VII. THE MIDDLE MISSISSIPPI "PHASE": DISCUSSION

1. Definition of Middle Mississippi Culture

Having now passed in review an unconscionable amount of descriptive and photographic material we are at length in position to consider the Middle Mississippi problem in some of its more general aspects. The first consideration is that of definition. Is it possible to define a Middle Mississippi "phase" in terms sufficiently precise to indicate the actual existence of such an entity? I believe there is such a possibility. Before doing so, however, I must point out a certain element of casuistry in the process. To the single aspect of Middle Mississippi which has been admitted into the McKern classification, the Monks Mound aspect, I have added three other manifestations (without regard to the question whether they should be called aspects or not) selected on account of an a priori resemblance to Monks Mound. It should not be surprising, therefore, if I am now able to turn around and show that all four manifestations constitute a homogeneous entity. Is it possible that considerations of manifestations in the Middle Mississippi region other than those selected would have produced entirely different results? It seems altogether possible. The answer that there are no other manifestations concerning which we have sufficient information for the sort of treatment adopted here, is just another way of saying that the archaeological record in this portion of the Valley is woefully incomplete; it does not affect the point at issue. In fact, I see no way to get around the difficulty. It is perhaps

inherent in the culture comparative method of classification. In that method, your place of arrival depends to a great degree on your point of departure.

Tabular comparison of the four sub-divisions of the Middle Mississippi "Phase": A detailed comparison of our four Middle Mississippi cultures is given below (fig. 113). There are one or two circumstances mention of which at this point may render this long table somewhat more comprehensible. To begin with, there are certain difficulties in the first column owing to the fact that the Monks Mound aspect seems to be divisible into two sequent periods (the "Old Village" and the "Bean-pot" cultures) so that it has been necessary to relate certain traits to one or the other of these periods. In doing so I have adopted the terms Aztlan-Cahokia I and Spoon River-Cahokia II. It is also necessary to remind the reader that the Monks Mound data, derived entirely from the rather scanty literature, are particularly weak just where the others are strong, namely on the side of pottery. This produces a discontinuity, as between Monks Mound and the other three cultures, more apparent than real. Aside from these difficulties in the Monks Mound column and certain grave omissions in the non-ceramic portion of the Cairo Lowland column, the table offers a fairly satisfactory basis for a tentative definition of Middle Mississippi culture.

A rigorous tabulation of traits that occur in all four columns of the table would give us, unfortunately, no definition at all, owing to the serious gaps in the non-ceramic portion of the Cairo

Comparison of the four sub-divisions of the Middle Mississippi "Phase". Fig. 113.

MONKS MOUND

CUMBERLAND

CAIRO LOWLAND

EASTERN ARKANSAS

No

evidence regarding semblage of mounds,

Poor information.

except that a single large platform mound

teristics General characsite

mounds of Spoon River, informal village site with formal oriented Inconsistent. From mounds of Cahokia to great platform plaza assemblage. with low burial

blage. Generally one of formality and oridominant mound abutting on plaza. Lack Loose plaza assementation.

Loose plaza arrangement similar to Cumberland. Very little information. without bastions simi-One or two sites delar to the Cairo fended by stockade Lowland. Possibly

plastered with clay.

In some cases the site rangement is probable.

the site. Plaza ar-

generally dominates

consists of a single

mound, "acropolis"

fashion.

an immense mound of this cases the whole site is the only form. In some site above flood stage. type. Probably to get Information very poor. domiciliary type probably dominant, if not Stratified pyramidal

projecting bastions Stockade defences, clay-covered, with at Aztlan.

with bastions, probclay, generally oval Stockade defences, ably covered with or D-shaped.

lar, sometimes oval. Stockade defences -tions or clay daub. no evidence of bas-Generally rectangu-

which is not very far. far as evidence goes, Close correspondence with Cumberland so

Mounds

No clear dominance of truncated pyramidal. conical mounds conlatter. Pyramidal Some level. Some conistages, post-hole cals perhaps also tained burials in Both conical and patterns at each mounds built in domiciliary. log chambers.

regularly stratified. also domiciliary, may Truncated pyramidal through erosion and have become conical domiciliary mounds clearly dominant, mounds apparently Smaller conical cultivation.

Houses in some cases made up of several contiguous rooms.

EASTERN ARKANSAS	No burial mounds reported.		Rectangular. No information on floor levels. Probably not depressed. Rigid frame construction with interior supporting posts in some cases. Otherwise bent-pole frame indicated.	Considerable use of clay daub, possibly on roof as well as sidewalls.
CAIRO LOWLAND	Burial mounds perhaps more important, though not certainly of deliberate intent.	Pyramidal mound covered with coating of stiff clay.	Rectangular (?) with depressed floors. No data on framework.	Use of clay daub clearly indicated.
CUMBERLAND	Same, composed of stone graves in "tiers".		Rectangular with slightly depressed floors. Bent-pole framework, no interior supporting posts.	Wattle and daub probable in ordinary dwellings, certain for larger ceremonial structures on mounds. Carefully prepared clay floors and fire places. Storage pits beneath house floors with clay covers.
MONKS MOUND	Low burial mounds "accidental" perhaps, in Spoon River.	Terraced mound at Aztlan.	Rectangular with slightly depressed floors in Spoon River; no evidence from other foci.	No certain evidence of wattle-and-daub construction.

House

Mounds (cont.)

Burials in houses, which were burned down and

covered with earth.

MONKS MOUND	CUMBERLAND	CAIRO LOWLAND	EASTERN ARKANSAS
Burials in jumbled mass forming low mound.	Burials in stone graves, usually in flat cemeteries, occasionally in tiers forming low mound.	Most burials in mounds of "cumulative" Spoon River type.	Burials in "cemeteries" not in mounds except on or under floors of in "domiciliary" mounds.
Predominantly extended, some "bundle", occasionally flexed.	Predominantly extended, many "bundle" burials, occasionally flexed in round or octagonal stone grave.	Poor data. Probably extended dominant, secondary "bundle" and mass burials not uncommon, flexed position rare.	Predominantly extended, secondary "bundle" burial absent, flexure rare, cremation (?).
Grave goods abundant, especially pottery, in Spoon River-Cahokia II. Not abundant in Aztlan-Cahokia I.	Grave goods not abundant.	Grave goods fairly abundant, chiefly pottery.	Grave goods abundant, especially pottery.
	Special treatment for children, sub- floor burial. More offerings in chil- dren's graves.	Probably sub-floor burials for children.	Special treatment for children indicated, probably sub-floor.
Log tombs containing many burials in several large mounds of Cahokia complex.			

Burials

EASTERN ARKANSAS	Small willow leaf points (or half willow-leaf) with flat base.	Long blades, or swords, said to occur.	Large chipped agricultural tools present but apparently less common than in other Middle Mississippi cultures.	Small chipped celts common, often of petrified wood.	Flint "mace" present but rare. Other eccentric forms not reported.	Small polished celts.
CAIRO LOWLAND	(Poor dataso far as goes, shows close resemblance to Cumber-land.)		Large chipped agri- cultural tools es- pecially charac- teristic.	Chipped hump-back celts, adzes, chisels, indistinguishable from Cumberland.		Smell polished celts.
CUMBERLAND	Small points (scarca in collections) elongated triangular with concave base. Larger points tend to notched and stemmed	Long leaf-shaped blades with "ogee" point. Extremely long blades "swords".	Large chipped agri- cultural tools, "hoes" and "spades".	Chipped "humpbacked" celts, adzes and chis- els, partly polished.	Chipped "mace", "dag- ger" and other eccen- tric forms.	Polished celts, various sizes. Spatulate celt. Monolithic ax.
MONKS MOUND	Small flat triangular points, notched and unnotched. Frequently serrated. Basal notch at Cahokia.	Large broad leaf- shaped blades.	Large chipped agri- cultural tools, "hoes" and "spades".	Chipped humpbacked celts, adzes, chisels, partly polished.		Polished celts, various sizes. Spatulate celt.
	Artifacts: stone				ï	•

EASTERN ARKANSAS	Small discoidals common. Large circular "palettes" perhaps.		Large human effigy pipes, generally crude.	Crude stone images.		Bonework on the whole more important than in other cultures.	Socketed antler points common. Antler flakers	• TOURING TO	Worked deer astragali. Hairpins (?) decorated ends. Bone comb. Tubular beads. Implements of deer scapulae.
CAIRO LOWLAND	Small discoidals.		Frog effigy vive.			No data.			
CUMBERLAND	Discoidals, all sizes. Large bi-concave type probably present.	Ear-plugs, napkin ring type.	Small human effigy pipe.	Stone images.		Poor data. Awls of deer ulna and cannon-bone.	Socketed antler points rare.		Worked deer sstragali. Hairpins (?) with spatulate ends.
MONKS MOUND	Discoidals, all sizes. Bi-concave type present.	Ear-spools, double disk type and napkin ring type.			Boatstones (rare).	Except for common types of awls and perforators, data insufficient for generalization.	Socketed antler points extremely rare.	Fishhooks at Spoon River.	
	Artifacts: stone (cont.)					Bone			·

EASTERN ARKANSAS	Beads of many types. Disk. Barrel-shape.	Busycon pendants common. Ear pins mushroom and disk-headed. Rar snools (?).	Shell spoons usually with plain handles. Shell cups rare, un-	decorated. Gorgets present, seldom engraved, only type is	"mask" type.	Mask type present.	• : 8201: 0110
CAIRO LOWLAND	No data except on engraved gorgets.			Gorgets: Guilloche	Cross Spider fairly common. Naturalistic human figures.)	Fresh water pearls occasional.
CUMBERLAND	Beads of many types. Disk.	Hour-glass. Bar pins, mushroom and disk-headed.		graved shell cups very rare. Gorgets: Plain	Cross "Nashville type" Woodpecker Spider rare Rattlesnake rare Naturalistic human	Mask type absent.	
MONKS MOUND	Beads of many types. Disk.	Annular. Busy con pendants.	Ollvella and margi- nella beads. Shell spoons with work- ed handles. Shell cups rare, no	engraved cups reported. Gorgets absent. No engraving on shell of	any sort reported.		Unio hoes common at Spoon River. Mussel shell rattles.

Shell

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EASTERN ARKANSAS	Copper used chiefly as overlay.	Stone and wood ear- spools overlaid with metal.	Rolled tubular beads. Cruciform pendants.	Fragment of repousse plate, Etowah style. Ceremonial lance heads of sheet copper.	No implements re-	Abundant, well made.	Emphasis on elaboration of form. Decoration moderate.	Variety of types in constant association. Plain Dreb	Thin Drab Polished Drab Polished Drab Incised
CAIRO LOWLAND	No data.					Abundant, well made.	Emphasis on elabora- tion of form. Decoration moderate.	Variety of types in constant association. Plain Drab (informad-no data)	Thin Drab
CUMBERLAND	Fair amount of over- lay on wood, stone, bone, tortoise shell,	cniefly ear-spools. Imitation milk-weed pods of wood overlaid with copper.	Cruciform pendants,	oration. Circular copper plates, decorated, probably repoussé.	Small celts (associa- tion doubtful).	Abundant, well made.	Emphasis on elaboration of form. Decoration at minimum.	Variety of types in constant association. Plain Drab	Thin Drab Polished Drab
MONKS MOUND	Considerable amount of copper overlay at Cahokia, chiefly on	wood. Stone ear-spools overlaid with copper at Aztlan.	Rolled copper beads.		Small celt.	Abundant and well made especially in	early period. Emphasis on elabora- tion of form Considerable surface	decoration. Variety of types in constant association. Plain Drab	Cord-marked Variant. Polished Drab Polished Drab In-
	Copper					Pottery: General		· ·	•

EASTERN ARKANSAS	Redware Red on buff Red and white Polychrome Lost Color Salt-pan ware not re-	ported. The fundamental cooking ware, coarse shell tempered, unpolished.	"Standard jar form" with loop handles and/or lugs. Large sizes predominate.	No information on decoration. No cord-marking reported.
CAIRO LOWLAND	Redware Red on buff Red and white Polychrome Lost Color Combination (paint and lost color) Salt-nan ware (?)	Salt-pan ware (:) No data.		
CUMBERLAND	Lost Color	Salt-pan ware The fundamental cook- ing ware, coarse shell tempered, un-	"Standard jar form" with loop handles and/ or lugs only shape re- ported.	Very little decoration. Punctations outlining lobes (?). No cord-marking reported.
MONKS MOUND	Redware Lost Color (?)	Salt-pan ware The fundamental cook- ing ware, coarse shell tempered, un-	"Standard jer form" often with loop handles, the commonest shape. Bowls, the soupplate", "bean-pot", bottles, etc. regarded as Plain Brab by Cole & Deuel, would probably be under Polished Brab in system used here.	Crude simple decoration by incision, punctation, etc. Cord-marking common enough to constitute a sub-type.
	Pottery: General (cont.)	Plain Drab		``

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EASTERN ARKANSAS	A fairly distinct type, particularly in the Mississippi sub-division. Moderately coarse shell temper, thin fabric, lack of polish. Evidence of culinary use (sooting) in some cases. Small version of "standard jar" with loop handles and/or lugs. Handles elaborated into specialized "lunette" collar in Mississippi section.	Decoration by incision, punctation or both, simple in St. Francis, highly developed in specialized Mississippitype. Nail marking as all-over texturing common in St. Francis. Nodel decoration around shoulder or all over, resulting in "nubbin" vessel.	Lobing very rare.
CAIRO LOWLAND	More distinct as a type than in the Cumberland, marked by coarse shell tempering and thin fabric, lack of polish. Some evidence of culinary use (sooting). Small version of "standard jar" with handles and/or lugs.	Simple decoration by incision or punctation outlining lobes.	Lobing common. ("melon-pot") Gadrooning occasional. Shoe-form pots.
CUMBERLAND	Intermediate between Plain and Polished Drab. Often difficult to distinguish from Polished Drab. Generally coarser shell temper, thinner fabric, little or no polish. Small version of "standard jar" with broad flat handles and lugs.	Rude decoration in incision or punctation outlining lobes. Conventionalized animal features common.	Lobing common.
MONKS MOUND	No first-hand information. Sources do not distinguish between various types of drab ware. Reasonably certain, however, that the type occurs at Cahokia at least (Titterington, 1938, fig. 40 d,e,f,h).		

Thin Drab

Polished Drab

EASTERN ARKANSAS	Dominant mortuary ware, accounts for more than 70% of present collections. Moderately coarse shell tempered paste with polished ("tool compacted") surface. (Finer paste and surface in Miss. subcenter.) Greatest variety of shapes is in this type.		Bowls: All sizes and a great many shapes from shallow plate-like forms to deep straight-sided "pots".	Plain undifferentiated rim. Indented rims. Indented rim coil present but not com-	Nodes below rim, con- tinuous or in groups.	Bowls with lugs. Large deep bowls with lugs, a specialized type probably culinary.
CAIRO LOWLAND	Dominant mortuary ware. Medium fine shell or grit temper- ing, hard lustrous tool-compacted sur- face. Greatest variety of shapes in this type.		Bowls: Tend to shallow flat-bottomed flaring-sided shapes.	Plain undifferentiated rim common. Indented rims present but not common. Indented rim coil	Scalloped rim common. Nodes below rim in groups. Medallion heads.	Bowls with lugs.
COMBERLAND	Dominant mortuary ware. Fine shell tem- per, smooth polished surface often "smudged" to lustrous black. Greatest variety of shapes is in this type.	Small jars with scalloped rim.	Bowls: Both flat bottomed flare-sided and hemispherical shapes.	Plain rim usually on flaring-sided bowls. Indented rim coil on hemispherical bowls,	Scalloped rim.	Bowl with lugs. Bowl with "pitcher spouts".
MONKS MOUND	Material lacking for detailed study. Some of the shapes listed below regarded as Plain Drab by Cole & Deuel probably qualify as Polished Drab in Classification used here.	Carinated jar (Aztlan-Cahokia I)	Bowls: Shallow straight- sided bowls (Azltan) Soup-plate			Bowl with lugs (Aztlan).

EASTERN ARKANSAS	Rectangular bowls.	"Half-gourd" bowls.	Rim effigy bowls. Human	"Man bowl" Animal	Bird Serpent			Bottles:	Globular) necks in) all three) ranging) from low	Flattened) to Carinated) high.	Annular base, plain and perforated. "Pancake base". Tetrapod (rare, only in Mississippi sub-center.
CAIRO LOWLAND	Rectangular bowls.		Rim effigy bowls. Human	"Man bowl" Animal	Bird		Bean-pot present but rare.	Bottles:	Globular, necks low to high, generally low.	Flattened, necks generally high.	Annular base, plain and perforated.
CUMBERLAND		"Half-gourd" bowls.	Rim effigy bowls. Human	"Тмоо пвт.	Bird			Bottles: extremely rare.	Globular high neck the only type present in col- lection.		
MONKS MOUND	Rectangular bowls (Aztlan). "Seed bowl" (Aztlan-Cahokia I).		Rim effigy bowls.	,	Bird	Tall cylindrical vase (Cahokia I).	5 0 U	Bottles: apparently rare.	Globular high necked (Aztlan)	Flattened, medium neck (Cahokia II).	

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EASTERN ARKANSAS	Tripod Hollow bulbous Solid	Nodes around shoulder Dimples on body in sets of four	Gadrooned bottle Medallion heads or	Punctate band and skeuo- morphic handles on neck.	 1	"Ogee collar"	Effigies: Elaborated on jar, bottle and bowl shapes. Treated by subject.	Frog-on jar or "seed-bowl" shapes. Highly conventionalized frog bowl a special St.	Fish	i de la companya de l	"Seed-bowl"	Bottle Possi	Deep "St. Francis type"
CAIRO LOWLAND	Tripod Hollow bulbous type	Lobate bottle	Gadrooned bottle Medallion heads	Handles on neck	Fillet at junction of neck and shoulder, often with small loop	handles. Horizontal grooves on body.	Effigies: Elaborated mainly on jar, "seedbowl" and bottle shapes.	Frogon jar and "seed-bowl" shapes	Fish	Jar	"Seed-bowl"	Bottle	
CUMBERLAND	Tripod (single speci- men, hollow bulbous type)	Lobate bottle					Effigies: Less varied than Cairo Lowland and Eastern Arkansas. Almost entirely associated with jar and bowl shapes.	Frogon jar and "seed-bowl" shapes	Fish	Jar	"Seed-bowl"		
MONKS MOUND							Effigies: practical- ly no data						

Polished Drab (cont.)

EASTERN ARKANSAS	Swan Opossum Gourd Shell Univalve Bivalve "Gourd-like" forms	"Blank-face" Animal	Quadruped Human Foot	Eccentric forms: Spouted effigies Teapot Stirrup-handle Double spout-bridge connected Horned bottle Compound Vessels Tripartite Vessels	Extreme minority factor, more important and highly developed in Mississippi subdivision.
CAIRO LOWLAND	Beaver Gourd Shell Univalve Bivalve "Gourd-like" forms	"Blank-face", very common Animal common	Quadruped Human Seated on vessel Impaled on neck of bottle Head vessel	Eccentric forms rare.	Absent
CUMBERLAND	Shell Univalve Bivalve "Gourd-like" forms	rere. "Blank-face"	Humen	Eccentric forms absent.	Absent
MONKS MOUND	.	"Blank-face" (present at Aztlan, Spoon River and Cahokia	···•	Eccentric formsno data.	Good deal of the polished drab ware at Aztlan and Cahokia I is incised, but not after firing. A few
	Polished Drab (cont.)			•	Polished Drab Incised (engraved)

EASTERN ARKANSAS	Decoration of advanced symbolic style (cf. Moundville).	Important minority type. Paste and surface similar to Polished Drab, except for addition of fairly uniform red slip.	Shapes have precise counterparts in Polished Drab. Higher percentage of bottles may be significant.	Important minority group: Red on buff Red and white	Polychrome (red, white and black)
CAIRO LOWLAND		Extreme minority factor. Red slip variable, not well controlled.	Shapes have precise counterparts in Pol-ished Drab. Relatively large number of owls may be significant.	Minority group, often in combination with lost color. Difficult to classify. Great many types Red on buff Red and white on buff	Polychrome (red, white and black) Combination (lost color and direct painting)
COMBERLAND		Absent		Absent	
MONKS MOUND	sherds of post-fired incision (engraving) have been reported, however.	Minority factor in Spoon River-CahokiaII, associated particular- ly with "bean-pots". A few sherds at Aztlan, decorated by puncta-	tion, maybe a separate	Extreme minority factor. Few sherds of red and white ware reported at Aztlan, but not described.	
	Polished Drab Incised (engraved)	Redware		Painted	•

EASTERN ARKANSAS	Generally same shapes as Redware and Polished Drab. Still greater emphasis on bottles. Only shapes not occurring in Polished Drab are owl effigies and head vessels.	Decoration, broad treatment, dominant motives, swastika spiral and alternate vertical panels. Cosmic symbols occasional.	Extreme minority factor. 2 vessels out of total Series of 1,995.	One type: Black on buff	Combination with direct painting possible in type listed above as Polychrome.	Shapes confined to
•				One BJ	J	
CAIRO LOWLAND	Shapes confined to bottles and a few effigies.	Decoration, too varied for brief summarization. Cross, star and other "cosmic" symbols the commonest motives.	Important minority element, especially when combined with direct painting.	One type: Black on buff	Combination with direct painting common.	Shapes confined to bottles and effigies, particularly the former.
CUMBERLAND			Important minority factor. Only type of pigmented decoration.	Two types: Black on buff (or red) Black on white (slip)	Combined with direct painting, rare.	Shapes in present collection confined to bottles and efficies, particularly latter.
MONKS MOUND	·		Painted ware at Spoon River as described probably Lost Color.			
	Painted wares (cont.)		Lost		,	•

EASTERN ARKANSAS			No data.	Miniature vessels Ladles Disks	Trowels	Rattles		Ear plugs, several types	Pipes Equal armed "elbow" type Pot supports Clay "standards"
CAIRO LOWLAND	·	Decoration: "Cosmic" symbols	No data.	Miniature vessels Ladles	Trowels			Ear plugs (mushroom shaped)	Pipes Equal armed "elbow" type
CUMBERLAND	Shallow dishes reported by Myer (1928) probably Lost Color.	Decoration: "Cosmic" symbols Rattlesnake design on human effigies.	Two types: Plain Textile marked	Winiature vessels Disks	Trowels Figurines Solid	Hollow rattles	Beads (hour-glass type)	Ear-spools Napkin-ring type	Pipes Equal armed "elbow" type
MONKS MOUND			Present at Cahokia. One type: Textile marked	Miniature vessels Ladles Disks	Trowels		Beads	Ear-spools Double-disk type	Pipes Equal armed "elboy" type
	Lost Color (cont.)		Salt-pan ware	Miscel- laneous	objects			· ·	•

Lowland column and the ceramic portion of the Monks Mound column.

A more discursive type of description that will permit the necessary qualifications, suppositions, expressions of probability (and even hope) is therefore indicated. I shall, however, attempt to stick to the facts as closely as possible. The resulting description will, I hope, err on the side of understatement rather than the reverse.

General site characteristics: A plaza type of site assemblage with one dominant mound abutting on the plaza, other smaller mounds grouped irregularly about it, is the rule. Exceptions, in the various Cahokia groups, are on the side of greater formality, rectangularity consistency in orientation, etc. On the other hand in Eastern Arkansas exceptions are in a contrary direction, so that it is doubtful if one can say here that a plaza arrangement regularly obtains.

Stockade defences are common, but by no means universal, depending on local political considerations no doubt. The Aztlan type, with projecting bastions and clay-covered walls, is probably commoner than is indicated by the evidence. A brief survey of its distribution, however, indicates a possibility that it might be a determinant for a Mississippi pattern, but is clearly too widespread to be confined to any particular phase.

Mounds: Mounds are predominantly of the "domiciliary" type, erected primarily as substructures for buildings of wood. The tendency toward repeated rebuildings resulting in a vertical stratification of successive floors and post-hole patterns is marked.

Mounds of this dominant type are almost invariably rectangular in

plan, truncated pyramidal in elevation. Burial mounds, if the mound-like accumulations of burials that frequently occur be excepted, are notable for their absence. Exceptions, again, are in the Cahokia complex where at least two large conical mounds containing multiple burials in log chambers have been reported.

House types: Rectangular houses, built on the surface or with slightly depressed floors (depth scarcely sufficient to qualify as "pit-houses") seem to constitute the dominant type. The little evidence available indicates a wattle-and-daub construction on a bent-pole framework. Apparently the larger ceremonial structures on mounds were not essentially different.

Burials: Burial was by inhumation in jumbled "mounds" or "cemeteries", with relative simplicity of burial rites indicated.

Graves were frequently in, under or about the dwellings particularly in Eastern Arkansas where concentration in cemeteries is not well-marked. Special treatment for children is indicated in various ways, amounting in some cases to actual segregation in separate burial places. Burials are predominantly extended in the flesh, though secondary "bundle" and mass burials are not uncommon. Flexure is extremely rare, cremetion present only in certain doubtful cases. The stone graves of the Cumberland present a specialization but no radical departure from the general pattern. Log sepulchres, mentioned above in connection with certain Cahokia mounds suggest a difference of some significance in view of the fact that log chambered burials are characteristic of the earlier Adena and Hopewell cultures.

Grave goods are relatively abundant, except in the Cumberland,

and chiefly in the form of pottery. To this last circumstance we owe our heavy dependence on mortuary pottery in the present comparison.

Artifacts: stone: Stone work does not hold together as well as might be expected. The triangular arrow point, frequently cited as a general Mississippi diagnostic, though conspicuous at Cahokia, is by no means dominant in all centers, being replaced by a willow-leaf type in Eastern Arkansas. Lack of sufficient information in the Cairo Lowland and Cumberland renders generalization hazardous, but the apparent scarcity of small points of any kind in both centers is perhaps significant. From the scanty evidence at hand in the Cumberland it would seem that points tend to larger sizes with notched and stemmed forms predominating, a condition approximating the definition of Woodland rather than Mississippi.

Larger chipped forms, however, show up rather better. Large leaf-shaped or lanceolate blades, as well as the coarser agricultural tools, appear to be excellent diagnostics. The splendid chipped celts, adzes and chisels of Cahokia, the Cumberland and Cairo Lowland are practically indistinguishable from one another, but their failure to appear in Eastern Arkansas robs them of complete diagnostic value. Smaller chipped celts and adzes of somewhat different form do occur in Eastern Arkansas, however, so in a general way the chipped, partly polished celt remains as an important characteristic of Middle Mississippi as a whole.

The chipped celt by no means excludes the polished celt, which holds its own as a Middle Mississippi trait, but one of little

diagnostic importance because of its occurrence throughout the eastern United States generally. Certain specializations, however, such as the spatulate celt (or "spud"), shouldered celt and monolithic ax may have a closer bearing on the Middle Mississippi problem, but only the first can be stated quite positively to be a feature of the culture.

Small discoidals are very characteristic of Middle Mississippi, the larger bi-concave type probably, but not surely. The still larger "palettes" are too rare to be of much value as culture determinants. Stone ear-spools are present but not particularly common, seem to have been largely replaced by ear-spools of pottery. Stone, as a material for pipes also, is distinctly subservient to pottery, though large rather elaborate effigy pipes, both animal and human, do occur. Related to the latter are the occasional stone images, remarkable neither for artistic conception nor skillful execution.

It seems that on the whole Middle Mississippi stone work shows a falling off from the high standards set by the Hopewell-Adena cultures. The exceptions are in such special traits as spatulate and shouldered celts, monolithic axes, bi-concave discoidals, "palettes", etc. There is a considerable probability that these things belong to an earlier stage of the culture, that by the time of the full-fledged Middle Mississippi, with its enormous emphasis on pottery, stone work had fallen into a decidedly secondary position.

Bone: Information in respect to work in bone, antler, etc. is insufficient for any positive generalizations. It is apparent, however, that these materials do not play as important a role as in

Upper Mississippi, notably Fort Ancient and Iroquois. Offhand this would seem to be one of the important differentia between the two phases, Upper and Middle. Only in Eastern Arkansas is there an approximation to the Fort Ancient situation, with socketed antler points, antler "flakers", tubular beads, combs and large digging implements made from deer scapulae, closely resembling their counterparts in the more northerly culture.

Shell: Owing to its perishable nature and the fact that shell was used very largely for articles of personal adornment, we get very little of it except in burials. The present information deriving almost entirely from burial sites, it is not surprising that shell materials bulk large in the comparative table. Discounting this fact for all that it signifies, it still remains possible, I believe, to emphasize the importance of shell as a general Middle Mississippi feature, the particular traits being: beads, of disk, barrel-shape and hour-glass forms; busycon cups and pendants; unio "hoes" and spoons with worked handles; and gorgets, both plain and engraved. The last may be cited as a trait of special significance with a large number of types of local specialization. Similar engraving on whole shells is, unfortunately, not as well established as a Middle Mississippi trait.

Copper: For the almost total failure of copper in the Upper Mississippi "phase" we are only slightly compensated here in the Middle. As material for implements of any practicable sort it is practically non-existent. With trifling exceptions it occurs only in the form of sheet metal, rolled up into beads, as plates, head

bands, cruciform pendants, ceremonial lance heads, etc. Repousse decoration occurs but under conditions of somewhat uncertain association. On the other hand stylistic connection with the well-known repousse plates of Etowah and Moundville can be made through engravings on shell and pottery of definite Middle Mississippi context.

Pottery: Abundance of well-made pottery is a general Mississippi feature and, one that applies with special emphasis here in the Middle "phase". Nowhere else in the United States, excluding the Southwest, is there an equal variety of associated wares and shapes. Decoration, on the other hand, is relatively undeveloped. It is in pottery, perhaps more than all other traits combined, that the fundamental relationship of the four centers of Middle Mississippi culture dealt with here is brought out. Elaboration of this point would simply result in a repetition of the pottery section of the table (fig. 113). Certain features, however, warrant additional emphasis. To begin with, the presence of plain drab, thin drab, polished drab, redware and a pigment-decorated ware (direct painting, lost color or a combination of both) in what I have called a "standard association" is, one feels, a most important Middle Mississippi determinant. It breaks down, apparently, only at one point, the failure of redware in the Cumberland. With more data, it is very likely that salt-pan ware could be added to the combination. Such complexity from the point of view of wares alone, irrespective of shapes and decoration, is in sharp contrast to the one-ware situation in the Upper Mississippi, not to mention Hopewell and Woodland.

Of this group of associated wares, plain drab is quite evidently the oldest and most fundamental, shows therefore the greatest homogeneity in shape and decoration factors. It is the foundation on which a definition of Middle Mississippi pottery should rest. is unfortunately just here that our information fails most miserably. So far as it goes, it describes a coarse thick shell-tempered ware, roughly smoothed but unpolished, more buff than drab in color, the dominant (and perhaps only) shape, a large globular jar with vague neck and slightly flared rim generally provided with handles and/or Decoration is at a minimum and consists of elementary running lugs. patterns of incision, punctation or both. Lobing is common and frequently the lobes are outlined by incised lines or rows of punctations. Cord-marking is present but in general a plain untextured surface is the rule. The conclusion that cord-marking comes into the Middle Mississippi as a late intrusive influence from Woodland is clearly indicated.

Thin drab raises questions which can only be settled by excavation. Whether it represents a mortuary variant of the fundamental plain drab ware, or simply appears as a separable type through selection of small size jars of plain drab for funerary purposes, need not be settled here. The important thing is that its position, with respect to other wares, is the same in all centers so that, however ambiguous from the point of view of pottery classification, it is one of the strongest elements making for homogeneity of the culture as a whole. Thin drab may be described as similar to plain drab except that jar sizes are a good deal smaller, their walls, in

spite of the coarse shell tempering, exceedingly thin. Local specializations, such as the addition of effigy features in the Cumberland, or the elaboration of decorative handles in the Mississippi section of Eastern Arkansas are not sufficient to affect the general uniformity of the type from one center to another. The shoe-form pot, which occurs in thin drab only in the Cairo Lowland is a specialization of a different order, which raises some very interesting questions which have already been discussed (p. 414 et seq.) and will be referred to again.

Polished drab, the dominant mortuary ware, is somewhat more difficult to define in terms that apply equally to all centers of Middle Mississippi culture. It may be described as a mediumto fine-textured shell (occasionally grit or sand) tempered ware with a fairly hard, "tool-compacted" surface, that shows as a rule the marks of the polisher and is not without considerable lustre. Color varies through the various buffs and drabs to almost black. Decoration, except for addition of modeled elements, rim indentation, etc. is normally absent. The outstanding characteristic of this ware is the tendency to proliferation of shapes. It is among the vast number of shapes in polished drab that we might expect to find useful items for the further definition of Middle Mississippi culture. Actually very few of them appear in all four sub-divisions. This is partly due, no doubt, to deficiencies of data, but not altogether. The fact is that most pottery shapes are too localized in distribution to serve as determinants for manifestations of the order of the Middle Mississippi. In attempting to get at the peculiar characteristics of the culture as a whole, it is necessary to consider general tendencies rather than specialized shapes. This I shall do as briefly as possible under the arbitrary headings adopted here, namely, jars, bowls, bottles, effigies and eccentric forms.

Jar forms are rare in polished drab, except when associated with certain effigy factors, as we shall see. The carinated jar of Aztlan and the earlier Cahokia period, is not present in the other centers. The vast majority of simple forms divide themselves between bowl and bottle shapes, but not with consistent regularity. The scarcity of bottles in Monks Mound and the Cumberland cannot be entirely due to deficiencies of sampling. Bowls, on the other hand, are about equally present in all four centers. Two general shapes, with all possible gradations between, appear to be normally representative of Middle Mississippi as a whole: shallow hemispherical bowls with rounded or slightly flattened bottoms, and shallow flaring-sided bowls with flat bottoms. Both are very likely to have indentations about the rim. Rectangular bowls are present in all but the Cumberland. Rim effigy bowls constitute an excellent diagnostic for the culture as a whole. The bird type seems to be fundamental, is at any rate the only one appearing in all four centers. The peak of successful representation is reached in the Cumberland in bowls with human heads, whereas Eastern Arkansas is quite evidently the center of greatest diversity of subject.

Generalizations with respect to bottle forms are more or less precluded by their apparent scarcity in the Monks Mound and Cumberland. The scanty evidence for these centers would indicate that a

slightly flattened globular bottle with a small and rather high "vague" neck is the fundamental shape. In the Cairo Lowland bottles become more important numerically and the shape undergoes some modification, mainly in the direction of greater flattening; in Eastern Arkansas such tendencies are further emphasized. The only form of support that may be general for the entire culture is the bulbous tripod. Annular bases seem to be confined to the Cairo Lowland and Eastern Arkansas, tetrapods, solid and slab tripods, and the pancake base, to Eastern Arkansas alone. There can be no question that the importance and diversity of bottle forms increases markedly going down the River. Two explanations suggest themselves, both equally plausible: one, that the bottle is a southern trait, more Lower than Middle Mississippi perhaps, in which case its greater develocment in the southern portion of our area is simply in line with the facts of distribution; the other that the bottle is a late development in Southeastern ceramics generally -- a view that can be supported by stratigraphy in the Lower Mississippi -- consequently the difference between the Cumberland and Eastern Arkansas, to take the two extremes, is a matter of chronology. It seems more in line with other evidences to accept tentatively the second alternative.

For purposes of definition effigies are not less disappointing than bottles. The Middle Mississippi is known as the effigy region par excellence, yet from the limited data at hand it does not appear that effigies are particularly characteristic of the Monks Mound -- in fact only one type, the "blank-face" is noted. Perhaps an explanation is to be found in the fact that Cahokia has not yet yielded up

its dead. A large collection of burial pottery from that site might appreciably change the situation. As it is we are obliged to pass up a large number of traits that one expected to find most useful in the definition of Middle Mississippi culture because of their failure to appear in the one aspect at present recognized by the (1)

McKern classification. Eccentric forms are still less useful as determinants, since they are not only absent in Lonks Nound and the Cumberland, but, except for compound vessels, in the Cairo Lowland as well.

For purposes of definition the incised variant of polished drab may be disregarded entirely. It is highly probable that its occurrence as a minority factor in the earlier Monks Mound horizon (Aztlan-Cahokia) and in Eastern Arkansas is the result of influences that are fundamentally non-Middle-Mississippian in character. In any case the virtual absence of polished drab incised in the Cumberland and Cairo Lowland effectively removes the ware from the list of Middle Mississippi determinants.

The case of red and painted wares -- for the present purpose they can be humped together -- one feels, is different. In spite of their apparent absence in the Cumberland and the meagre evidence in

⁽¹⁾ I am beginning at last to see why Deuel has steadfastly insisted, against the opposition of most of his colleagues, in running the line between Middle and Lover Mississippi north of the Cairo Lowland. Thereby, the region of intense effigy development is placed in the Lower Mississippi. The weakness of the scheme, however, is that the Cumberland (which he calls Gordon-Fewkes) is left in the Middle phase, notwithstanding its obvious relationship with the Cairo Lowland.

Monks Mound, it is impossible to think of these wares otherwise than as fundamentally characteristic of Middle Mississippi. The strongest argument is to be found in the identities of paste, treatment (aside from the introduction of the pigment itself) and shapes, with the dominant polished drab. If the Cumberland, on further investigation, should continue to lack these wares, one could only say that to this rather considerable extent it fails to conform to the Middle Mississippi norm.

Lost color appears to be in inverse relationship to red and painted wares. It occurs in force in the one center where they are absent, namely, the Cumberland. At the other extreme, in Eastern Arkansas, where red and painted wares constitute important minorities, lost color is extremely rare. In Monks Mound and the Cairo Lowland there is a little of each. The question here is whether we are warranted in regarding lost color as a definitive Middle Mississippi trait. Distribution (fig. 108) helps materially toward an answer. There is no question that lost color has Middle Mississippi associations, but like certain other traits perhaps not unconnected with it, such as repousse copper and symbolic engravings upon shell and copper, has a distribution extending far beyond the present recognized limits of Middle Mississippi. In view of this fact and the chronologic factor implicit in it (v. p. 455), it would seem wiser to leave lost color in a suspense account so far as the definition of Middle Mississippi culture is concerned.

Salt-pan ware is pretty certainly a Middle Mississippi feature.

Its regrettable absence from the table (fig. 113) in the Cairo

Lowland and Eastern Arkansas columns is probably to be explained by the almost complete lack of information concerning anything but mortuary wares in those centers. Furthermore, as has been pointed out (p. 204), since it normally occurs only in the vicinity of saline springs, its absence from a given collection has not the same significance as that of ordinary pottery types.

A pronounced Middle Mississippi characteristic is the extent to which pottery is used for various small objects. Of most consistent occurrence are miniature vessels, disks, trowels, ladles, ear-spools and pipes. The first two have a distribution far beyond the Middle Mississippi limits, are therefore out of the running as diagnostics of the culture. Trowels, ladles and ear-spools are rather better. The pottery pipe also has a wide distribution, but examples from all Middle Mississippi cultures examined seem to run remarkably true to type. This type, which may be defined as an equal-armed "elbow" pipe with large stem hole, seems at the moment to constitute one of the most reliable criteria for Middle Mississippi culture.

2. Relationships of the four centers of the Middle Mississippi "Phase".

Having at length achieved a definition of Middle Mississippi culture, or at least got an idea of its general outlines, we are now in position to consider the interrelations of the various sub-divisions, the extent of cohesion between them, their conformity, or lack of conformity to the pattern of the whole and, most important of all from the point of view of the present work, the chronologic bearings of such departures from the norm as may be found to occur.

The first and perhaps most important question concerns the position of the Monks Mound aspect. A glance through the comparative table (fig. 113) reveals at once that this center stands further apart from the other three than they to each other. reason is not far to seek. Monks Mound, as herein conceived, comprises two chronological levels, the first represented by the "Old Village Culture" at Cahokia and Aztlan, referred to hereinafter as Aztlan-Cahokia I; the second, the inelegant Bean-pot Culture of Cahokia and Spoon River, called here Spoon River-Cahokia II. The question is, which of these chronological sub-divisions is responsible for the failure of Monks Mound to conform to the general Middle Mississippi configuration? Without definite information concerning the stratification at Cahokia, a final answer is out of the question. As a matter of fact it looks as if they were both partly responsible. Certain definite Spoon River-Cahokia II traits, such as cord-marking and the eponymous bean-pot are definitely absent from our Middle Mississippi definition. The earlier Aztlan-Cahokia I complex, however, shows a far greater number of such divergences: large conical or oval mounds containing mass burials in log chambers, orientation of mounds, terraced mounds, paucity of artifacts with burials, spatulate celt, stone double-disk ear spool, sometimes overlaid with copper, large human effigy pipes, imitation turtle shells of copper, deer mandibles overlaid with copper, copper rods (perforstors?), copper rods fastened together with plates of the same material (conjoined tubes?), fine pottery with thin paste, dark highly polished surface, incised decoration, sharp profiling

(carination) of jars and bowls and tall cylindrical beaker. Among this list are features with very interesting non-Mississippi associations. Oval mounds, mass burials in log tombs, imitation turtle shells of copper, copper rods, deer mandibles overlaid with copper and the tall cylindrical beaker are Hopewellian traits. the other hand, the spatulate celt, double-disk ear spool covered with copper and large human effigy pipes find exact parallels at Spiro, in Eastern Oklahoma. As the report of the recent excavations at Spiro has not yet appeared, we are unable to pronounce on its cultural affiliation or chronological position. The general opinion, however, is that it is fundamentally Caddo plus something else -- possibly Middle Mississippi. The fine dark ware of Aztlan-Cahokia I bears a general resemblance to a similar Caddo ware, particularly in its tendency to pronounced carination ("cazuela") shape.. Thus we find two groups of traits suggesting affiliations in seemingly contradictory directions, to the Ohio Hopewell on the one hand, to Spiro and the Caddo on the other. The contradiction is not as serious as might be supposed. Upon looking at a small collection of artifacts from Spiro in the University of Arkansas Museum, the writer was struck by the Hopewellian appearance of some (2)of them. Furthermore, it has been demonstrated by Ford that the

⁽¹⁾ It may be stretching a point to call this a Hopewell trait. It occurs, however, among the small series of vessels in the P. M. collection from the Turner Mounds.

⁽²⁾ At the moment I can remember only a pair of imitation antlers of wood overlaid with copper and several small copper masks. One might add that the quantity of fresh water pearls at Spiro has never been approached except in certain Hopewell sites of Ohio.

Caddo developed out of a Hopewellian culture (Marksville). The two seemingly contradictory linkages, therefore, actually concur in relating Aztlan-Cahokia I, however distantly, to that shadowy entity called Hopewell. Its non-conformity with what we have defined as typical Middle Mississippi being in a Hopewellian direction, is very probably a matter of chronology, since Hopewell is known to antedate Mississippi types of culture wherever the two come together. Such a conclusion agrees perfectly with the fact that the later Spoon River-Cahokia II phase, though divergent in certain particulars, is on the whole more typically Middle Mississippi in character.

The stratification at Cahokia furnishes a lead that may be followed further. The question immediately arises: which of the three other Middle Mississippi centers does the earlier Aztlan-Cahokia I horizon most nearly resemble? A careful recheck of comparative materials gives a slight advantage to the Cumberland, which has three Aztlan-Cahokia I traits not shared by the Cairo Lowland and Eastern Arkansas to wit: the Aztlan type of palisade defences, the spatulate or flared bitted celt and paucity of artifacts with burials. This is not an impressive list. . . .

It can be shored up somewhat by a more roundabout method of argument. I shall sum up presently the evidences of connection between the Cumberland and Spiro (partly direct, partly via Etowah and Moundville). Similar Spiro connections for the Cairo Lowland and Eastern Arkansas, in spite of their nearer geographical position, are not forthcoming. Thus, though by direct comparison the Cumberland stands only slightly closer to Aztlan-Cahokia I

than do the other two centers, by reason of a common connection with Spiro that slight advantage is perceptibly increased. It seems permissible, therefore, to conclude, with all due reservations, that if Monks Mound by virtue of its earlier Aztlan-Cahokia I phase stands somewhat apart from the other three centers, the Cumberland detaches itself to a certain extent from the other two to remain near it. If the non-conformable traits of Aztlan-Cahokia I be omitted from consideration, the position is very materially altered, Monds Mound moves up much closer to the Cairo Lowland and Eastern Arkansas. The very close relationship of the two last named centers is brought out sufficiently in the comparative table (fig. 113). Of the two, the Cairo Lowland is nearer the Cumberland, nearer also to both horizons of Monks Mound. The position may be represented diagrammatically as below (fig. 114) in which the distances between

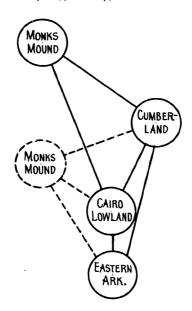


Fig. 114. Relationships of the four sub-divisions of Middle Mississippi culture.

the circles represent in crude fashion the extent of cultural relationship. Dotted lines show what happens when the non-Middle Mississippi traits in Aztlan-Cahokia I are omitted. It is hardly necessary to add that the arrangement is based almost entirely on subjective impression. A method in which the length of these lines is determined mathematically by counting trait correspondences would look very slick on the surface, but would be a very specious objectification.

Chronology: In a concluding chapter I shall attempt to place Middle Mississippi in its proper chronological setting with respect to the Mississippi pattern and Southeastern archaeology as a whole. Here we are concerned simply with the interrelations of the four sub-divisions of the culture insofar as they seem to reflect factors of chronological significance.

There is nothing to add to what has already been said about the situation in Monks Mound. Its Hopewellian tendencies, present in its earlier Aztlan-Cahokia I level, are sufficient to indicate priority in time. We may start, therefore, with Monks Mound as the base of our hypothetical arrangement. The question as to how late it continued in its Spoon River-Cahokia II phase may be dealt with later. We turn, then, to the question of seniority among the remaining three centers. An a priori case for the Cumberland is presented by the fact that, of the three, it shows the closest relation to the early phase of Monks Mound. A considerable number of additional typological and distributional factors can be enlisted in its support. Many of these have already found place in the

foregoing pages, but the issue seems of sufficient importance to warrant their reappearance here. To avoid undue confusion, it will be well to consider only factors bearing on the time relations of the Cumberland and Eastern Arkansas, excluding the Cairo Lowland for the present. These may be briefly listed as follows:

- 1. Burial "mounds" may be unintentional in the Cumberland, hence the inverted commas, but are absent altogether in the Eastern Arkansas. All evidence in the Southeast generally points to a progressive tendency away from elaborate burial practices as time goes on. The lack of burial mounds of any sort, added to the casualness of burials generally, in Eastern Arkansas, suggests a later date for that center.
- 2. Outside the Cumberland, stone lined graves have been reported from certain Hopewell sites in Ohio and from Etowah. In relation to Middle Mississippi, therefore, they look early. Lack of them in Eastern Arkansas does not, of course, signify anything one way or the other.
- 3. Wherever we have stratigraphic control it appears that paucity of artifacts with burials is the earlier condition, is followed in the later periods by an abundance of funeral offerings, chiefly pottery. To the extent that this generalization is sound, Cumberland appears to be earlier than Eastern Arkansas, for the situation in the two centers is in sharp contrast.
- 4. In the Southeast generally, a technical improvement in pottery, along with increased quantitative importance, is accompanied by a falling-off in stone work. According to this generalization,

the Cumberland appears to be earlier than Eastern Arkansas. Specifically, there is lacking (or rare) in the latter culture a wide range of stone forms which in the Cumberland show a high standard of excellence: large chipped celts and adzes, ceremonial blades, "swords", "daggers", "maces", the spatulate or flare-bitted celt and monolithic ax. That it is not merely a matter of distribution is indicated by the occurrence of most of these forms in abundance at Spiro.

- 5. Stone ear-spools, both double-disk and napkin ring types, are reported from the Cumberland. The first type has been known to occur in Eastern Arkansas, but the second, I believe, is absent from that culture. It is this type that approximates the more advanced Hopewellian forms. It may, therefore, have some slight chronological significance.
- 6. The general affinities of Eastern Arkansas bone work are with the Upper Mississippi, particularly Fort Ancient as typified by the late site of Madisonville, a relationship evidently not shared by the Cumberland. Traits involved are: socketed antler points, antler flakers, cut deer-jaw graters, combs and tubular beads. One can scarcely refrain from invoking a chronological explanation.
- 7. The considerable emphasis on carved shell in the Cumberland is not shared by Eastern Arkansas in the least. Gorgettypes of the Cumberland such as the cross, scalloped disk, woodpecker, spider and naturalistic human figures are conspicuously absent in Eastern Arkansas, nor are there others to take their places.

The only type occurring in Eastern Arkansas is the questionable mask type, whose lateness is attested by its occurrence in one instance in a grave containing European trade materials, by its presence at Madisonville, and by Harrington's belief that its presence in East Tennessee was associated with the historic Cherokee. It is, apparently, absent in the Cumberland. These far-reaching discrepancies in shell-work, both general and specific, offer one of the strongest arguments so far encountered for the priority of the Cumberland. Again, a merely distributional or environmental explanation is ruled out by the presence of carved shell in remarkable profusion at Spiro.

- 8. A fondness for fresh water pearls, a decided Hopewellian trait, is indicated by their presence in small quantities in the Cumberland. Their absence in Eastern Arkansas cannot be attributed to environmental reasons, it would seem, in view of the enormous quantity taken from the Spiro mound.
- 9. Similarly faint suggestions of Hopewell may be seen in the occasional occurrence of mica cut-outs and crystals of galena. The latter is one of the major diagnostics of Major Webb's Copena Culture (COPper-galENA) on the Tennessee river, a culture that is strati(1) graphically older than Middle Mississippi.
- 10. In pottery the Cumberland shows no radical departures from the general Mississippi situation, and particularly nothing specifically in a Hopewell direction. There are differences in detail,

(1) Information from Marshall Newman.

however, between the Cumberland and Eastern Arkansas that seem to invoke a chronological explanation. For the sake of brevity, these are listed below in outline form:

- Lack of red and painted wares in the Cumberland. Lost color the only form of pigmented decoration. See discussion p. 453 et seq.
- Greater modification of standard jar form in Eastern Arkansas, away from fundamental shape (elaboration of decorative handles, lunette collar, etc.).
- Simplicity of bottle forms (and their scarcity) in the Cumberland, contrasted with elaboration of shapes in Eastern Arkansas, sharper profiling, supplementary features, etc. It may be added that the bottle is a notoriously late feature everywhere in the Southeast.
- Globular tripod only form of vessel support in the Cumberland, competes with annular and "pancake" base, solid and slab tripod, in Eastern Arkansas.
- Greater variety of rim effigy bowls in Eastern Arkansas, many types not present in Cumberland, including serpent and abstract forms, but with falling off in execution. The Cumberland looks typologically nearer the source of development. Same with all effigies, head vessels and certain fish bottles excepted.
- Hollow and solid figurines fairly important in the Cumberland, absent in Eastern Arkansas. Hollow figurines appear as early as the Marksville in Louisiana, solid figurines only slightly later. (1) Their occurrence in Ohio Hopewell (Turner) and Etowah may also be mentioned.

It is not maintained that the above factors are all conclusive of an earlier date for the Cumberland. I doubt if any of them would be strong enough to carry the weight of such an argument alone. Taken together, however, the cumulative effect is pretty strong.

(1) Information from Gordon Willey, 1939.

What about the Cairo Lowland? Fortunetely it is not necessary to produce a lengthy demonstration of its chronological position, which is clearly intermediate between the Cumberland and Eastern Arkansas. Its nearest affiliations are perhaps with the Mississippi sub-division of Eastern Arkansas. This, however, is getting down to details unwarranted by the nature of the evidence.

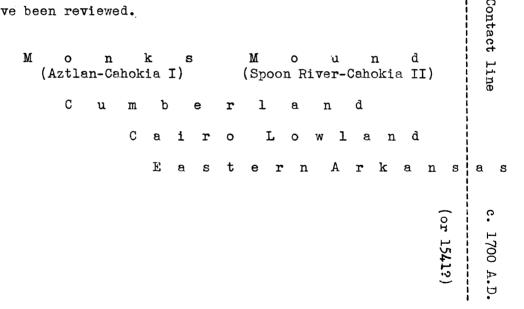
The question of absolute time, that is to say a starting point for a chronological arrangement, is beset with difficulties. historical approach has not been followed anywhere in the Middle Mississippi area, so far as I know. No excavation of an identifiable contact site has been reported. That contact sites are present in the Mississippi section of Eastern Arkansas is plainly indicated in the reports of C. B. Moore. Furthermore, the closely related sites of the lower Arkansas river, to be discussed in a later section, belong almost altogether to the contact period. The relationship of these sites is as much, if not more, with the St. Francis section of Eastern Arkansas, notwithstanding the fact that contact sites have not been reported from that area. The question whether such contacts belong to the period of DeSoto or to the time of the French penetration a century and a half later will be discussed presently (under the heading of "Ethnographic Correlations"). We may anticipate here by saying that the probabilities favor the latter alternative. It seems reasonable, therefore, to take an arbitrary contact line of 1700 A. D. for the terminating date of Eastern

⁽¹⁾ Rhodes Place. (Moore, 1911, p. 415) Bradley Place. (Ibid., p. 435)

Arkansas culture. The possibility that this line should be 1541, however, is not to be lost sight of.

Returning to the Monks Mound aspect, and the position of its later horizon, Spoon River-Cahokia II, there are few positive indications. It seems quite evidently later than the Cumberland, yet does not reach the contact line, as does the Eastern Arkansas culture. An intermediate position analogous to that of the Cairo Lowland is therefore indicated.

With the foregoing highly tentative conclusions as a basis, the following arrangement is offered as an hypothesis, subject to revision when chronological evidences from the Lower Mississippi shall have been reviewed. \S



3. Ethnographic Correlations

Since Eastern Arkansas is the only one of our four sub-divisions of Middle Mississippi that reaches the contact line, it is only here that we might expect to establish any correlations with known ethnic

groups. Any such expectation, I may say at the outset, is doomed to disappointment. We find ourselves immediately face to face with what may be called the Quapaw problem. I shall review the facts as briefly as possible.

In 1541 a portion of the Middle Mississippi region was illumined for a brief instant, when DeSoto crossed into what is now eastern Arkansas, allied himself with tribes that disputed his passage, fought alongside them against their enemies, patched up a peace and departed southwestward toward further and bitterer disappointment. Not until 1673 was the curtain lifted again, this time to remain, when Marquette and Joliet peacefully floated down in canoes from the What changes took place in the interval, long enough for the rise and fall of kingdoms, we have no means of knowing, but may surmise that they were considerable. There is a good deal of evidence that the period immediately before the coming of the French was marked by calamitous events, wars, famines, plagues, and their attendant movements and displacements of peoples. Nature seems to have been preparing the aborigine for the coming of the whites, so soon to overwhelm him utterly. As the missionary M. de la Vente puts it, ". . . il semple visiblement que Dieu veut qu'ils cedent leur place a de nouveux peuples. On connait par les plus ages qu'ils autrefois incomparablement plus nombreux qu'ils (ne sont)". In short it seems very unlikely that the ethnic situation as described

⁽¹⁾ Letter of 1704, quoted in M. l'abbe Gosselin, "Les Sauvages du Mississippi", Compte Rendu du Congres International des Americanistes, XVe session, Quebec, 1907, pp. 36-37.

by the French was the same as that encountered by DeSoto.

The Dhegina Sioux, consisting of five cognate tribes, Omeha,

Ponca, Kansa, Osage and Quapaw, have traditions of an eastern origin

near a large body of water, which Fletcher believes was the Atlantic
(1)
ocean, but which, it would seem, could have as well been one of the

Great Lakes. In any case all versions agree that after leaving their
place of origin, the five tribes wandered westward to the region

between the Missouri and the Mississippi, where they remained for

some time, when they again turned south and east, reached the Ohio

river and followed it to its mouth. Here a split occurred, the

Quapaw continuing down the Mississippi -- hence the name "U-ga-qpa",
(2)

meaning "the downstream people", -- the four remaining tribes moving
(3)

up the Mississippi and the Missouri to their historic homes.

Older writers are unanimous in asserting that this split at the mouth of the Ohio took place before 1541, because in that year (4) the Quapaw were encountered by DeSoto in eastern Arkansas. No

- (1) Fletcher 1911, p. 35.
- (2) Dorsey, 1886, p. 215.
- (3) The stay, of the Quapaw at least, on the Ohio, must have been more than a brief incident, for as Swanton was, I believe, the first to point out, the name "Accansa" by which the Quapaw were known to the French, was also applied by them to the Ohio. The point is not important here, except insofar as it suggests that the Quapaw may have had a Mississippi type of culture of the sort found along the Ohio. (Fort Ancient?, Tolu?) See Swanton, 1923, p. 42.
- (4) Dorsey, 1886, p. 215.
 Dorsey, 1895, p. 130.
 McGee, 1897, p. 191.
 Fletcher, 1911, pp. 36, 67, 72.
 Bushnell, 1922, p. 77.

evidence is cited by any of these authorities except Dorsey, the earliest, from which it may be surmised that the others are simply repeating his statement without questioning it. Dorsey's evidence is of the sketchiest nature. Whereas three of the DeSoto chroniclers mention a chieftain whose name and capital was "Pacaha", the fourth, Garcilaso, gives it as "Capaha", which is near enough "U-ga-qpa", from which we get "Quapaw". In 1912 Swanton pointed out the weakness of this identification. ". . it is unfortunate that this identification rests on the spelling of the poorest of all our authorities. . . it is my belief that most of the names in this trans-Mississippi region are in Natchez and Tunica, but so far I have been able to make little of them." If there is any other reason for thinking it was the Quapaw that DeSoto met in 1541, careful search through the extensive literature has failed to uncover it. There is no alternative but to follow Swanton in his belief that the Quapaw represent a more recent migration into the area in question. This would account for the fact that the tradition of the separation at the Ohio was still vivid in the latter nineteenth century among the various tribes concerned, likewise the fact that the Quapaw and Ponca dialects were still so close that Quapaws encountered by Dorsey could understand him "very easily" when he

⁽¹⁾ Swanton, 1912, p. 150. In 1932 Swanton was still of the same opinion: "The Pacaha have hitherto been identified with the Quapaw, but I think this has been due merely to a confusion of names, and I regard the former as part of the Tunica. 'Tunica Oldfields' is almost opposite the sites occupied by these Pacaha in 1541." -- Report of Birmingham Conference, 1932, p. 62.

(1) spoke to them in Ponca.

There seems to be no reasonable doubt, therefore, that the Quapaw were not the people encountered by DeSoto in eastern Arkansas.

Does this exclude them from participation in what has been designated here as Eastern Arkansas culture? Most students of the area would answer without hesitation in the affirmative. I cannot see that it necessarily follows. It all depends on whether the contact sites in the southern portion of the Eastern Arkansas area date from the period of DeSoto or from the time of the French, a century and a half later. If the former, then we must conclude that Eastern Arkansas culture was in being as early as 1541. There are certain difficulties in the way of such a conclusion.

In Louisiana, those best qualified to judge believe that DeSoto's (2) visit came during the Coles Creek period. This allows the interval between 1541 and about 1700 for the remainder of the Coles Creek and the Caddo period, which accords with general archaeological probabilities. If the Eastern Arkansas culture is made to equate with Coles Creek, what shall we use to fill the 150 year interval until the arrival of the French? What have we that corresponds to the Caddo further south? Nothing whatever, so far as I can see. To all appearances the Eastern Arkansas culture is the latest occupant of the region. Moreover, in the border zone along the Arkansas river, Caddo and Eastern Arkansas types of culture meet and mingle in a manner suggestive of outright contemporaneity.

⁽¹⁾ Dorsey, 1886, p. 216.

⁽²⁾ Information by Gordon Willey, 1939.

Again, in surface collections from the Menard site on the lower

Arkanses river, regarded by Swanton and Fordyce as the Guiguate of
(1)

DeSoto, the writer found pottery with Coles Creek characteristics.

It is altogether possible, therefore, that the site dated from

DeSoto times; if so, one may surmise that the culture he found there

was not what we have defined as Eastern Arkanses, but something more

like Coles Creek. In short it is possible that DeSoto did not come

into contact with a full-fledged Eastern Arkanses culture at all,

it being not yet in existence at the time of his visit. Careful

search through the narratives themselves fails to bring out any conclusive arguments on this point, but there is one fact of considerable

interest. It appears that the town of Pacaha was defended by a stockade and moat, the wall being furnished with "towers" and plastered
(2)

with clay. This exactly describes a clay-covered palisade with

Elvas, (Bourne) I, pp. 123-124. "One Wednesday, the nine-teenth day of June (should be 29th), the Governor entered Pacaha and took quarters in the town where the Cacique was accustomed to reside. It was enclosed and very large. In the towers and the palisade were many loopholes. There was much ary maize, and the new was in great quantity, throughout the fields. At the distance of half a league to a league off were many large towns, all of them surrounded with stockades. Where the Governor stayed was a great lake, near to the enclosure; and the water entered a ditch that

⁽¹⁾ Swanton at Birmingham meeting, 1932. "Guiguate, reported to have been the largest town in Florida, Col. Fordyce has placed tentatively at the Menard Mounds, and with this identification I concur."

⁽²⁾ Ranjel, (Bourne) II, pp. 139-140. "This town was a very good one, thoroughly well stockaded; and the walls were furnished with towers and a ditch round about, for the most part full of water which flows by in a canal from the river; and this ditch was full of excellent fish of divers kinds . . . In Aquixo, and Casqui, and Pacaha, they saw the best villages seen up to that time, better stockaded and fortified, and the people were of finer quality, excepting those of Cofatachequi."

bastions of the Aztlan type, which, it will be recalled was common in the Cumberland, but was thought not to be associated with the Eastern Arkansas culture. This not only gives us a date for the Aztlan type of stockade, but suggests contemporaneity of Pacaha with the Cumberland, which according to a great many lines of evidence (brought together in the preceding section) seems to have antedated somewhat the typical Eastern Arkansas culture.

It appears from the foregoing that general archaeological probabilities, as well as a few particular facts that can be brought to bear on the question, indicate that the Eastern Arkansas culture falls mainly within the interval between 1541 and 1700. In such a case, it is not impossible that the Quapaw did share in its

well-nigh went round the town. From the River Grande to the lake was a canal, through which the fish came into it, and where the chief kept them for his eating and pastime." There follows a description of the various fishes and their abundance.

De Biedma, (Bourne) II, p. 28. "We travelled two days, and then discovered the town on a plain, well fenced about, and surrounded by a water-ditch made by hand."

Garcilaso, (Shipp), pp. 410-411. ". . . and arrived, at the end of three days, upon an eminence from which they saw the Capital of Capaha, very well fortified, because it was the key to the province. This town is upon a small eminence, and has some five hundred good houses, and a ditch of ten or twelve fathoms, fifty paces wide in most places, and forty at others. Besides, it was filled with water by means of a canal which they had extended from the place to the Chucagua (Mississippi). The canal was three leagues long, at least as deep as a pike-staff, and so wide that two large boats abreast could very easily ascend and descend it. The ditch, which is filled by the canal, surrounds the town, except in a place which is closed by a palisade of large costs fixed in the ground, factened by other cross-pieces of wood, and plastered with loam and straz. There were, besides, in this ditch, and in this canal, such a quantity of fish that all the Spaniards and Indians, who followed the general, fished from it without it appearing that they had taken a single fish from it."

possession. If the identification of the Oneota aspect of the Upper (1)
Mississippi with the Chiwere Sioux is a sound one, it would not be surprising to find a tribe of the Dhegiha Sioux in possession of an Eastern Arkansas culture. Of all three Upper Mississippi aspects,
Oneota is the closest to Middle Mississippi in general and Eastern Arkansas in particular. It would explain certain characteristics of the latter, such as the fact that in the use of bone and antler, it is more like Upper than Middle Mississippi.

On the other side of the question it must be freely confessed that our very scanty information on the Quapan culture -- apparent— (2) ly all but extinct even at the time of the first French contacts -- does not reveal anything of an Eastern Arkansas character. One very damaging fact is the testimony of Dumont that they had large round houses, but the information dates from a period in which they may (3) have lost all their original culture.

Turning to the Omaha, where the documentation is excellent, one finds the same disappointment. If one attempts to get back to

⁽¹⁾ Griffin, 1937a.

⁽²⁾ In 1699 the quapaws were said to have been reduced by war and smallbox to 100 men. Gosselin, 1907.

⁽³⁾ Dumont de Montigny, 1753, I: p. 142.

⁽⁴⁾ Fletcher, 1911.

the original Dhegiha culture by subtracting from the Omaha culture traits said to have been borrowed from the Arikara, one only gets (1) still further from a Middle Mississippi type of culture. With which we leave the Quapaw question exactly as we found it.

Since we have no definite information relating to the presence of tribes other than the Quapaw in the region where the Middle Mississippi culture makes its only contact with the historic period, further speculations on the subject are not likely to lead to any positive results. The interesting suggestion of Swanton that Pacaha and other nearby place-names of DeSoto's time may have been Tunica cannot be verified except by excavation and comparison with known Tunica sites down the River. As we shall see in a later section, a connection of some sort between Middle Mississippi and Tunica is definitely indicated, so it may be in this direction that the search for ethnographic correlatives will be attended with success. As I intimated at the beginning of this discussion, however, little can be hoped for until we have had careful excavations on contact sites, particularly those thought to have been visited by DeSoto. More than this, we need a stratigraphic time scale, that will enable us to dispense with such chronologically unsatisfactory terms as "Eastern Arkanses". It would appear self-evident that historical findings

⁽¹⁾ Fletcher, op. cit., pp. 70-71. The fact is, consideration of the Omaha culture as reflected in their traditions is completely inimical to identification with any sort of Mississippi culture. Sand tempered pottery, the grooved ax and birch canoe are very definitely not Mississippi traits. The earth lodge, and possibly agriculture, were said to have been taken over from the Arikara; without these, Omaha culture looks actually more Woodland than Mississippi.

can only come about through a chronological approach. Cultural definitions that take no count of time make poor vehicles for ethnographic -- which is to say historical -- correlations.

4. Middle American and Southwestern Influences in the Middle Mississippi.

The question of Middle American relationships is one for the Mississippi Valley as a whole. The nature of the material at hand is, however, such that it is best to confine our discussion to the Middle "phase", and to introduce it, accordingly, at this point. If any significant contributions appear in the brief consideration of Lower Mississippi in the chapter to follow, they may be added in the final summary.

It was admitted at the outset of this work that the problem of Middle American relationships was one of its chief points of interest. A second admission has to come here, that the bold expectations implied in that approach have not been fulfilled. I have been laboring under a misconception, which, I think, has claimed other victims, to wit, that traits introduced by a "thrust" or "drive" from an outside source travel about in a constant association or "complex", so that it is a comparatively easy matter, once you have got hold of such a "complex", to place it in its proper spatial and temporal setting and thus be enabled to produce some very illuminating historical connections. Such was my hope in regard to the Q-complex, brilliantly launched into the Mississippi Valley a few years ago by (1) Vaillent. Closer acquaintance with the component traits of the

Q-complex has diminished my original impression of its importance. At the same time I have come to feel that the Middle American question is no less tied up with another nexus of traits, mainly non-ceramic, which shows little if any connection with the Q-complex, on the contrary seems rather to be associated with sites in which Q-factors are relatively unimportant if not absent altogether.

The Eagle-warrior complex: When news of the remarkable finds at Spiro became known a few years ago, students were immediately struck by resemblances to the well-known sites of Etowah and Moundville. The most striking correspondences were in highly developed stone forms, engraved shell and repousse copper, whereas the more fundamental aspects of the culture, particularly pottery, were as different as might be expected in such widely separated manifestations. It was evident that here was a new problem in Southeastern archaeology, one however that was obviously not ready for solution until the results of the University of Oklahoma's work at Spiro should have been published. In the meantime the unofficial version was that the remarkably similar features at the three sites was attributable to a common influence from the Middle Mississippi. question why the Middle Mississippi should exert influence in just this way, leaving pottery and other more terrestrial aspects of the culture untouched, was not entered upon. Such was my own position at the outset of the present study. As the work proceeded, however, it became more and more apparent that it would be necessary to come to terms with this seemingly anomalous situation. To begin with,

it developed that the traits in question were not so deep-seated in Middle Mississippi after all. Except perhaps in the Cumberland, their appearance was such as to suggest that Middle Mississippi was on the receiving rather than the transmitting end of the connection. It became clear that the ultimate solution was not going to be found within the limits of the Middle Mississippi culture as herein defined, at the same time some statement of the position was necessary to an understanding of the Middle Mississippi problem. To fill this need I have been emboldened, in the face of a healthy skepticism regarding "complexes" in general, to postulate a combination of ceremonial traits, which for want of a better name I shall call provisionally the Eagle-warrior complex. When more is known about it, a more satisfactory name will be found, or, as is more likely, a name will not be necessary.

The principal traits are as follows:

Long ceremonial blades
Chipped "mace"
Spatulate celt, shouldered celt and "spud"
Monolithic ax
Large copper axes
Large effigy pipes of stone, both animal and human
Stone images
Large stone disks or "palettes"
Engraved shells and gorgets
Repoussé copper plates
Engraved pottery decoration
Lost color decoration
Batik dyed textiles (?)

A mere list of traits does not convey any idea of the unity of the group, which is held together by a series of symbolic elements rendered in lost color, repousse copper, and engraving on stone, shell and pottery. These elements are so interpenetrated with one

another, and so completely pervaded by a characteristic style, as to leave no doubt of their origin in a common fund of religious and mythological ideas. They tend to group themselves around three principal subjects: (1) the sun and four world quarters; (2) animals, birds, reptiles and human figures with zoomorphic attributes; (3) death. In the first group are various combinations of the cross and circle, spiral, swastika, guilloche, looped square, etc., symbols for the most part of almost universal distribution, hence of little value in the present discussion. Their constant occurrence in combination with factors of more particular significance, however, makes it impossible to leave them out of account. The second group, besides simple zoomorphic representations such as the woodpecker, spider, etc., comprises several familiar Middle American composites, horned and plumed serpent, serpent-cat (perhaps bat), and human personages or deities with zoomorphic attributes. The last are usually depicted in attitudes of the dance, carrying severed heads, brandishing clubs (in form similar to the chipped mace), with elaborate vane-like headdress, long pendant affairs hanging down between the eyes and bellows-shaped pouches suspended at the waist. commonest attributes are those of the eagle, though serpent and cat features are not wanting. Throughout, like a trademark, whether on eagles, cats, serpents or men, runs the double-pointed figure around the eye, the "weeping eye" as it is frequently called. The third group is made up of symbols connected with death, the grinning skull, crossed bones, hand, eye-in-hand and a curious ogival figure that may be a conventionalized eye.

The pronounced Middle American flavor of many of these symbolic elements has been repeatedly emphasized during the course of this work so that it scarcely seems necessary to refer to the point again. I think it is not too much to say that a good half of them may be definitely traced to that source. Unfortunately that does not explain them all, nor a number of other puzzling questions, such as how the spatulate celt, monolithic ax and lost color came into the complex, or the question of the origin of repoussé copper. As I suggested at the beginning of this section, any attempt to bring the entire complex in from Middle America in a body is likely to be just as wide of the mark as the effort to deny that any of it had such an origin.

Negative features must not be overlooked. I have spoken of the circumstance that in general these elements are not carried by pottery -- which alone argues against a Middle Mississippi source. Except in lost color, and in the form of engraving on pottery in certain restricted areas (Moundville and Eastern Arkansas) and in the case of certain effigy forms (the "dog-pots" of the Cumberland, in reality serpent-cat effigies and the "serpent" bowls of Eastern Arkansas, which are the same thing) the complex is predominatly non-ceramic. Contrast with the Q-complex, which is made up entirely of pottery traits, is most striking. It might be asked whether these elements do not make up the non-ceramic complement of the Q-complex? An attractive thought, but unfortunately completely belied by the facts of distribution and what little we know of chronology. I shall return to this point later.

Rectangular platform mounds with plaza assemblage, etc. do not occur with unfailing regularity in association with the Eagle-warrior complex. The great Spiro mound seems not to have been of this type at all, was apparently built primarily to cover a large group burial in a log chamber. Apart from Spiro, however, there do not seem to have been any elaborate and specialized burial practices. Neither from the point of view of mounds or burial practices is the highly ceremonial character of the complex maintained.

Taking all circumstances together, so far as we know them, the non-utilitarian character, the identities in subject and style over (1) an enormous distribution, the esoteric and foreign (Middle American) character of the symbolism, it must be obvious that we are dealing purely with the transmission of religious and ceremonial factors. But lack of uniformity in mounds and burish practices would seem to rule out religion in the usual sense. It must have been rather something in the nature of a cult, or series of related cults, something sufficiently extraneous to permit grafting upon cultures differing in other and more fundamental respects, -- something in the nature of the Ghost Dance of the Pleins perhaps. Spinden imaginatively suggests a copper trade with the Lake Superior region carried on under the aegis of Toltec warrior cults. His remarks on the subject afford an excellent summation of the Mexican elements in the complex, merit quotation in full: "The associations of warriors which regarded

⁽¹⁾ A distribution that extends from the Carolinas to eastern Oklahoma and from Illinois to Florida.

eagles and jaguars as their helpers may be compared to the European orders of knighthood; they were still powerful among the Aztecs when the Spaniards arrived. In art the Eagles and Jaguars, associated with the Plumed Serpent whose power was as the storm rack and the lightning flash, were represented in half-animal, half-human forms. These knights believed that after death they would become gods provided the God of Death could be appeased by human sacrifice. Their ceremonies were involved in cosmic patterns, with special colors, animals, trees, sacrifices, etc., distributed to the four directions of the earth or the six directions of the universe. The sun was their special deity and the symbols of human sacrifice were used by them as motives of decoration. These symbols, joined in series, included shields, lances, knives, hearts, skulls, crossed bones, and severed hands. . . . When we pass to the Mound-building area, the acceptances of Toltec symbolism are still more striking. (He has just discussed the Southwest) Indeed, the elements which follow the Mexican mode in subject matter are precisely the ones which dominate the highest art of the Mound-builders. These are humanized eagles as warriors holding severed heads as they do in Mexico; Plumed and Horned Serpents, which may also be supplied with wings; various cosmic symbols or diagrammatic representations of the Sun; the world and the universe conceived as having four or six parts; and symbols in series which include shields, lances, skulls, bones, hands, etc. The hands frequently have an eye in the palm, an idea also used in Mexican art. It seems not unlikely that the Toltecs found a way to reach the copper supplies about the Great Lakes by coast-wise trade

(1)

from northern Vera Cruz." An intriguing suggestion, but subject to a trifling difficulty which may be unimaginatively pointed out. trade was maintained with Mexico, we should expect to find objects of actual importation. None of the factors of the Eagle-warrior complex, no matter how Mexican they look, can be shown to have actually come from Mexico. However, it seems quite possible to envisage a penetration of warrior cults with some object other than trade. Fortunately, there are no chronological difficulties. warrior complex was apparently in full swing at a time corresponding to the earlier portion of the Middle Mississippi period and carried on long enough to have impinged on the Eastern Arkansas culture in the latter part of the same period. In other words it could not have preceded the coming of DeSoto in 1541 by any great length of time, and may actually have followed it. I have half seriously entertained the idea that some traits of the complex may have been introduced by Mexican Indians in DeSoto's train. This is probably overdoing it. In any case we may note Spinden's statement that the warrior cults were still powerful among the Aztecs when the Spaniards arrived. There is no serious discrepancy on the Middle American side, therefore, in the assumption of a very late date for the contacts.

Enough has been said to indicate the importance of the questions raised by this interesting constellation of traits. I have only been able to sketch the outlines of the problem. With publication of the work at Spiro, and with more knowledge of the cultural

⁽¹⁾ Spinden, 1931, pp. 14-15.

and chronological position of Etowah and Moundville, it will be possible to put flesh on the bare bones presented here. When that time comes, one may predict that the most amusing chapter of Southeastern archaeology will be written, for it must be apparent that many of the most vivid and highly characterized traits of the Southeast are contained in it.

The Q-complex: For the early Maya, or pre-Maya, manifestation known as Influence "Q" or simply the Q-complex, the reader is referred to various publications of Lothrop and Vaillant. An excellent summary of the entire position is to be found in Vaillant's "Archaeological Setting of the Playa de los Muertos Culture". (Maya Research, Vol. I, No. 2, October 1934) The same writer is responsible for injecting the discussion into the Middle Mississippi region in "Some Resemblances in the Ceramics of Central and North America". (Medallion Papers, No. 12, Gila Pueblo, Globe, Arizona. 1932.) Although several writers have dealt with the problem of Middle American-Southeastern relationships in archaeology in a more or less negative way, Vaillant was the first to advance a serious hypothesis to account for such connections. Avowedly put forward for the purpose of stimulating discussion, this provocative hypothesis has never received the attention it deserves. I shall therefore be excused for considering it in some detail.

⁽¹⁾ Swanton, 1924. Mason, 1937.

Vaillant sees the strongest evidence for connection with Middle America in a group of ceramic traits centering in the Middle Mississippi, particularly in the Eastern Arkansas sub-division. He does not deny the evidence which we have just considered (Eagle-warrior complex), but minimizes its importance, arguing that it represents a late ceremonial infiltration for which a very few individuals may have been responsible; whereas his ceramic factors, being related to the supposedly very old Q-complex in Middle America, indicated an earlier and more fundamental drive of culture into the Mississippi "Perhaps it would not be too far-fetched to hypothefrom the South. cate that the irruption of the Nahua tribes into Vera Cruz wedged the Huaxtec with their pre-Maya culture away from the main Maya stem. This dislocation would have started a successive series of thrusts to the northward that might have ended in shoving some peoples with a Q-influenced ceramic up the coast and thence through the swamps of Louisiana into the West Mississippi region. These emigrants would not have dared invade the east bank of the Mississippi where lived strongly cultured indigenous tribes. There may have been even two such infiltrations, for the Red River sites differ from the others in some respects and have been attributed to the Caddo, whose range extended far west into Texas. I venture this hypothesis with an open mind, not from conviction but to stimulate discussion." The

⁽¹⁾ Vaillant, 1932, pp. 19-20.

factors in question are as follows:

- 1. Tripod support of vessels
- 2. Funnel-neck jars
- 3. Double-bodied jars
- 4. Rarely the shoe-form of vessel
- 5. High and low forms of annular base
- 6. Spout handles
- 7. The composite silhouette form of bowl
- 8. Vessels with spouts, plain and in effigy
- 9. Vessels modeled in the effigy of animals and humans
- 10. Vessels in the form of the human head
- 11. Vessels with the head or features attached.

Before considering these factors severally in detail, what about the extent to which they hold together in a "complex"? All but two of the eleven traits are good honest Middle Mississippi factors. That does not mean they occur in all Middle Mississippi manifestations, far from it. Their distribution may be seen in the accompanying table (fig. 115). It appears that their association is not constant, that only in the Cairo Lowland and Eastern Arkansas do they tend to hang together, most of them dropping out in the Cumberland and Monks Mound. The indications of a late date in this will be emphasized later. Two of the traits, funnel-neck jars and composite silhouette bowls do not appear to be Middle Mississippi traits at all, are associated rather with the Caddo cultures in the Lower Mississippi and may be supposed, therefore, to have a different background altogether.

	Monks Mound	Cumber- land	Cairo Lowland	Eastern Arkansas
Tripod	-	x	x	x
Funnel-neck jar	-	-	-	-
Double-bodied jar	-	-	x	x
Shoe form	-	-	x	3
High and low annular base	-		x	x
Spout handles	-	-	-	x
Composite silhouette	?	-	-	-
Vessels with spouts	-	-	-	x
Effigies	?	x	x	x
Head vessels	-	-	x	x
Vessels with heads, etc.	x	x	x	x

Fig. 115. Distribution of Q-complex factors in Middle Mississippi.

Generalizations on the complex as a whole may be preceded by a brief consideration of the individual traits in turn:

1. The tripod is one of the few factors (certain effigies furnishing the others) which, through association with lost color decoration in the Cumberland and Etowah, seems to be connected with the Eagle-warrior complex. It also lies outside the Middle Mississippi in the Caddo. (See distribution map, fig. 98.) On the other hand its center of distribution is pretty clearly the Eastern Arkansas area; only here do solid and slab tripods occur. So far as its probable origin is concerned, there are a number of alternatives to be considered. It may have evolved locally out of a tripartite vessel of three bulbous lobes joined by a single neck -- the distribution

indicates that the bulbous type of tripod is the earliest; or out of an earlier tetrapod, as it is said to have done in Middle America -the tetrapod is definitely early in the lower Mississippi (Marksville, Coles Creek). Less likely, but not to be passed over entirely, in view of the southwestward extension into the Caddo region, is the possibility of Southwestern origin (Hohokam). Notwithstanding all these possibilities of origin other than Middle America, the tripod still remains one of Vaillant's best arguments, but there can be no question of an early date. Its association entirely with bottle forms is against it to begin with, to which may be added the fact that it piles up in the later sub-divisions of Middle Mississippi, the Cairo Lowland and Eastern Arkansas. In Middle America the tripod is early, but it is also late. It may be a strong argument for Middle American connections, but not necessarily on the hypothetical Q stage. Offhand it would seem likely that it came into the Southeast about the same time as lost color and other elements of the Eagle-warrior complex.

- 2. The funnel-neck jar, which is nothing more than a jar with a broad, high, outflaring collar is one of the weakest of the Q-factors, owing to the ease with which it could be independently evolved. Consequently the fact that its occurrence in the Mississippi Valley is confined to the late Caddo culture need not be stressed.
- 3. Against the double-bodied jar may be urged the doublebarreled objection that it occurs in the Southwest as well as Middle

(1) Vaillant, 1932, p. 13.

America, and, in any case, as Vaillant freely admits "is a form that (1) could be independently invented".

- 4. The shoe-form has such a wide distribution in the New World generally, both early and late, as to be deprived of any great significance as evidence for specific relationships. The few examples occurring in the Middle Mississippi have practically identical counterparts in both Middle America and the Southwest, with a slight edge (2) in favor of the later.
- 5. The annular base is in better case than the tripod, because it is said not to occur in the Southwest and is rare in the Valley of Mexico. On the other hand the simplicity of the device makes its local invention by no means out of the question. Its distribution in the Middle Mississippi, confined to the Cairo Lowland and Eastern Arkansas, indicates a very late period, but it is said to occur in a (3) pre-Marksville stage in Louisiana, which is very early indeed.
- 6. The spout handle or "stirrup-handle" to use its Peruvian title (which emphatically should not be used) may as easily be derived from the Southwest as from Middle America. The similarity between Middle Mississippian and Southwestern versions is very close, (4) closer than between either and Middle America, or, if one prefers, a

- (1) Vaillant, op. cit., p. 13.
- (2) For a discussion of the striking parallelism in this factor between the Cairo Lowland and Pecos, see pp. 415-416.
- (3) Information from Gordon Willey, 1939.
- (4) For references to Southwestern and Middle American occurrences of the spout handle, see p. 600.

sufficiently plausible line of evolution can be supplied locally as suggested in fig. 102.

- 7. The composite silhouette bowl or "cazuela" appears uncertainly in the Monks Mound aspect, is common in certain late cultures in East Tennessee, Alabama and Georgia, and in the Caddo culture of the lower Mississippi. There is no apparent connection between these three centers of occurrence, which, in view of the essential simplicity of the shape does not seem a matter for surprise. For the same reason remote connections with Middle America are not indicated.
- 8. Spouted vessels ("teapot") show an extremely narrow range in the Mississippi, being confined to the lower Arkansas River and the Mississippi down to Natchez. This restricted distribution plus a demonstrable lateness in time (the teapot is regularly associated with post-contact materials) argues conclusively against a derivation from an early horizon in Middle America. Furthermore, a rather good case can be made out in favor of a local evolution from an animal effigy with a spout tail.
- 9. Effigies, both human and animal, are extremely important in Middle Mississippi, but give no sign of being particularly fundamental or early. The subject is too broad for brief generalization. While undoubtedly many points of similarity between Middle Mississippi effigies and those of the Q-influenced cultures in Middle America are to be found, the same may be said of the Southwest. In fact the closest all-around affinities in style and treatment, particularly in human effigies, lie with the Casas Grandes culture of Chihuahua.

- 10. For one type of effigy, the so-called head vessel, there is no counterpart in the Casas Grandes, I believe, but here again, as with the teapot, an extremely limited distribution suggests a local specialization rather than introduction from an outside source.
- "rim effigy bowls", enjoy the widest distribution in the Southeast of any of Vaillant's Q-factors. It is the only trait of the lot that is clearly present in all sub-divisions of Middle Mississippi, and probably extends far beyond the limits of that culture, particularly in the direction of the Southeastern States including Florida. It is evidently an old and fundamental Southeastern trait. Unfortunately for Vaillant's hypothesis it is the one trait about whose Middle American origin he is most in doubt. In view of its wide distribution east of the Mississippi, he suggests that it may possibly go back to an Antillean prototype.

It appears from the foregoing that, of the eleven Q-factors listed by Vaillant, for only two, the tripod and annular base, can a good case for Middle American origin be made out. For the others, the possibility of Southwestern or local origin is at least as great as, if not greater than, the chances of introduction from Middle America. It must be admitted, however, that an unfair advantage is taken when a complex is pulled to pieces and each piece knocked out separately. A stronger attack may be made on chronological grounds. The tendency for Q-factors to heap up in the Cairo Lowland and

⁽¹⁾ Vaillant, 1932, p. 17.

Eastern Arkansas, especially the latter, is a very strong indication of a late date -- not to mention the fact that some of these factors have turned up in post-contact graves (teapot, cazuela, funnel-neck jar, effigies). According to the chronology adopted here (vide p. 675) it is by no means impossible that the time of greatest emphasis of the Q-complex was during the period between DeSoto's expedition in 1541 and the coming of the French shortly before 1700. Until evidence can be produced of the existence of these factors in the Middle Mississippi at an appreciably earlier date, any sort of connection with a Maya or pre-Maya horizon seems a very remote possibility.

Summary of Middle American relationships: So far as the two complexes discussed in the preceding pages are concerned, the status of the Middle American question can be briefly summarized. Between the two, the Eagle-warrior complex is evidently the earlier and more certainly Middle American. However it allows us to postulate little more than a ceremonial infiltration at a comparatively late date, not long before DeSoto's expedition of 1541, if not actually after it. The Q-complex seems to have been still later, its Middle American connections tenuous in the extreme. It must be emphasized again, however, that these two complexes do not tell all the story. Some of their component factors may have had a longer history in the Southeast. Lost color, for example, is a problem all by itself. The possibility that it may go back to the Hopewell period in Florida has been discussed (p. 621). That it could have had an origin

independent of Middle America, however, seems very unlikely. Repousse copper, considered solely as a technique, certainly goes back to Hopewell times in Ohio (pp. 507-8), but the designs in the Southeast are among our strongest evidences for Middle American connections. Evidently we have here an imported style grafted on an older tech-The rectangular mound complex cannot be tied in securely with the Eagle-warrior combination. It seems to have come into the Lower Mississippi at an earlier time (Troyville). After all these questions of ceremonial import have been settled, there still remain the vastly more important problems such as the origin of agriculture and pottery in the Southeast. It does not seem probable at the moment that these fundamental questions will be settled without reference to Middle America. In short, it must be now abundantly clear that, although the Middle Mississippi as herein defined contains within itself more elements of probable Middle American origin than any other Southeastern culture perhaps, their ramifications lie outside the Middle Mississippi both spatially and temporally, from which we must conclude that the answer to the Middle American question is not to be found therein as first supposed. Thus we leave the subject about as we found it, only with an increased awareness of its interest and complexity.

<u>Influences from the Southwest:</u> It is generally considered that the characteristic features of Southeastern culture owe little if

⁽¹⁾ Information from James A. Ford.

As applied to the Middle Mississippi specifically there are a great many reasons for suspecting its validity. Whereas the spectacular traits such as mounds, highly developed stone objects, carved shell, copper, etc. are clearly independent of the Southwest, an impressive list of correspondences in the humbler field of pottery can be compiled. Such a list would include the following traits:

Association of drab, red and red-on-buff wares Painting without slip, with subsequent polishing Fundamental globular jar form with handles Small neck bottle Double neck jar or bottle Rectangular bowl, including special terraced type (Zuni-Moundville) Shoe form Spout handle ("stirrup-handle") Ladle, both hollow handle and scoop types Rim effigy bowl Effigies, human, animal, bird, fish, gourd, "blank-face" Compound vessels, both horizontal and vertical Zoomorphic handles Horizontally perforated lugs Nail marking Nodal decoration ("nubbin vessels")

If we were to carry the inquiry further southwestward into the Caddo region, this list could no doubt be extended. (Vide Gladwin, 1934, 1936; Haury, 1936).

Elaboration of the Southwestern-Middle Mississippi question is not within the purview of the present work. I shall merely point out here that an overwhelming majority of the traits listed above are concentrated in Eastern Arkansas and the Cairo Lowland, that (according to the tentative chronology adopted here) as we go back in time into the Cumberland and Aztlan-Cahokia I period of Monks

Mound, they seem to drop out rapidly. A tentative conclusion that Southwestern traits are generally later than those from Middle America seems to be indicated.

One further point, it will not have escaped the reader that several factors of the Q-complex are on the Southwestern list. If any validity still adheres to the complex, it is possible to argue that it came into the Mississippi, not direct from Middle America, but via the Southwest and southern Plains. This would account for the scarcity, amounting practically to non-existence, of Q factors in the Lower Mississippi and Gulf region.

This treatment of the Southwestern problem is hopelessly inadequate, but sufficient to indicate that there is a positive connection, which, though late, is of considerable interest. It is
perhaps the principal cause of the increased emphasis on pottery that
comes into the later part of the Middle Mississippi period.

5. Conclusions on the Middle Mississippi "Phase".

Turning back now to the original purpose of the present study, we must consider for a moment the classificatory position of Middle Mississippi. To what extent may it be said to represent a homogeneous phase of the Mississippi pattern? Bearing in mind the lamentable results of a similar inquiry into the existence of an Upper Mississippi phase, we have here a remarkably satisfactory situation. The cohesion between the several sub-divisions was sufficient to permit a definition (vide p. 652 et seq.) without resorting to meaningless generalities. Compare, for exemple, the pottery

section of the Upper Mississippi definition (p. 102) with that of Middle Mississippi (pp. 657-664). The effect is of something solid, (1) an actual cultural entity, not merely a classificatory abstraction.

The homogeneous exterior was found on closer analysis, however, to be bristling with incongruities within. For the most part these appear to have been explainable on chronological grounds, and have tended to group themselves in such a way as to indicate two general periods, one represented by the early level at Cahokia (Aztlan-Cahokia I) and the Cumberland, the other by the later level at Cahokia (Spoon River-Cahokia II), the Cairo Lowland and Eastern That the two "periods" overlap considerably has been sufficiently emphasized. Some rather interesting differences of a general nature seem to be indicated. The early period includes most of the more highly characterized traits of Middle Mississippi, particularly those for which a Middle American origin is at present the best explanation. It seems to have been at this time that Middle Mississippi culture reached its peak of intensity, as well as influence on other portions of the Southeast. It was in this period apparently that artistic impulses associated with some specialized religious cult, whose original inspiration seems to have been Mexican, swept over the Southeast lending a characteristic flavor to Middle Mississippi as well as other related cultures.

⁽¹⁾ To what extent this solid front would have broken down if the inquiry had been extended to cover manifestations, regarded by many as Middle Mississippi, in Eastern Tennessee, Alabama, Georgia, and the Carolines, is another question. One may still venture to predict that it would not disintegrate to the condition of Upper Mississippi.

period, by comparison, appears as one of decline, marked by a falling off in ceremonialism, as expressed in mound building and elaborate funerary practices, in stone and copper working, shell carving, etc., but an advance, quantitative at least, in pottery. In this period influences from Middle America are less to the fore, whereas there is not a little evidence that the Southwest was having something to This last period may have been so late as to have fallen mainly within the interval between 1541 and 1700 in which case the cessation of Middle American influence would have a direct historical cause: Middle American culture had by this time ceased to exist. Ιſ the second period falls largely into the interval between 1541 and 1700, the first can perhaps be pushed back to somewhere around 1400. What happens before this? We cannot hope for an answer without direct archaeological methods, but a safe guess would be something in the nature of Hopewell. The basis for such a prediction will sufficiently appear in the following section on the Lower Mississippi.

In concluding this tedious analysis of Middle Mississippi culture, it may as well be admitted that the original intention, i. e., an examination of the concept of a Mississippi pattern -- and in particular a Middle Mississippi phase of that pattern -- has been very nearly lost sight of, owing to a shift of interest toward a chronological approach. In defence it may be said that this was not altogether arbitrary on the writer's part; to a certain extent the classificatory differences invited chronological interpretation. The result has been a loss of interest in a Mississippi "pattern" and the awakening of a belief in the possibility of a Mississippi "period",

that is to say a time when cultures of a Mississippi type were dominant in the Valley. We shall accordingly turn to the Lower Mississippi with this reorientation of the problem in mind.