suggest copper-covered cougar teeth may have been badges of military office. If so, the office must have been hereditary, as a study of the skeleton indicates the Dickson man had been crippled from birth, though he would have been able to shuffle along rather rapidly (Blakely and Walker; notes).

Another plausible explanation is that F^O34-284 was a shaman slain as a witch. This possibility is strengthened by his being a cripple. If positions of military leadership were hereditary, a physical disability might not disqualify the candidate but, judging from historic customs, might have enhanced an individual's chances of becoming a shaman. The occurrence of the shell imitation teeth with the cripple discussed below is a further suggestion that his status was a result of a physical anomaly.

The pair of cougar (Felis concolor) upper canines (Plate 15E) found with F^O34-294 were almost certainly ear pendants. Support for this assumption is to be found in the occurrence of another pair found at the sides of the ascending rami of a burial (F^O34-497) found during the 1967 excavations, the occurrence of shell imitations of what appear

to be cougar canines in the same position with F^o14-50, a severely crippled adult male with an abundance of grave goods, including two discoidal shell beads, marine shell fragments, a bone hair pin, two "bear" teeth, quartz and calcite crystals and a pipe (Cole and Deuel, 1937:83), and the positioning of the copper-covered wood imitations discussed above.

Necklaces

Four shell bead necklaces were found during the 1966 excavations. Two were composed of cut marine shell disc beads while one of the others was made up of eleven jasper Dwarf Olive (Olivella jaspidea) shells and one tubular bead of cut marine shell and the fourth was composed of a mixture of forty-one jasper Dwarf Olive and twenty-three Marginella (Marginella apicinum) shells.

The longest necklace was composed of more than 800 small (.25 inches or .64 cm. in diameter) marine shell disc beads which made up a strand 5.1 feet (1.55 m.) long. This necklace was found with F^o34-271, a child of three and one-half years. It was looped twice around the neck and several inches of slack were coiled behind the shoulders. There is little doubt this was an adult's necklace with the corpse rather than one worn by this individual during life. The other necklace of marine shell disc beads was made up of approximately 300 tiny (.12 inches or .30 cm. in diameter) beads

forming a strand 16.5 inches (41.91 cm.) long. This necklace was worn by F^o34-242, a pubescent female who wore a bracelet of the same beads. The two burials with disc bead necklaces were about ten feet apart in Area A and both had other valuable objects interred with them.

Both burials with univalve beads were in the same plot within Area B and both wore ornaments other than beads. The mixture of Olivella and Marginella shells was found with F^o34-228 while the necklace of Olivella shells and a cut bead was found with F^o34-292. The Olivella shells were prepared for stringing by grinding off the apex while the shoulder was ground off the Marginella.

Pendants

Pendants included two whole Busycon shells, one cut piece of marine shell, one pearl slug and one galena cube. An immature perverse whelk (B. perversum) shell (Plate 15I) grooved around the posterior end of the canal was found on the left hand of F^o34-240. Another B. perversum shell (Plate 15F) four inches (10.16 cm.) long and perforated for suspension was found beside F^o34-300. Since the shell around the perforation as well as much of the outer coil had been broken away, this object could not have been worn as it was buried and may well have been interred as raw material. Busycon shells are ubiquitous occurrence in Middle Mississippian sites. A trianguloid cut marine-shell pendant

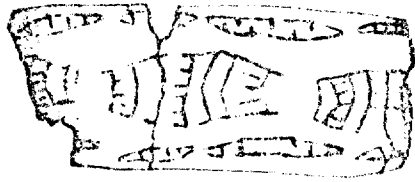
(Plate J), 3.6 inches (9.14 cm.) long and three inches (7.62 cm.) wide with notches for suspension located about .5 inches (1.27 cm.) below the apex was found on the chest of F^o34-310. The object was cut from a section extending from the posterior end to just above the shoulder of a medium-sized conch shell. A similar object, smaller in size and perforated for suspension, was found on the Keeler site (Conrad, n.d.).

A perforated barrel-shaped pearl slug or baroque (Plate 15L) measuring .5 inches (1.27 cm.) long was found on the chest of F^o34-288. It did not seem to have been strung with the beads worn by the same person. The conical perforations which extended from either side were .25 inches (.63 cm.) wide. One hundred-thirty-one such beads were found scattered across the skeleton of F^o34-131 (Harn, 171:16). Burial 15 at the Emmons site, an infant, wore a necklace of seventeen "river pearls" (Morse, Morse and Emmons, 1961:134). A galena cube worked into a barrel shape with one flattened side was found on the chest of F^o34-288. It measured .6 inches (1.52 cm.) long and .5 inches (1.27 cm.) thick and was drilled from either side with a conical perforation measuring .4 inches (1.02 cm.) wide at the widest point. It did not seem to have been strung with the other beads or the pearl pendant worn by the same person. Similar objects have been reported from Cahokia (Wittry and Vogel, 1962:30).

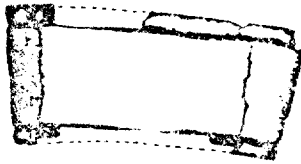
PLATE 16

Bone Bracelets

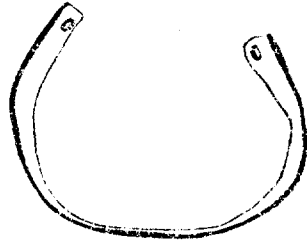
- A. Associated with F^o34-256.
- B. and C. Associated with F^o34-292.



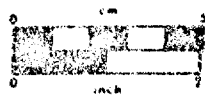
A



B



C



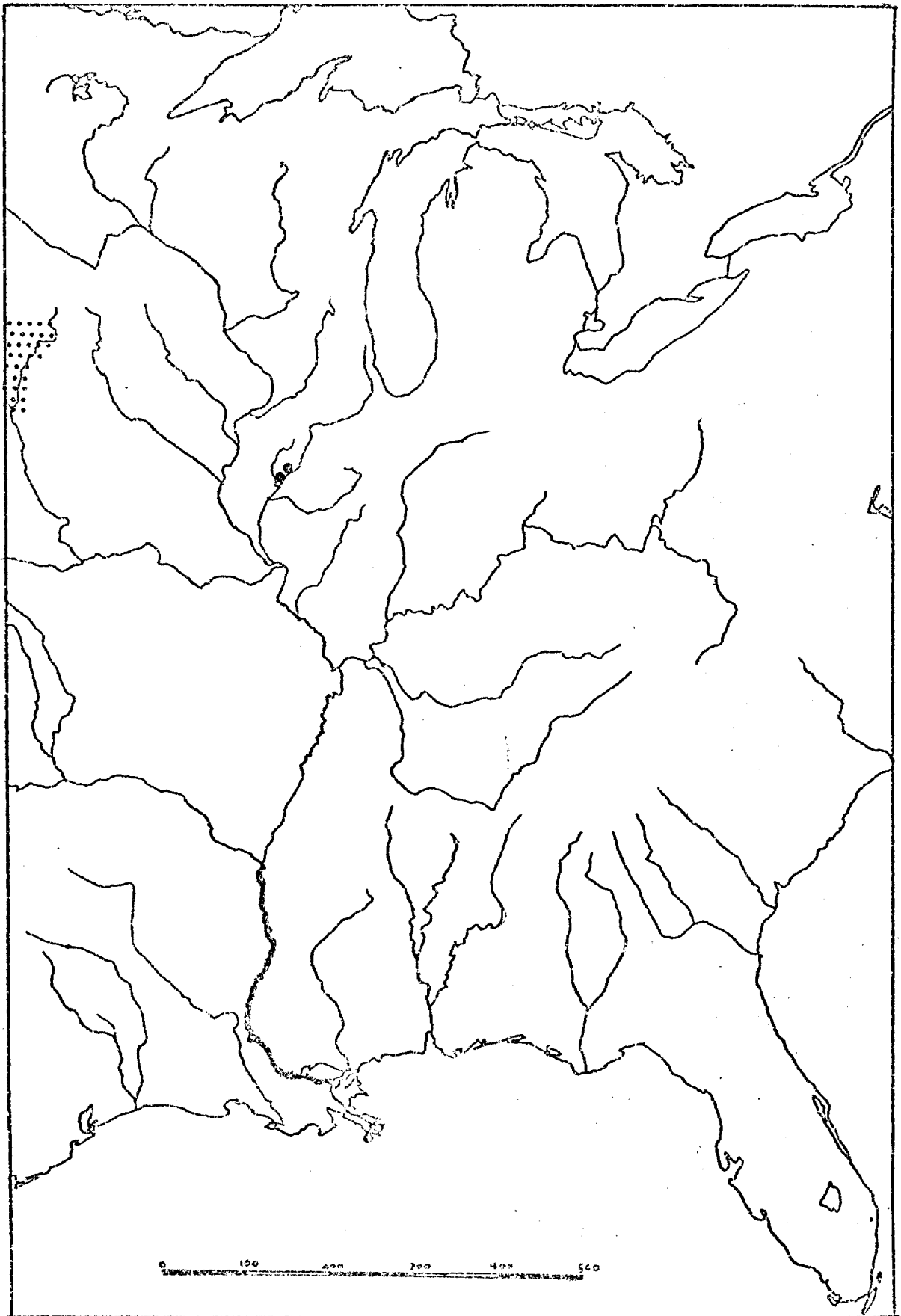
Bracelets

Our excavations produced five bracelets. Three were probably made of bison (Bison bison) bone; the fourth was made up of tiny marine-shell disc beads and the fifth was composed of sub-spherical marine-shell beads. The last will be described under "Bead Ensemble". A single engraved bone bracelet (Plate 16A) measuring 1.75 inches (4.45 cm.) wide and apparently about eight inches (20.32 cm.) long was found with F^o34-256. Both ends had decomposed. The engraved design is almost identical to one engraved on one of the four reported from the Dicksons' excavation (Cole and Deuel, 1937: Fig. 25:8; Harn, 1971: Fig. 14, bottom). Two bracelets - one plain and one engraved - were found with F^o34-292. The plain one (Plate 16C) which measured 5.25 inches (13.34 cm.) long and one inch (2.54 cm.) wide in the center and slightly less at the ends, lay on the chest. At either end it had a single perforation drilled from the outside. The second bracelet (Plate 16B), which measured 6.5 inches (16.5 cm.) long and 1.4 inches (3.56 cm.) wide, was found on the right wrist. It was decorated with a single groove along the periphery. Single perforations were drilled at each corner. As mentioned above, the latter two bracelets were too large to have been worn by the child with whom they were buried. The only other site in Illinois from which similar bracelets are reported is Weaver (F^o228 and F^o914) (Wray and MacNeish, n.d.). Similar objects have been reported from contemporary sites in Iowa,

PLATE 17

Map Showing Distribution of Bone Bracelets.

Shaded area indicates southeastern end of archaeological occurrences.



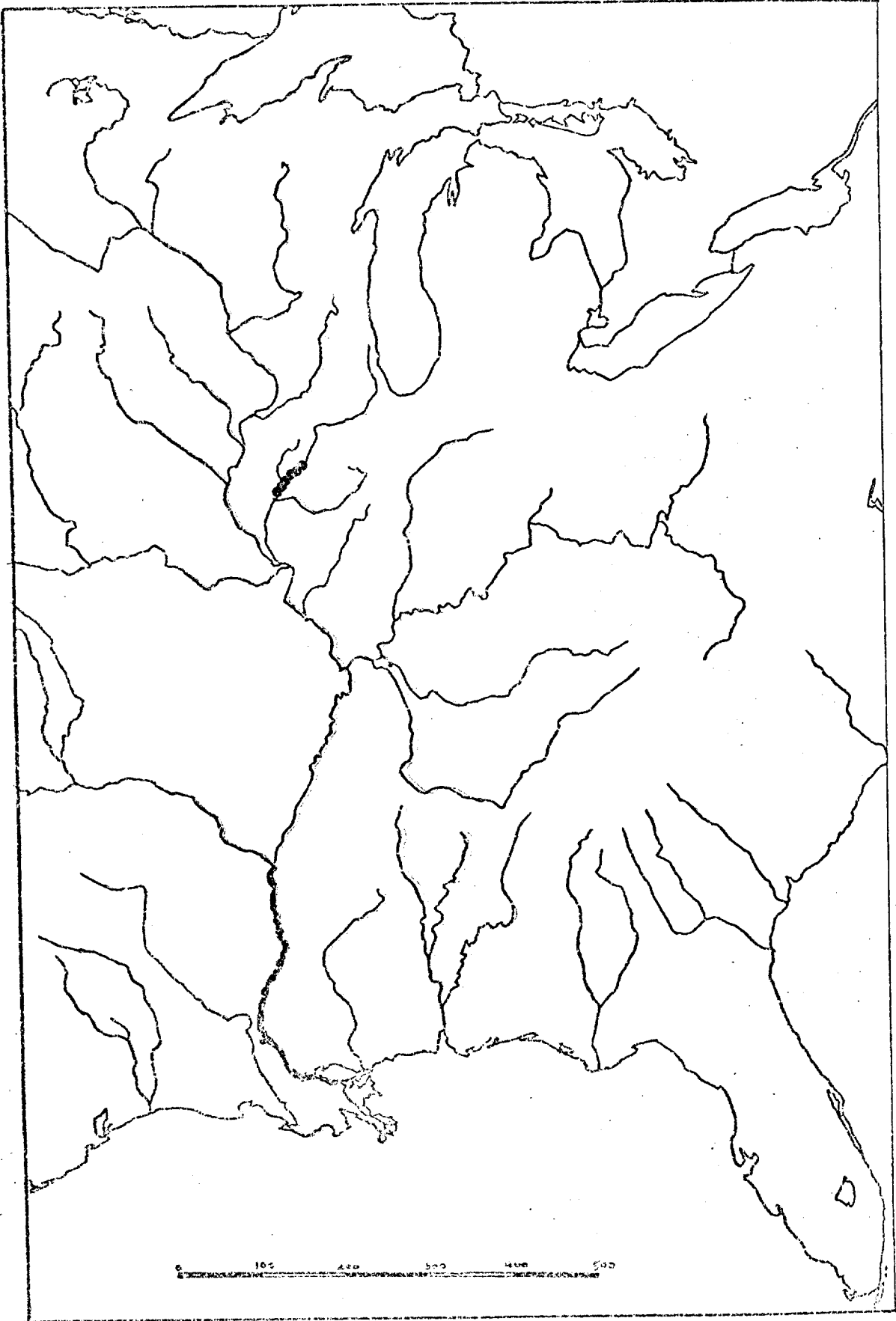
Nebraska and South Dakota (Fugel, 1962: Fig. 11R, Fig. 24E and F, Fig. 35M and N) (see Plate 17). It is quite possible that these objects were imported from Mill Creek or related groups in that region. A bracelet of approximately seventy-five tiny (.12 inches or .30 cm.) marine shell disc beads was found on the left wrist of F^o34-242.

Rattle - Anklets

Sixteen dually perforated immature mucket (Actinonaias carinata) shells were found at the ankles of F^o34-256. The sample consisted of four left and twelve right valves. The shells were paired but no pebbles were included. Three sets of this variety were found in the Dicksons' excavation (Cole and Deuel, 1937:122; Harn, 1971: Fig. 12 left). Similar objects have been reported from several Spoon River sites in the area but seem to be limited in their distribution to the central Illinois Valley (see Plate 18).

Bead Ensemble

An ensemble of eight cut marine-shell beads was associated with F^o34-262. The ensemble was composed of one cylindrical and one barrel-shaped bead (both 1.1 inches or 2.79 cm. long) which were probably attached to a forelock and were found on the frontal bone, a single strand of three sub-spherical beads (about .6 inches or 1.52 cm. in diameter with converging perforations) at either temple, a double or triple



Ma

PLATE 18

Map Showing the Distribution of Mussel Shell Rattle-Anklets.

stranded bracelet of sub-spherical beads on the right wrist and a single strand of sub-spherical beads below each knee. The only comparable ensembles reported from the area are those found at the site since 1966. Elements present in the ensemble occur in many areas but we have been unable to find an exact duplicate in the literature. Beaded forelocks are recorded from the Emmons site (Morse, Morse and Emmons, 1961: 134) and in the art of Cahokia (Perino, 1959: Fig. 66) and all of the "Southern Cult" sites in the Southeast. With the exception of those burials from the Dickson Mound, strands of beads on the wrists and below the knees seem to occur together only in the Southeast. When they occur together there are frequently more than one strand in both areas and often several strands at the ankle. The closest similarities we have been able to find to the strands of beads at the temples is a series of three sub-spherical beads trailing down the side of a head represented in profile on a shell gorget from Moundville (Fundaburk and Foreman, Plate 41) and on an engraved shell fragment from Spiro (Duffield, 1964: Plate X 4 and 5). This figure also wears a double stranded bracelet. Both wear ear plugs while F^o34-262 does not. It appears the ensembles are "poor man's versions" of the ensembles from the richer sites in the Southeast.

Miscellaneous Beads

A group of eleven marine-shell disc beads, each measuring .2 inches (.51 cm.) in diameter, was found without apparent

arrangement in the grave fill immediately below the torso of F^o34-291. It is almost a certainty that these beads were associated with this burial but, since F^o34-292 was located below it in the same grave, there is room for question. Two other marine-shell thick-disc beads measuring .2 inches (.51 cm.) in diameter was found at the right ankle of F^o34-248. Both beads are seen as accidental inclusions.

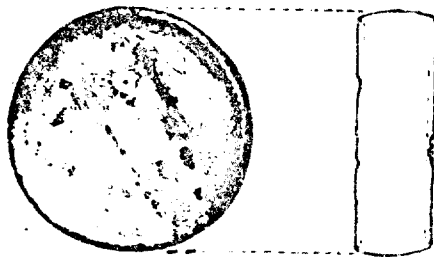
Ritualistic Objects

Under this heading we have included those items which we felt played an actual or symbolic role in community religious, military and/or civil functions. These objects include a turkey wing fan, copper-over-wood imitation canine teeth, a paint palette, shell rattle-anklets and a bead ensemble.

The facts that beads never occurred with ceramics and only with infants and children led us to believe they were of special mortuary significance but their significance in life and death was not discernable. The almost complete exclusion of vessels with burials associated with ornaments including beads led us to conclude all ornaments had ritualistic significance. All ornaments are described under that term but we shall give our reasons for including the various objects, including some of the ornaments under the category under discussion.



A



B



A.
B.

PLATE 19

Ritualistic Objects

- A. Paint palette fragment (depression is at lower right)
associated with F^o34-287.
- B. Discoidal associated with F^o34-271.

Paint Palette

A fragment of a fine-grained sandstone paint palette (Plate 19A) was found between mandible and the cervical vertebrae of F⁰34-287. The irregular fragment measured five inches by 5.5 inches (12.70 by 13.97 cm.) and showed no evidence of an attempt to dress the edges. Modification was confined to the grinding of a shallow roughly circular depression approximately 3.5 inches (8.89 cm.) in diameter. The break ran through this depression. The depressed side was covered with red ocher. The object was interred with the depressed side down.

Webb and DeJarnette (1942:287) considered the circular notched disks characteristic of Moundville and Etowah to be paint palettes because, "Some are concave on one face as if used as palettes for grinding paint. Many have been found with lead or iron oxides smeared on them." Red's link with war was very strong in the Southeast. So much so that among the Creeks the towns of the war moiety were known as the red towns. Pigments are common occurrences in status graves in the Southeast during the Mississippian period.

Discoidal

A discoidal or chunkee stone of dark gray quartzite (Plate 19B) was found under the right wrist of F⁰34-271. The object measured 2.4 inches (6.10 cm.) in diameter and .75 inches (1.91 cm.) in thickness. The concavity on either side

was broad and shallow, leaving a sharp lip. The rim is slightly convex. It falls into Perino's "Cahokia" discoidal type (Perino, 1971: 115 and Fig. 54). Nicks on both lips indicate it had been used before it was contributed as grave furniture. Discoidals occur frequently on habitation areas and in cemeteries of the Eveland and Larson Phases.

They were recognized by Waring and Holder (1945) as an important part of the Southeastern Ceremonial Complex. Representations of chunky players dressed in ceremonial apparel which includes several Southeastern Ceremonial Complex elements are found on many sites in the Middle Mississippi drainage (Fundaburk and Foreman, 1957: Plates 47 & 50; Duffield, 1964, Plate IV). Concerning chunkee stones Adair (quoted in Swanton, 1928:466) tells us,

"The hurling stones they use at present, were time immemorial rubbed (sic) smooth on the rocks, and with prodigious labour; they are kept with the strictest religious care, from one generation to another, and are exempted from being buried with the dead. They belong to the town where they are used, and are carefully preserved."

Though they are found in graves over a wide area, they are very rare in graves from the Tennessee Basin south (except at Moundville), the area of which Adair was speaking.

Turkey Wing Fan

A single turkey (Meleagris gallopavo) carpometacarpus (lower wing bone) found at the right wrist of F^o34-302 may

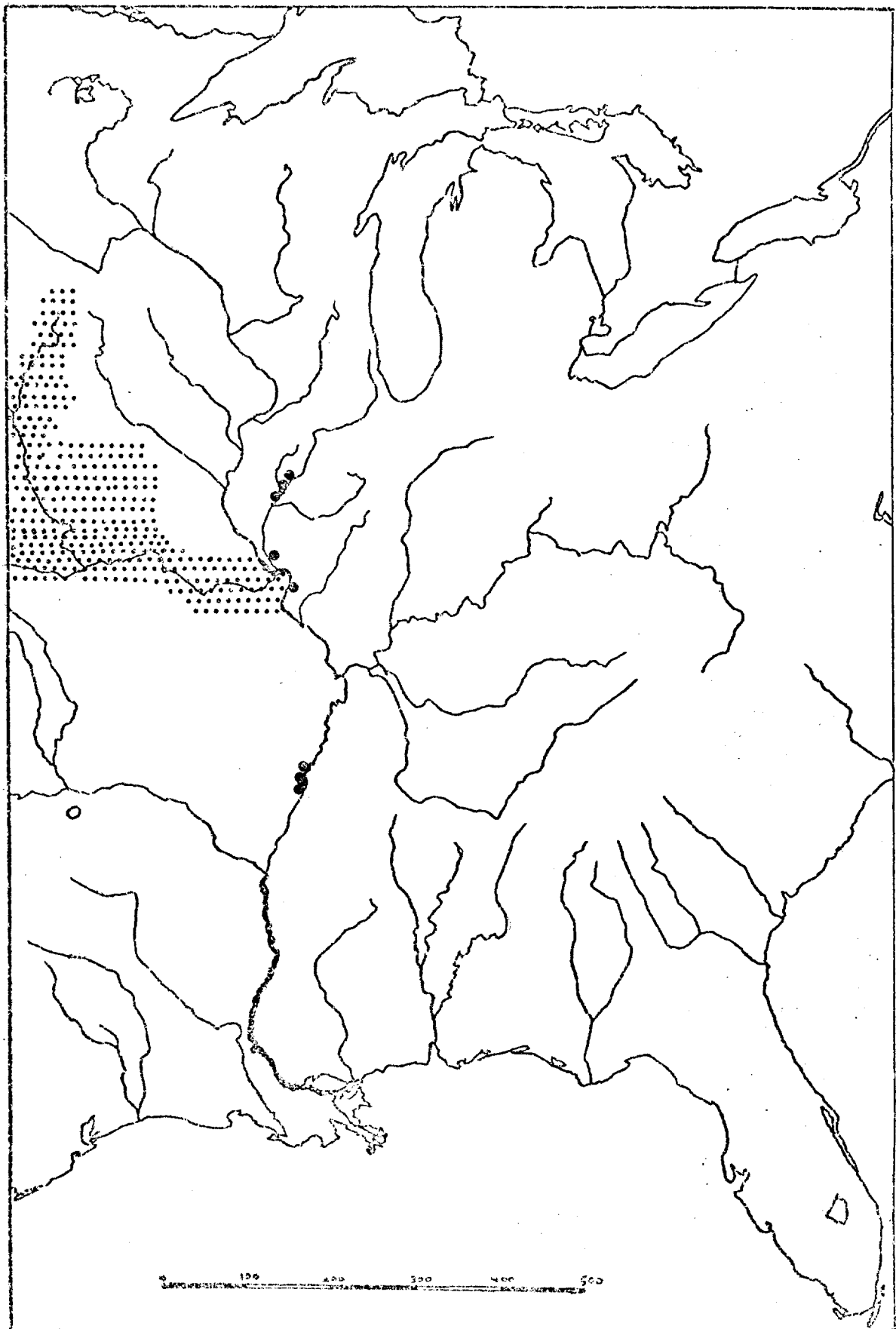


PLATE 20

Map showing Distribution of Bird Wing Fans.

Dots indicate archaeological occurrences. Hollow dot indicates representation in art. Shading indicates ethnographic occurrences but could probably be extended.

represent the remains of a wing fan or similar object. Objects of this type are known from three general locations: Fulton County, Illinois, the American Bottom - southern Illinois River Valley area and east-central Arkansas (Crittenden and Mississippi counties). The Emmons site in southern Fulton County produced two snowy owl (Nyctea scandiaca) wings (Parmalee, 1967:159) and the Weaver site (F^O228) yielded eight "bird wings" (Wray and MacNeish, n.d.). The Schilds site in the southern Illinois Valley yielded three turkey, one great horned owl (Bubo virginianus) and two snowy owl wings (Perino, 1971:62-63) while a turkey wing was found at the Victor Kruger site in the southern American Bottoms (Parmalee, 1967:159). Wing bones of several species including Swan (Olar americanus), Canada goose (Branta canadensis), wild turkey, lesser snow goose (Chen hyperboreus)? and duck (sp.?) have been reported from the Rhodes Place, the Bradley Place and the Banks site in Crittenden County and the Pecan Point site in Mississippi County, Arkansas (Moore 1910: 414-16, 430, 449, 450-2, 454-55; and Perino, 1966: 62-63). At all of these sites at least some of the wing bones were found with burials. At Weaver and Schild the bones were located near the ends of long bone pins. At both of these sites these possible wing and pin combinations occurred with burials having a wealth of non-perishable grave furniture. It may be that others were attached to wooden pins.

Duffield (1964: Plate IX-1) pictures an engraved conch shell fragment from Spiro bearing part of a human figure holding a bird wing in its left hand. The left arm is decorated with ogee symbols. These symbols along with the fact the figure was engraved on a ceremonial vessel indicate a ceremonial function for the wing. Adair (quoted in Fundaburk and Foreman, 1957: caption to Plate 160) says, "During dances some of the Creek Indian men and probably those of many other tribes carried turkey feather fans in their left hands as a sign of leadership and also to protect their eyes from the fire." While this quote says "feathers" rather than "a wing" it does link turkey feathers with a symbol of leadership among a historic Mississippian group.

Fans made from wings of large birds are well documented ethnohistorically (Whitman, 1938:119; Howard, 1965:114) and strongly suggested by the archaeological evidence (Scott, 1972) from the eastern Great Plains (see Plate 20).

Items discussed under Ornaments which are important in the ceremonialism of the Southeast include especially the bead ensemble, conch shell pendants, and the copper-coated-stone ear plugs. We have discussed the bead ensemble above. In addition to their being made at least partially of exotic materials and often being associated with burials interred with a wealth of burial furniture, ear plugs are seen as status indicators because they appear so frequently with

figures in Southeastern ceremonial art and with the corpses of the people wearing the paraphernalia of the people represented in this ceremonial art. The same arguments hold for conch shell pendants.

What are apparently canine teeth or imitations of same used as ear pendants occur occasionally in Mississippian ceremonial art (see Duffield, 1964: Plate IX-5 for an example). They also occur from time to time in Mississippian graves but they do not appear to have been so important elsewhere as in Fulton County, Illinois. Though it seems to us that these are ceremonial objects, it is difficult to demonstrate this on the basis of available ethnographic and archaeological evidence from Mississippian sites. Perhaps these teeth correspond to what Peebles (1971) called local symbols as opposed to supra-local symbols. He felt the former were of significance over a relatively limited geographical area to differentiate individuals, while the supra-local symbols were virtually identical over a large area and probably conveyed similar meanings over that area. The three sites which have yielded real or imitation canine teeth apparently had virtually identical burial customs. Though we admit we have not found external support for these particular items serving as indicators of status and/or role, we feel secure in suggesting they were symbols of a geographically restricted nature.

Bone bracelets are even more difficult to deal with, since they are so rare in the Mississippian area and since virtually no inhumations are known for those people who used them on the Plains. They have been reported from the Weaver and Dickson sites only, east of the Mississippi. At Weaver they were found exclusively with children as were almost all of those from the Dickson Mound. At least at Dickson their position or size suggested they were contributed status validators and they were often associated with marine shell beads at both sites. Since they were used as status validators, they must have been status indicators. Their coincidence with marine shell beads which, for reasons detailed above, seem to be of ceremonial importance seems to support this assumption.

Another item which we feel to have had a ritualistic function, for which we have been unable to find a close analogue outside of the central Illinois Valley is the set of mussel shell rattle-anklets. These rattles are a very frequent occurrence in the Fulton County area where they are usually found on the ankles of women or children, but occasionally on the ankles of men. Again we feel these are local symbols which are analogous to the turtle shell rattle-anklets of the Creeks and Cherokees. Lewis and Kneberg (1946:127) list four eyewitness accounts of the use of these rattles published between 1745 and 1803. Howard (1968) and Feder (1968) describe the use of these rattles and condensed

milk can substitutes in 1965. Adair (in Lewis and Kneberg, 1946:127) spoke of land tortoise shell rattles being worn on the legs of women when they took part in religious dances with men. David Tait (referenced in the same source) says such rattles were worn when the women danced alone. Moravian missionaries (referenced in the same source) say such rattles were worn by, "The female leader of this dance...". Howard (1968:90-92) and Feder (1968:167-168) mention leg rattles being worn by women in the Women's or Ribbon dances performed in Oklahoma in 1955 by descendants of Southeastern Middle Mississippians of the historic period and Feder (1968:165) mentions their use in the Stomp Dance. Swanton (1931:45-46) suggests the Women's Ribbon Dance was an attempt to represent war as a protestive institution (against aggressors) and to thank the powers above for past victories and (1928:547) that the Stomp Dance, like the Busk, was conducted to insure tribal health.

In summary we can say the 1966 excavations yielded ritualistic objects such as a paint palette, a bead ensemble, various marine shell ornaments and a discoidal which would have been recognized throughout the greater Southeast as well as several that seem to be confined entirely or nearly so to the central Illinois Valley, including, cougar teeth and imitations of same, bone bracelets and mussel shell rattle-anklets. These two groups seem to correspond to what Peebles (1971) called supra-local and local symbols. Bird

wing fans may be local symbols but their appearance only in sites on the Mississippian western periphery of their extent suggests an adoption by several groups of a Plains symbol.

Mussel Shell Spoons

Five modified pocketbook (Lampsilis ventricosa) shell spoons (Plate 21) were found in direct association with burials. Four left valves and one right valve were found. Modification varied from slight notching to form a handle to deep notching and grinding and polishing. The shells ranged in length from 3.5 to 5 inches (8.89 to 12.70 cm.). All of these shells were found in association with jars and, with the possible exception of the miniature with F^o34-285, all jars were associated with spoons. We do not attach great importance to the absence of a spoon with the miniature vessel for two reasons: much of the area adjacent to this vessel had been disturbed by previous excavators; and it is possible that miniature vessels were considered different than full-sized vessels. Spoons were found in association with F^o34-244, F^o34-252, F^o34-256, F^o34-265 and F^o34-293.

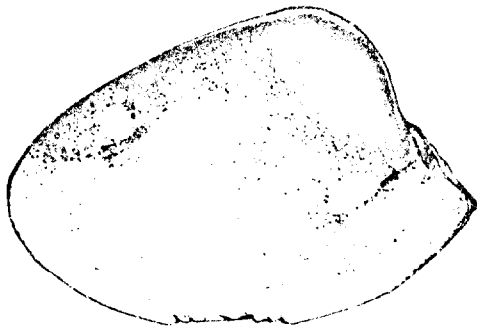
Another such spoon with ground edges and a worn tip was found in the fill of the grave of F^o34-254. It was a left valve. Another spoon was found in the bone worker's kit associated with F^o34-255.



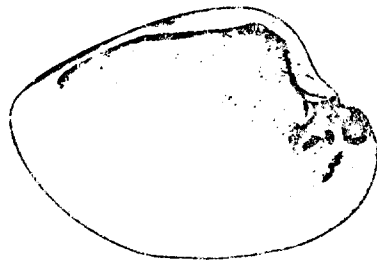
A



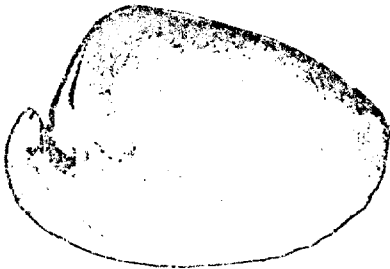
B



C



D



E



F



PLATE 21

Mussel Shell Spoons Associated with Larson Phase Burials.

- A. Associated with F^o34-252.
- B. Associated with F^o34-290.
- C. Associated with F^o34-293.
- D. Associated with F^o34-244.
- E. Associated with F^o34-256.
- F. Associated with F^o34-271.

The only spoon not manufactured from a Lampsilis shell was the one (Plate 21F) found at the head of F^o34-271. It was manufactured from the left valve of a Leptodea cf. fragilis shell and had ground edges and a worn tip.

Single unworked L. ventricosa valves were found at the heads of F^o34-283, F^o34-290 (Plate 21B) and F^o34-307. The former was an adult male and the latter two were infants. These shells would have been reasonable food dishes for infants but the function of the one buried with the adult is unclear. It is possible but unlikely that a jar was behind the head in an as yet unexcavated area and that this shell was a spoon associated with it.

While the possibility that these shells rested in perishable containers cannot be ruled out, it seems that if this is true there must have been a strong correlation between perishable containers and unmodified shell spoons, since all three of the valves unaccompanied by ceramic vessels were unmodified and they were the only three unmodified valves found during the excavation of Larson Phase graves. Perino (1971: Table 2) reports 54 shell spoons associated with Mississippian vessels at the Schild site and 19 in a Mississippian context unassociated with ceramics. He does not mention any difference between these spoons.

Projectile Points

The 1966 excavations produced six triangular projectile points, five of which were apparently funerary offerings and one of which was imbedded in the chest of F⁰34-287. The attributes of each point are listed in Table VI. All of the points were found with males. All of the material utilized in the manufacture of these points fell within the range of Avon chert. Though the collection was small it was useful in placing the burials chronologically. Long, slender, multiple-notched points of fine workmanship were characteristic Eveland Phase and to a lesser degree Larson Phase burial furniture. Their complete absence in our sample suggests a post-Eveland time period for it. The longer of the two points with F⁰34-283 was virtually identical to those in a cache of twenty found in a grave which also contained Ramey Incised and Monks Mound Red vessels (see Simpson, 1930:41). This along with the Barrel-Shaped Beaker, the cambered-rimmed jar and other ties with presumed early sites seem to indicate a Larson Phase placement of circa A.D.1200±50.

TABLE VI: Attributes of Projectile Points

Burial Number	Plate	Length	Width	Cross Section	Base	# of Notches	Notes
F ⁰ 34-277	-	1.1"	.7	bi-convex	concave	0	
F ⁰ 34-283	B	1.1"	.5	bi-convex	flat	2	
F ⁰ 34-283	A	.9"	.4	bi-convex	flat	2	Serrated blade
F ⁰ 34-283	C	.8"+	.6	plano-convex	?	?	Modified flake, broken
F ⁰ 34-287	E	1.1"	.6	bi-convex	concave	0	Coarse work, heavy imbedded in chest shattered
F ⁰ 34-302	D	1.0"	.5	bi-convex	concave	5	Coarse work, broken tip and corner of base.



A



B



C



D

E



F



G



H



I



J



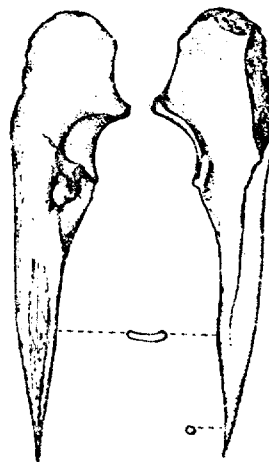
K



L



M



N

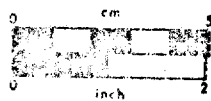


PLATE 22

Weapons and Utilitarian Objects

- A, B and C. Projectile points associated with F°34-283.
- D. Projectile point associated with F°34-302.
- E. Projectile point imbedded in chest of F°34-287.
- F. Flake side scraper associated with F°34-293.
- G. Flake side scraper associated with F°34-317.
- H. Flake side scraper associated with F°34-277.
- I. Flake knife associated with F°34-262.
- J. Flake graver associated with F°34-260 or 261.
- K. Unmodified flake associated with F°34-265.
- L. Unmodified flake associated with F°34-252.
- M. Bifacial knife associated with F°34-271.
- N. Deer ulna awl associated with F°34-308.

Bifacial Knife

A single bifacially-worked leaf-shaped knife (Plate 22) of poor quality Kaolin chert was found with F^o34-271. It measured 6.7 inches (4.32 cm.) long, 1.7 inches (4.32 cm.) wide and .5 inches (1.27 cm.) thick. It had a plano-convex cross section and was beveled at the tip. A broad, shallow notch was located on either side two-thirds of the way down the blade. Both notches were knapped from the same side. Though one notch is partially ground, both have sharp enough edges to inhibit hafting. They seem to have functioned as grips to facilitate closer control of the tip of the blade. There was no other grinding or polishing on the object. Blades of this type, exclusive of notches, are frequent occurrences on sites of the Cahokia Tradition but Kaolin chert is seldom seen as the material for such mundane objects in the Illinois Valley. It was usually reserved for maces, spatulates, notched hoes, large, well-made blades and exquisite projectile points.

Flake Tools

In addition to the four scrapers listed under "Bone Worker's Tool Kit" we have eight solitary flakes and flake tools of Avon chert. Single crescent-shaped flake side scrapers (Plate 22 F and G) were found beneath the wrists of F^o34-293 and F^o34-317. A semi-lunate flake scraper (Plate 22 H) was found beneath the wrist of F^o34-277. A

fourth retouched flake from the grave of F°34-236 was probably a scraper but is unavailable at this time. A single flake knife (Plate 22 I) was found at the right wrist of F°34-262. A flake graver (Plate 22 J) was Single unmodified flakes (Plate 22 L and K) were found near the left wrists of F°34-252 and F°34-265.

The occurrence of these solitary flakes - both modified and unmodified - almost exclusively (87.5% of the time) at the wrists and hands is not mere coincidence but their significance is not apparent at this time. Such objects occur in several positions in the Dicksons' excavation without a noticeable pattern (Harn, personal communication) but material recovered since 1966 conforms to this pattern.

TABLE VII

Placement of Objects Other than Beads and Ornaments Always Found in Position

	vessels	unmodified valves	spoon	tool kit	palette	Busycan sherds	points	bone	bracelets	flake	tools	knife	fan	discooidal	total
head	5	3	1	1	1	1									12
chest							3	1	1						5
arm	4					1	1				1				7
wrist & hand						1	1	2	6			1	1	1	12
knees															0
ankles															0
feet	1														1
total	10	3	1	1	1	3	5	3	7	1	1	1	1	1	37

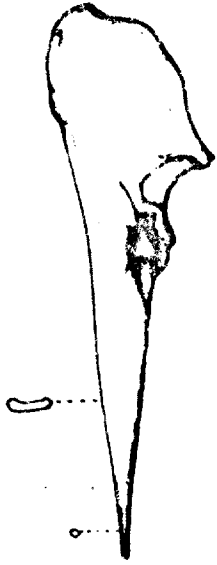
The Emmons site (Morse, Morse and Emmons, 1961) conforms to this pattern, with flake "kives" occurring at the hands or lower arms of 14 of the 83 burials from the site. All but two of the flakes were found with adults and the others were found with infants. Since the authors of the article caution against placing faith in the sexual determinations, no attempt at correlation will be made here.

Deer Ulna Awls

Two awls fashioned from deer (Odocoileus virginianus) ulnae were found during 1966. One was found in the bone worker's kit (Plate 23 A) while the other (Plate 22 N) was found with the few remaining bones of F^o34-308. Though a minority type, such awls do occur on other Spoon River sites.

Bone Worker's Tool Kit

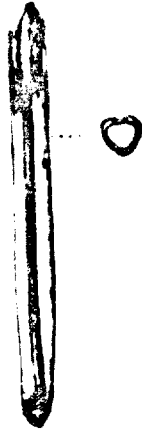
A cache of objects (Plate 23) which appeared to be a bone worker's tool kit was found in a compact mass behind the head of F^o34-255. The cache included: one complete deer ulna awls; one thin polished needle(?) fragment; one worked L. ventricosa shell spoon; two cut bird tibiotarsi, including at least one from a swan, probably a trumpeter swan (Olor buccinator), one of which was slotted for splitting; one unfinished fish hook blank of a split section of a bird bone; two Avon chert side scrapers; one Avon chert utilized-flake side scraper; two Avon chert wedges (?); one fragment



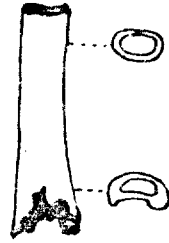
A



B



C



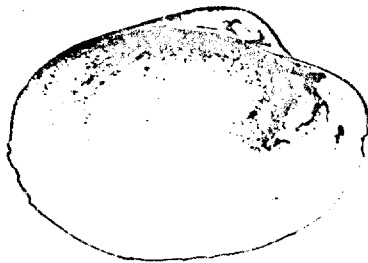
D



E



F



G

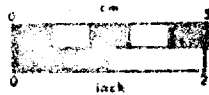


PLATE 23

Objects from Bone Worker's Kit Associated with F°34-255.

- A. Finished deer ulna awl.
- B and C. Slotted bird bone sections.
- D. Cut bird bone section.
- E and F. Chert scrapers.
- G. Mussel shell spoon.

of a broken bifacially-worked blade of Avon chert; nine Avon chert flakes; two quartz fragments; and one unworked sandstone fragment.

The objects in this cache can be broken down into three groups: finished products (deer ulna awl, shell spoon and bone needle (?)); tools (scrapers, sandstone fragment, wedges and perhaps the bifacially worked blade fragment) and raw materials (cut bird bones and chert chips).

Raw Material

In addition to some of the objects in the bone worker's kit, three Busycon perversum shells seem best considered as raw material. One four-inch (10.16 cm.) shell with a broken posterior end and a section cut from the shoulder was found in a previous excavator's pit in Square 70-0. A 3.5 inch (8.89 cm.) shell with a broken posterior end and a spiral pecked out around the interior spiral at the cone in preparation for cutting the shell into pieces and removing the central whorl was found at the head of F°34-292. The third was the damaged shell found with F°34-300 and discussed above under "Ornaments". Judging from their broken posteriors, the shells represent broken pendants in the process of being salvaged for use in the manufacture of beads and/or pendants. This indicates a value contrasting sharply with Cahokia, where large pieces of marine shell and even whole shells are frequently found in the middens.

Sources of Raw Materials

Most of the artifacts found during 1966 were manufactured from locally-available materials. Most of the "flint" objects were made from Avon chert collected from the Avon chert quarries located about 30 miles north-northwest of the Dickson Mound on tributaries of the Spoon River. The only exception is the Kaolin chert knife of material from Union County in southern Illinois. It appears these quarries were extensively exploited by people from the nearby Ware site where banks were roughed out. Many of these blanks were then probably sent to Cahokia for final finishing. From there they seem to have been sent into the Illinois Valley as finished objects.

We feel it is likely that the bone bracelets were imported as finished objects from Great Plains. This is based on the fact that they are quite common there and rare in the Illinois Valley; the ornamentation of many of them is identical to that on some from the Plains and other materials including ceramics, Catlinite and bison scapulae were being imported during the early part of the Spoon River period.

The Busycon perversum shells could have been secured from Cape Hatteras to the Florida Keys^{*}; the Olivella

* There seems to be considerable confusion concerning the identification of this species (see Abbott, 1954:236). We are following the precedent long established in the archaeological literature of the area.

jaspidea shells must have come from southeast Florida; and the Marginella apicinum could have come from the Atlantic Coast as far north as Cape Hatteras and south to the Florida Keys and from the Gulf Coast.

The galena could have come from Missouri or northwestern Illinois.

It is generally assumed that the copper found in the Illinois Valley originated in the Lake Superior region and was transported from there by glaciers or Indians. While this is probably correct, we think another possibility should be kept in mind until spectrographic analysis has been conducted on some of the material involved. Hurst and Larson (1958) have demonstrated that some of the copper utilized by the inhabitants of the Etowah site in Georgia came from that general area. Even though the Wulfing Plates from Missouri (Watson, 1950) and the Mangum Plate from Mississippi (Cotter, 1952) seem to have been made of Lake Superior copper, there still seems to us to be a distinct possibility that finished ceremonial objects made of local copper were moving from the major southeastern ceremonial centers.

SUMMARY AND CONCLUSIONS

The 1966 excavations at the Dickson Mound provided valuable data on the burial customs of the Eveland Phase of the Spoon River Culture, on the construction of the mound and the definition of the Larson Phase of the Spoon River Culture, its social organization and its relationships with other groups.

Since the beginning of investigations at the Eveland site (F^V900) in 1958 there have been many questions concerning its relationship to the Dickson Mound on the bluff above it. The discovery of an emptied grave containing a fragment of a Powell Plain jar sandwiched between a Sepo and an Eveland midden and the discovery of a shell-tempered jar in a grave sealed by a midden producing Sepo sherds demonstrated the mound was a burial area for this important village site.

Prior to 1966 Dr. Don Dickson had recognized that some of the burials at the bottom of the mound had been buried in pits (Cole and Deuel, 1937:121, footnote 69). However, it seems to have been universally held that the mound itself was built up by repeated covering of individual corpses or small groups of corpses with thin layers of soil. Our excavations proved conclusively that the mound was built in definite stages and that virtually all (if not all) of the burials were interred in shaft graves sunk either into the hill or into definite mound stages built over what were actually filled cemeteries.

An attempt was made to wring as much cultural information as possible from the 1966 sample. The analytical methods used were described in the Introduction of this paper. Using these techniques several tentative conclusions were drawn concerning part of the sample. It was only for the Larson Phase sample that even tentative conclusions were possible. This was due to the extreme limitations on the size of the Eveland Phase burial sample. Only four burials were recognized as belonging to this phase. Even the Larson Phase sample was much smaller than we would have liked. It consisted of a maximum of eighty burials, many of which have been damaged to a greater or lesser degree by aboriginal grave diggers or modern relic hunters, but several of these may actually have been Eveland Phase burials.

Generalizations were formulated concerning the disarticulated burials in the sample. In the two instances where only sub-adults were represented no burial furniture was found. In the three instances where adult skeletal components were present disarticulated or articulated sub-adult remains were also present, as were status-indicating items. In the two cases where articulated sub-adults were present the status items were in direct association with them. Subject to testing against the large sample excavated since 1966, it has been suggested that these may have been instances of the sacrifice of children of status at the time of the final disposal of the corporeal remains of a high status

individual. With less assurance the possibility was suggested that one of the two adolescents buried side by side in a large grave may have been a retainer for the other, and that three children buried with an articulated adult male may have been too. The sample was simply too small to allow for a definite statement on this problem, but it is hoped those working with the material excavated since 1966 will look for possible links among graves containing more than one individual, the occurrence of occipital flattening and the placement of infants adorned with marine-shell ornaments with the remains of adults, particularly disarticulated adults. The suggestion that such links may exist is based upon internal evidence from the 1966 sample, other archaeological evidence from western Illinois and the Caddo area and ethnohistoric material from the Gulf Coastal regions.

Similarities and differences between the 1966 sample and that in the Dicksons' excavations were noted. Also noted were numerous groups of burials on nearly identical axes which it was felt, but admittedly not proved, were family plots. Two larger groups, each of which had a different group of orientations within it, were also isolated. It was suggested that it might be worthwhile to approach the Dicksons' sample with this idea in mind in hopes of explaining some of the differences in orientations in the two samples. On the basis of the similarities between three of the latest graves in area A and the majority of the graves in area B, and the

differences between them and the majority of the graves in area A, it was suggested that these areally-based variations were a function of time. Support was found for this suggestion in the sudden shifts in building orientations at the Larson site and Cahokia. Since the completion of the 1966 excavations it has been conclusively demonstrated that the mound was actually a composite of several mounds built consecutively over a number of years. As yet no comparative studies have been made of the orientations in these various areas.

Artifacts were divided into five categories which it was felt might have been recognized by the aborigines and the occurrences of items of these categories were examined for patterning. The categories included ceramics, utility equipment, ritualistic equipment (excluding beads), beads and contributed goods. There was some overlap among items in these categories. With the exception of projectile points being found only with adult males, patterns were found concerning only beads and contributed goods. Both categories were found exclusively with sub-adults. The contributed goods were seen as validators of status and both categories were found to occur only when ceramics were absent. It may be that the beads were contributed status validators but the necklaces and the single bead ensemble seemed, with one exception, to fit the person wearing them. Only one of the eight people associated with ornaments were associated with

ceramics. The occurrence of status validating items with children seemed to indicate that at least some of the statuses in the society were assigned. It is possible that the significant facet in the ornament-ceramic mutually exclusive set is marine shell, rather than the functional category of ornaments. If this is the case, there is no overlap between the two groups. But again, the sample is simply too small to tell.

There were three cases of limonite on the floors of graves of adult males. All three cases were either later graves in area A or in area B.

The three cases of occipital flattening in our sample involved three sub-adults in double or triple graves. Our sample is too small to warrant speculation on its significance. We have suggested a line of inquiry which we feel might shed more light on the practice.

Larson Phase ceramics from the site consisted of six jars, including one miniature lobed jar and one cambered rimmed one, three beakers of different varieties and an effigy bowl. The ceramic assemblage seemed to fit well into the Larson Phase assemblage.

Ornaments included a bone hair pin, a bone comb, real and copper-over-wood imitation cougar teeth, copper-over-stone ear plugs, pendants of cut marine shell, a galena crystal and a fresh water pearl, bone bracelets, a set of rattle-anklets, several necklaces of cut marine shell beads and/or small marine gastropods, a bracelet of tiny marine-

shell beads and a bead ensemble of the type often portrayed in the iconographic art of the Southeastern Ceremonial Complex.

Objects considered to be ritualistic or ceremonial in nature were divided into local symbols and supra-local symbols. The local symbols which probably functioned mainly as status differentiators in the eyes of local group members, included canine teeth, real and imitation, bone bracelets and mussel shell ankle-rattles and possibly a turkey wing fan. The supra-local symbols which were recognized throughout the greater Southeast included a paint palette, a discoidal, conch shell pendants and copper-over-stone ear plugs.

Several pocketbook (Lampsilis ventricosa) shell spoons and a single paper shell (Leptodea cf. fragilis) spoon were found in the 1966 excavations. Those spoons associated with ceramics were always found with jars and all jars except the miniature were associated with shell spoons. Three unworked pocketbook shells were also found as grave furniture with Larson Phase burials.

Utility items recovered included six triangular projectile points, one of which was imbedded in a man's chest, a large bifacially-worked knife, six solitary flake tools, a deer ulna awl and a cache of bone worker's tools which included various items, some of which duplicated some of the items listed above.

It is felt that the foregoing study may help to place considerations of Spoon River society on a much firmer footing than has been available in the past. While we agree that earlier assumptions that it must have resembled that of the Southeastern Indians because the artifacts did was generally correct, we know of no reports for the area offering any evidence that this was the case. In addition to fulfilling our obligation to report on field work conducted, we have tried to use this paper as a vehicle for a detailed examination of the social implications of the burial practices. We have presented evidence of hereditary high social position and for human sacrifice in connection with burial ritual. This suggests a form of social organization similar to that of the Natchez and Taensa of the lower Mississippi Valley. Though these two groups concentrated unusually great powers in the hands of the members of a rigidly defined social class, their culture was in most ways similar to the other groups in the Southeast. From the more extensive records available on some of these other groups we have been able to offer explanations of the significance of several of the artifacts which we interpreted as ceremonial and/or status-validating objects. Further evidence was found in the iconographic art of the Southeastern Ceremonial Complex and in the graves of the functionaries of this complex. Elsewhere (Conrad and Harn, 1972) we have listed the artifacts of this complex which have been found in the central

Illinois Valley. We caution against speaking as some (Morse, 1960; and Morse, Morse and Emmons, 1961) of the "Southern Cult" in the area. This complex might be viewed as a polythetic set (Clarke, 1968:37-38) and accepted as existing in an area where a portion of the elements are missing but cannot be assumed to have been extant at every site evidencing a weeping eye or a human-head effigy rattle. It is most likely that these artifacts represent a regional variation of the celebration of the green corn ceremonies (see Waring, 1968; and Howard, 1968) and that some of the artifacts crept into the ceremonies of the Spoon River people.

We will present the following model for testing against the material recently recovered from the Dickson Mound and from Cahokia.

The available evidence bearing upon the Eveland and Larson phase Spoon River social organization seems to be best explained by a model resembling that of the Natchez.

At least during the early part of the Eveland Phase, Cahokia would have been a part of the same social system. Evidence from the site indicates high status individuals merited numerous human sacrifices at their funerals even before the initial Mississippian intrusion into the Illinois Valley. Since the Ramey Incised pottery quickly degenerated into a variety using single line elements and multi-lined elements occurred on vessels associated with retainers and

presumed retainers at Dickson Mound and Kingston Lake respectively, it is suggested that members of Cahokia's royal lineage were among the first immigrants into the area and that they established colonies at or near what were to become major administrative centers. It is assumed the people buried with retainers in the Illinois Valley derived this sumptuary privilege through kin ties with the Cahokia rulers who derived it through fictive kin ties with the supernatural. The administration of outlying vassel towns and districts by members of the ruling family of the principle town is well-documented ethnohistorically (see Bourne, 1904; Garcilaso de la Vega, 1951; and Swanton, 1911 and 1922).

Among the Natchez and probably several other groups in the historic Southeast, members of the ruling class were interred in the flesh but were later disinterred and selected bones were stored in a charnel house. We have suggested the adult disarticulated burials in our sample represent members of this class and the associated sub-adults are retainers. Sub-adults buried with partially disarticulated and articulated adults might also be retainers. This suggestion is based upon a complex of traits associated with the articulated burials associated with the bundle burials and by the suggested retainers buried with articulated corpses. All of the traits are not found with each burial of either group of postulated retainers. Traits include wearing of marine-shell ornaments, occipital flattening and the occurrence of more

than one person in the same grave. This latter set of identifications is admittedly tenuous but seems to be worthy of further investigation. It is possible that these status burials do not represent the actual rulers but rather their immediate families. The rulers may have been buried at Cahokia or the Larson site. Perhaps the differences in the conditions of the corpses at burial of people who seem to have had retainers was a function of their degree of relationship to the ruler.

If we are correct in assuming many of the retainers were children of the civil servants of the dead aristocrat, this group of civil servants probably represented a second social stratum. In addition to the immolated children this class was probably represented by adults and children buried with ornaments and other status items.

A third stratum was probably composed of successful hunters, warriors, and craftsmen of achieved status. This class was probably represented by those burials associated with projectile points and the one with a bone worker's kit. Numerous occurrences of projectile points imbedded in bones of both men and women and the stockade around the Larson site indicate Spoon River peoples were no exception to the historic and prehistoric Mississippian norm of bellicosity. It seems conflicts were mainly with other groups of the Cahokia Tradition, since the points imbedded in the bones are almost always characteristic notched or unnotched triangles commonly called "Cahokia points".

The lowest stratum within the society was probably composed of a large number of in-group members who were eligible for achieved status but had not met the requirements.

The existence of out-group members such as slaves and war captives is entirely possible and may be evidenced by occasional rubbish pit burials.

The focal point of the community or talwa to which the Larson Phase people in the Dickson Mound belonged was presumably the public square and platform mound at the Larson site, approximately a mile away. It was at this town, perhaps on the platform mound that the regional administrator lived and where discussions and ceremonies effecting the whole community were held. Judging from the Southeastern ethnohistoric record, the local administrator was also the regional high priest of an essentially monotheistic religion concerned largely with success of the crops, health and military victory, or at least security. While illness of the common people was presumably the concern of local shamans, the illness of a member of the aristocracy was probably of celestial importance.

Though the aristocracy were theoretically unquestioned rulers, it is very probable that their policies were greatly influenced by a council of hereditary advisors and respected commoners. The office of hereditary war chief was so nearly universal in the Southeast that we may assume it was present among the Spoon River people.

As mentioned above, the center of the community was the temple town with its platform mound and plaza. For a time, at least, the several talwas in the Illinois Valley were probably subject to Cahokia but they seem to have gone their own ways as Cahokia's power waned. Extending along the Illinois River on either side of these towns were villages, hamlets and farmsteads. There is evidence to suggest that the Larson site was the winter quarters for many of the inhabitants of these outlying sites (see Harn, 1970:7-8). The Myer-Dickson village site seems to be a segmented village as defined by Chang (1958:298). He presents strong ethnographic evidence that such an organization probably indicates the presence of several lineages within the site. Since houses are seldom larger than 400 square feet, it seems the basic social unit was the nuclear family but extra relatives may have been present, as they often were historically.

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