MEDICINES AT MOUNDVILLE:

AN INTRASITE ASSESSMENT OF THE

MOUNDVILLE CEMETERIES

by

JENNIFER LYNN FUNKHOUSER

IAN W. BROWN, COMMITTEE CHAIR
VERNON J. KNIGHT, JR., COMMITTEE CHAIR
CHRISTOPHER LYNN
JOHN H. BLITZ
SHANNON CHAPPELL HODGE

A DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Anthropology in the Graduate School of The University of Alabama

TUSCALOOSA, ALABAMA

ABSTRACT

This research investigates expressions of group identity and social cohesion at the Moundville Archaeological site, a large Mississippian mound center in the Black Warrior River Valley (BWRV) of west-central Alabama. The mortuary program at Moundville has been extensively examined for evidence of status-based social differentiation, viewed from a perspective of hierarchical political organization. My analysis, a biocultural intrasite assessment of mortuary ritual at the center, investigated the construction and use of interment areas at Moundville from representative, spatial, and ontological perspectives. Data on interment location, composition, and associated accourtements were examined from applied categories of medicine making including curing, hunting, renewal, and war. I argue that the ceremonial landscape was one deliberately crafted for community-centric renewal ritual, and later inundated with war medicine that necessitated a balance of esoteric and community ritual engagement including, but not limited to, the enactment of the mortuary program.

ACKNOWLEDGEMENTS

This research would not have been possible without the cooperation, assistance, and advice of many friends, colleagues, and collaborators. I am indebted to Vernon J. Knight for his guidance, mentorship, time, and patience during the completion of this project. I could not have done it without him. I am also particularly grateful to Ian W. Brown. Thank you for your time, help, and encouragement at the end and for teaching me how to apply for grants, peer review articles, write letters of recommendation, and not fret over spilt coffee in the beginning and middle. I appreciate your efforts on my behalf more than I can possibly say.

I would like to express my gratitude to the entire faculty and staff of the University of Alabama's Department of Anthropology. In particular, I would like to thank Missy Sartain and my committee members John H. Blitz and Christopher D. Lynn. Thank you, Missy, for all of the things and for always being there for your students. Thanks to John Blitz for letting me practice zooarchaeology lectures in his lab methods class, for getting me involved with Moundville zooarchaeology, and for treating and including me like one of his students. Thanks to Chris Lynn for encouraging my participation in Anthro is Elemental and for allowing me to develop it into a class centered around pedagogical methods. My interests as a researcher are broad and my committee members and department have allowed me to develop them in remarkable ways that I will always be grateful for. Thanks too to my outside committee member Shannon Chappell Hodge, who first introduced me to Southeastern bioarchaeology as an undergraduate student and has continued to enthusiastically cheerlead my efforts in the field.

I have been excessively fortunate to have built a village of scholars and mentors at UA and beyond who have helped me develop as a scholar and professional in this field. My sincere thanks to Keith Jacobi, Ed Jackson, Susan Scott Jackson, Marie Danforth, Gregory Waselkov, Craig Sheldon, Kristrina Schuler, and Cathy Clinton Meyer for the opportunities, advice, and encouragement that got me here. Dear friends Jessica Kowalski, Amanda Harvey, Angel Narvaez-Lugo, Erik Porth, Daniel LaDu, Brooke Persons, Max Stein, Ashley Stewart, and Camile Morgan offered friendship, good times, and advice throughout my graduate experience. I am particularly grateful to Susan Scott Jackson, Tracy Bowles, LisaMarie Malischke, Samuel and Hannah Huey, and Jim Delahussay for their friendship, counsel, and encouragement during the writing process. I am honored to have had Susan as a friend, colleague, and mentor. Thank you, Sue, for everything.

I would like to express my deep affection and appreciation to my family for their unconditional love and support. Thank you to my parents, Ann and Eric Funkhouser, and my brother, Matthew, for your unwavering assistance throughout the entirety of my academic journey. This work is dedicated to my grandparents, Mary and William Leser and Ruth and Chester Funkhouser.

This research was supported by the University of Alabama through a Graduate Council
Research Fellowship and through the University of Alabama Department of Anthropology's
David and Elizabeth DeJarnette Endowed Scholarship in Anthropology.

CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	v
LISTE OF FIGURES	xiv
INTRODUCTION	1
The Moundville Site	1
Theoretical Considerations	4
Mortuary Studies at Moundville	9
MEDICINE	13
Making Medicine	15
Curing Medicine	20
Hunting Medicine	24
Renewal Medicine	28
War Medicine	34
Summary	37
MEDICINE, DEATH, AND THE CEREMONIAL LANDSCAPE	40
Maize	41
Ceremonial Centers	44
Mississippian-era Esoteric Medicines for Renewal and War	48
Divergent Theories of Practice	51
Esoteric Representational Art	54

Summary	61
AN INTRASITE-ANALYSIS OF THE MOUNDVILLE MORTUARY PROGRAM	63
Mound A	68
Mound B	70
Mound V	72
Mound C	75
Mound D	83
Mound E	112
Mound F	132
Mound S	136
Rhodes	142
Mound G	157
Mound X	177
Mound H	178
Administration Building	184
Mound T	189
Mound I	189
Mound J	191
Mound K	194
Mound L	200
Mound M	203
Mound N	212
Mound O	215

Mound W	221
Mound P	222
Mound Q	264
Mound R	274
MEDICINE AT MOUNDVILLE	300
REFERENCES	316

LIST OF TABLES

4.1. Burial area, number of individuals recovered, and excavator, * denotes a minimum approximate number	64
4.2. Burial type and count for the interment area West of Mound A	69
4.3. Burial type and count for the interment area West of Mound B	71
4.4. Burial type and count for interments within Mound C	76
4.5. Associated accoutrements recovered from Mound C	77
4.6. Hemphill style ceramics recovered from Mound C	80
4.7. Burial type and count for interments Northeast of Mound C, recovered by Moore	81
4.8. Associated accoutrements from Northeast of Mound C, recovered by Moore	81
4.9. Hemphill style ceramics recovered from Northeast of Mound C	82
4.10. Burial type and count for interments within Mound D	85
4.11. Associated accoutrements recovered from Mound D	86
4.12. Hemphill style ceramics recovered from Mound D.	86
4.13. Burial type from the interment area north of Mound D, recovered by Moore	87
4.14. Burial type from the interment area north of Mound D, recovered by Moore	87
4.15. Burial type from the interment area North/Northeast of Mound D, recovered by AMNH in February 1930	
4.16. Associated accoutrements from the interment area North/Northeast of Mound D, recovered by AMNH in February 1930	90
4.17. Burial type from the interment area Northeast of Mound D, recovered by AMNH March in 1930	91
4.18 Associated accourtements from the interment area Northeast of Mound D	

recovered by AMNH in March 1930	91
4.19. Hemphill style ceramics from interment areas North and Northeast of Mound D	92
4.20. Burial type for the interment area South of Mound D, recovered by Moore in 1905.	93
4.21. Associated mortuary accoutrements recovered from the interment area South of Mound D, recovered by Moore in 1905	93
4.22. Hemphill style ceramics recovered from the interment area South of Mound D, recovered by Moore in 1905	93
4.23. Burial type and count for the interment area South of Mound D, recovered by Moore in 1906	94
4.24. Associated mortuary accoutrements recovered from the interment area South of Mound D, recovered by Moore in 1906	95
4.25. Hemphill style ceramics recovered from the interment area South of Mound D, recovered by Moore in 1906	95
4.26. Burial type for the interment area South of Mound D, recovered by the AMNH in February 1930	97
4.27. Associated accoutrements for the interment area South of Mound D, recovered by the AMNH in February 1930	98
4.28. Burial type for the interment area Southeast of Mound D, recovered by the AMNH in March 1930.	99
4.29. Associated accoutrements for the interment area Southeast of Mound D, recovered by the AMNH in March 1930	99
4.30. Burial type and count for South of Mound D interments recovered by the AMNH in 1932	100
4.31. Associated accoutrements from the interment area South of Mound D, recovered by the AMNH in 1932	
4.32. Hemphill style ceramics from the interment area South of Mound D, recovered by the AMNH in 1932	103
4.33. Sherd fragments as associated accoutrements in the interment area South of Mound D collapsed	105

4.34. Shell accoutrements in the interment area South of Mound D collapsed	106
4.35. Burial type from the interment area South of Mound D, recovered by the AMNH in 1930	107
4.36. Associated accoutrements from the interment area South of Mound D, recovered by the AMNH in 1930	107
4.37. Burial type and count for the interment area East of Mound D 1937	109
4.38. Associated Accoutrements from the area East of Mound D	110
4.39. Hemphill style ceramics from Mound E contexts recovered by Knight	115
4.40. Interments and associated accoutrements recovered from the interment area Northea Mound E 1930	
4.41. Burial type and count for the interment area North of Mound E 1930	117
4.42. Associated accoutrements for the interment area North of Mound E 1930 (Jones)	117
4.43. Associated Accoutrements recovered by the AMNH 1929–1930 (Chapman)	118
4.44. Burial type and count for the interment area North of Mound E	119
4.45. Associated accoutrements for the interment area North of Mound E	121
4.46. Hemphill style ceramics recovered from North of Mound E	122
4.47. Burial type and count for the interment area East of Mound E	123
4.48. Associated accoutrements recovered from the interment area East of Mound E	124
4.49. Hemphill style ceramics recovered East of Mound E	127
4.50. Ceramic vessel fragments included with interments in the area East of Mound E.	128
4.51. Counts for single and multiple burials for the interment area East of Mound E	129
4.52. Burial type for the interment area East of Mound F	132
4.53 Associated accourrements for interments within Mound F	133

4.54. Hemphill style ceramics from Mound F	134
4.55. Unassociated artifacts from blocks 48+00 and 48+50 East of Mound S	139
4.56. Burial type and count for interments from the roadway East of Mound S	140
4.57. Associated accoutrements recovered from the roadway East of Mound S	140
4.58. Incomplete interments from Roadway excavations East of Mound S	141
4.59. Interments and accoutrements observed at the Oliver Rhodes site, 1930	142
4.60. Unassociated artifacts recovered from the Upper Rhodes site	143
4.61. Burial type and count of interments associated with the Upper Rhodes site	145
4.62. Associated accoutrements recovered from the Upper Rhodes site	147
4.63. Hemphill style ceramics recovered from the Upper Rhodes site	148
4.64. Unassociated artifacts recovered from the Rhodes Site	150
4.65. Burial type and count for interments from the Rhodes site structure	151
4.66. Associated accoutrements for interments from the Rhodes site structure	152
4.67. Burial type and count for the Rhodes site palisade	153
4.68. Associated Accoutrements, Rhodes site palisade segment	155
4.69. Hemphill style ceramics recovered from the interment area near the palisade at the Rhodes site	156
4.70. Hemphill style ceramics recovered from Mound G	159
4.71. Burial type and count for the interment area North of Mound G 1930	160
4.72. Associated accoutrements recovered from the interment area North of Mound G 19	30161
4.73. Unassociated materials recovered from North and Northeast of Mound G	161
4.74. Burial type for the interment area North and Northeast of Mound G 1934	162
4.75. Associated accoutrements recovered from North and Northeast of Mound G	164

4.76. Hemphill style ceramics recovered from the interment area North of Mound G	164
4.77. Burial type for the interment area East of Mound G 1930	165
4.78. Associated accoutrements from the interment area East of Mound G 1930	166
4.79. Burial type and count for the interment area associated with Roadway excavation block 43+50-44+50 East of Mound G	
4.80. Unassociated artifacts from Roadway investigations East of Mound G, blocks 43+50–44+50	
4.81. Burials recovered from the Roadway excavations East of Mound G with missing elements noted in excavation notes	169
4.82. Burial type and count for the interment area South of Mound G	171
4.83. Associated accoutrements recovered from the area South of Mound G	172
4.84. Burial type and count for the interment area Southwest of Mound G	173
4.85. Associated accoutrements from the interment area South and Southwest of Mound G	175
4.86. Hemphill style ceramics recovered from Southwest of Mound G	176
4.87. Burial type and count, Mound H	179
4.88. Associated accoutrements recovered from Mound H	179
4.89. Burial type and count, Southeast of Mound H 1930	180
4.90. Associated accoutrements Southeast of Mound H 1930	181
4.91. Hemphill style ceramics recovered from the area Southeast of Mound H	181
4.92. In situ artifacts recovered from Administration Building excavations	185
4.93. Burial type and count for interments recovered from the area designated for the Moundville Administration Building	186
4.94. Associated accourrements recovered from the area designated for the Moundville Administration Building	187

4.95. Burials recovered from Roadway excavation block 35+50	188
4.96. Burial type and count from Roadway excavation blocks 30+50 and 30+00	193
4.97. Burials recovered from Roadway excavation block blocks 30+50 and 30+00 missing elements	193
4.98. Burials recovered from Roadway excavation blocks 26+50–27+50	196
4.99. Burials recovered from Roadway excavation block 27+00	197
4.100. Burials recovered from Roadway excavation block 27+00	197
4.101. Burials recovered from Roadway excavation block 27+00	198
4.102. Burials recovered from Roadway excavation block 26+50	199
4.103. Hemphill style ceramics from interment area South of Mound L	201
4.104. Hemphill style ceramics from interment area South and Southwest of Mound M	206
4.105. Burial count and type from Roadway block 15+00, Pre-Structure 8	208
4.106. Associated accoutrements from Roadway block 15+00, Pre-Structure 8	209
4.107. Burial count and type from Roadway block 15+00, post Structure 8	209
4.108. Associated Accoutrements from Roadway block 15+00, post Structure 8	210
4.109. Burials recovered from Roadway excavation block 15+00	210
4.110. Burials recovered from Roadway excavation block 13+00	214
4.111. Burials recovered from Roadway excavation block 12+50	214
4.112. Burials recovered from Mound O including Lupton (1869) and Moore (1905)	216
4.113. Associated accoutrements recovered from Mound O by Moore in 1905	218
4.114. Hemphill style ceramics recovered from Mound O by Moore in 1905	219
4.115. Hemphill style ceramics recovered from the area North of N ¹	221
4.116. Burial type and count for interments recovered from Mound W	222

4.117. Associated accoutrements recovered from Mound W	223
4.118. In situ materials recovered from Mound W	225
4.119. Hemphill style ceramics recovered from Mound W area	227
4.120. Interments recovered from Roadway Block 5+00	228
4.121. Interments recovered from Roadway Block 4+00	228
4.122. Materials recovered in situ from the Museum Parking Area	228
4.123. Burial type and count for the Museum Parking Area	229
4.124. Interments missing elements from the Museum Parking Area	230
4.125. Burial count and type recovered from the area East of Mound P	235
4.126. Unassociated artifacts recovered from the area West of Mound P	235
4.127. Burial type and count from the South Pit area West of Mound P	238
4.128. Associated Accoutrements from the South Pit area West of Mound P	241
4.129. Hemphill style ceramics recovered from the area West of Mound P	242
4.130. Burial type and count for interments from West of Mound P South	243
4.131. Burial type and count for interments from West of Mound P South	243
4.132. Burial type and count for interments from the North Pit West of Mound P	245
4.133. Associated accoutrements from the North Pit west of Mound P	245
4.134. Burial type and count of interments from West of Mound P, North	247
4.135. Associated accoutrements from West of Mound P, North	247
4.136. Burial type and count for interments whose location is unknown in the area West of Mound P	249
4.137. Associated accoutrements for interments whose location is unknown in the area West of Mound P	250
4 138 Interments recovered from Roadway Block 3+00	252

4.139. Interments recovered from Roadway Block 1+00	253
4.140. Interments recovered from Roadway Block 0+50	253
4.141. Unassociated materials recovered from the areas North and Northwest of Mound W	254
4.142. Burial type and count from the area Northwest of Mound W	255
4.143. Associated accoutrements recovered from the area Northwest of Mound W	255
4.144. Burial type and count for interments recovered from the area North of Mound W	256
4.145. Associated accoutrements recovered from the area North of Mound W	257
4.146. Burial type and count for interments recovered from the area West of Mound P ¹	260
4.147. Associated accoutrements for interments recovered from West of Mound P ¹	262
4.148. Associated accoutrements for interments recovered from West of Mound P ^I	262
4.149. Hemphill style ceramics recovered from Mound Q	266
4.150. Burials recovered from roadway block 71+50	270
4.151. Burials recovered from roadway block 71+00	271
4.152. Burials recovered from roadway block 70+50	271
4.153. Burials recovered from roadway block 70+00	272
4.154. Burials recovered from roadway block 69+00	272
4.155. Burial type and count from West of Mound R 1905–1906	276
4.156. Burial type and count from West of Mound R 1905–1906	277
4.157. Interments and artifacts noted for the area Southwest of Mound R, February 1930	277

4.158. Interments and artifacts noted for the area West-Southwest of Mound R, January–March 1930	278
4.159. Unassociated materials for the area West-Southwest of Mound R, February 1930	278
4.160. Burial type and count for the area West of Mound R, December 1930	279
4.161. Unassociated materials for the area West of Mound R, December 1930	280
4.162. Associated accoutrements for the area West-Southwest of Mound R, December 1930	281
4.163. Hemphill style ceramics recovered from the area West-Southwest of Mound R	281
4.164. Burial type and count, Knoll Southwest of Mound R	282
4.165. Interments recovered from the Picnic Building Area West of Mound R	282
4.166. Hemphill style ceramics, Picnic Building area West of Mound R	283
4.167. Burial type and count, North of Mound R in 1905	287
4.168. Associated accoutrements recovered North of Mound R in 1905	288
4.169. Burial type and count, Northwest of Mound R in 1931	289
4.170. Unassociated materials Northwest of Mound R in 1931	290
4.171. Associated accoutrements, Northwest of Mound R 1931	291
4.172. Burial type and count, Northeast of Mound R in 1931	292
4.173. Unassociated materials Northeast of Mound R in 1931	292
4.174. Associated accoutrements, Northeast of Mound R in 1931	293
4.175. Hemphill style ceramics recovered from North of Mound R.	294

LIST OF FIGURES

1.1 Map of the Moundville Archaeological Site	2
1.2 Mississippian period phase sequences and chronology for the Black Warrior Valley	2
3.1 Diachronic distribution of Hemphill style ceramics	54
4.1. Excavation areas at Moundville	66
4.2. Roadway excavations North of Mound A, blocks 62+00-51+00	70
4.3. Map of Moundville showing possible Mound A and Mound B pairing, with the elevated renewal platform in green and the vision seeker in yellow	
4.4. Burial locations South of Mound D, AMNH 1932	101
4.5. Plan view of interment area East of Mound D	109
4.6. Map of Moundville showing variable social roles on the Moundville landscape with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green	135
4.7. Roadway excavation blocks 50+50-46+50 East of Mound S	137
4.8. Roadway excavation blocks 48+50 and 48+00 East of Mound S	138
4.9. Plan view of the Upper Rhodes site excavations	145
4.10. Plan view of the Rhodes site excavations	149
4.11. Roadway excavation blocks 46+00–40+50, North and Southeast of Mound G	167
4.12. Plan view of Roadway excavation blocks 43+50-44+50	168
4.13. Plan view of interment areas South and Southwest of Mound G	170
4.14. Revised plan view of interment areas South and Southwest of Mound G, highlighting possible mortuary schema of clustered linear rows	170
4.15. Roadway excavation blocks 40+00-37+50 East and South of Mound H	182
4.16. Map of Moundville showing variable social roles on the Moundville landscape	

with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green	184
4.17. Administration Building excavations	185
4.18. Plan view of Administration Building excavations	186
4.19. Roadway excavation blocks 37+00-35+00 between Mound H and I	188
4.20. Roadway excavation blocks 34+50-31+50 located south of Mound I	191
4.21. Roadway excavation blocks 31+00-28+00 South of Mound J	192
4.22. Roadway excavation blocks 30+50-30+00 South of Mound J	193
4.23. Roadway excavation blocks 27+50-22+00 southeast, east and north of Mound K	196
4.24. Roadway excavation block 27+50 Southeast of Mound K	197
4.25. Roadway excavation blocks 21+50-19+00 South of Mound L	202
4.26. Map of Moundville showing variable social roles on the Moundville landscape with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green	203
4.27. Roadway excavation blocks 18+50-15+00 North of Mound M	207
4.28. Roadway excavation block 15+00 North of Mound M	207
4.29. Roadway excavation blocks 14+50-12+00 West of Mound N	213
4.30. Roadway excavation blocks 12+50 and 13+00 West of Mound N, with the bundle cluster highlighted	214
4.31. Map of Moundville showing variable social roles on the Moundville landscape with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green	215
4.32. Roadway excavation blocks 11+50-8+00 Southwest of Mound O and excavation block N ¹	220
4.33. Excavation areas for Mound W, Roadway excavation blocks 7+50-4+00 West of Mo W, and the Museum Parking Area	
4.34. Interments recovered from Mound W	223

4.35. Excavation block associated with the Museum Parking Area	230
4.36. Area designated West of Mound P (XXI) showing the position of the trench and Mound W (XXXII)	235
4.37. Area West of Mound P	237
4.38. Area West of Mound P emphasizing interments clustered around the screen	238
4.39. South Pit in the interment area west of Mound P	239
4.40. North Pit in the interment area West of Mound P	244
4.41. Excavation areas West of Mound P (XXI), Roadway Blocks 3+50-0+00, North and Northwest of Mound W (XXXI), and West of P ¹ (XXII) highlighted	252
4.42. Area designated Northwest of Mound W	254
4.43. Area designated West of P ¹	260
4.44. Roadway excavation blocks 72+00-67+50 North of Mound Q	269
4.45. Roadway excavation blocks 71+50-70+50 north of Mound Q	270
4.46. Roadway blocks 70+00-69+00 North of Mound Q	272
4.47. Excavation areas around Mound R	276
4.48. Mound R1	284
4.49. Roadway blocks 67+00-62+00 South of Mound R	296
4.50. Map of Moundville showing variable social roles on the Moundville landscape with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green	299

INTRODUCTION

Transitioning from interpretations that emphasize hierarchical ranking and chiefly authority, emergent research at Moundville increasingly highlights the role of social memory, sacred landscapes, and corporate practice (Blitz 2007, 2016; Briggs 2016; Davis 2014; Phillips 2012; Porth 2017). This research investigates expressions of group identity and social cohesion at the Moundville Archaeological site, a large Mississippian mound center in the Black Warrior River Valley (BWRV) of west-central Alabama. The iconic mortuary program at Moundville has been continually examined for evidence of status-based social differentiation, viewed from a perspective of hierarchical political organization (Peebles 1971; 1983; Peebles and Kus 1977; Marcoux 2010; Nelson 2014; Wilson et al. 2010). My analysis, employing an ontologically based biosocial perspective, examined burial accoutrements, iconography, and demographic data across individual cemeteries. These data suggest that rather than employing a singular monolithic interment program based on status distinctions, ritual practitioners and corporate community members were collaboratively engaged in an esoteric ritual practice and scholarship that necessitated the functional transformation of the site to accommodate overlapping corporate norms and ritual needs.

The Moundville Site

The Moundville site (1Tu500) is located in the alluvial valley of the Black Warrior River in West Central Alabama. The site encompasses 75 hectares and includes 30 confirmed earthen mounds that cluster around a central plaza and served as an important political and ceremonial center in the period preceding European contact (Figure 1.1). The configuration of the site is

patterned in that mounds, generally, alternate between larger and smaller platforms that decrease in size moving from north to south (Knight 1998:47-49). The ceramic sequence constructed for the site consists of five phases, supported by radiocarbon dates (Steponaitis and Scarry 2016:6-13) (Figure 1.2).

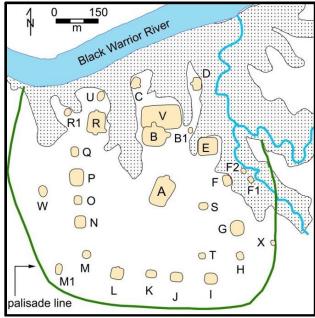


Figure 1.1. Map of the Moundville Archaeological Site (Copyright John H. Blitz 2008, used with permission).

Years Calibrated ^a	Ceramic Phase	Developmental Stage ^b	Residential and Ceremonial History ^c
A.D. 1520-1690	Moundville IV		
A.D. 1400-1520	late Moundville III	Collapse and Reorganization	
	early Moundville III		Outmigration and Necropolis
A.D. 1250-1400		Paramouncy Entrenched	
		Regional Consolidation	Consolidation and Emplacement
A.D. 1120-1250 Moundville I	Initial Centralization		

Figure 1.2. Mississippian period phase sequences and chronology for the Black Warrior Valley. a, Years Calibrated (after Steponaitis and Scarry 2016). b, Developmental Stage (after Knight and Steponaitis 1998). c, Residential and Ceremonial History (Porth 2017:Figure 1.4; after Wilson and Marcoux 2010).

The Early Moundville I phase of the site occupation marks the emergence of the Mississippian culture around A.D. 1120 and the appearance of two small mounds at the site, Mound X and Asphalt Plant Mound (Blitz 2016; Knight 2010:360; Porth 2017:9; Steponaitis and Scarry 2016:1). Early occupation at Moundville is also visible as habitation areas west of and around Mound P, north of Mound R, south of Mound E, and in the central part of the site that would become the plaza (Davis 2014:195, Figure 6.9; Knight 2010: 238; Knight and Steponaitis 1998:13). People at this time were primarily living at farmsteads or hamlets dispersed throughout the valley and increasingly turned to maize cultivation and hominy foodways (Briggs 2016; Maxham 2000). The Moundville I - Moundville II transition marks the construction of a paramount center at the site and the political consolidation of the area (Knight and Steponaitis 1998:14-15; Steponaitis and Scarry 2016:1-3).

The basic plan for the center was established in the late Moundville I phase, around A.D. 1200, which included the erection of all the major mounds around a planned plaza and the construction of a bastioned palisade which served to bound, and compact, the settlement (Knight and Steponaitis 1998:15; Vogel and Allan 1985). At the rise of the Moundville II phase, around A.D.1250, the region had become consolidated, with Moundville serving as a fortified residential center to a large, aggregated population and as the primary center for the polity (Knight and Steponaitis 1998:15). Around A.D. 1300, however, the resident population began to vacate the center, migrating to farmsteads and hamlets elsewhere in the valley. Moundville post-A.D. 1300 was a transformed ceremonial landscape, with mortuary ritual assuming a primacy that did not exist previously. In a drastic renegotiation of site functionality, Moundville metamorphosed from a fortified residence to an operating necropolis with resident ritual specialists (Knight 2016:36).

This transition in site functionality, from residence to necropolis, coincided with the abandonment of most of the southern mounds on the site, the utilization of a series of deliberately constructed cemeteries, and the adoption of a local iconography dominated by references to warfare and cosmology (Knight 2010:320-321). The Moundville III phase is marked by the end of mound building on the site and the continued occupation of only three mounds – Mounds P, B and E. The Moundville IV phase is marked by an additional decrease in site use, with mortuary ritual conducted on an ever-diminishing scale (Knight and Steponaitis 1998:19).

Theoretical Considerations

Biosocial bioarchaeology may read as a redundancy. Bioarchaeology is a specialization in the excavation and analysis of skeletal material and associated mortuary accourtements from archaeological sites. Biosocial bioarchaeology is the application of critical theories of the body, as ultimately reflective of an individual's natural and cultural environment, to the analysis and contextualization of human skeletal remains (Agarwal and Glencross 2011). The distinction is subtle but consequential. A biosocial bioarchaeology of complex societies emphasizes the biocultural adaptation of the body to the multifaceted, often overlapping, social dimensions it exists within and contextualizes that information within larger, regional, patterns of behavior (Agarwal 2016; Roksandic and Armstrong 2011; Watts 2011, 2013). Employed in mortuary analysis, biosocial bioarchaeology foundationally situates biological information pertaining to the deceased into larger analyses of spatial dimensions, material distribution, and iconography to allow for an improved recognition of social identity and shared corporate practice.

This research employs the Saxe-Binford mortuary model (Binford 1971; Saxe 1970) as a heuristic explanatory framework for the reflective relationships between the interred and their

associated mortuary accoutrements. Arthur Saxe completed a dissertation at the University of Michigan that employed materialist principles to investigate the social dimensions of mortuary practices. Critical to Saxe's work is the notion of representation in funerary rites. This perspective maintains that mortuary ritual is representative of the deceased individuals and their place in the greater social context. Lewis Binford added to this a cross-cultural investigation of mortuary practices, utilizing data drawn from the Human Relations Area Files. Interestingly, Binford chose to define social dimensions quite broadly, including cause of death and location of death in addition to the more familiar social dividers of age, sex, and affiliation (Binford 1971:18). Following Saxe, and in a representativist view, Binford postulated that more complex societies will perform more complex funerary rites and that these will reflect the social personae of the deceased.

Mortuary analyses of the last century have been dominated by these representative approaches (Sullivan and Mainfort 2010). Codified by the Saxe-Binford Model, representative approaches attempt an understanding of individual intersectional identities manifest in mortuary treatment. In mortuary analyses, as in osteological analyses, aggregate data on mortuary variables derived from the sample are used to make observations and inferences about the population. For the Mississippian period, the archaeological approach to delineating social identities generally begins with what are believed observable indices of status, followed closely by sex and age.

Addressing status specifically, Linton (1936:114) argued that status is a "collection of rights and duties" and divided status into the two primary categories of ascribed and achieved.

Ascribed status exists outside of personal ability or achievement, while achieved status is derived from competition with others. Edmonson (1958) delineated a third dimension, associational

identities, wherein an individual may be further defined by group membership including sodalities, orders, clans, and age grades. Associational identities are capable of cross-cutting achieved and ascribed identities. Linton's delineations were also critiqued by Goodenough (1965), who advocated the replacement of "status" with "social identities," asserting that this was less limited to issues of rights and responsibilities. Whereas Linton understood status to be the sum of all available social roles, Goodenough viewed the same intersectional summation as a *composite social persona*. Saxe and Binford both drew from Goodenough's work for the formulation of their own perspectives on mortuary analysis and the Saxe-Binford approach utilizes the idea of the composite social persona as advocated by Goodenough. To summarize, individuals possess an aggregate of social identities that function in different ways at different times and will be represented, to various degrees, in death as in life.

Addressing correlations in mortuary behavior between corporate social structure and landscape use, Saxe (1970:119-121) also hypothesized that groups attaching legitimation to lineal descent would dedicate discrete space for corporate mortuary use. Lynn Goldstein (1976:35-69) tested this, analyzing 30 ethnographic groups and concluding that when such a discrete space existed, it appeared to be in corporate lineal control. Her revision to Saxe's hypothesis is as follows:

The evidence supporting the hypothesis suggests that if there is a formal bounded disposal area, used <u>exclusively</u> for the dead, then the culture is probably one which has a corporate descent structure in the form of a lineal descent system. The more organized and formal the disposal area is, the more conclusive this interpretation (1976:63, emphasis in original).

Goldstein's (1976, 1980) investigation of the relationship between spatial structure and social organization at Mississippian cemeteries in the Lower Illinois River Valley highlighted the efficacy of a multidimensional analysis of spatial distribution. This approach allows for the

delineation of intra-site variability within the mortuary assemblage and the further elucidation of procedural patterns within those intra-site patterns, as social identity may be expressed, identified, and derived through landscape use (Goldstein 1976:32).

Landscapes structure and are structured by social action, they may be employed as a communicative tool, and are capable of affecting and reflecting social change (Goldstein 2010:96). At mounds sites generally, scholars have variously investigated systems of "persistent place" and "emplacement" attempting to better understand how communities tether themselves to the landscape (Littleton and Allen 2007; Rodning 2009:629; Schlanger 1992; Thompson and Pluckhahn 2012:49). Thompson and Pluckhahn (2012:50) advocate for subsets of persistent places and note just as ecological factors can influence the relative attractiveness of a location, so too can the symbolic power and history of some constructed landscapes become persistent monumental places. The creation, transformation, and maintenance of such landscapes is one of the ways social groups demarcate their social identities (Hendon 2007:308; Wilson 2010).

Persistent landscapes are also, often, sacred landscapes. Vine Deloria Jr. (2003: xv) notes, "Some sites were sacred themselves, others had been cherished by generations of people and were now part of their history and, as such, revered by them and part of their very being."

Mississippian landscapes are typically located along major rivers, with soils well suited for intensive agriculture (Smith 1978). The co-occurrence of conspicuous, collaborative terraforming and intensive maize agriculture begins with the rise of the Cahokia site and settlement at the confluence of the Mississippi, Illinois, and Missouri rivers outside the modernday city of St. Louis, Missouri. Between A.D. 1050 and 1200 the Cahokia polity grew to become the largest Native American community north of Mexico, boasting more than 100 mounds and four plazas (Alt 2006; Byers 2006; Emerson and Pauketat 2002). The proliferation of ceremonial

mound sites within the Southeastern interior during the Mississippian period, A.D. 1050-1600, circumstantially suggests a concomitant rise in ceremonial specialists practicing a ritual scholarship.

Inference on the esoteric functions and abilities of a priestly office in the Mississippian is derived primarily from ethnohistoric accounts. In his treatise on Creek religion and medicine, Swanton (1928:616) notes that among the Creek:

Just as among the beings and objects in nature there were certain which possessed or acquired exceptional supernatural powers, so there were certain men who were possessed of such power or were mediums for its expression. They were also versed in the powers possessed by other created things and hence were partly prophets or soothsayers and partly doctors, while some of them occupied official or semiofficial positions and became priests.

In the sense that they are called upon to cure the sick, the designation "doctor" is also reasonably applied. Unfortunately, the innocuity of the term fails to capture the dynamic complexity of the position. Ethnographic accounts of medicine-makers detail their involvement in a variety of activities including healing, promoting success in warfare, and the curation of sacred myths and esoteric knowledge (Knight 1986:681; Swanton 1911:80-90, 113-134, 158-181, 1928a:620). In the chapters to follow, I endeavor to contextualize the Moundville mortuary program within a larger ritual context, employing a relational ontological perspective of Native North American medicine.

Heywood (2012:143) notes, "[T]he 'ontological' turn in anthropology is premised on the notion that anthropologists are fundamentally concerned with alterity and that this is not a matter of 'culture', 'representation', 'epistemology', or 'worldview', but of being." Unfortunately, this presents fundamental problems in archaeological application, as a specialization in the reconstruction of past cultural events from a fundamentally materialist perspective. The potential benefit of a broadly applied philosophy of relational ontology in the examination of the

relationships between people, places, and things lies both in its innate emphasis on cosmogony and its ability to situate natural fundamentals (including matter, agency, space, time, and energy) within a larger indigenous framework (Alberti et al. 2011:897; Alberti and Bray 2009; Ingold 2000:140; Watts 2013). Increasingly, archaeological endeavors employing relational ontology have allowed for the study of agency in material culture, sentient ecologies, alternate realities, and other-than-human persons (Alberti and Bray 2009; Anderson 2000; Baltus and Baires 2018; Buchanan and Skousen 2015; Hill 2013; Ingold 2000; Pauketat 2013).

While seemingly incompatible, this research employs both relational ontology and a representational approach to mortuary ritual. Complex mortuary rites are fundamentally reflective of underlying cultural and ritual complexity, including aggregate social identity, social hierarchy, and social inequity. The approach used here presents a broad assessment of mortuary material culture and practice as ultimately reflective of period and group based cultural constructions that define life, death, and the respective roles of affiliated parties in this abstraction. The concomitant use of both a relational ontological perspective and representative mortuary framework maximally allows for the elucidation of cultural constructions surrounding mortuary ritual while providing a language with which to cross-culturally compare patterns of behavior.

Mortuary Studies at Moundville

Foundational research on Mississippian mortuary programs was principally centered around investigations of socio-evolutionary typologies and sociopolitical hierarchies (Autry 1983; Braun 1979; Brown 1971, 1981; Hatch 1976; Larson 1971; Milner 1984; Peebles 1971; Peebles and Kus 1977; Sullivan and Mainfort 2010:3-9). New themes in mortuary investigation focus on, among other things, agency, gender, and the social context of burial programs

(Boudreaux 2013; Emerson et al. 2016; Marcoux 2010; Pauketat 2010; Wilson 2008; Sullivan and Mainfort 2010:9-13; Williamson 2018). Our understanding of mortuary patterns at Moundville comes primarily from the work of Christopher Peebles (1973; 1974) who employed burial data derived from previous excavations from across the site and concluded that Moundville was an ascriptive ranked society. More recent work by Wilson (2008, 2016; Wilson et al. 2010) and Nelson (2014) has focused on distinct interment areas around the site as individual entities, with emphases on social memory and socio-political status respectively.

A century of excavation at Moundville is responsible for the exhumation of approximately 3,000 burials and a collection of associated objects that, even focusing on life at Moundville, is forced to keep the dead in mind. Mortuary analysis became a research focus at Moundville in the 1960s and 1970s. In 1964 Douglas McKenzie completed a dissertation that employed mortuary data from 403 burials generated by the excavations of C.B. Moore and the Alabama Museum of Natural History in a descriptive analysis that, among other things, compared Moundville to other Mississippian mortuary programs and found that they most closely resemble those in the Central Mississippi River Valley. In 1974 Christopher Peebles completed a dissertation that used Moundvillian mortuary data but placed the research emphasis on intrasite social structuring. Peebles hypothesized that if Moundville was a ranked society there would be two primary dimensions of social standing, reflecting ascribed and achieved statuses respectively, and that differences in grave goods and burial facilities would reflect this. Employing the Saxe-Binford model with data from 719 provenienced burials, Peebles used agglomerative and subdivisive numerical strategies to produce clusters of related variables, concluding that Moundville was a ranked society with quantifiable differences observed by mortuary location.

More recently, Phillips (2006) utilized the Binford-Saxe approach in her analysis of nonrandom variation in the distribution of certain classes of artifacts that are believed indicative of religious, economic, or kin-based identities. Finally, Wilson (2008; Wilson and Davis 2003; Wilson et al. 2010) focused on interment clusters associated with structures, excavated as part of a roadway mitigation project conducted by the Alabama Museum of Natural History, and found that the burials postdated the structures, concluding that subclan lineages were creating and maintaining ties to the ceremonial center. Ultimately, the advocated perspective here asserts, and reminds us, that mortuary practices reflect the status of the deceased but also, and just as significantly, the aspirations of the living (Wilson et al. 2010:89).

Research is reported here in five chapters. Chapter 2 will present an expanded concept of medicine and medicine-making. A preponderance of evidence suggests that the modern Muscogee linguistic community possess ancestral claim to the Moundville landscape (Ethridge 2008:22-31; 2010; Galloway 1995:316-320, Figure 9.1; 2002:236; Grantham 2002: 8-10; Griffin 1985; Knight 1998; O'Brien 2002:23). Manifestations of Mississippian culture in the panregional Southeast can be attributed broadly to ancestral Muskogean, Algonquin, Siouan, Caddoan, and Iroquoian communities (Hudson 1976: 23; Swanton 1922:191-215; 1946:32-33; Usner 1992:13-19). The assessment of medicine provided here focuses on ethnohistoric and ethnographic accounts from these communities. Chapter 3 will investigate death as a variable of the Moundville ceremonial landscape. Mortuary ceremonialism manifests dynamically on terraformed precolonial landscapes in the Southeastern woodlands, though ultimately in concordance with the needs, abilities, and traditions of area communities. In this chapter, mortuary ceremonialism at Moundville is compared and contrasted to other area sites that display similarities in practice. Chapter 4 will provide an intrasite analysis of interment areas at

Moundville with an emphasis on patterned approaches to mortuary practice. Information on excavations at Moundville, including investigations of the monuments, has been primarily drawn from published accounts. This data is situated diachronically and spatially in an effort to elucidate social identity and cohesion within and between burial clusters. Discrete areas are further situated within a discussion of site-wide engagement at the center. Chapter 5 will present the results and conclusions of the intra-site assessment and highlight diachronic trends in medicine and medicine-making at Moundville.

MEDICINE

Medicine is one of the last aspects, if not the final one, of aboriginal culture to disappear completely under acculturative pressure. Much of aboriginal medicine survives among the highly acculturated remnant groups of eastern United States, as Speck and his students have demonstrated (e.g., Speck, 1937; Speck et al., 1942; Tantaquidgeon, 1942). But, among such groups the esoteric, the religious and supernatural, the theoretical, and the etiological ideas of the past are largely or entirely gone, leaving a largely herbal folk medicine comparable with that of lay practitioners and country people in Europe and among Euro-Americans. (Sturtevant 1954:14)

This research investigates the construction and use of interment areas at the Moundville site from representative, spatial, and broad ontological perspectives. Seemingly faddish, the current emphasis on ontology in Southeastern archaeology (Baires 2014, 2018; Baltus and Baires 2012; Colvin and Thompson 2018; Henry 2017; Pauketat 2013; Buchanan and Skousen 2015; Waselkov and Funkhouser 2020) is perhaps better understood as the continuation of a longstanding tradition of inquiry into larger cultural-cognitive structures (Brown 1971; Howard 1968; Knight 1981,1986; Waring 1968; Waring and Holder 1945). As archaeological methods and theories change in predictable concert with questions investigated, relational ontology provides a philosophical framework to explore issues of interconnectivity and positionality between humans, animals, and the environment (cultural/supernatural/natural) from a holistic perspective.

Among the major Southeastern language families including Muskogean, Iroquoian, Siouan, and Caddoan, *medicine* is a synonym for *power* (Deloria 2006: xxiii; Hudson 1976:23). Medicine can be innate or constructed, beneficial or malicious, and exists in relative degrees. Medicine-making involves the generation or acquisition, control, and directed use of power, often through communicative action including song, instrument use, and/or dance and employing

associated paraphernalia. Unfortunately, a comprehensive review of available literature on Southeastern Indigenous medicine is outside the scope of this project. Instead, an emphasis has been placed on ethnohistoric and ethnographic research among the tribes of the Muscogee linguistic family as it offers continuity of lens. A key source in the construction of an anthropological understanding of medicine in the Native North American Southeast comes from ethnographic research with the Mikasuki Seminole Tribe in south Florida; Hitachi-speaking segments of former Lower Creek towns who settled in the Everglades during violent confrontations with colonial powers in the early 18th and 19th centuries (Sturtevant 1954:68). Relatively isolated until the 1940s, the Everglades Mikasuki were comparatively protected from the deleterious impact of legislation aimed at the suppression of traditional ritual practice and practitioners (Hagan 1966:107-108; Sturtevant 1954:70-72).

William Sturtevant conducted ethnographic field work among the Mikasuki, accruing 13 months from 1950-1952, for his dissertation *The Mikasuki Seminole: Medical Beliefs and Practices* (Sturtevant 1954:2). Defining medicine, he notes:

Mikasuki medicine as here described is broadly defined as the constellation of culture-traits centering around curing. This includes more than the practices and beliefs connected with the cause, diagnosis, and cure of sickness as such. Ceremonial and religious traits which show relationships to curing in theory or practice are described, as also are birth and death activities and beliefs involving similar items and structure. Magic has close relations with curing, in personnel as well as behavior, and is discussed as a whole. Finally, the concluding chapter deals with ethnobotany, since plant remedies are an important part of Seminole medical practice. (Sturtevant 1954:14)

In the late 1990s, Susan Stans collaborated with Mikasuki Seminole herbalist Alice Snow on the documentation of ethno-biomedicine practiced within the tribe, producing the manuscript *Healing Plants: Medicine of the Florida Seminole Indians* (Snow and Stans 2001). Anticipating critics, angry at the public dissemination of esoteric information, they begin the manuscript with a series of justifications. The first, that Snow sought to publish her knowledge because "fewer

and fewer people in the Seminole Tribe were using traditional medicine and fewer still collected or knew the songs to treat the herbs, thus providing the herbs with healing power" (Snow and Stans 2001:1). The second, that detailing tribal botanical information was no serious transgression as "the real secrets are in the songs the Indian doctor uses to empower the treatment with healing properties" (Snow and Stans 2001:1-2). Snow and Stans (2001:25) define "Indian medicine" as comprising "a minimum of five elements: the patient (*es-te-enokkv*), the doctors and collectors (*heles-hayvlke*), the herbs (*rvkvpv*), the diagnosis, and the treatment or songs." While this definition is then directly applied to ethno-biomedicine within the Mikasuki, it may also be used to appropriately articulate medicine-making as a kind of scholarship generally.

Making Medicine

Songs appear to be an essential component to medicine-making, the controlled dissemination of power, and highlight the communicative nature of the exercise. Power is procured, controlled, and conveyed through communicative action and often with assistance from powerful spirits, including ancestors and supernaturals. The songs may be inherited from another or received through induced visions. Discussing songs and chanting in medicine-making, Snow and Stans note that:

Doctors use many songs to instill power in the medicine. The songs are lengthy and most sung in Creek/Muskogee language. Apprenticeship and repetitious singing with traditional healers are the only way to maintain this cultural tradition, for songs are guarded as secret from the outside world and important in ceremony. A Seminole interested in becoming a doctor must study long and memorize the songs aurally. Audiotaping of the singing is prohibited, even when teaching someone to become a doctor. The songs do not change, but treatments can vary as to the type and number of herbs, of goods exchanged for services, and of restrictions for the patient. (Snow and Stans 2001:27)

Similarly, Swanton (1928:503) notes that among the Creek "magical songs or formulas accompanied the use of most medicines and charms, and very wonderful things were supposed to be accomplished by these" and that among the Chickasaw the doctor "sang a song each time he treated a person" (Swanton 2006:96). James Mooney, an ethnographer working among the North Carolina Cherokee in the late 19th century, published a curated selection of "sacred formulas" solicited from Eastern Band medicine-makers. He notes that of the recorded canon of some 600 songs, "medical formulas" account for about half with "love charms" and "songs and prayers used in hunting and fishing" close for second and third place, respectively (Mooney 1891:307). In his explanation of their acquisition, he notes:

On first visiting the reservation in the summer of 1887, I devoted considerable time to collecting plants used by the Cherokees for food or medicinal purposes, learning at the same time their Indian names and the particular uses to which each was applied and the mode of preparation. It soon became evident that the application of the medicine was not the whole, and in fact was rather the subordinate, part of the treatment, which was always accompanied by certain ceremonies and "words." From the workers employed at the time no definite idea could be obtained as to the character of these words. One young woman, indeed, who had some knowledge of the subject, volunteered to write the words which she used in her prescriptions, but failed to do so, owing chiefly to the opposition of the half-breed shamans, from whom she had obtained her information. (Mooney 1891:310)

Medicine-makers may be conceptualized as fundamentally belonging to one of two groups: generalists and specialists. Generalist medicine-makers craft with innocuous medicines possessing a high degree of accessibility and with an emphasis on the individual (Howard and Lena 1984:82). Generalist medicine use encompasses common-place curing medicines, such as for toothaches, and individual relationships with powers and spirits for personal use (Howard and Lena 1984:83-84; Sturtevant 1954:90-91). Specialist medicine-makers, in contrast, typically undertake dedicated training and a much wider applied practice. Specialist medicine-makers may be further divided into two groups: those who engage primarily in curing medicines, and for whom the term doctor may be reasonably applied, and esoteric specialists who principally

engage in ritual practice, including the keeping of the medicine bundles (Greenlee 1942:27, 1944:317; Sturtevant 1954:88). Mooney highlights a distinction between specialist medicine-makers in compensation for services, noting that among the Eastern Cherokee:

As a general rule the doctor makes no charge for his services, and the consideration is regarded as a free-will offering. This remark applies only to the medical practice, as the shaman always demands and receives a fixed remuneration for performing love charms, hunting ceremonials, and other conjurations of a miscellaneous character. Moreover, whenever the beads are used the patient must furnish a certain quantity of new cloth upon which to place them, and at the close of the ceremony the doctor rolls up the cloth, beads and all, and takes them away with him. The cloth thus received by the doctor for working with the beads must not be used by him, but must be sold. (Mooney 1891:338)

Doctors specialize in applied curing medicines and may, with innate abilities and dedicated training, come to hyperspecialize in specific affiliations and protections, such as from death (Sturtevant 1954:92; Swanton 1928:251,775). On the distinction between bundle-keepers and doctors among the Florida Seminole, Snow and Stans (2001:27) only refer to Sturtevant, observing that he distinguished between groups and believed only Panther Clan members could be bundle-keepers. Unfortunately, this is an inaccurate assessment of Sturtevant's reporting on the issue, as two Wind Clan members were noted to have been bundle-keepers and busk officiants while research was being conducted (Sturtevant 1954:39-41). It seems possible that some clans are more likely to be bundle-keepers in the same way some clans are more likely to occupy leadership positions (King 1976; Snow and Stans 2001:19). Snow and Stans (2001:27) do note that "Because their training is free, the doctors are expected to perform their services for free, accepting gifts rather than payment." As with the Eastern Cherokee, "gifts" to the doctor were frequently a specific quantity of cloth. An example of negotiated cloth is found in a story about Snow making an impromptu request of a doctor:

Alice asked about another treatment. She had dreamed that someone died. So that the dream wouldn't come true, she asked for some more medicine to be treated. It was a bundle of bay branches and leaves (*tolv*). She was told to burn the bundle and let the

smoke waft over her. She was not to watch television for one day. Since this treatment was an afterthought, she had not brought any black material to give the doctor. We went out to the local shops to find the material. Not finding any, she looked for a black towel or T-shirt. We found only a black T-shirt with a Chicago White Sox emblem on it, so she purchased it. She got an XL, which she thought would be the right size for the doctor. When she took the shirt back to him, he looked it over and said okay. Because it wasn't yardage, he had to approve it, but he liked the design. He took the shirt and the bay leaves to the back room to sing the songs. It took him about forty minutes to treat the leaves for bad dreams. (Snow and Stans 2001:26)

The authors (Snow and Stans 2012:24-25) also note that the Behavior Health Program, working to mitigate substance abuse in the Miccosukee community, maintained a cabinet stocked with bolts of cloth as payment for Seminole doctors who consented to treat a patient. Swanton similarly notes that among the Creek a small gift was given to encourage the doctor:

The medicine was piled into a pot at the direction of a physician, along with water, after which he blew into it through the cane four separate times after as many repetitions of a sacred formula suited to the kind of disease which he supposed the patient had contracted. He came four successive mornings, allowing the gift to remain where it had been placed until the fourth, when he took it with him. This gift might be some cloth – perhaps 10 yards of calico – money, a handkerchief, or, if the doctor were a woman, a shawl. Money has been given only in late times. (Swanton 1928:623)

In an overview of the dress, paraphernalia, and decoration of Southeastern specialist medicine-makers, Swanton (1946:477-480) notes that doctors are marked by distinctive cloaks, hairstyles, satchels for paraphernalia, and face paint. These individuals do not appear to have been associated with the level or type of ornamentation or personal effects observable or available to elite corporate kin group members.

Esoteric medicine-makers, variably referred to as bundle-keepers or shamans and who may also regularly engage as doctors, specialize in relatively arcane theories of practice including but not limited to community-based renewal and war medicines. Sturtevant summarizes his accrued information on the remarkable abilities of former esoteric practitioners and their craft:

It is difficult to differentiate sharply between Seminole magic and medicine. Many of the techniques are similar, and there is not a strict distinction in Seminole belief. The methods described above for inducing lactation (ch. 3), prevention of fever (2.6.11.), and some of those for cuts (2.6.23.) might perhaps be as aptly labelled magic as medicine. The chief criterion here, which I believe also exists to some degree in the Seminole view of these matters, is between those techniques used for curing on the one hand, and those used to produce bad health or for purposes unconnected with health, on the other.

The malevolent techniques are lumped together by the Seminole in the category półi:kî: 'sorcery.' Some of the other magical practices, chiefly connected with hunting and warfare, are known to many people, but great power in beneficial magic was the characteristic of the owă:lî:, all of whom are now dead. These categories overlap to some extent: knowledge of medicine is sufficient grounds for suspicion of sorcery, and an owă:lî: was a man with great supernatural power of all kinds, including medicine and sorcery as well as beneficial magic.

The term owă:lî:, apparently unanalyzable, is variously translated as 'wise-man,' 'magician,' or 'prophet.'...Such people had many powers. They were doctors who not only could cure serious illness (even reviving the dead), but discovered new medicines (songs and plants) by supernatural means. They acted as "prophets" in the sense of introducing ceremonial practices (apparently usually for medical reasons): the use of the ayikctanahkî: at the busk was introduced by an owă:lî: to prevent the ill effects of fighting; the taboo on eating corn before the busk was similarly begun when an owă:lî:, discovered its danger. There are stories of owă:lî:, ridding streams and bodies of water of dangerous supernatural snakes and other beings. They could predict the future, tell what was happening at distance, control the weather, and perhaps find lost objects. They protected themselves and their people during wartime by their knowledge of magic. They also knew sorcery, and some Seminole believe that there are none left now because all were killed for this reason. (Sturtevant 1954:368-370)

Similarly, Swanton (1928:620), discussing Creek medicine-makers, notes, "It appears that this order of magi were the custodians not only of medical secrets but of secrets supposed to be of value in warfare, of the sacred myths, and of various branches of learning." William Strachey, a colonist at Jamestown in 1610, writes of the ornamentation evidenced by esoteric practitioners associated with the Powhattan temple at Utamussack, in modern-day Virginia:

In this place commonly are resident seven priests, the chief differing from the rest in his ornament, whilst the inferior priests can hardly be known from the common people, save that they had not (it may be may not have) so many holes in their ears to hand their jewels at. The ornaments of the chief priest were, upon his shoulders a middle sized cloke of feathers much like the old sacrificing garment which Isodorus calls cassiola, and the burlett or attire of his head was thus made: some twelve or sixteen or more snakes'

sloughs or skynns perhaps as many; all these were tied by the tayles, so as their tayles meet in the tope of the head like a great tassel, and round about the tassel was circled a cownett (as it were) of feathers, the skynns hanging around about his head, neck, and shoulders, and in a manner covering his face. The faces of all their priests are painted so ugly as they can devise; in their hands they carry every one his rattle, for the most art as a symbol of his place and profession, some basse, some smaller. Their devotion is most in songs, which the chief priest begins and the rest follow him; sometimes he makes invocation with broken sentences, by starts and straung passions, and at every pause the rest of the priests give a short groan (William Strachey in Swanton 1946:477-478).

Finally, Adair in 1775 similarly notes that among the Chickasaw, priests were marked by distinctive adornments:

The American *Archi-magus* wears a breast-plate, made of a white conch-shell, with two holes bored in the middle of it, through which he puts the ends of an otter-skin strap, and fastens a buckhorn white button to the outside of each...The Indian wears around his temples either a wreath of swan-feathers, or a long piece of swan-skin doubled so as only the fine snowy feathers appear on each side... [and he] wears on the crown of his head, a tuft of white feathers, which they call *Yatèra*. He likewise fastens a tuft of blunted wild Turkey cock-spurs, toward the toes of the upper part of his maccasenes. (Adair 2005:131-132)

Esoteric medicine-makers appear associated with an atypical type and volume of ornamentation associated with their position both within their field and the community. In the following sections I argue that most medicine generated and utilized in Southeastern precolonial history can be classified into four general applications: curing medicine, hunting medicine, renewal medicine, and war medicine. The recognition of possible material correlates of these practices offers another avenue of exploration in assessments of death-based community ritual at Moundville.

Curing Medicine

Curing medicine is concerned with providing care for living and nonliving agents during various, and often volatile, aspects of the life cycle including birth, maturation (including weaning), trauma and disease treatment and prevention (including soul loss), and death

(including soul travel). Curing medicine is made for infants, for example, to assist in the developmental process. Alice Snow details:

Little small babies when they are born, they're not real humans, and they call that *vtelokuce*. They have to fix that, and they have to give a bath to her four times in the morning. We have to go through that *sofkee*, *afkoce hvtke*, and all that stuff. That's the way they make a human person. I did that for Jenny, Salina, all of my children. (Snow and Stands 2001:57-58)

The archaeological implications of infants as societally and physiologically not-quite-human are significant. Southeastern examples of infant death or interment as an aspect of larger ritual practice span from the Paleoindian to ethnohistoric periods (Boudreaux 2007:70; Kassabaum 2014; Knight 1981:25; McWilliams 1981:129-131; Meltzer 2009:251; Smallwood et al. 2018:186; Swanton 1911:140-158).

Ethnohistorically, specialization in curing medicine was signified by worn accoutrements, including animal pelt caps and bird feathers (Dye 2017; Swanton 1928:775). Swanton (1928:251,775) notes that Creek doctors displayed buzzard features to show proficiency in treating gunshot wounds and fox skins to highlight an ability to heal snake bites (for an overview of Southeastern ethno-biomedicine practices see Swanton 1946:782-799). Unsurprisingly, diseases, etiology, symptoms, and prescribed treatment are all found to be tribally specific (Swanton 1946:782). Among the historic Creek and Cherokee generally, however, the majority of illnesses were attributed to animals (Howard and Lena 1984:21; Sturtevant 1981b; Swanton 1946:782).

Curing medicine for disease, of natural or supernatural origin, was often accomplished by the medicine-maker through use of a tube, employed to blow healing power on or draw disease related agents from the afflicted (Howard and Lena 1984:23; Swanton 1946:782). A possible archaeological correlate of this has been proposed for bone tubes recovered from the Early

Archaic Windover cemetery in east-central Florida (Dickel 2002:107). Five bone tubes, all identified as probable pelican humeri with three bearing decoration, were recovered as accoutrements to interments, with four burials identified as female and one a subadult (Dickel 2002:105). The possible association of women with curing medicine is interesting, as Swanton remarks while some women were "true doctors," this was rare (Swanton 1946:783). On the relative paucity of female doctors, Swan and Stans (2001:29, 53, 58) also note that while some older women were doctors, powerful ritual medicine could only be handled by men.

Curing medicine is also for the souls, as among many Southeastern nations there are believed to be at least two (Swanton 1928:278). Sturtevant (1954:328) notes, "A very young baby, in the first few days after birth, may be treated to "call" his souls, which will keep him happy all his life and ensure his living to an old age." Soul loss among the living is said to occur when one of the souls becomes too enamored of a dream and leaves the body, causing sickness and necessitating medicine for its return (Snow and Stans 2001:125). It was also commonly held that at death one soul became a ghost, or animal, while the other journeyed to the land of the souls (Swanton 1946:746, 778).

Death-based curing medicine appears multipurposed in that it both protects the living from the dead and assists one of the souls of the deceased in its postmortem journey (Swanton 1928:512-513). In reference to the latter, Sturtevant notes:

The doctor sits down to the west of this pot [of medicine – prepared herbs in water] and sings a series of about twenty songs, blowing into the medicine through his medicine tube in the intervals. These songs send the ghost over the Milky Way on its way to the afterworld. (Sturtevant 1954:342)

Assistance to the dead also comes with significant material signatures: fire, for light, warmth, and the protection for the deceased; food, to quell hunger; tools, for gender, age, and ability specific aid; and personal accourtements that the deceased might attempt to recover in death,

inadvertently causing sickness (Sturtevant 1954:339-341; Swanton 1946:742). Ethnohistoric accounts of the death ceremonies of the Natchez and Calusa elite suggest some Southeastern death rituals also featured the sacrifice of lower status community and family members to act as companions to and/or a retinue for the illustrious deceased (Swanton 1911:140-158; 1922:389; 1946:763).

Significantly, Southeastern populations assert substantial agency to the dead, whose actions, quite like the living, possess the potential for unintended consequences and necessitate protection of the living. Alice Snow describes a childhood experience in which curing medicine for death was employed to protect the living:

The first time I started collecting Indian medicine was when my – I call him Grandpa [Calo Harjo, her mother's mother's brother] – died. At the time my mother collected the medicine.... She had a lot of different material to take to the doctor. She had more materials than we use today. She had ones that we use to make a dress, one with flowers on it. And one that had stripes, too. She gave the material to the medicine man with knives, and axe – whatever he asked for. Most times a hog, too....

When my grandpa Carlo Harjo died, they laid him out.... We were not supposed to watch where they were moving the body or anything. Just a few people can see that body when they move it. We didn't have caskets back then. They said they built a little ol' box and put it on top of the ground. They took the body in the woods outside of the yard. After they put the body in the woods, they had to build a little fire beside him. When they come back, we were not supposed to see those people, the ones that were burying the body. The next day they had to go back and build the fire again for him. They do it like that for four days.

We just sat there for four days, no playing around. We couldn't change our clothes. We didn't have to comb our hair. They didn't want us to look where the sun goes down. We are supposed to face east all the time. The medicine was kept by the fire on the west side. We had to drink it and face east. We were not supposed to carry the medicine away from the fire. The restrictions were the same as they are today. And they were strict, too. (Snow and Stans 2001:59-60)

Finally, curing medicine is noted as possessing a remarkably high relative level of accessibility. Males and females, adults and children can perform curing medicines, with young

children able to learn and perform innocuous procedures, such as for toothaches (Snow and Stans 2001:xiii). Subsequent hunting, renewal, and war medicines are executed by adult men.

Hunting Medicine

Hunting medicine includes the wide variety of measures used to secure aid in the acquisition of whatever culturally constitutes game. Ethnohistoric mention of medicine related to hunting comes in many forms, both pre and post hunting event (Sturtevant 1954:371, 374-375; Sturtevant 1981a; Swanton 1946:351; Waselkov 2020). Among the Cherokee, Mooney (1891:307) notes that of the recorded canon of some 600 songs, "medical formulas" account for about half with "love charms" and "songs and prayers used in hunting and fishing" close for second and third place, respectively. Mooney's bald recount of the coercive tactics employed to access this esoteric information also highlights the necessity of songs for success in hunting:

The next day Swimmer was told that if he persisted in his refusal it would be necessary to employ someone else, as it was unfair in him to furnish incomplete information when he was paid to tell all he knew. He replied that he was willing to tell anything in regard to stories and customs, but that these songs were a part of his secret knowledge and commanded a high price from the hunters, who sometimes paid as much as \$5 for a single song, "because you can't kill any bears or deer unless you sing them".

He was told that the only object in asking about the songs was to put them on record and preserve them, so that when he and the half dozen old men of the tribe were dead the world might be aware how much the Cherokees had known. This appeal to his professional pride proved effectual, and when he was told that a great many similar songs had been sent to Washington by medicine men of other tribes, he promptly declared that he knew as much as any of them, and that he would give all the information in his possession, so that others might be able to judge for themselves who knew most. The only conditions he made were that these secret matters should be heard by no one else but the interpreter, and should not be discussed when other Indians were present. (Mooney 1891:311)

A significant component of being a medicine-maker is a person's ability to harness and control the power they acquire or generate. Swanton (1946:780) notes that medicine-makers were said to obtain their power "by isolation in a cabin, fasting, invocations to the spirits, a

constant noise made with a gourd rattle, and bodily contortions." Controlling power often comes from controlling objects imbued with power. Hunting power is perhaps most commonly found encased in charms.

Swanton (1928:498) defines charms as being "rather a means of securing supernatural help than active helpers themselves." In his discussion of sabīa, small charms known among the tribes of the Creek Confederacy, Swanton notes:

According to tradition sabīa and the knowledge of how they should be used came from the Yamasee, so that in singing the song which goes with them, but is not used much on account of its sacredness, the word Yamasee continually occurs. The sabīa is kept in a little piece of buckskin along with red paint, and when a man went out hunting he opened this up, took a little red paint out on the end of a match or straw, and put it on his cheek. Then the deer did not seem wild and there was little trouble experienced in finding and shooting them. This is not done until one has gotten a little distance from camp, and the action is accompanied by song intended to make the deer approach. Another song may be sung to blind the deer after one has seen him so that you can get as near to him as possible before shooting. During the sabīa songs the charm itself is not unwrapped. (Swanton 1928:499)

Similarly, Howard and Lena (1984:88) note that sapiya, an alternate spelling of sabīa, are special stones capable of producing medicine in love, hunting, and war. The authors note:

Willie said that his uncle possesses a *sapiya* and knew the procedures and songs necessary to control it, but he refused to teach this lore to Willie. Willie, however, did manage to "catch" one of the songs associated with this powerful medicine and sang it for me...The Creeks keep their *sapiya* stones tied up in circles of white buckskin, but Willie said that the Seminoles use a container made from a small section of river cane with a small buckskin disc tied over the top.

To use the *sapiya* one places powdered Indian paint (vermilion) in the container along with the stone. The user goes out in the woods, away from other humans, and builds a small earthen mound. The container with the *sapiya* and paint is placed on top of this mound. The practitioner then sings the proper songs and carefully removes the buckskin cover from the container. Using a grass stem, he carefully removes a small amount of the paint that has been next to the magic stone and applies it at the outer corner of each eye.

The act immediately transforms the person using the paint. As Willie described it "the paint makes you 'sparkle." (Howard and Lena 1984:88-89)

Swanton (1946:528-532) notes the prodigious use of body paint within the panregional Southeast, emphasizing its employ in common and formal settings by both sexes. Paint is routinely employed as a decorative element by both sexes and in hunting, warfare, and ball games, and official occasions by men (Speck 1909:76; Swanton 1946:528).

Other common charms include minerals and plant and animal elements (hair, teeth, bones, etc.) (Swanton 1928:499-503). Bartram (Van Doren 1928:59) writes that among the Creek and Cherokee, hunters would carry the yellow fruit of the physic-nut, or Indian olive, plant with them to charm deer. Adair (2005:257) notes the distress of a Chickasaw man after stealing the "foot of a guinea-deer out of his shot pouch," as the charm was believed to aid success in hunting. Similarly, the horns of the horned snake were believed to be powerful hunting and war medicine charms (Swanton 1946:773; 200:494). Swanton provides Jackson Lewis's 1922 account of the horned snake charm:

This snake lives in water and has horns like a stag. It is not a bad snake...The old Creeks sometimes got hold of the horns of this snake, and they were broken up into very minute fragments and distributed among the hunters of the Creek Nation. These fragments are red and look like red sealing wax. A Creek hunter is always exceedingly anxious to obtain even the most minute fragments of such a horn, because it is said to give luck and success in hunting and killing deer. (Swanton 1928:494)

Though charms may be conceptualized as aids, more than active agents, other stones and minerals, including copper, can have an innate medicine that may more appropriately translate as *spirit* (Deloria 2003:89). This has manifest implications on lithic resource extraction and use in Southeastern precolonial history. On the nature of sacred stones and places, Vine Deloria Jr. remarks:

One of the most prevalent entities in the traditional Indian spiritual universe was the sacred stone. Almost every tribe had its own understanding of the important role stones play in the physical/spiritual universe. The largest stones, of course, are the mountains. They often represent the center of the universe or the center of each nation's hoop, as

Black Elk discovered, and in this sense, they provide a cosmic perspective that the people must always keep in mind. (Deloria 2006:149)

Similarly, Lame Deer, medicine-maker among the Tetonwans (Lakota) notes:

I read messages in the stones. I pay special attention to them, because I am a Yuwipi [Medicine] man and that is my work. But I am not the only one. Many Indians do this. *Inyan* – the rocks – are holy. Every man needs a stone to help him. There are two kinds of pebbles that make good medicine. One is white like ice. The other is like ordinary stone, but it makes you pick it up and recognize it by its special shape. You ask stones for aid to find things which are lost or missing. Stones can give warning of the enemy, of approaching misfortune...Tunkan, the stone spirit; Wakinyan, the thunder spirit, Takuskanska, the moving spirit; Unktehi, the water spirit – they are all *wakan*: mysterious, wonderful, incomprehensible, holy. (Lame Deer and Erdoes 2009:112-115)

Explaining how stones were traditionally collected for sweat lodge ceremonies Deloria notes:

In the old traditional way, stones to be used in a sweat lodge ceremony were gathered in a special way. When a medicine man went in search of stones, he wandered around telling the stones that he was going to hold the ceremony and asking different stones if they wished to participate. George Tinker told of helping a medicine man to gather stones and said that instead of simply taking the available stones nearby, he had to canvas the whole field to find the proper stones, a good distance from the car in which they were to be hauled. Following the ceremony, the stones were always returned to their original location, since it is their home. (Deloria 2006:153)

On the properties of copper specifically, Alanson Skinner observes that:

Among the spirit rocks, copper may be included. This is one of the strongest of strong powers, and is much desired to ward off evil spirits, for which purpose it is often kept in bundles of the secret sort. During the winter of 1911-1912 two Indians on the Menominee reservation were taken ill and a local shaman declared, after going into a trance, that they could only be cured by the use of some fragments of copper to exorcise the bad spirits. (Skinner 1914:84)

Fire feeding is also routinely featured as an important component of hunting medicine (Adair 2005:159-160; Harper 1999:93; Harvey 2017:13-14). Typically, a portion of the remains, sometimes the entirety of the available skeletal material, was put into the fire to guarantee the spirit of the animal would not be offended and game would remain in the area (Hallowell 1926:136; Swanton 1946:314,813). Mather (2020:60) speculates that this activity, depending on the perceived characteristics of the animal and context of the cooking/consumption event, also

qualifies as kind of a ritual cremation with care expressed for the spirit of the deceased. Finally, hunting medicine appears to display variable accessibility depending on scale. While individual hunters may acquire songs, charms, and respectful behaviors to promote success in the acquisition of game, only specialized ritual practitioners direct community ritual initiatives.

Renewal Medicine

Renewal medicine is curing medicine that has been grouped separately because it possesses a high level of esoteric control and is based in community-centric annual events, primarily emphasizing the purification of the ceremonial landscape and renewal of the sacred medicine bundles. Ethnographic and historic accounts of renewal ritual among Native North Americans of the southeastern woodlands focus largely on the Green Corn Dance or Busk (the latter is derived from *poskita*, "a fast") (Brown 2011:102; Sturtevant 1954:407; Swanton 1928:546). Coinciding with the harvest of early, or green, corn, the annual multiday ritual gathering is a dynamic event emphasizing purification and renewal, marking the start of a new year (Swanton 1932:176; 1946:262,264). Snow and Stans note that among the Florida Seminole:

The yearly Green Corn Dance (*eshvyvtketv*) maintains ties to traditional religion. The ceremony is central to keeping the medicine bundles and is a symbol of renewal and health for the people. The Green Corn Dance is the celebration of the ripening of corn and usually occurs in June. A week is set aside to allow participation in fasting and dancing in a remote area. During the event, men are purified through the scratching and fasting. Combs, once made of gar teeth but now made of needles, are scraped along the men's arms. The loss of blood from the scratches is symbolic of purification. Women are not scratched because they are purified monthly through menstruation.

The sacred medicine bundles handled by the *heles pocase* (medicine men) of the Panther clan are an integral part of the renewal and healing at the ceremony. It is a time for inspection of the bundles and renewal of their medicinal and protective powers. Traditional Seminole religion incorporates a belief in Hesaketvmesē, or Breathmaker, who instills the power into the medicine bundle. (Snow and Stans 2001:19-20)

Similarly, Sturtevant notes that:

The function of the busk most important to the Seminole is that it allows males to eat the new crop of corn without becoming sick; it was for this reason that the ceremony was traditionally instituted by the owă:lá:lî:, 'prophets.' The fasting, 'big gathered medicine', and scratching prepare the men for eating the new corn. . . There are of course other functions served by the busk – maintenance of the strength of the medicine bundle, the judicial and political duties of the council, and not least the exercise and renewal of the social ties which accompany the religious rationale binding together the scattered camps of the busk group into the largest structured grouping of Seminole society. (Sturtevant 1954:410-411)

Historically, the ceremony was four to eight days long, though related community events might be consolidated into ground activities prior to the ceremony (Sturtevant 1954:408; Swanton 1928:603-606;1946:771). Observing the ceremony among the Mikasuki in 1952, Sturtevant notes that:

Each day there is a (single-pole) ball game in the afternoon, with boys and young men playing against girls and young women, and a series of dances are held from dusk to about midnight. The second day centers around feasting, in preparation for the next day on which the men fast.

The ceremony reaches its climax on the third day and the following night. All men fast and stay awake from the preceding midnight until the following dawn. The medicine bundle is brought in, examined and displayed for the third day and the subsequent night. In the morning, all the men take two emetics one or more times. One of these consists of the roots of the pasî: 'button-snakeroot' (Eryngium synchaetum) in cold water, and the other bark of okibaksî:, 'water strings' (willow, Salix amphibia) in cold water. The pasî: emetic is not doctored, but the willow medicine is given potency by being sung over and blown into (with a special long blowing tube) by the presiding medicine man or his assistant. Each man drinks quite a large quantity of each medicine, and then leaves the dance area to vomit in private. The council meeting at which crimes and other important matters of the past year are discussed and settled is held in the early afternoon. At twilight, a special fire is lit with flint and steel (in former days, all the campfires were extinguished and then relit from this), and the medicine bundle contents are laid out near it. On this fire is cooked the ayikctanahki: 'gathered medicine,' also called ayikctanahkco:bi:, 'big gathered medicine,' (to distinguish it from ayikctanahko:cî:, 'little gathered medicine,' used in curing)...This medicine, also sung over and blown into, is boiled until midnight, when four ears of corn which have been roasting beside it are added, and the men drink it four times and vomit it out. The men take it also at irregular intervals during the dancing which continues all night long...The men's fast is broken with a large meal which includes corn from the new crop, eaten by men now for the first time. The participants then return to their homes. (Sturtevant 1954:408)

Fasting, singing and dancing (or contorting) are principal components of the Green Corn Ceremony, and of medicine-making generally. An ethnohistoric summation of medicine-making among the early 18th-century Natchez, provided by the Jesuit priest Pierre de Charlevoix, highlights the interconnected necessity of these components:

This nation, like others, has its medicine men; these are generally old men, who without study or any science undertake to cure all complains. They do not attempt this by simples, or by drugs; all their art consists in different juggieries; that is to say, that they dance and sing at night and stay about the sick man and smoke without ceasing, swallowing the smoke of the tobacco. These jugglers eat scarcely anything during all the time that they are engaged in the cure of the sick, but their chants and their dances are accompanied by contortions so violent that, although they are entirely naked and should naturally suffer from cold, yet they are always foaming at the mouth. They have a little basket in which they keep what they call their spirits; that is to say, small roots of different kinds, heads of owls, small parcels of the hair of fallow deer, some teeth of animals, some small stones or pebbles, and other similar trifles. It appears that to restore health to the sick, they invoke without ceasing that which they have in their basket. (Charlevoix in Swanton 1911:179)

Fasting assists in the solicitation of visions, the platform with which the esoteric elite and community members alike receive aid from "benevolent spirits" in the form of information and songs (Deloria Jr. 2006:2). Fasting is so central to medicine-making that those interested in learning medicine may also be formally trained at a "fasting school," where young men learn from, and may later act as apprentices to, skilled medicine-makers who are themselves fasting school alumni (Sturtevant 1954:93; Swanton 1928:617-619). Swanton (1928:620) notes that "those who had gone through with this training were held in high esteem, and there appears to have been no fast for persons not intending to become doctors, except at the great annual [Green Corn] ceremony."

Fasting is seen as a method of purification, commonly done in tandem with emetics, principally black drink and involving ritual scratching by gar teeth. Jackson (2003:197-198) notes that among the Yuchi fasting is "viewed as a route to, and expression of, physical and

spiritual purification...While fasting, combined with emesis and medicine taking, is among the central acts of the Green Corn Ceremony itself, it occurs in related contexts where the well-being of the community and its members is at issue (see Hudson 1976)." Discussing preparations for Arbor Dance activities, a community event held prior to the Green Corn Ceremony, Jackson (2003:198) also notes that by "fasting during such activities the men ensure that they are spiritually clean, so as both to protect the square from contamination and ensure that the powerful spiritual forces that reside there will not overpower them. Everything that relates to the square ground and its rituals is expected to be in a pure or purified state."

Historically and ethnographically, the ritual purification of the ceremonial ground was and remains a necessary component of its use. Earthen mounds are historically recorded as a ritualized byproduct of larger purification activities including the annual sweeping out of sacred fires and/or previously polluted, or compromised, earth from the adjacent ceremonial square ground (Knight 2006b:426-428; 1981:51; Swanton 1932). John Payne, recounting his experience at the Green Corn Ceremony of the Creek in 1835, notes that:

In the center of this outer square was a very high circular mound. This, it seems, was formed from the earth accumulated yearly by removing the surface of the sacred square thither. At every Green-Corn Festival, the sacred square is strewn with soil yet untrodden; the soil of the year preceding being taken away, but preserved as above explained. No stranger's foot is allowed to press the new earth of the sacred square until its consecration is complete. (Swanton 1932:177)

The result is a newly terraformed edifice that, being composed of a variety of ritualized debris, is a powerful symbol of purification and renewal (Knight 2006b:426). In an analysis of historic correlates of the Southeastern ritual tradition, Knight (2006b:424-425) notes that material and linguistic tradition among "Muskogee, Yuchi, Chickasaw, Choctaw, and Cherokee sources yields a reasonably coherent picture of mounds as symbols. Mounds possess symbolic associations with

autochthony, the underworld, birth, fertility, death, burial, the placation of spirits, emergence, purification, and supernatural protection."

Medicine bundles (or baskets) also feature centrally in ethnographic and ethnohistoric mentions of the Green Corn Ceremony. Bundles are amalgamations of powerholding charms and various accoutrements, organic and inorganic, necessary to produce curing, hunting, and war medicines. The individual aspects of a bundle composite are accrued through a combination of powerful professional skill and supernatural aid. Some items within a bundle may become so powerful that they necessitate specialized handling and include sanctions on direct contact (Sturtevant 1954:379). Discussing the medicine bundles of the Mikasuki Seminole, Sturtevant observes that:

The bundles are exceedingly powerful sacred objects. Each contains a large number of small packets of medicine, which had various traditional uses, mostly in connection with warfare. The medicines are now handled only by medicine men, and then only during the fasting period at the busks. For the rest of the year the bundles are hidden in the woods. The precise theoretical function of the bundles is difficult to determine from informants; Capron (1953: *passim*) indicates that they are palladia whose existence and proper treatment are necessary for the continuous wellbeing of the Seminole, and this description probably represents the Seminole view. Certainly, if not handled properly the bundle may injure the people who belong to the busk group centering around it. If the medicine man does not correctly perform his duties, the bundle attacks his people causing Medicine bundle sickness ...

Some of the individual medicines in the bundles were given to Seminole ancestors by various supernaturals, but tradition emphasizes the roles of two men (the "first medicine men" according to Capron [1953:164-166]) names toklỗ:cî: (of the Wind sib) and to:yǎ:kî: (of the Tiger sib). Most medicine was made by these two men, while fasting. Some items they found in the ground, or discovered when they heard the objects singing. (Sturtevant 1954:420)

Swanton similarly notes that:

The Creek Chief James Islands spoke of articles used by various towns during the celebration of the busk and held in great reverence, and he instanced large conch shells out of which the Coweta Indians took their black drink. These, he said, they had had for a long time and preserved with great care. But there is no certainty that these were really palladia. Nevertheless, there is one apparent exception, the famous copper and brass

plates preserved by the town of Tukabahchee... The plates were brought out once annually at the time of the busk and formed the principal feature in one of their dances to be described presently. (Swanton 1928:572-573)

Interestingly, two accounts from the 1917 Tukabahchee Creek Green Corn Ceremony provided observations of the two sets of plates, one renewed during the annual ceremony and recounted by General Hitchcock and one that was kept buried, too powerful to be utilized, as recounted by Creek Nation Chief Grayson. General E.A. Hitchcock, observed that:

On the same day...the sacred plates and other holy utensils are taken by persons appointed for that purpose from the places where they have been preserved, unseen by humans eyes for a twelve month, they thoroughly scour and clean them, and about one o'clock they are brought into the square. These utensils are regarded as presents from the Great Spirit. They are brought into the square with great ceremony. The persons bearing them are preceded by two men provided with cocoanut shells which they rattle continually, the men singing all the time, and they are followed by others with long reeds from the end of which white feathers stream in the wind. The whole procession dances into the square and around it four times and then passes outside and dances around another spot four times. Then they again enter the square repeating the dance in and out four times. After this the sacred pieces are delivered over to the King (Micco) and after fasting all day and all night and dancing all night...they dance the War Dance. (Swanton 1928:572)

Chief Grayson added details:

The Indians declare they were given to them from on high at a very early period in their existence as a people, and attribute to them profound sacredness. From such information as I have been able to secure respecting these curious objects it would seem that some 70 or more years ago they were much more come-at-able, in other words that the custodians were more readily induced to permit them to be seen than in later times. I find that the present custodians appear to regard them with a degree of awe that is more pronounced than in earlier periods. It is asserted that these objects have not been disturbed or removed from their present inclosure for many years because, as it was explained, the old medicine men who by their powers of magic could handle them without detrimental consequences had all passed away. It seems to be firmly believed that should they now be taken out or handled by persons untaught in the mysteries and magic of the old medicine men of the past, dire results such as sickness in inordinate degrees of virulence, fatalities in the families of the town, destructive wind storms, and various other sinister phenomena would occur. So, when one was asked why they did not take the plates out and wash and brighten them up as was early practice, the answer came promptly, 'Because there is none competent.' (Swanton 1928:509)

Renewal medicine is cooperatively generated community medicine, with power created and manipulated by the actions of both the ritual officiant(s) and larger ceremonial community. Ceremonial community members dance, sing, and fast upon a purified ceremonial landscape for the annual renewal of power in the paraphernalia responsible for the generation, control, and dissemination of medicine. The annual purification of sacred space allows ceremonial community members to cooperatively engage with the ceremonial landscape through the creation and use of a sacred geography upon which medicine renewal ceremonies and associated community-centric events are conducted.

War Medicine

War medicines are powers conferred upon an individual or community engaged in or anticipating violent conflict. These come in a remarkable variety of forms and can include skill or aid in attacking the enemy (Swanton 1946:772), imperviousness to weapons, the ability to transfigure the body into atypical dimensions or other entities, the ability to become invisible, and, perhaps critically, for protection (Mooney 1902:394; Sturtevant 1954:376-377). Le Moyne provides a description of war medicine in practice among the Timucua of northeast Florida in 1564:

The sorcerer...made ready a place in the middle of the army, and, seeing the shield which D'Ottigny's page was carrying, asked to take it. On receiving it, he laid it on the ground, and drew around it a circle, upon which he inscribed various characters and signs. Then he knelt down on the shield, and sat on his heels, so that no part of him touched the earth, and began to recite some unknown words in a low tone, and to make various gestures, as if engaged in a vehement discourse. This lasted for a quarter of an hour, when he began to assume an appearance so frightful that he was hardly like a human being; for he twisted his limbs so that the bones could be heard to snap out of place, and did many other unnatural things. After going through with all this he came back all at once to his ordinary condition, but in a very fatigued state, and with an air as if astonished; and then, stepping out of his circle, he saluted the chief, and told him the number of the enemy, and where they were intending to meet him. (Le Moyne in Swanton 1946:762)

War medicine appears to possess central components including charms/paraphernalia and trophy-taking. War medicine bundles, regularly referred to as "arks" in the ethnographic literature, are composites of both charms and smaller medicine bundles that together provide assistance in times of conflict. Adair (2005:193) notes that "Before the Indians go to WAR, they have many preparatory ceremonies of *purification* and *fasting...*" Of war charms he notes that, "The Indian ark is deemed so sacred and dangerous to be touched, either by their own sanctified warriors, or the spoiling enemy, that they durst not touch it upon any account. It is not to be meddled with by any, except the war chieftain and his waiter, under penalty of incurring great evil" (Adair 2005:195). Similarly, Reverend Cephas Washburn (1869:191-192), discussing decreased participation in annual ceremonies among the Cherokee, notes that his informant, Taka-e-tuh, attributes this to the capture of their war medicine bundle, stating "The cause of this, as he said, was the capture, by the Delawares, of their religious deposit, the interpreter called it the ark, which contained the symbols of their worship."

Swanton notes that among the Creek:

Memory of such an ark was preserved until recently among the Alabama Indians, who seemed to think there was but one in the tribe (Swanton, 1928, p.425). As a whole the Creeks appear to have had two principal war medicines, the horn of the horned snake, and bones of another mythic creature called "man-eater," but later, after white contact, "lion" (Hawkins, 1848, pp.79-80; Swanton, 1928, p.429). (Swanton 1946:695)

And, finally, among the 18th-century Natchez:

As the war chiefs always carry with them their idols, or what they call their spirits, well secured in some skins, at night they suspend them from a small pole painted red, which they erect in a slanting position, so that it may be bent to the side of the enemy. The warriors, before they go to sleep, with war club in hand, pass one after the other in a dance before these pretend spirits, at the same time uttering the fiercest threats toward the side on which are their enemies. (Swanton 1946:700).

Aspects of what may have historically been discrete war medicine bundles are ethnographically observed as components of community-maintained medicine bundles.

Sturtevant (1954:378) notes that the Seminole medicine bundles renewed in the Green Corn Ceremony "contain many objects which were magically used in warfare" and details eight specific items. The first, "a small rock... kept unwrapped inside the medicine bundle" that could transform into a protective barrier when needed (Sturtevant 1954:378). The second, the "twins plaything," a multicolored stone that could deter projectiles and was gifted to the Seminole by a supernatural Thunder (Sturtevant 1954:378). The third, a "thunder missile," kept wrapped in deer skin and only handled with the aid of buzzard bones, "was given by the thunder (tonohkahoî:) under the water to a hunter who carried back a wounded water-puma" (Sturtevant 1954:379). Interestingly, it is possible that this "water-puma" is the same "man-eater" detailed by Swanton and Hawkins as a war charm among the Creek, a creature now commonly referred to as the underwater panther. The fourth, "a silvery powder" kept wrapped in deer skin that could cause enemy soldiers to sleep (Sturtevant 1954:380). The fifth is a powder called "living medicine" that is variably described as being blood red or white and used by medicine-makers during wartime to capture the souls of the enemy soldiers (Sturtevant 1954:380). The sixth is another "silvery powder" that could "kill enemies during the war" (Sturtevant 1954:380-381). The seventh, "six or seven rattlesnake fangs...kept in a little bottle in the medicine bundle" and used to prevent fear and muscle cramps in wartime (Sturtevant 1954:381). The eighth and final war medicine, a small rattle with pellets unwrapped in the medicine bundle (Sturtevant 1954:382).

If they are properly cared for, medicine bundles provide curing, hunting, and war medicines. War trophies seem to have a relationship to war medicine and may, similarly, have been a necessary component for its proper care and/or generation. Discussing warfare among the Timucua, Swanton notes that:

Adult male enemies were killed and their heads carried off to be scalped later if there was no time to do this at once, reed knives being used for this purpose...If there was time,

they dried the scalps they had taken before their return and cut off parts of the bodies of their enemies, which they also brought home and dried... After their return, they hung the scalps and other fragments of human flesh on a row of poles and a sorcerer cursed these, holding an image in his hand which was possibly the one that had been taken on expedition. He was accompanied by three musicians, one of whom beat a flat stone, while the others used rattles. We are informed that this sort of celebration was held every time they returned from war. (Swanton 1946:693)

Lieutenant Henry Timberlake observed that the 18th-century Cherokee:

On the 10th of March, while we were again preparing for our departure, the *Death Hallow* was heard from the tope of Tommotly town-house. This was to give notice of the return of a party commanded by Willinawaw, who went to war towards the Shawnese country some time after my arrival... About eleven o'clock the Indians, almost forty in number, appeared within sight of the town; as they approached, I observed four scalps, painted red on the flesh-side, hanging on a pole, and carried in front of the line, by the second in command, while Willinawaw brought up the rear. When near the town-house, the whole march around it three times, singing the war-song, and at intervals giving the *Death Hallow*; after which, sticking the pole just by the door, for the crowd to gaze upon, they went in to relate what manner they had gathered them. (Timberlake in Swanton 1946:691-692).

Swanton (1946:695) recounts that among the Creek, "The bodies of dead enemies, besides being scalped, were cut up and the various parts were borne along homeward as was done by the Timucua. Scalps placated the spirts of the dead besides advancing the social position of the man who took them." Finally, that improperly cared for medicine can result in negative health consequences for the ceremonial community is detailed by Sturtevant:

In former days, the medicine in the medicine bundle (apparently all of it) "ate" the blood of the people the Indians killed in war. In those days the Seminole did not suffer much from this kind of pains. But now, with no warfare, the medicine bundle "eats people," by "shooting" them, "just like eat them." This can occur at any time of the year. The sufferers are the people associated with the particular bundle which causes the difficulty. If the medicine man in charge of the bundle care for his people properly the medicine will not "eat" them, but if he fails to do so, they suffer in this way. (Sturtevant 1954:215-216)

Summary

Indigenous scholarship, ethnographic and ethnohistoric accounts portray medicines as powers and spirits that can protect, aid, enhance, and transform. Medicines with a relatively high

degree of control over the knowledge surrounding them should be considered from a perspective of generated and applied scholarship. Making medicine, at the individual and esoteric level, is a communicative act that maintains structured component parts: the agent(s) for whom the medicine is made, the specialist, the necessary paraphernalia, the articulation of the problem, and the treatment of the problem with directed power. Advanced methods of communication are accrued by formal training in fasting school. Most medicines can be collapsed into one of four general categories though some, like hunting and war, will share attributes and charms (the horned snake, for example).

Native North Americans of the southeastern woodlands are not now, and were not previously, culturally homogenous. Indeed, tracking, understanding, and articulating the proliferation of change within and between archaeologically-derived culture areas is where much of our scholarship is invested (Boudreaux et al. 2020; Ethridge and Hall 2009; Sullivan and Mainfort 2010; Waselkov and Smith 2017; Wilson 2016; Worth 2017). This acknowledged, there does seem to be shared ceremonial behavior within the panregional southeast that is suggestive of a worldview foundationally rested on a similar cosmogony (Carmody and Barrier 2019; Gibson 2001:186; Hall 1997; King 2007; Knight 2006a). Shared ceremonial ritual behavior is perhaps most archaeologically visible in the form of traded materials and patterned approaches to landscape modification that reflect wider patterns of an applied esoteric scholarship.

At the height of its prominence, the Moundville site was a community-based multimound ceremonial center occupied by a ritual elite specializing in esoteric medicine (Knight 2016:36; Steponaitis and Knight 1998). Approaching death ritual at the site from a perspective of relational ontology allows for an articulation of mortuary behavior that situates it within a larger suite of related ceremonial practices. Subsequent chapters will detail the creation and use of the Moundville landscape, emphasizing possible medicine expression and mortuary ritual from diachronic and panregional perspectives and the delineation of interment areas around the site, providing a biosocial intrasite analysis of mortuary activity at the center.

MEDICINE, DEATH, AND THE CEREMONIAL LANDSCAPE

This research uses an intrasite assessment of the Moundville mortuary program, from ontological and representational perspectives, to investigate group identity and social cohesion at the ceremonial center. Ceremonial centers of the Eastern Woodlands may be generally understood as a dynamic reflection of collaborative practice among affiliated corporate and ritual communities. Mortuary activity at these sites is similarly representative of community and cohesion, with ritual and corporate-kin leadership dictating the timing, scale, and placement of ritual upon the ceremonial landscape. This chapter investigates the creation and use of the Moundville landscape, emphasizing possible medicine expression and mortuary ritual from diachronic and panregional perspectives. Comparative examples of landscape use, possible medicine expression, and mortuary ritual expression are drawn from the Lubbub Creek Archaeological Locality in the central Tombigbee River Valley, Winterville Mounds in the Lower Mississippi River Valley, Cahokia Mounds in the American Bottom, the Mound Bottom site in the Tennessee-Cumberland, and the Upper and Middle Nodena sites in the Lower Mississippi River Valley.

Moundville is located on a flood-free terrace, situated within an alluvial valley capable of sustaining intensive maize agriculture, and proximal (30 km south) to the Upper Pottsville Formation quarry source of grey micaceous sandstone utilized in the creation of the stone medicine palettes associated with the center (Davis 2016:236; Knight 2010:2; Steponaitis 2016; Whitney et al. 2002:228). Mortuary ritual at Moundville manifests in a manner somewhat atypical for large Mississippian ceremonial centers in that the site is dominated by single primary

extended interments, arranged in off-mound kin-based corporate groups, situated atop previous habitation areas (Wilson 2010; Wilson et al. 2010). Further, this prolific mortuary activity transformed the ceremonial center into a remarkable necropolis *after* the initial mound-and-plaza layout had been enacted and suggests that profuse mortuary ritual was not considered a necessary aspect of early site use or construction (Knight and Steponaitis 1998:17-21).

Maize

Early Moundville I phase (A.D. 1120-1200) pre-plaza settlement on the terrace coincided with the adoption of maize in the valley as a contributor to local subsistence (Jackson et al. 2016; Steponaitis and Scarry 2016:1; VanDerwarker et al. 2017:49-51). The impressive site plan known today was established a century later, by a residential community substantially reliant on maize and from within the safety of a bastioned palisade. Maize has long been recognized as an aspect of the decision by local communities to adopt Mississippian ceremonial practice (Phillips et al. 1951:453; Waring and Holder 1945:30). Part of the mystique of maize, however, has been working to understand the disconnect between its intensive adoption in the Mississippian period and its many-centuries-earlier introduction (Fritz 1990; Fritz and Kidder 1993; Scarry 1993; VanDerwarker et al. 2017). Research by Scarry (1993:90) on the timing and intensification of maize within the Eastern Woodlands has proposed that cultural constraints associated with the plant account for the considerable delay between its introduction as a controlled ritual substance and adoption as an intensive agricultural resource. Mary Simon (2014), working on Late Woodland contexts in the American Bottom and Illinois Valley, maintains that maize was not a primary component of area Late Woodland subsistence economies and notes that "Late Woodland people, without a long tradition of growing and relying on [maize], would not have viewed maize as the 'corn-mother,' unless that concept arrived with the plant." This possibility is worth considering. Dissertation research by Briggs (2015, 2016) investigating the advent and spread of the hominy foodway in the Southeast has argued that maize agriculture, the Mississippian standard jar, and the process of nixtamalization were aspects of a Mississippian period shared civil foodway. It is possible that additional aspects of this intensive maize constellation (the plant, including how to grow, process, and prepare it) also included the esoteric medicine necessary to grow maize intensively and a ceremonial landscape appropriate for the ritual work.

Maize underwent a period of adoption at Moundville: small-scale introduction in the Late Woodland (A.D. 1020-1120), a phase of relative intensification in the early Moundville I phase (A.D. 1120-1200), and an increase in intensity during the Moundville I-II phase transition (A.D. 1200-1300) (Jackson et al. 2016:194; Schoeninger and Schurr 1998; VanDerwarker et al. 2017:50). The gradation in intensity of maize adoption at Moundville is in contrast to its apparent rapid proliferation at nearby Lubbub Creek, a single-mound ceremonial center located within the central Tombigbee River Valley in west-central Alabama. The concurrence of intensive maize and dedicated renewal ritual in the Tombigbee River Valley also coincides with a marked shift in ceremonial landscape use and mortuary ritual practice.

The Lubbub Creek Archaeological Locality is a large, multi-component site located within a horseshoe bend along the Tombigbee River in Pickens County, Alabama (Blitz 1993; Cole 1983:10). Flora recovered from Early Mississippian, Summerville I phase (A.D. 1050-1200), components at Lubbub Creek highlight a dramatic increase in maize production at the expense of hickory nut and acorn collection (Blitz 1993:42; Caddell 1983:270; Jackson et al. 2016; Jenkins and Krause 1986:76-77). Concurrently, the mound at Lubbub Creek appears to have functioned as part of a crafted ceremonial precinct for renewal ritual (Blitz 1993:74-82, 84).

Dubbed Summerville Mound, the multi-stage edifice retained evidence of "costume and ritual paraphernalia" and ritualized feasting (Blitz 1993:96). A dedicatory infant skull, recovered from an architectural feature associated with the pre-mound surface, was the only instance of human remains in direct association with the mound area (Blitz 1993:88). The early Mississippian pre-mound structures were found to retain elevated platforms that Blitz (1993:88) speculates may have served as altars, possibly for a sacred fire, commonly associated with renewal ceremonialism, and the bundled bones of curated ancestors, a common mortuary tradition of the preceding Woodland period in the area (Jenkins and Krause 1986).

Middle Woodland (A.D. 100-600) mortuary ritual in the central Tombigbee River Valley is a regional variant of the Hopewell Mortuary Complex, heavily invested in mortuary monuments, body processing, and secondary and multiple interments (Brown 2010:31; Jenkins 1979; Jenkins and Krause 1986:58-60). The concomitant association of Middle Woodland mortuary complexes with evidence of community congregation and feasting suggests some events on these landscapes were functionally concerned with a death-centered renewal ritual (Blitz 1993:72; Giles 2010; Hall 1997; Knight 2001:328; Pearson 1999:25; Seeman 1979:45-46; Swanton 1931). Similarly, the centrality placed upon death ritual at these landscapes, and within period trade networks, suggests it was viewed as a necessary component in the use and construction of the ceremonial space. It is possible that participant Middle Woodland communities constructed a ritual landscape to deliberately emphasize the power and importance of the ancestors, potentially conceived as active and benevolent agents, through mortuary monumentality. Further, it is possible that the Hopewell Mortuary Complex represents the rise of an esoteric medicine-making capable of generating and manipulating power for renewal through the collaborative participation of both the living and the dead.

By the Late Woodland, as earlier panregional trade networks faded, death ceremonialism in the Tombigbee River Valley underwent a substantial shift from mound-based mortuary ritual reliant on processed and curated remains to individual fleshed interments, initially in round and oval shaped pits that were later replaced with rectangular grave slots (Blitz 1993:89,101-103; Jenkins and Krause 1986:80). Summerville Mound appears to have developed as part of a larger ceremonial precinct invested in a renewal ritual that did not view death ceremonialism as a requisite variable in site use or construction; burials at this time were, instead, relegated to dedicated off-mound areas dominated by single primary extended supine interments (Jenkins and Krause 1986:97). It seems likely that esoteric medicine-making in precolonial history possessed different foundational theories of practice at different times, including what constituted an appropriate landscape for ritual work.

Ceremonial Centers

The most distinctive manifestation of Mississippian ceremonialism in west-central Alabama is the Moundville site. The symmetry of the landscape is striking, with the plazaperiphery mounds arranged around a constructed central space in a manner designed to reinforce relative social positions with an accentuation on duality (Knight 2010, 1998:47; Peebles 1971:82). The Moundville plaza is a massive continuous landform, one of the largest in the eastern woodlands, as calculated by Lacquement (2009:50-51). Similarly, Lacquement (2020:7) has observed that the chronology of the plaza construction, dating to the Late Moundville I – Early Moundville II transition (A.D.1200-1300), "indicates that the physical modifications were envisioned and completed before many of the mounds were constructed or had reached their final form." Like Summerville Mound, Moundville's great plaza-periphery earthworks were not burial mounds (Knight 2010:3). Of the 21 plaza-periphery mounds, only eight have been found

to contain evidence of burials: Mounds V, C, D, F, H, O, P and Q (Lacquement 2009:50-51; Peebles 1971:81; Porth 2017:350). Of these, only Mounds C and O have interments that seem to predate A.D. 1300. Between A.D. 1300-1350 the functionality of the Moundville site changed completely (Knight 2010:362). Gone were the residents, residential complexes, and the palisade as former habitation areas were transformed into corporate cemeteries with a shift in site use from a fortified residential-ceremonial landscape to a necropolis with a representational art style called Hemphill (Knight 2010:362; Phillips 2012, 2016; Scarry and Steponaitis 2016; Wilson 2008, 2016; Wilson et al. 2010).

The layout of Moundville's plaza-and-mound complex is markedly similar to the Winterville site (A.D. 1200-1500), centrally located in the Yazoo Basin of the Lower Mississippi River Valley (Jackson and Kowalski 2015:1; Knight 2016:26; Moore 1908:595). The two sites share a flair for symmetry and, initially, a similarly diminished view of the dead as a necessary variable in site use or construction. C.B. Moore visited Winterville in 1907, after his second excursion at Moundville, but came away sorely disappointed (Moore 1908:600). Moore excavated 146 "trial-holes" across the site including all 15 mounds and nine off-mound areas (Moore 1908:598-599). To his consternation, only four total instances of interments were encountered in three mounds: Mound D produced both a badly decayed isolated skull and collection of cranial fragments; Mound J possessed the adult skeleton of an extended primary interment; and a "much-decayed skeleton of an infant" was recorded two feet below the summit surface of Mound L (Moore 1908:599). Excavations by Jeffrey P. Brain in the late 1960s tested nine mounds and several off-mound areas, ultimately recovering 16 individuals "from the upper levels of Mound B" (Brain 1989:64). The burials were deposited in two separate layers: an upper with six individuals, comprised of three bundled and three extended interments, and a lower with

10 individuals, comprised of two isolated skulls, one bundled and seven extended interments (Brain 1989:66). None of the bundles contained accompanying mortuary items. Interestingly, seven of the eight individuals found with accourrements were from the earlier, lower, layer (Brain 1989:66).

Middle Woodland mortuary ritual in the Lower Mississippi Valley manifests as an area expression of the Hopewell Mortuary Complex called Marksville Culture (Kassabaum 2019:211-216; Toth 1988:29-73). Changes in the Late and Terminal Woodland Periods are appreciable, with a new ceremonial layout of mounds arranged around a dedicated and central gathering space gaining considerable prominence in the region (Barrier and Kassabaum 2018:175; Kassabaum 2019:216-217). Located in the lower portion of the Lower Mississippi Valley, Coles Creek period (A.D. 700-1200) mound sites typically have three mounds (some have more), and often a midden ring, around a leveled centralized space deliberately devoid of debris (Kassabaum 2014:13; 2019:227; Kidder 2002:87; 2004:527). Investigating Coles Creek period landscape modification at the Raffman site (A.D. 700-1000), a multi-mound and plaza center in northeast Louisiana, Kidder (2004) observed that the plaza's construction occurred prior to that of the mounds. Emphasizing the preplanned and deliberate nature of the plaza as a landscape feature, Kidder (2004:528) notes that "here the plaza was purposefully constructed in a manner that suggests the plaza defined the architecture of the mounds, not the opposite." Notably, the practice of open gathering places as a component of terraformed landscapes is observed in the Lower South from the Middle Archaic to European contact (Barrier and Kassabaum 2018:171-172; Kassabaum 2018:222-223). It is possible that a revitalized theory of landscape practice, emphasizing the creation of purified and curated public ceremonial space, developed during the Late Woodland period and that an aspect of site use was the facilitation of a purification-based

renewal ritual (Barrier and Kassabaum 2018; Kidder 2004:529; Knight 1989:283-284; 2001; Lacquement 2020).

Coles Creek mounds containing evidence of mortuary ceremonialism do not appear to be mortuary monuments in the Hopewellian sense, but rather manifest as entities associated with purification-based landscape practices that contain human interments as an aspect of the enacted cycle of mound use. That Coles Creek ritual landscapes did not emphasize death ceremony in the same manner as Middle Woodland predecessors is highlighted by the paucity of mortuary information available for period sites (Kassabaum 2011:215; Kidder 2002:87). Mortuary ritual at Coles Creek mound centers appears largely restricted to the mounds themselves, is variable with respect to body positioning and processing but typically manifests without accoutrements, and is often found in association with the termination of substructural platform mound stages (Kassabaum 2011:216; Kidder 2002:86-87; Williams and Brain 1983:45, 54-56). Mortuary ceremonialism was not the primary emphasis of Coles Creek landscapes – it was the construction, use, and maintenance of the central ceremonial gathering space.

Though the ceremonial landscape most associated with Mississippian ritual activities possess clear Lower Valley antecedents, Cahokia is generally recognized as the earliest major Mississippian period ceremonial center. The mound complex at early Cahokia is quite different from what is generally observed in the Lower Mississippi, Tombigbee, or Black Warrior river valleys in that it was a mortuary-centered landscape concurrently engaged in the creation and maintenance of open and uncompromised ceremonial space in the form of a dedicated, and debris-free, plaza. Dissertation research by Baires (2014) examined the role of mortuary practice at early Cahokia in the transformation of the natural and built environment. Notably, Baires (2014) concluded that the construction of Cahokia's mortuary mounds, including Mound 72,

Wilson Mound, the Rattlesnake Mound, Mound 49, and the Rattlesnake Causeway, connecting the Rattlesnake Mound to the greater Cahokia precinct, began around A.D. 1050 with the genesis of the site. The greater Cahokia precinct, including the Grand Plaza and Monk's Mound, also date to this initial proliferation of development (A.D.1050-1100) in the Lohmann phase (Alt and Pauketat 2017:56; Pauketat 2004:77). Investigating the formation of the Grand Plaza, Dalan (1997:96) notes that the northern section was stripped for earth moving, presumably for the construction of Monk's Mound, but was shortly thereafter re-filled with an apparent intent to create a debris-free and level surface. The constructed Cahokian landscape is also one emphasizing dualism, with an "asymmetrical symmetry," noted by Kelly (1997:142-145) and a site plan generally reminiscent of the mound centers of the Lower Mississippi River Valley noted by Knight (1997:231).

Mississippian Esoteric Medicines for Renewal and War

Early, uniquely Cahokian, mortuary mounds are distinct in their appearance as elevated linear ridgetops (Baires 2014:97; Pauketat 2004:75). Ridge-top Mound 72, located south of the greater precinct, represents one of the initial foundational rituals at the site and may highlight the emergence of an emphasis on warfare and defense at the center in the 12th century (Brown and Dye 2007:281; Emerson et al. 2016:421; Fowler et al. 1999). Beginning (pre-A.D. 1000) with large set posts and an associated charnel house, the mound is a culmination of several, roughly linearly arranged and particularly dynamic, interment areas with a final cap subsuming the different submound groups into a single ridge-top edifice (Emerson et al. 2016:407). The initial mortuary performance seems to belong to deposit 72Sub1, located in the southeast section of the northwest/southeast oriented mound (Baires 2014:126). A recent reanalysis by Emerson (et al. 2016:416) of 72Sub1's famed "Beaded Burial" (F101) found that the submound mortuary

chamber featured a dozen individuals and several bundles of female and male pairs; a significant departure from earlier analyses that delineated a central interment of two males with four sacrificial retainers (Rose 1999). Notably, Emerson's (et al. 2016) reconstruction of the depositional sequence, using Thompson's (2013) reanalysis of the osteological material, observed that the central interment consisted of a prepared platform covered in shell beads, upon which a primary extended supine young adult female (Burial 13) was placed, with additional shell covering her legs and a primary extended supine young adult male (Burial 14) situated atop her right side. Finally, a bundled female/male (Burial 13/14) pair were deposited along Burial 14's right side and a layer of strung and loose shell was situated atop the bundle completing the interment. As Emerson (et al. 2016:420) notes "either deliberately or fortuitously," this last deposition of shell beads, atop the bundled pair, lends the shell-laden tapestry the general shape of a large bird. Noting the preponderance of female/male pairs, Emerson (et al. 2016) concludes that 72Sub1 is likely symbolic of creation, fertility, and renewal (see also Romain 2018).

Mound 72Sub2, located on the northwest end of the mound area, is believed to have been constructed more or less concurrently with 72Sub1 (around A.D. 1050) and includes three mass graves (F205, F214, and F237) comprised of local young adult females, with no evidence of trauma and relative care taken in their positioning (Alt and Pauketat 2007:239; Fowler et al. 1999; Rose 1999; Thompson et al. 2015:342-343). The mass interments, though lacking an observable cause of death, are thought to constitute a mass sacrifice of explicitly childbearingage females (Fowler et al. 1999; Rose 1999). Hall (1997, 2000) has argued these mass female interments are specifically related to early maize renewal ceremonialism and may constitute a reenactment of the Corn Mother story (Alt and Pauketat 2007:239). An analysis of carbon isotope signatures by Ambrose and colleagues (2003) observed that these individuals consumed

a heavily maize-laden diet and relatively high levels of non-specific pathologies suggestive of nutritional stress that appear reflective of intracommunity status differences. 72Sub3 appears to have been constructed after the first two submounds and contained a fourth mass grave (F105) of 53 local young adult females, positioned similarly to those in 72Sub2 and again lacking evidence of violence (Koziol 2010:166; Rose 1999).

Finally, around A.D. 1100, and prior to construction of the final cap, a pit (F229) was dug into the ground surface southwest of 72Sub3 and lined with what appear to be violently sacrificed war captives (F229 lower), upon which a second layer of elite personages were arranged in litters (F229 upper) (Rose 1999; Thompson et al. 2015:353). Individuals were found to retain imbedded projectiles, display evidence of dismemberment, and include at least one who is suspected of having been interred alive (Fowler et al. 1999; Hall 2000; Rose 1999). It is possible that this is an example of a war medicine necessitating both violent death and dismemberment, situated within a larger framework of renewal.

Emerson (1997, 2009; Emerson et al. 2016:421) observes a change between early Cahokian symbolic expression centered on fertility and life renewal and later dominance of male mythic figures. Similarly, Brown (2004) notes a consolidation of conflict motifs within the Stirling phase (A.D. 1100-1200) that manifests after A.D. 1200 as the Classic Braden style, within which decapitation and scalping were prominent themes that appear to corelate with trophy taking as an aspect of violent conflict (Brown 2004; 2007; Brown and Dye 2007:281; Dye 2007; 2009:150; Jacobi 2007). Discussing the scalp motif specifically, Brown (2007:50; Brown and Dye 2007:281) notes that the Braden style at Cahokia seems to have inspired similar imagery at Spiro, Etowah, and Moundville. It is possible that a Cahokian esoteric elite, specializing in relatively arcane theories of medicine-making, developed or revitalized renewal

and war medicines that used the dead as a source of power. Similarly, it is possible that this Cahokian death-centered war medicine necessitated renewal, violence, and dismemberment and that this is represented iconographically as severed limbs, scalps, weaponry, warriors, and captives on variable media.

Divergent Theories of Practice

The Cahokian landscape appears to have facilitated death-based and purification-based renewal ritual, emphasizing fertility and war medicine. Death ritual at Cahokia manifests as a rather elaborate mortuary performance collaboratively constructed by and for ritual and corporate-kin elite leadership (Brown 2006). In stark contrast to Cahokia, death ritual arrived at Moundville after the initial construction of the site, around A.D.1300. The mortuary program at Moundville was both prolific (>3,000) and controlled with the vast majority of burials (>90%) being primary extended supine interments in seemingly corporate controlled off-mound areas, suggesting that death ritual was executed under a polity-wide agreed upon set of rules in a directed effort to host burial rites for affiliated communities in the valley (Peebles 1974:85).

A very similar off-mound mortuary patterning of multiple corporate cemeteries at a multi-mound-and-plaza center following site-level ideas about primary extended supine interments is seen at the Mound Bottom site in the Nashville Basin of Middle Tennessee. The Mound Bottom site is a multi-mound-and-plaza center located within a meander loop of the Harpeth River, approximately 20 miles west of the modern-day city of Nashville. Mound Bottom has 12 mounds, of 14 total, surrounding a central plaza and evidence that the area was, at one point in its use-life (A.D.1100 – 1300), protected by a palisade (Autry 1983:47; Deter-Wolf et al. 2018:113; Moore and Smith 2009:89; O'Brien and Kuttruff 2012). Like Moundville and Winterville, the Mound Bottom plaza-periphery monuments were not burial mounds (Moore and

Smith 2009:93; O'Brien and Kuttruff 2012). Autry (1983:46) distinguishes between burial and cemetery mounds in a manner that will also be utilized in this research, noting that "burial mounds differ from cemetery mounds in that the former contain specialized mortuary structures, commonly known as charnel houses, which function as staging areas in a more elaborate mortuary ritual." Cemetery mounds, in contrast, represent gradual and discrete periods of use as the interment location expands vertically, in tiers (Moore and Smith 2009:208).

All interments recovered from Mound Bottom (149) were located in discrete off-mound areas, four cemeteries and one cemetery mound, and were overwhelmingly primary extended interments without lasting mortuary effects (Autry 1983:99-100). In his dissertation research on mortuary ritual at the site, Autry (1983:101) found that those units located nearest to the "temple mound precinct" were better organized, more diverse, and more frequently contained mortuary accoutrements (often of nonlocal origin). Cemeteries to the east of the plaza were found to be more uniform, possessing only a few goods of local origin and utilitarian purpose (Autry 1983:101). One burial of note was a mature male with a pattern of dental modification, notching of the central incisors that has been similarly observed at the Cahokia site, who was interred with four copper-coated artifacts (Autry 1983:76,84,108). In stark contrast to Moundville, no burials at Mound Bottom were observed within or associated with former habitation areas (Autry 1983:100).

Like Moundville, Mound Bottom may have operated under the auspices of an esoteric cohort directing the interment of burials in corporate collective spaces under an agreed upon plan for single extended supine interments of the recently deceased. These mortuary attributes make the Mound Bottom site somewhat anomalous among Middle Cumberland mound centers where charnel structures and burial mounds for the curated dead are generally thought to predominate

(Autry 1983:119,122; Smith 1992:247). Middle Cumberland mound sites also typically lack the austerity of Mound Bottom's layout, instead generally manifesting as a somewhat haphazard collection of earthworks with a dedicated clearing (Moore and Smith 2009). Autry (1983:119) notes that the site bearing the most similarity to Mound Bottom in the Middle Cumberland Region is the Link Farm site, famous for the Duck River Cache of 46 Dover chert objects (Moore and Smith 2009:96).

Mortuary ritual in the Middle Cumberland also differs from Moundville in three noteworthy ways. First, the prolific frequency of human representations, often occurring in the form of hooded bottles, effigies, and rattles of pottery that occur in mortuary contexts in Middle Tennessee (Moore and Smith 2009; Sharp et al. 2011; Smith and Miller 2009:165). Human representations of any kind at Moundville are relatively rare (Steponaitis and Knight 2004:180). The second is that while shell ritual items are common in the Middle Cumberland, copper is relatively rare (Moore and Smith 2009). The converse of this is true for Moundville, with copper being intensively controlled but notable at the site while worked shell, outside of beads, is unusual (Phillips 2016:100,116; Steponaitis and Knight 2004:178). Of the eight shell gorgets recovered at Moundville, half possess stylistic elements that are clearly non-local with noticeable relationships to both the Tombigbee River Valley and the Middle Cumberland (Brain and Phillips 1996:301; Moore 1907:396-398; Knight and Steponaitis 2011:232-235; Steponaitis and Knight 2004:178). Finally, Middle Cumberland ceramics infrequently display incised or engraved decorative styles on the vessel body (Moore and Smith 2009: 211). At Moundville, decorative engravings on ceramic vessels form a primary component and genre of the regional Hemphill art style (A.D.1325-1450) (Phillips 2012:100; Steponaitis 1983:318).

Esoteric Representational Art

Originally named for the ceramic category Moundville Engraved, *var. Hemphill*,

Hemphill style representational designs are associated with the necropolis phase of site use and are found to predominate on ceramics and stone, including copper (Knight and Steponaitis 2011; Phillips 2012:24, 2016). Ceramic vessels bearing Hemphill designs are somewhat uniformly bottles and bowls, in descending frequency (Phillips 2016:100). Iconographic analysis of Hemphill ceramic design has identified 17 themes, five of which are considered primary including: winged serpent, trophy, center symbols and bands, crested bird, and raptor (Knight and Steponaitis 2011; Phillips 2012:77, 2016:100-101). Hemphill style ceramics appear to be a site-wide aspect of death ritual at Moundville, with no observed control over thematic distribution. However, the interment areas north of Mound R, south of Mound D, and east of Mound E have a much greater frequency of *variety Hemphill* ceramics relative to the rest of the site (Figure 3.1).

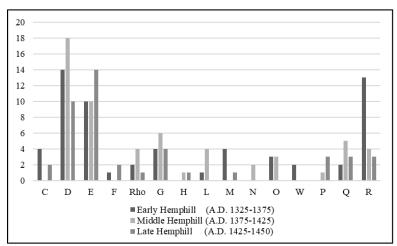


Figure 3.1. Diachronic distribution of Hemphill style ceramics (data derived from Phillips 2012); x-axis displays plaza periphery mounds, y-axis displays number of *variety Hemphill* ceramics analyzed by Phillips.

Hemphill vessels and fragments tend to display relatively high use-wear, with sherd distribution from mound flank and summit excavations further indicating these vessels were regularly used

and broken (Phillips 2012:92). Finally, Hemphill style pottery most commonly occurs with other ceramic vessels, shell beads, and copper-clad wooden ear disks (Phillips 2016:113). These items, including vessels with Hemphill style designs, may be understood from a representational perspective as a form of publicly accessible but still relatively elite indicators of status (Steponaitis and Knight 2004:179).

Ethnographic and ethnohistoric literature portrays death and the dead as dangerous to the living with mortuary ritual and death-based curing medicine acting as an interface, providing a means to buffer the danger to both parties. Discussing the dangers of the recently deceased among the Creek, Swanton notes that:

Another dangerous source of disease was a dead body. This disease was called ikan odjalgi, which means "land owners," as the dead were called. Certain maleficent influences were believed to emanate from a dead body even after it was laid in the ground, and persons in the vicinity were subject to aches and pains about the joints of the legs, and in other places. The ghost of the dead man was supposed to be the efficient cause of this. (Swanton 1928:651-652)

Interestingly, aches and pains of the joints are also a symptom of medicine bundle sickness as reported by Sturtevant (1954:216). In an assessment of Lower Mississippi Valley mortuary vessels for possible connections to Mississippian religious sodalities, Dye (2018:33) notes that "[A] critical component of Mississippian religious sodality rituals includes the manufacture of distinctive ceramic vessels for preparing, serving, and consuming sacred 'medicines' that were central to religious sodalities, requiring of its practitioners a state of purification" (see also Dye 2020). Similarly, dissertation research by Phillips (2012:96-97, 101) has proposed that the thematic diversity and diversity in subject matter of Hemphill style ceramics may be reflective of associational social categories, such as sodality or medicine society membership, at Moundville. It is possible that the water-bottles and bowls that somewhat uniformly host Hemphill engraved art may be specialized vessels created to contain medicines, with thematic diversity reflective of

membership and/or rank within an associative social order (Phillips 2012:100). As inclusions in mortuary ritual these vessels may have contained specifically death-based curing medicines, assisting some in their transition to death while concomitantly protecting those inhabiting the site from the dangers of both proximity to the dead and the volume of practice (Phillips 2016:100). Similarly, it is possible that the proliferation of death ritual at Moundville was both a source and testament of power by esoteric residents at the center.

As a decorative ceramic style, regional art at Moundville has early ties to both the Central Mississippi River Valley and the Northern Gulf Coast (Phillips 2012:124). The Central Mississippi River Valley also shares similarities in manifestations of death ritual with Moundville, particularly the sites of Middle Nodena (A.D. 1350-1400) and Upper Nodena (A.D. 1400-1550), located in northeast Arkansas (Mainfort and Fisher-Carroll 2010:128). Subjected to years of intensive cultivation, if Middle Nodena once had mounds they are no longer readily apparent (Mainfort and Fisher-Carroll 2010:130). The Upper Nodena site has two recorded mounds and speculation there may have once been as many as 17 (Fisher-Carroll and Mainfort 2000:107).

The mortuary populations at the Nodena sites are vast, with over 2,000 burials identified, the vast majority (>90%) being primary extended supine interments in what appear to be corporate cemeteries (Mainfort and Fisher-Carroll 2010:134; Morse 1990:75; Powell 1989:99). As with Moundville, Nodena burials are regularly located in former residential areas (Mainfort et al. 2007; Powell 1990:99). The Nodena sites, particularly Middle Nodena, are also well known for their relative proliferation of mortuary vessels (Mainfort and Fisher-Carroll 2010:135-137). Unfortunately, the Middle and Upper Nodena sites lack the same degree of sustained investigative inquiry as Moundville and our ability to make appropriate site-level comparisons is

consequently diminished (Mainfort and Fisher-Carroll 2010:131-133; Mainfort et al. 2007:108). Minimally, Nodena sites similarly contain directed site-wide ritual involving the recent dead and, possibly, the use of mortuary vessels as a component of death-based medicine.

At Moundville, expressions of Hemphill style art in stone may constitute an esoteric specialization in lapidary crafting and use (Marcoux 2000; Steponaitis 2016:122,131-133; Steponaitis and Knight 2004). Some of the best examples of stone medicine in Southeastern precolonial history may be found within the proliferation of ritually utilized stone in Middle Tennessee. The Middle Cumberland Region of Middle Tennessee is an area of prodigious limestone resources. Mississippian burials are particularly notable in this area because of the prolific use of stone box grave vaults, including at the Mound Bottom and Link Farm sites (Moore and Smith 2009). Though stone box graves generally predominate in the major waterways of the Southeastern interior, the Middle Cumberland Region may be the epicenter of the phenomenon (Brown 1981:2-3, 8-9; Smith 1992:230). Smith (1992:235) notes that "although the construction of the grave did require some shaping of the stones, the ready availability of thin limestone slabs in the vicinity would have facilitated the development and focus on this particular kind of burial form in the Middle Cumberland area." In general, stones were shaped and adjoined to ensure the effect of a fitted vault (Brown 1981:3, Figure 1; Smith 1992:233-237). It was common for a vault to be employed multiple times (Brown 1981:7; Smith 1992:239). It is possible that confining the dead to a stone encasement assisted in mitigating associated danger(s).

The Middle Cumberland Region is also home to an unusually large number of stone statues. Smith and Miller (2009:173) note that the "corpus of Tennessee-Cumberland style statues includes statues exhibiting several themes, not all of which are well understood. At this

point, the two most definable themes relate to male-female statuary pairs and the Old Woman." These male and female statuary pairs are generally restricted to Middle Tennessee and Northern Georgia, specifically the Etowah site between A.D. 1250-1350 (Smith and Miller 2009:9,173). The statues are not recovered as mortuary accourtements, but rather as primary interments and are often depicted with their mouths "open as if to speak" (Moore and Smith 2009:157). An analogous example may be provided by the pair of stone statues found interred in a "form fitted" (sized for the statues) stone box grave in Mound C at the Etowah site (Smith 1992:237; Smith and Miller 2009:159,165).

It is possible that the esoteric cohort at Moundville was similarly engaged in the extraction, modification, control, and use of stone as a medium for esoteric medicine. Possessing a wide distribution range within the region, the majority of stone palettes are found at Moundville (50+) and Etowah (10) (Steponaitis 2016:122, 126; Steponaitis and Knight 2004:174-175; Steponaitis et al. 2011:82). Palettes occur in two general types, formal and irregular (Knight 2010:61-62; Moore 1905:147; Williams and Brain 1983:265). Formal palettes are generally circular, of fairly uniform dimensions, and maintain common decorative elements including notched or scalloped edges and banding around the rim (Steponaitis 2016:122). In fact, the majority of Moundville artifacts bearing Hemphill representational designs are found to represent a single theme of centering, focusing on "circular images that function as symbols of the center, with which animate subjects are sometimes combined" (Knight and Steponaitis 2011:219). Similarly, the simple edge-and-rim design ubiquitous to palettes "shows clear iconographic parallels to the scalloped edge and multilinear band often found on copper gorgets" (Steponaitis and Knight 2004:175). Irregular palettes in contrast, are highly variable in size and general shape with one face usually evidencing abrasion and/or pigment (Williams and Brain

1983:265). Speculating on the probable function of the specialized item, Steponaitis (et al. 2011:101) notes they were likely used in anointing rituals "during which sacred substances were prepared on the palette, imbued with spiritual power, and then applied to people or other objects, thereby transferring that power (or its beneficial effects) to the recipients." Notably, the female/male stone statues recovered from Etowah were among several mortuary inclusions in Mound C to evidence such an anointing, with Steponaitis (2011:101) further observing similarities to an annual renewal event ethnohistorically observed among the Omaha.

Contrasting the Moundville palettes with those recovered at Etowah, Steponaitis (et al. 2011:91, 92-94, 96; 2016:132) observes that the latter are components of distinct bundles. At Moundville, palettes generally appear as an associated entity of the individual practitioner (Steponaitis 2016:132). A defining characteristic of the Etowah bundles is the inclusion and direct association of pigment producing minerals with the palettes (Steponaitis et al. 2011:91-98). Knight (2010:67-69) refers to the collective of such elements at Moundville as a pigment complex, and notes that red and yellow ocher, glauconite, galena, muscovite mica, graphite, and ferruginous siltstone (shale) appear to dominate this complex at the center. These minerals are uncommonly found in direct association with palettes at Moundville, except as remnant paint upon the palette surface. Stone palettes have also been found in the Lower Mississippi Valley, ranging from the Lower Yazoo Basin at sites including Lake George, Mabin, and Glass to the Natchez Bluffs at Ann and Fatherland; with some clearly sourced from the near-Moundville Pottsville formation (Knight and Steponaitis 2011:230-231; Williams and Brain 1983:263-265). In addition to palettes and pigments, the esoteric lapidary industry at Moundville was also invested in the creation of stone pendants, stone bowls, and stone effigy pipes (Steponaitis and Knight 2004).

Finally, unlike the locally sourced stone medicine palettes or copious resources of red ocher, the majority of copper recovered from Moundville appears to have been coming from the Appalachian Mountains (Knight 2010: 67; Steponaitis and Knight 2004:176). The recovery of sheet copper fragments from middens around the site and in association with other craft activity suggests at least some of it was being worked locally (Steponaitis and Knight 2004:176; Thompson 2011:Table 5). Among locally produced items are sheet copper gorgets, occurring in restricted circular and oblong forms with the oblong type, that Brown (2007) has identified as a manifestation of the scalp motif, occurring most frequently (Steponaitis and Knight 2004:176). Other iconographic representations in copper, including a feather, a key-sided mace, and a bilobed arrow, are all stylistically similar to copper materials recovered from the Etowah site in northwest Georgia (Knight and Steponaitis 2011:227). Notably, an elite burial at Lubbub Creek, dating to the Early Mississippian Summerville I phase (A.D. 1050-1200), was found in possession of impressive sheet copper accoutrements that appear to be from Georgia and with clear stylistic ties to the Braden style at Cahokia.

The 1977 excavations at Lubbub Creek recovered 40 individuals from a planned, primarily Mississippian, cemetery that had been positioned atop a Late Woodland midden some 600 feet east of Summerville Mound (Blitz 1993:102; Hill 1981:229; Jenkins and Ensor 1981:93). The earliest burials are also the most elaborate and appear to have been interred within a special structure, oval and of single post construction with no interior supports, that may have been erected for this purpose (Jenkins and Ensor 1981:89). Interred within, under "a flat floor area, indicated by the well-defined contact line of daub" in three pits were the remains of seven individuals (Jenkins and Ensor 1981:89). The primary interment appears to be Burial 20C, a large adult male placed in a large bathtub-shaped pit (Hill 1981:278-280). Placed atop his lower

legs were most of a pair of feet (Burial 20 D). A second large adult male (Burial 20B), exhibiting a projectile point in the right side of the chest, was placed atop the half-intact feet (perhaps an old trophy). A fleshed (at the time of interment) pair of legs and arms (Burial 20A) completed the assemblage (Blitz 1993:102). Accoutrements associated with Burial 20C, specifically, include a large sheet copper plate embossed with a falcon and a dozen sheet copper arrowshaped symbol-badges (possibly a headdress), a cube of galena, two drilled bear canines, and 165 marine-shell beads (Blitz 1993:102; Cole et al. 1982: Table 2). Flanking this pit, extending north, the second pit contained an adolescent female (Burial 28A) extended atop a young adult male (Burial 28B) (Hill 1981:284). The third pit, flanking Burial 20C to the south, contained Burial 36, an infant (Hill 1981:290).

Summary

Mississippian ceremonial landscapes are highly variable but are often found to feature one or more mounds and an associated central and dedicated plaza. The frequent concomitant association of mound-and-plaza ceremonial centers with renewal ritual and intensive maize agriculture suggests that a purification-based ceremonial landscape may have been necessary for the renewal medicine needed to grow maize intensively. From this perspective, Mississippian plaza centers appear to be landscapes for renewal with cultural differences ultimately related to a dynamic combination of local tradition, need, and the abilities of affiliated medicine-makers and corporate-kin groups. In this same vein, it is possible that some of what distinguished the Cahokia site, specifically, was the 12th-century establishment of an esoteric elite specializing in death-centered renewal and war medicines. A divergent theory of mortuary practice, emphasizing the single interments of recent community members, appears to manifest at the Moundville site rather dramatically around A.D. 1325.

The Moundville terrace was settled and terraformed in conjunction with an increasing dependence on maize in the Black Warrior River Valley. Over the course of a century, a residential community protected by a palisade constructed the central plaza and all the major mounds. A cohort of esoteric specialists then took residence at the center, resulting in the removal of the palisade and relocation of the former residential population. Over the next century the cohort engaged in collaborative theories of practice based on shared interpretations of a widely-held belief system, resulting in the saturation of the site with the individual interments of recent ancestors in areas deemed appropriate for that use; a deliberate effort that allowed for both the continued ability to appropriately purify the ceremonial landscape and the incorporation of ancestral communities in lived renewal efforts. In sum, Moundville appears to be a constructed purification-based landscape for esoteric renewal medicine, with the esoteric residents at the site seemingly specializing in the manipulation of earth and stone as media for ritual use and expression. The following section will detail Moundville's excavation and exhumation history with an emphasis on the context and association of interments with the ceremonial landscape from a representational and ontological perspective.

AN INTRASITE ANALYSIS OF THE MOUNDVILLE MORTUARY PROGRAM

This chapter provides a site-wide assessment of Moundville mortuary data from representational, spatial, and broad ontological perspectives in an effort to improve our understanding of expressions of group identity and social cohesion at the center. The following sections detail previous investigations into mounds and near-mound areas with an emphasis on area composition, burial type, and the frequency, diversity, and distribution of associated accoutrements (Table 4.1). Interment locations reference Christopher Peebles's (1973:Figure I-1) master map of Moundville excavations from 1905-1951 (Figure 4.1). Regrettably, no modern analysis of the mortuary material is available. Provided data have been principally derived from Peebles's (1973) compilation of available burial forms and, consequently, employ colloquial and inaccurate terms such as "bird points, "paint rocks," and "conch" shell (instead of lightning whelk specifically, for example). Hemphill style ceramics are noted for each area and used as chronological markers, though with the notable caveat that heirlooming may have been relatively commonplace (Phillips 2012:74). In an effort to make the analysis as data inclusive as possible, no specific information on age or sex has been included. Demographic data provided for the age classifications of adult, adolescent, child, and infant are derived from a combination of published materials and unpublished field notes. The analysis is intended to provide an initial framework for continuing investigation and by emphasizing previous research, rather than a definitive overview of the materials, cultural or osteological, themselves.

Table 4.1. Burial area, number of individuals recovered, and excavator. * Denotes a minimum

approximate number.

Area	# Individuals	Excavator
West of Mound A	10*	Moore
West of Mound B	5	Moore
Northeast of Mound B (Mound V)		
1930	1	AMNH
Northeast of Mound B (Mound V)	2*	Knight
Mound C	48	Moore
Northeast of Mound C	40	Moore
North of Mound C	2	AMNH
Mound D	44	Moore
North of Mound D	27	Moore
Northeast of Mound D	49	AMNH
North of Mound D	2	AMNH
South of Mound D 1905	25	Moore
South of Mound D 1906	176	Moore
South of Mound D 1930	14	AMNH
South of Mound D 1932	173	AMNH
Southeast of Mound D 1930	13	AMNH
East of Mound D 1930	11	AMNH
East of Mound D 1937	49	AMNH
Northeast of Mound E 1930	11	AMNH
North of Mound E 1930	94	AMNH
North of Mound E 1932	95	AMNH
East of Mound E 1931-1932	226	AMNH
Mound F	19	Moore
East of Mound F 1933	11	AMNH
Roadway 48+50 and 48+00		
East of Mound S	57	AMNH
Rhodes 1930	7	AMNH
Upper Rhodes	117	AMNH
Rhodes (Structure)	40	AMNH
Rhodes (Palisade)	67	AMNH
North of Mound G 1930	19	AMNH
North of Mound G 1934	56	AMNH
Northeast of Mound G 1930	16	AMNH
East of Mound G	2	Moore
East of Mound G 1930	16	AMNH
Roadway blocks 43+50-44+50	24	AMNH
South of Mound G 1934	53	AMNH
Southwest of Mound G 1934	73	AMNH
Mound H	4	Moore
Southeast of Mound H 1930	31	AMNH
Administration Building	13	AMNH

Total	3,131	
Outside Roadway 1940	3	AMNH
North of Mound R 1931	51	AMNH
North of Mound R	64	Moore
Mound R1	1*	Kelly
West of Mound R 1951	17	AMNH
West of Mound R 1930	61	AMNH
West of Mound R	62	Moore
Roadway blocks 72+00 – 68+35	39	AMNH
North of Mound Q	7*	Moore
Mound Q	2*	Knight
West of P ¹	35	AMNH
North of Mound W	43	AMNH
Northwest of Mound W	13	AMNH
Roadway blocks 3+00 – 0+50	15	AMNH
West of Mound P	395	AMNH
East of Mound P	3	AMNH
Mound P	1	Porth
Museum Parking Area	18	AMNH
Roadway block 6+00 – 4+00	9	AMNH
South of Mound W	11*	AMNH
Mound W	71	AMNH
North of N ¹	24	AMNH
Mound O	42	Moore
Mound O	8*	Lupton
Roadway 13+00 and 12+50	16	AMNH
North of Mound N	3	AMNH
West of Mound N	8	Moore
Roadway blocks 15+50 and 15+00	40	AMNH
Southwest of Mound M	137	AMNH
South of Mound M	13	AMNH
Southeast of Mound M	12	AMNH
Field near M	59	Moore
Roadway blocks 27+30 = 20+30 Roadway block 21+50	1	AMNH
Roadway blocks 27+50 – 26+50	24	AMNH
Roadway blocks 30+50 and 30+00	21	AMNH
Roadway block 34+00 Back	2	AMNH
South of Mound I 1930	5	AMNH
East of Mound I 1930	51	AMNH
Roadway excavation block 35+50	2	AMNH

Initial scientific investigations at Moundville were made by the Smithsonian Institution in 1869 and 1882. The first, 1869 excavations, were directed by Nathanial Lupton, a chemistry

professor at Southern University in Greensboro, Alabama (Steponaitis 1983a:6, 1983b:128). In addition to constructing the first map of the site, Lupton's early work included excavations into Mound O, where he reported seeing stratified layers of skeletons (Steponaitis 1983b:131-132).

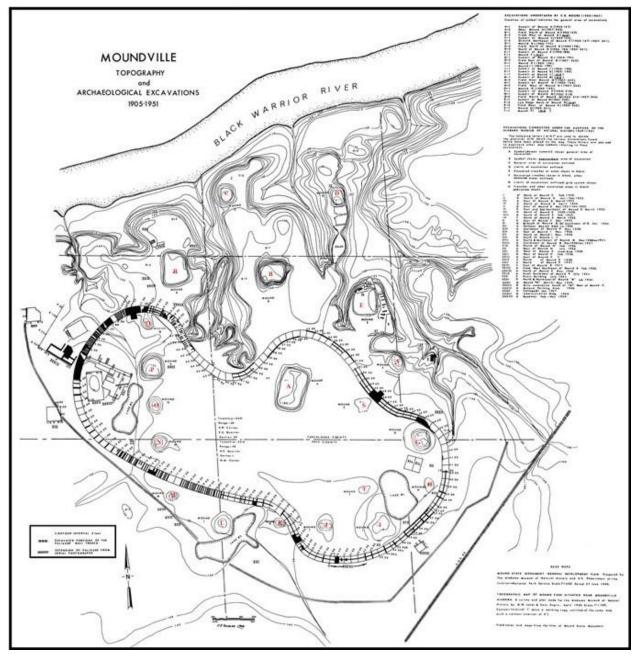


Figure 4.1. Excavation areas at Moundville (Peebles 1973:Figure I-1).

The subsequent 1882 investigations were conducted by James Middleton, who was sent to Moundville as an agent of the Bureau of Ethnology's Mound Exploration program (Steponaitis

1983b:133). Middleton's investigation of Moundville produced a faulty map of the site and a small surface collection (Steponaitis 1983a:6). Material from both surveys is currently housed at the National Museum of Natural History, Smithsonian Institution (Steponaitis 1983b:137).

The first intensive excavations at the site came in the early 20th century and were conducted by Clarence Bloomfield Moore, who famously traversed the major waterways of eastern North America on his workboat, Gopher of Philadelphia, looking for Native American mound centers. He investigated Moundville twice, once in 1905 and again in 1906 (Moore 1905, 1907; Steponaitis 1983a:10). The 1905 field season focused, almost entirely, on test excavations in every major mound at the site. Human remains identified in the course of this testing were found to be "badly decayed and nearly all were represented by fragments only" (Moore 1905:140). The 1906 excavations, in contrast, were devoted to off-mound areas, with the single exception of continued testing into Mound Q (Knight 1996:10; 2010:74). Human remains identified during the second field season were generally found to be in a better state of preservation, likely the result of relatively superior water drainage in off-mound locations (Moore 1907:338). Collectively, Moore's exploration identified approximately 800 burials and recovered thousands of corresponding artifacts (Peebles 1974:80). Unfortunately, though concerted efforts have been made to locate the human skeletal material exhumed from Moundville, the current whereabouts of the skeletal samples recovered by the Moore expedition are unknown (Peebles et al. 1981; Powell 1988:3-4).

The second major series of excavations began in 1930 and were run by the Alabama Museum of Natural History, under the direction of Dr. Walter B. Jones and David DeJarnette (Knight 2021). The AMNH explorations followed in Moore's footsteps by beginning in areas he had previously explored and, initially, approaching these investigations with very similar field

methods and a shared intent to recover museum specimens (Peebles 1973:2). With the election of Franklin D. Roosevelt, sponsorship was increasingly supported by various relief agencies including the Works Progress Administration, Civilian Conservation Corps, Civilian Works Administration, and the National Parks Service until excavations concluded in 1941 (Knight 2021; Steponaitis 1983a:7). Nearly half a million square feet were excavated during this period of fieldwork, including more than 75 structures, 2,200 burials, and 20,000 artifacts (Powell 1988:5). Combined with Moore's previous 800, the total count of identified burials at Moundville is just over 3,000 (Peebles 1974:80; Powell 1988:12).

Mound A

Mound A is a large monument, with a broad summit, located in the center of the plaza (Knight 2010:302). Its unique relative position on the landscape and considerable size indicate it acted as axis for the larger sociogram enacted around the plaza at the site (Knight 2010:302). Moore excavated 33 trial-holes into the summit of Mound A in his first field season at Moundville but found nothing associated with mortuary ritual (Moore 1905:141). Core samples identified four probable major building stages of Mound A (Gage 2000). Excavations conducted by Vernon Knight tested the southeast and south-central summit in 1996 to investigate summit architecture (Knight 2010:302, 311). Unfortunately, these efforts were frustrated, and no evidence of summit architecture was found (Knight 2010:306). Materials of note recovered from these excavations included a palette rim fragment, eight occurrences of mica, and several pieces of red ferruginous sandstone (Knight 2010:311). Recovered ceramics were found to date principally to the late Moundville I phase (A.D. 1200-1260) (Knight 2010:310). Knight (2010:307, 309, 312) concluded that the monument was probably constructed in the late Moundville I phase (A.D. 1200-1260), with the final occupation of the mound summit probably

dating to the late Moundville II and/or Moundville III phases (A.D.1325-1400 and/or A.D. 1400-1520).

Gradiometer survey of the Mound A summit revealed multiple, large anomalies with high probabilities of brin buried structures (Davis et al. 2015). Small test excavation units placed at the southwestern summit of Mound A identified fire-hardened surfaces separated by sand lenses, probable prepared floors on the interior of structures, lending support to the gradiometer interpretations (Blitz et al. 2014). Recovered ceramics suggested a date no earlier than late Moundville II for this penultimate building stage, the terminal stage having been destroyed by erosion.

During the 1905 field season Moore also conducted minor excavations "in the level ground near the western side of Mound A," which resulted in the identification of "a number of skeletons" though none, to his disappointment, retained accoutrements (Moore 1907:340). The subsequent 1906 field season saw Moore return to this area and identify an additional 10 burials: eight extended primary interments; one instance of aboriginal disturbance, defined as "redigging for burial that had gone on in ancient times, grave cutting through grave" (Moore 1907:341); and a lone skull (Table 4.2). A single interment was accompanied by a bowl and bottle (Moore 1907:340).

Table 4.2. Burial type and count for the interment area West of Mound A.

West of Mound A Burial Type	Count
Extended	8
Isolated skull	1
ND	1
Total	10

Finally, a series of excavations was undertaken from 1939-1940 in areas around the site that would be impacted by a proposed roadway (Peebles 1973:804; Wilson 2010:30). The Roadway investigations were executed in a series of 50 feet by 50 feet blocks, with 147 total

blocks labeled from 0+00-72+00 covering the proposed area around the site (Figure 4.1). Blocks 62+00-51+00 ran north of Mound A (Figure 4.2) but produced no structural debris or burials; artifacts noted in situ include only a stone discoidal recovered from block 52+00 and a small projectile point recovered from block 53+50 (Peebles 1973:941-942).

That the entire stretch of Roadway north of the mound was observed to be without structural debris is, as will be shown, strikingly atypical and highlights that the monument is situated as a broad elevated platform *within* the plaza. From a perspective of medicine-making, and with the centrality of the monument to the site layout in mind, it is possible Mound A functioned as an elevated renewal platform for the sacred landscape created with the establishment of the site layout in the late Moundville I phase (A.D. 1200-1260).

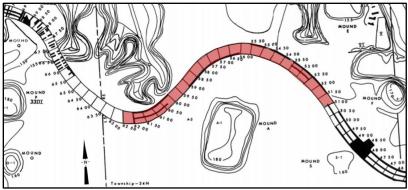


Figure 4.2. Roadway excavations North of Mound A, blocks 62+00-51+00 (Peebles 1973:Figure I-1).

Mound B

Mounds A and V, that may have been built by drawing labor from the entire polity, rather than an individual corporate-kin group (Knight 2010:313, 315; Lacquement 2009:152). Together with Mound A, Mound B appears to define the north-south bilateral axis at the site (Knight 2010:313). Moore's excavations into Mound B consisted of 22 trial-holes that produced nothing (Moore 1905:141). The Alabama Museum of Natural History tested the summit of Mound B in

the winter of 1930 but found no evidence of burials (Knight 2010:313). They did, however, recover several vessels within a dedicatory cache bearing chronological markers of the Moundville III phase (A.D 1400-1520) and that appeared to be associated with a razed daub structure (Knight 2010:314-315). Other diagnostic ceramics recovered from the Depression-era investigations highlight connections to the Lower Mississippi Valley, in both early and late contexts (Knight 2010:315).

Moore also tested an area immediately west of Mound B, possibly a low mound now referred to as C1, but met with negative results (Moore 1905:142-143). In a small space between the field west of Mound B and the nearby ravine, however, Moore discovered an interment area described as "a mingling of bones in which at least three adults and one child were represented" (Moore 1905:142). Associated artifacts included a decorated bowl, an undecorated bottle, and a stone discoidal (Moore 1905:143). Moore notes another child nearby as a primary extended interment, associated with a decorated bowl seriated to the Moundville II and III phases (A.D. 1325-1520) (Steponaitis 1983a:136) (Table 4.3). Apart from human remains, excavators recovered one human and one fish head rim effigy, one piece of worked lithic material, six ceramic discs, and one ceramic human hand gorget (Moore 1905:142-143). The inclusion of a fish effigy is notable as fish, frog, and human head medallion effigies possess a reasonably secure chronological position within the Moundville III phase (A.D. 1400-1520).

Table 4.3. Burial type and count for the interment area West of Mound B.

West of Mound B Burial Type	Count
Extended	1
Child	1
ND	4
Adult	3
Child	1
Total	5

Regrettably, Mound B remains something of an enigma although the position of the monument on the landscape suggests an extraordinary authority. It is possible that Mound B represents a centrally positioned leadership for the entire landscape, the existence of which is observed in the precision and uniformity of both the site layout and the enactment of the mortuary program. Though interment areas around the site will be shown to differ, some quite substantially, they ultimately manifest in concordance with what appear to be site-level rules. Finally, the orientation and proximity of Mound A with Mound B suggest the two may have functioned as aspects of a pair, which will be explored in greater detail in the subsequent sections (Figure 4.3).

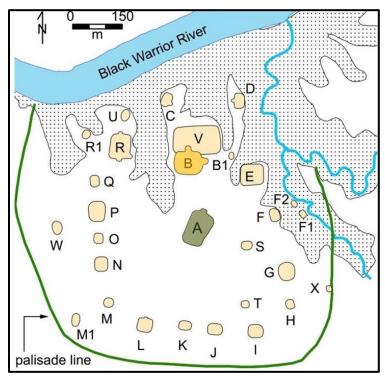


Figure 4.3. Map of Moundville showing possible Mound A and Mound B pairing, with the elevated renewal platform in green and the vision seeker in yellow (Copyright John H. Blitz 2008, used with permission).

Mound V

Attached to the northern margins of Mound B is a broad artificial platform designated Mound V (Knight 2009:20, 2010:3). The monuments physically articulate, with the northern

ramp from Mound B terminating into the Mound V platform (Knight 2009:20). As with many of the monuments at Moundville, Mound V was the recipient of Depression era reconstructive efforts aimed at stabilizing and recontouring the mounds, so its current dimensions are in part attributable to this effort (Knight 2009:20). Moore investigated the area with 18 test pits and a narrow trench in 1905, noting that it bore "numerous traces of aboriginal occupancy" (Moore 1905:141). Mixed with "the usual midden debris," excavators recovered a single artifact deemed worth mentioning, a stone hoe-shaped implement interpreted as a ceremonial axe (Moore 1905:142). Moore and his team failed to encounter any evidence of mortuary ritual in the area however (Moore 1905:142). The Alabama Museum of Natural History conducted testing in an area labeled northeast of Mound B in February of 1930 and identified a single interment in the area. Skeletal material was noted as "mostly absent" though whether that was related to preservation or removal is unclear from available notes (Knight 1992:10). A single "large pot" was recovered in association, noted as being located "where the skull should have been" (Knight 1992:10).

Knight investigated the northeast corner of Mound V with a series of field seasons from 1999-2002 (Knight 2010:3, 9). A 1-inch split core auger was used to look for intact deposits on the landform, the results of which suggested the northeast corner would be a promising location (Knight 2009:22). Two adjoining structures were identified during excavations in this area, the western-most a large earthen lodge (Structure 1a/b) with an embankment of tan-orange sandy clay (Knight 2009: 24). The lodge was found to possess two superimposed floors. The first floor (Structure 1a) was dismantled after use and a clean layer of fill deposited to construct the second floor (Structure 1b) (Knight 2009:24). A somewhat unusual aspect of the initial construction was

use of an unnecessarily grandiose central roof support, with later post-hole fill observed to contain tiny copper pellets (Knight 2009:26). The second iteration of the earthen lodge featured no obvious ostentatious displays in the form of roof supports but did host daub plastered walls painted in white and red and two notable oval pit features of unknown use, one observed to contain a triangular quartz projectile point and a white-painted clay bead (Knight 2009:26-27). Similar oval voids were observed to be a repetitive feature associated with earthen lodges of the Macon plateau, prompting Fairbanks (1946:102-103) to speculate they may have been vomitive basins related to the ritual consumption of Black Drink. Knight (2009:27) has proposed that the oval basins recovered in association with the earthen lodge at Moundville may have hosted interments that were removed before termination of the structure by fire. After the fire, a midden-like fill was deposited atop the area and affiliated events seemingly discontinued (Knight 2009:27).

Adjoining the earthen lodge to the east was a rectangular secondary building (Structure 2) that was rebuilt in place at least twice and possessed an entranceway connecting directly to the earth lodge (Knight 2009:23). The buildings are atypical for both the site and west-central Alabama, possessing architectural features principally observed within the South Appalachian Mississippian tradition (Fairbanks 1946; Knight 2009:27). Calibrated radiocarbon dates and diagnostic ceramics allow both structures to be confidently placed in the Moundville III phase (A.D. 1400-1520), with the first iteration of the lodge (Structure 1a) employed in the waning years of prolific mortuary ceremonialism at the site (A.D. 1400-1450) and the second (Structure 1b) sometime after the dissolution of the mortuary program at the center (A.D. 1450-1520) (Knight 2009:27).

Mound C

Mound C is a relatively small mound located to the north of the main plaza, situated in the northwest corner of a land strip surround by steep ravines that merge into the banks of the Black Warrior River (Knight and Steponaitis 1998:5). Burials were encountered almost immediately by Moore and his team upon beginning test excavations into Mound C, though only in the northern half of the mound summit plateau and in association with a distinctly organic soil matrix evidencing miscellaneous stone and shell debris (Moore 1905:143). Moore identified at least two distinct mound construction stages, each with evidence of burial pits intruding from the summit (Moore 1905:151, 154). An earlier mound surface was identified at 6.5 feet below the 15.5 feet-high mound summit plateau (at center, as of 1905). Though several pits were found to intrude into the mound from this earlier summit surface (at 9 feet high), and with evidence of bark lining in one, only two evidenced human remains with both in a state of advanced degeneration (Moore 1905:151). In the mound fill of this lower level, workers recovered a copper-coated wood carving of a large carnivore canine with a perforation at one end for suspension and the remnants of a fiber casing. This earlier occupation stage also evidenced a ceremonial axe of plutonic rock similar in execution to one recovered from the Mt. Royal site, along the St. John's River in east-central Florida (Moore 1905:152).

The advanced degeneration of skeletal material within the mound provides little information for a patterned approach to these interments. Additionally, general age is so rarely provided by Moore that it is assumed the interments are probable adults unless otherwise noted (Peebles 1973:37-41). Still, it is possible to note that Mound C interments include an interesting variety of burial types (Table 4.4). Notably, Moore records two lone skulls, one without associated accourrements and one with a small quartz projectile point (Moore 1905:151, 158); an

isolated femur with "a considerable number of tubular shell beads" and the remainder of a shell cup bearing an image of "two fighting figures" (Moore 1905:154); three small deposits of calcined bone (Moore 1905:157, 162); and one child burial, interred with two sheet-copper ornaments (both swastika design) attached to strung peals (Moore 1905:160).

Table 4.4. Burial type and count for interments within Mound C.

Burial Type, Mound C	Count
Bundle	2
Cremation	3
Extended	6
Isolated long bone	2
Isolated skull	2
Scattered bones	1
ND	32
Total	48

Of the 48 burials described by Moore in Mound C, just over half (29) were associated with accourrements. The vast majority of those (21) were associated with emblems of esoteric office, including stone palettes, aspects of the pigment complex, and ceremonial copper items (ceremonial axes, hair ornaments, embossed sheets, and gorgets) (Moore 1905:145-147; Peebles 1973:37-41; Steponaitis and Knight 2004:174) (Table 4.5). Three of the five stone palettes recovered from Mound C were seemingly bundled, an unusual occurrence at Moundville:

A skeleton at full length on the back, at about the same depth as the last, had near the head a drill-point wrought from a jasper pebble, and a disc of metamorphic gneiss, 7.8 inches in diameter, with an oblong slab of sedimentary rock, 4.75 inches broad by 5.75 inches long, beside it. Resting on these two was another disc of metamorphic gneiss, of the same diameter as the other. The whole deposit was covered with decayed wood. The discs, somewhat crushed, have been repaired. On each are traces of pigment. Neither on these discs and slabs nor on any others found by us at Moundville was there incised decoration on both sides; and on neither side had an attempt been made to represent figures. (Moore 1905:149-150)

Among pigments, mica was observed as an associated accoutrement to three individuals and is uniformly noted as occurring in small quantities (Moore 1905:143, 149, 151). Galena occurs three times, with two individuals, but in comparatively sizable amounts, and with one sample

evidencing considerable wear (Moore 1905:155, 157, 159). Finally, a single deposit of asphaltum was recovered near Burial 37 (Moore 1905:166).

Table 4.5. Associated accoutrements recovered from Mound C.

Associated Accoutrements, Mound C	Burial Count
Copper axe	2
Copper hair ornament	1
Formal palette with traces of paint; bottles (2) (C4/m5 - Phillips 2012:194)	1
Fragments of sheet copper	1
Galena (about the size of a child's fist)	1
Oblong copper gorget	1
Quartz projectile point	1
Small fragment of sheet copper	1
Small masses of galena (2); fragments of sheet copper; quartz discoidal	
stone	1
Small quantity of mica	1
Small quantity of mica; water bottle with red on white painted decoration	
(mothra); cup (Hemphill C2/m5 Phillips 2012:160)	1
Tubular shell beads	1
Jasper drill point; stone discoidal; formal palettes, two circular and one	
rectangular, covered in decayed wood (on each palette traces of pigment)	1
Oblong sheet copper gorgets encrusted with pearls (2)	1
Copper axe; copper-coated shell bead	1
Copper axe; large breast-piece of sheet copper	1
Globular copper-coated beads around ankles (45) and at wrist (16); pearl	
beads at ankles; copper axe; oblong copper gorget; circular copper gorget	
with pearls (atop oblong gorget); sheet copper ornament; copper pin;	
amethyst head; asphaltum	1
Copper ear plug; remains of copper ornament of considerable size	1
Copper pendant; copper ear plugs (2)	1
Fragments of sheet of copper at head and upper chest; shell beads at knees;	
pebbles at each ankle (rattles); a small quantity of mica	1
Copper axe; copper ear plugs (2); circular copper gorget; decorated bottles	
(2) (C8/m5 Phillips 2012:337)	1
Informal palette; copper fragments; undecorated vessel; decorated bottle	1
Undecorated vessel; decorated cup	1
Quantity of shell beads; engraved shell cup	1
Great quantity of shell beads; fragments of sheet copper	1
Shell beads; fragments of sheet copper	1
Copper fragment; oblong layer of pebbles surrounded by decayed	
container (rattle)	1
Shells (2)	1
None	19
Total	48

Copper is, dramatically, the most well represented esoteric artifact class in the mound with 18 individuals interred with at least one copper object and seven interred with at least two, including two individuals who appear to have been buried with rattles (Moore 1905:149, 150). In his investigations at Moundville, Moore (1905:154) found that most copper objects recovered from the site, excluding ear spools and hair ornaments, were observed to possess remnant, decayed, casings of either wood or matting. For example, within Mound C Moore notes that:

near a dark line, probably left by decaying bones, was a ceremonial axe of copper...This implement, encased in wood, as usual, has no handle remaining upon it, but it plainly shows where a handle has been, with part of the axe body behind it. (Moore 1905:157)

It is possible that encasing powerful medicine was a component part of a larger risk mitigation practice that may have also included entombment in the mounds. Similarly, it seems likely that in situations where atypically powerful medicines, like copper, are interred with an individual for whom an ability to control the object would be unlikely if not impossible, like an infant or child, the individual is probably acting as an accourtement or ritual accompaniment for the object (Peebles 1971:82; Peebles and Kuss 1977:439).

One particularly well-appointed individual, designated Burial No. 37 by Moore (1905:162-164), was interred with a remarkable display of paraphernalia, including coppercoated wooden beads at the wrists and ankles, a copper ceremonial axe placed across the knees, and three sheet-copper gorgets. Two of these pendants possess symbolic scalps, one a stylized bellows-shaped apron recovered on the lower chest and one eight-pointed star within a circle recovered on the upper chest (Brown 2007:46-47; Brown and Dye 2007:281). The third, and uppermost, gorget was a large circle possessing a central carved amethyst head (Moore 1905:163). Moore (1905:164) notes that the central burial complex of the Crystal River site, in

west-central Florida, also produced an amethyst pendant. Interestingly, a similar circular-pendant-with-centerpiece can be seen on the Thruston Tablet, an engraved limestone slab recovered from near the Castalian Springs mound center in Middle Tennessee, presumed to date between A.D. 1250-1350 (Steponaitis et al. 2011:137).

The Mound C ceramic assemblage is entirely dominated by locally produced wares (Knight and Franke 2007:148; Steponaitis 1983a:234-235). The most commonly occurring ceramics, with data derived from Steponaitis (1983:235), are bottles (8), followed by bowls (3) and one tall conical vessel. Eight ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with one dating to the Moundville I/II phases (A.D. 1120-1400), three dating to the Moundville II phase (A.D. 1260-1400), and four dating to the Moundville II/III phases (A.D. 1260-1520). Notable ceramics recovered from Mound C include four Hemphill style vessels, all seriated to A.D. 1325-1425, and a painted bottle (Philips 2012; Steponaitis 1983a:235) (Table 4.6). Beginning excavations, Moore (1905:143) notes that they quickly identified "2 feet from the surface ... a single skull with a bunch of bones badly decayed and crushed." Associated with this interment was a small amount of mica, a cup bearing an Early Hemphill style phase (A.D.1325-1375) three finger motif, and a bottle bearing the painted image of the moth/butterfly supernatural (Moore 1905:143; Phillips 2012:160). Phillips (2012:160, 74) observed that the cup recovered with this individual was heavily worn and reminiscent of two others: one recovered from Mound D and another from the interment area north of Mound E. That this well-worn stylistically early Hemphill cup was recovered from one of the final mantle burials in Mound C may also be an example of heirlooming (Knight and Franke 2007:148). The bottle, seriated to the Moundville II phase (A.D. 1260-1400), features an unusual decoration method, being painted, and motif of a moth-butterfly supernatural; only two others have been

recovered from the site, both acting as mortuary accoutrements to individuals interred in the Rhodes Site near the palisade (Knight 2010:45, 102; Steponaitis 1983a:277, 348). Knight and Franke (2007:148) have speculated that this figure may represent a transformed Birdman, commonly associated with Hightower style gorgets from Etowah, and employed in war medicine.

Table 4.6. Hemphill style ceramics recovered from Mound C.

Artifact #	Burial #	Motif	Designation	Fellows
C2	CM26	Three fingers	Early Hemphill	D5, NE128
C4	CM46	Hand and eye	Early Hemphill	
	Recovered	Center symbol with radiating		NEC9, F3, NR1,
C12	apart	crosshatched bands	Early Hemphill	NR11
		Center symbol with radiating		
C8	CM12	crosshatched bands	Middle Hemphill	

Moore tested the northeast corner of the Mound C land strip in both 1905 and 1906, recovering another 40 burials total and noting that the associated artifacts "seemed to indicate that their former owners had belonged to a class less prosperous" (Moore 1905:167; 1907:341). The majority appear to have been primary extended interments and are presumed adults unless otherwise stated (Moore 1905:167) (Table 4.7). Moore (1905:167, 169, 171) does note four instances of infant burials, all somewhat unusual; two lone infant skulls recovered near two small loop-handled pots; an infant in a carefully prepared clay pit with large sherds "carefully worked to an elliptical outline;" and an infant interred with "a large slab of limonite" under its skull. Moore (1905:169) also details a child burial and three pits evidencing aboriginal disturbance. These pits may have been repeatedly utilized for both interments, with newer burials cutting away earlier ones, and extraction, with some evidence that remains were anciently removed (Moore 1905:170).

Table 4.7. Burial type and count for interments Northeast of Mound C, recovered by Moore.

Northeast of Mound C Burial Type	Count
Extended	14
Flexed	2
ND	24
Total	40

Table 4.8. Associated accoutrements from Northeast of Mound C, recovered by Moore.

Associated Accoutrements, Northeast of Mound C	Burial Count
Two large sherds carefully worked to an elliptical outline	1
Large slab of limonite	1
Pot	2
Shell beads at neck; formal palette (rectangular) with red and white	
pigment	1
Shell gorget	1
Undecorated bottle	1
Undecorated bottle; large vessel fragment; shell beads at neck, left wrist,	
both ankles	1
Mica; shell beads at each wrist	1
Pots (2)	1
Decorated effigy bowl; pot	1
Pot; bottle (NEC11 Phillips 2012:282)	1
Pot; small effigy bowl	1
None	27
Total	40

Less than half (13) of the interments recovered from the Northeast of Mound C area were associated with mortuary accourtements (Table 4.8). No copper artifacts were recovered in this locale and associated vessels "were undecorated as a rule, and when decoration was present it was often of inferior execution" (Moore 1905:167). Unlike Mound C, where bottles dominated ceramic accourtements, the interment area Northeast of Mound C evidenced jars (3) in equal numbers with bottles (3) and two effigy bowls (Moore 1905:170-171; Steponaitis 1983:235). Three vessels were able to be seriated within a two-phase span by Steponaitis (1989), with one dating to the Moundville I/II phases (A.D. 1120-1400), one dating to the Moundville III phase (A.D. 1400-1520), and one dating to the Moundville III/IV phases (A.D. 1400-1650). Though the sample is small, the ceramics identified suggest the use-life for the interment area spanned

much of the occupation of the center and may have persisted after interments into Mound C had ceased.

Two Hemphill style ceramics were recovered from the area, one as a mortuary accoutrement and one apart from human remains (Table 4.9) As ethnohistoric documents, including engravings and historic portraiture, depict relatively socially elevated personages wearing shell accoutrements around the neck, wrists, waist, just below the knee, and at the ankles, four individuals appear relatively elite (Dye 2017; Swanton 1946:804, 808). These include an individual with mica and shell beads at each wrist (Moore 1905:167); another with shell beads at the neck, left wrist, and both ankles (Moore 1905:172); the third with a shell gorget with complicated design on the chest (Moore 1905:172); and the fourth noted as having shell beads at the neck and a decorated slab palette with red and white pigment (Moore 1905:172). Finally, the Alabama Museum of Natural History conducted excavations North of Mound C in 1930, recovering two interments noted as supine and extended (probable adults), one without observed accoutrements and one interred with a bone pendant and fragments of mica (Knight 1992:10; Peebles 1973:11, 41). A ceramic pipe was recovered in the area, apart from human remains (Knight 1992:10).

Table 4.9. Hemphill style ceramics recovered from Northeast of Mound C.

Artifact #	Burial #	Motif	Designation	Fellows
		Center symbol with radiating		
NEC9		crosshatched bands	Early Hemphill	C12
NEC11	NEC8	Paired tails	Middle Hemphill	Rho19

Interments within Mound C appear invested in a highly controlled esoteric practice, with the volume, variability, and associated iconography of copper accourtements suggestive of a concerted investment in war powers. More than half of interments in the mound possess accourtements, with ceramics occurring minimally, almost exclusively in the form of bottles and

bowls, and of local origin. Finally, interments in the monument are uniformly adults, with the single exception of a child interred with two, matching, oblong copper gorgets on similar stands of pearls. Northeast of Mound C, in contrast, appears to host a minimum of five infants/children – though perhaps atypically situated. Associated accoutrements in this area include mica and a formal palette with paint, but in an area where mortuary inclusions are generally dominated by undecorated ceramics with a relatively elevated number of pots/jars. The segregated and restricted position of Mound C on the Moundville landscape, and the area north of Mound C even more so, suggest that the individuals comprising the mortuary sample within the mound and the individuals comprising the mortuary population within the North of Mound C area were well-known to each other and perhaps directly affiliated.

Mound D

Mound D marks the northeast corner of the Moundville site plan, with respect to conspicuous terraforming. As with Mound C, the monument is positioned north of the plaza and on a land strip bordered by deep ravines (Knight and Steponaitis 1998:5). Moore's testing of Mound D quickly identified burials in the middle half of the eastern side and the northern half of the western side of the plateau summit, leading Moore and his team to extensively excavate the entire northern portion to a depth of 3-4 feet; trial holes investigating the southern section were "without material result" (Moore 1905:172). As with Mound C, burials were found in dark, loamy soil and with the soil matrix also containing "the usual dwelling site debris, bones, hammers, pitted stones, etc..." (Moore 1905:172-1733; Peebles 1974:206). The northern half of the summit plateau also contained unassociated fragments of sheet-copper, three discoidal stones, a ceramic disc, a tool of beveled greenstone, four bone tools, and an identified swan bone (Moore 1905:173).

The recovery of swan is remarkable because it is highly unusual for the area (Jackson and Scott 2003, 2010; Porth et al. 2017; Scott 1982, 1983; Woodrick 1981). The only other documented instance, as far as the author was able to ascertain, of swan recovered from the Black Warrior or Tombigbee river valleys is from a Moundville I (A.D. 1200) pit feature at the nearby, non-mound, Grady Bobo site (1TU66) (Maxham 2004; Jackson 2002; Jackson and Scott 2003:558). Swan remains recovered from within Mississippian contexts are typically interpreted as a component part of larger ritual paraphernalia crafting activities including the creation and/or adornment of mantles, staffs, pipes, and fans (Buchanan 2018; Jackson 2002:5; Kelly 2001:352, 2010:4-5). An ethnohistoric association of swan with copper axes is found in Adair's (2005:178-179) accounting of a Tukabahchee ritual procession wherein, "their magnus carries one under his arm... next to him their lead warrior carries another... all others carry white canes with swan feathers at the top" (Peebles 1974:188). Swan in ritual context within the Mississippian may be best exemplified from deposits at the Cahokia site recovered from within sub-mound 51 and Mound 34 and dating to the Lohmann (A.D. 1050-1100) and Moorehead (A.D. 1200-1275) phases, respectively (Kelly 2001, 2010; Kelly and Kelly 2007).

Moore identified a total of 44 burials within Mound D and provided descriptions for the 10 in possession of mortuary accompaniments (Tables 4.10. and 4.11.). In stark contrast to Mound C, only three individuals interred in Mound D evidenced accoutrements associated with esoteric office. Two individuals were interred with sheet-copper pendants, one of which displayed a repoussé eye "somewhat similar to those found in Mound H at Moundville" (Moore 1905:175-176; Peebles 1973:206-209). A single wood encased copper axe and a single stone palette with paint were recovered from Mound D, presumably from burials that had completely deteriorated (Moore 1905:173,175). No pigment complex minerals are noted as recovered from

Mound D, in either associated or unassociated contexts. Notable burials include two extended adults interred into a shared pit, with one individual positioned prone and interred with the sheetcopper pendant with the repoussé eye (Moore 1905:175); three extended adults oriented to radiate from a common center at the top of the skull, one of them evidencing a badly healed fracture of the left humerus (Moore 1905:176); one pit with adult remains deliberately mixed with the feature fill (Moore 1905:178); one pit with an extended adult at the bottom and the bones of a child deliberately mixed with the feature fill (Moore 1905:178); and one pit with a deposit of bones that included 11 skulls, three undecorated bottles, an undecorated bowl, and an effigy bowl (Moore 1905:175). The Mound D ceramic assemblage was observed to be almost equal parts bottles (6) and bowls (5, including an effigy bowl), with a single pot/jar. Five ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with three dating to the Moundville II/III phases (A.D. 1260-1520), one dating to the Moundville III phase (A.D. 1400-1520), and one to the Moundville III/IV phases (A.D. 1400-1650). Notable ceramic inclusions include four Hemphill style vessels, though with none belonging to the Late Hemphill style phase (A.D. 1425-1450) - a deficit that was also observed within Mound C (Table 4.12). In comparison with Mound C, assessed to have hosted a relative proliferation of esoteric materials and presumed personnel, Mound D interments appear far less representative of an esoteric elite and may, instead, represent a non-specialist corporate leadership actively engaged with site-level activities and ideally positioned to supply individuals to specialist pursuits.

Table 4.10. Burial type and count for interments within Mound D.

Mound D Burial Type	Count
Extended	21
Adult	14
Adolescent	2
Child	1
Infant	4
Flexed	1

Adult	1
Prone	2
Adult	2
ND	20
Adult	12
Child	1
ND	7
Total	44

Table 4.11. Associated accoutrements recovered from Mound D.

Associated Accoutrements, Mound D	Burial Count
Mussel shell	1
Number of freshwater shells	1
Small pot	1
Stone discoidal	1
Small undecorated bottle (2); effigy bowl; undecorated bottle;	
undecorated bowl	1
Sheet copper ornament; decorated bottle (D3/m5 Phillips 2012:321)	1
Decorated bowl (D4/m5 Phillips 2012:310); shell beads near head and	
one wrist	1
Copper ear plug near skull; symbol badge on clavicle	1
Decorated bottle (2)(D5/m5 Phillips 2012:162)(D6/m5 Phillips	
2012:279); formal palette with paint; undecorated bowl; decorated bowl	1
Shell beads at one ankle (3)	1
None	34
Total	44

Table 4.12. Hemphill style ceramics recovered from Mound D.

Artifact #	Burial #	Motif	Designation	Fellows
D5	DM16	Finger bars and wing pairs	Early Hemphill	C2, NE128
				SD71, O9, NR38,
D3	DM13	Hand and eye	Middle Hemphill	SL'8
		Scalped heads and hand and		
D4	DM14	eye	Middle Hemphill	NR9, NR25
				O6, EE3, Rho338,
D6	DM16	Crested bird	Middle Hemphill	NE60

The recovery of a stone palette by a local farmer led Moore to extend excavations in a field occupying the northeast corner of the of Mound D land strip. In the southern portion of the field the expedition encountered 27 burials within "a dark soil such as found in dwelling sites" and additional pit features without evidence of mortuary use (Moore 1905:178; Peebles

1973:209-210) (Table 4.13.). Notable interments included one child with shell beads at the wrists and knees (Moore 1905:180); an extended adult who was interred with large sherds under the skull (Moore 1905:181); one adult with "shell ornaments ... made from small sections of conch, pierced at one end" (Moore 1905:180); and a pit, intruding into an earlier pit, containing an individual with a sheet-copper ornament and associated shell beads (Moore 1905:182) (Table 4.14). Ceramic inclusions consisted of a majority of bottes (7), with equal numbers of bowls (4) and pots/jars (4). Finally, an unusual fragment from a square vessel with stepped sides was recovered unassociated with human remains (Moore 1905:182). This atypical form was recovered from other interment areas around the site including south of Mound D (Knight 1992:5; Peebles 1973:69), the 'Field near Mound M' (M1) (Peebles 1973:71), and north of Mound E (Peebles 1973:71).

Table 4.13. Burial type from the interment area north of Mound D, recovered by Moore.

Burial Type North of Mound D	Count
Extended	16
Adult	16
Flexed	7
Adult	7
ND	4
Child	1
Infant	1
ND	2
Total	27

Table 4.14. Associated accourrements from the interment area north of Mound D, recovered by Moore.

Associated Accoutrements, North of Mound D	Burial Count
Decorated bowl; decorated bottle (ND14/m5 Phillips 2012:225)	1
Decorated bottle under body	1
Decorated bottle; undecorated bowl	1
Fragment of pottery beneath skull; pot (3)	1
Pot	1
Quartzite lancehead without notches (2); quartzite lancehead with notches (2);	
masses of limonite and of hematite; small jasper arrow-head; thin slab of	
ferruginous sandstone; numerous small shell beads	1
Small bottle with holes for suspension; fragments of sheet copper ornament and	1

shell beads	
Undecorated bottle; slab of trap-rock; fragments of sheet copper at feet; discoidal	
(2)	1
Fragment of coarse earthenware on the thorax; decorated bowl and undecorated	
bottle recovered under body	1
Decorated bottle	1
Decorated bowl	1
None	16
Total	27

Among items associated with lapidary crafting, heat-treated local Tuscaloosa gravel chert may be somewhat atypically well-represented in this area. The local gravel chert is typically observed to be yellowish-brown in color and occurs naturally in the form of pebbles and cobbles along the banks of the Black Warrior River (Thompson 2011:241). Heat-treating Tuscaloosa gravel typically transforms the color to something ranging from light pink to deep red, and, in addition to possessing the utilitarian function of allowing for improved flaking, may have an added color-based significance. Moore (1905:178-179) notes the presence of "drills, discs made from earthenware vessels, several bird-arrowheads of jasper (heat-treated Tuscaloosa gravel chert) and one of quartz; three rough arrow heads or knives, one of chert; and a long, slender arrowhead of jasper." The pigment complex is also better represented here but in unusual contexts with Moore (1905:179) noting, "Near certain loose bones were a mass of limonite and an implement of bone decorated with notches and incised lines." Similarly, he observes,

One of the bunched burials referred to was in reality a deposit of bones extending over a number of square feet. Near a skull in this mass of bones were two carefully made lanceheads of quartzite... With these were masses of limonite and of hematite, a small jasper arrow-head, and a thin slab of ferruginous sandstone. At another part of this deposit of bones were two lanceheads of quartzite...having notches at the base for attachment, which the other two lanceheads did not have. With the lanceheads found last was a number of beads made by grinding down small shells... (Moore 1905:179)

Moore (1905:180) also observed that several individuals were interred with small amounts of mica.

The Alabama Museum of Natural History engaged in some amount of maintenance for Mound D in early 1930 that resulted in the recovery of a cream-colored bowl with a red rim and a ceramic discoidal (Peebles 1973:60). In February and March of 1930, the AMNH investigated the area North/Northeast of Mound D (Knight 1992:8-9, 15-16; Peebles 1973:54). The first exploratory effort "in a field just above the river," recovered 23 interments, with variable information provided for the individual burials (Knight 1992:8-9) (Table 4.15). Only two individuals are provided ages, an adolescent and a child, suggesting excavators were only noting variations from adult interments in a manner similar to Moore. Two multiple burials were observed in the area, the first comprised of five extended individuals, assumed to be adults, associated with a decorated bowl and pot/jar (Knight 1992:8). The second was comprised of three flexed probable adults without associated accoutrements and missing a number of elements, including all three skulls (Knight 1992:9). A minority of five individuals were observed with accourrements (Table 4.16). Notable associations include a probable adult interred with "hundreds of beads;" a child interred with an axe fragment and ceramic fragments; and a probable adult interred with six small projectile points, shells, and a "piece of copper from a rib" (Knight 1992:8-9, 18). A formal stone palette and decorated bottle were recovered apart from human remains (Peebles 1973:56-58).

Table 4.15. Burial type from the interment area North/Northeast of Mound D, recovered by AMNH in February 1930.

Burial Type North/Northeast of Mound D	Count
Extended	6
Adult	5
Adolescent	1
Flexed	5
Adult	5
ND	12
Child	1
Adult	11
Total	23

Table 4.16. Associated accourrements from the interment area North/Northeast of Mound D, recovered by AMNH in February 1930.

Associated Accoutrements North/Northeast of Mound D	Count
6 bird points; a few shells; small piece of copper from chest	1
Axe fragment; ceramic fragments	1
Decorated bowl; pot	1
Large beads at ankles and smaller beads at wrists ("hundreds of beads"); large ceramic fragment; pot	1
Pot	1
None	18
Total	23

The second round of testing Northeast of Mound D, in March of 1930, recovered 26 burials, again with variable information provided on the individual interments (Knight 1992:15-16; Peebles 1973:55-56) (Table 4.17). Atypically, only five individuals were observed to be single burials; the additional 21 individuals were recorded as belonging to seven multiple interments (Knight 1992:15-16). A single child was noted for the area, so consequently, all others are assumed to be adults. Similarly, only flexed positions were noted among interments, suggesting excavators only noted variant body placement on a landscape generally dominated by extended supine interments. The seven recorded multiples include three pairs of presumed adults, with one pair noted as flexed; two trios of presumed adults; one multiple of four flexed adults, with three situated together atop the fourth; and finally a multiple of five. The largest of the multiple interments, this burial is described as a pit that consisted of four discrete levels. The lowermost level hosted two flexed probable adults, one observed with shell beads at the left wrist and the other observed with a square greenstone slab and a ceramic fragment filled with red pigment (Knight 1992:16). This level, level four, was preceded by the only child noted for the area, observed in association with a duck effigy bowl without the duck head (Knight 1992:16). Level two was observed to host a presumed extended supine adult with a bowl on the chest, while the uppermost level, and first interment encountered, hosted a presumed extended supine

adult observed with a fish effigy bowl and a black pot/jar (Knight 1992:15-16). A minority of eight individuals were observed with associated accoutrements (Table 4.18). Mortuary associations of note for the area include the aforementioned square greenstone slab; two decorated bottles, one painted and one Hemphill style; shell beads; and a rectangular stone palette.

Table 4.17. Burial type from the interment area Northeast of Mound D, recovered by AMNH March in 1930.

Burial Type Northeast of Mound D	Count
Extended	18
Adult	17
Child	1
Flexed	8
Adult	8
Total	26

Table 4.18. Associated accourrements from the interment area Northeast of Mound D, recovered by AMNH in March 1930.

Associated Accoutrements, Northeast of Mound D		
Bottle (NED10 Phillips 2012:261) situated atop a fragment of large pot near head;		
awls, paint rock fragment, unidentified bones, and thick ceramic fragment at feet	1	
Bowl on chest	1	
Ceramic fragment filled with red pigment and a square slab of greenstone	1	
Duck effigy bowl in two pieces, head missing at the neck	1	
Fish effigy bowl; black pot	1	
Red and white painted bottle	1	
Shell beads at left wrist (approximately a dozen)	1	
Square stone disc	1	
None	18	
Total	26	

Finally, grounds maintenance North of Mound D in 1935 led to the discovery of two additional interments, both primary and extended supine and both with effigy vessel accoutrements, a fish and duck respectively (Peebles 1973:60). Of ceramics recovered in the area north of the mound, six were able to be seriated within a two-phase span by Steponaitis (1989) with two dating to the Moundville II phase (A.D. 1260-1400), three dating to the Moundville

II/III phases (A.D. 1260-1520), and one to the Moundville III phase (A.D. 1400-1520). A total of five *variety Hemphill* ceramics were recovered north of the monument, with all seriated by Phillips (2012:225, 255, 261, 304, 408) (Table 4.19). The AMNH recoveries combined with the recovery of a single Hemphill style bottle (ND14/m5) by Moore (1905:182), show a higher relative frequency of Middle Hemphill style phase (A.D. 1375-1425) ceramics in northern contexts, mirroring chronological data from the monument and suggesting the two were operating concomitantly.

Table 4.19. Hemphill style ceramics from interment areas North and Northeast of Mound D.

Artifact #	Burial #	Motif	Designation	Fellows
ND14	ND27	Four forked eye surrounds	Early Hemphill	
ND"B"	No Data	Winged serpent	Middle Hemphill	
ND4	No Data	Scalps and three fingers	Middle Hemphill	SL'8, NR38
ND3	No Data	Hands and skulls	Late Hemphill	
NED10	No Data	Winged serpent	Middle Hemphill	

Moore investigated the area South of Mound D twice, resulting in the identification of 201 total burials (Moore 1905:184-187,1907:341-343; Peebles 1973:214). The first, in 1905, focused on the elevated eastern border of the land strip south of the mound (Moore 1905:184; 1907:341). Nineteen trial holes identified 25 burials, though he only provides details for seven of them (Moore 1905:184; Peebles 1973:214). All ceramics recovered, including three Late Hemphill style phase (A.D. 1375-1400) bottles, came from two burial pits that evidenced multiple interments and multiple interment episodes (Moore 1905:184) (Tables 4.20 - 4.22). One infant was notably interred with two canine teeth of large carnivores, with perforations for suspension (Moore 1905:187). An additional burial of note was an individual interred extended supine with a bowl inverted over the face and a layer of sherds covering the body from the chest to the pelvis (Moore 1905:186). Found in the soil, apart from remains, were several discs made

from vessel fragments (Moore 1905:187). Surprisingly, no copper, palettes, pigment, or shell were encountered as mortuary accourtements.

Table 4.20. Burial type for the interment area South of Mound D, recovered by Moore in 1905.

Burial Type South of Mound D 1905	Count
Extended	3
Adult	3
Flexed	1
Adult	1
ND	21
Adult	2
Infant	1
ND	18
Total	25

Table 4.21. Associated mortuary accourrements recovered from the interment area South of Mound D, recovered by Moore in 1905.

Associated Accoutrements, South of Mound D (1905)	Burial Count
Bowl over face; sherds covering chest and abdomen	1
Perforated canine of a large carnivore (2)	1
Pot; partially decorated bottle (SD6/m7 Phillips 2012:346)	1
Small plain bowl (2); crude pipe (2); bottle (SD9/m5 Phillips 2012:423)	1
Small bottle (SD1/m7 Phillips 2012348); frog effigy pot; small celt	1
Bottle; plain bowl	1
Bottle; vessel fragment	1
None	18
Total	25

Table 4.22. Hemphill style ceramics recovered from the interment area South of Mound D, recovered by Moore in 1905.

Artifact #	Burial #	Motif	Designation	Fellows
SD1	SDM1	Winged serpent	Late Hemphill	SD6
SD9	SDM3	Crested bird	Late Hemphill	
SD6	SDM5	Winged serpent	Late Hemphill	

Moore returned to the area around Mound D in 1906, testing areas to the northeast and continuing his investigations of the land strip south of the mound. Moore's second expedition, which investigated the landform far more intensively than his previous inquiry, recovered 176 burials south of the mound, for all of which he provides general information (Moore 1905:341-342; Peebles 1973:214) (Table 4.23). A distinct minority of 29 individuals are reported with

mortuary accoutrements, with 10 individuals in possession of at least one copper item (including ear spools) (Peebles 1973:213-218) (Table 4.24). Notable burials include four individuals interred with copper gorgets, three of them with oblong gorgets specifically; a multiple burial of two extended adults with a limestone raptor pipe between them (Moore 1907:384); an extended adult with a stone bowl of a vulture that may have been ritually killed (Moore 1907:384); a child interred seated, with the knees turned to the left (Moore 1907:342); two infants interred in urns (Moore 1907:342-343); a multiple burial containing an adult and an infant with a spaghetti style gorget (Knight and Steponaitis 2011:Figure 9.29, 232-234; Moore 1907:396); and a multiple burial containing an adult and an infant. Recovered around the temporal bones of the adult were several sheet copper pendants in the shape of symbol badges but lacking decoration (Moore 1907:342, 400). Regrettably, Moore does not note the recovery of most of the 114 ceramics recovered from the area, including 20 Hemphill style ceramics (Moore 1907:345) (Table 4.25). Found in the soil, apart from remains, were two juvenile bear femurs, both with considerable polish from use possibly as drumsticks (Moore 1907:382).

Table 4.23. Burial type and count for the interment area South of Mound D, recovered by Moore in 1906.

Burial Type South of Mound D 1906	Count
Extended	92
Adult	79
Adolescent	12
Infant	1
Flexed	10
Adult	10
Sitting	1
Child	1
Urn	2
Infant	2
ND	71
Adult	1
I/C	19
Infant	4
ND	47

Total

Table 4.24. Associated mortuary accourrements recovered from the interment area South of Mound D, recovered by Moore in 1906.

Associated Accoutrements, South of Mound D 1906	Burial Count
Bowl covering skeleton; small shell beads; large mussel shell	1
Bowl; water bottle; shell gorget	1
Circular copper gorget with inset pearl; oblong copper gorget; shell beads	1
Fragment of a bowl, covered by another bowl; small shell beads; mussel shell	1
Limestone vulture bowl	1
Oblong copper gorget with strung pearls	1
Oblong copper gorget; mass of galena	1
Oblong copper gorget; shell beads	2
Sheet copper disc (2); mass of hematite; knuckle bone of deer	1
Shell beads at wrists; copper ear spools	1
Shell beads; limestone eagle pipe between burials	1
Shell gorget between skulls	1
Water bottle; cup; copper ear spool; several sheet copper pendants by each	
temporal bone	1
Shell beads	13
Urn	2
None	147
Total	176

Table 4.25. Hemphill style ceramics recovered from the interment area South of Mound D, recovered by Moore in 1906.

Artifact #	Burial #	Motif	Designation	Fellows
		Center symbol and finger		
SD7	ND	bars	Early Hemphill	NE128, NR1
SD13	ND	Ogees	Early Hemphill	NE128, O16
SD18	ND	Pseudo-raptor	Early Hemphill	
SD27	ND	Hand and eye	Early Hemphill	EE182, EE234
		Center symbols and finger		
SD28	ND	bars	Early Hemphill	C2, NE128
				SL'31, NR30,
SD34	ND	Winged serpent	Early Hemphill	WR81
SD48	ND	Bilobed arrow	Early Hemphill	F3, NR11
				SD805, SD836,
				NE80, SW62,
SD54	ND	Raptor	Early Hemphill	NR17, O10
SD88	ND	Bones and hands	Early Hemphill	SWM15a
				D3, SD71, SL'8,
SD32	ND	Hand and eye	Middle Hemphill	SL'14, WP208,

				O9, NR19, NR38,
				WR8
CD22	NID	W 1	M: 1.11 - TT 1.11	
SD33	ND	Winged serpent	Middle Hemphill	
SD44	ND	Winged serpent	Middle Hemphill	SD87
				D3, SD32, SL'14,
				SL'8, O9, WR8,
				NR9, NR19,
SD71	ND	Raptor and hand and eye	Middle Hemphill	NR38, WR208
SD86	ND	Crested bird	Middle Hemphill	SD814
SD87	ND	Winged serpent	Middle Hemphill	
SD93	ND	Crested bird	Middle Hemphill	
				EE391, NE79,
SD15	ND	Center symbols and bands	Late Hemphill	NE458
				EE75, NE596,
SD42	ND	Winged serpent	Late Hemphill	SWM185
SD50	ND	Severed tails	Late Hemphill	SD9
SD59	ND	Wings	Late Hemphill	

The Alabama Museum of Natural History excavated extensively around Mound D from 1930-1937 (Peebles 1973:52-218). The area designated South of Mound D was completely excavated by the AMNH between 1930-1932, resulting in the identification of a total of 200 burials (Peebles 1973:72). In February of 1930, the AMNH conducted excavations in an area designated south of Mound D, including the area around a low mound now referred to as B1 (Knight 1992:5; Peebles 1973:62; Steponaitis and Scarry 2016:Figure 1.1). A total of 14 individuals were observed, with burial type generally noted for the majority of interments but not age (Table 4.26). Like the AMNH excavations Northeast of Mound D, a single child was noted for the area (Knight 1992:6). Two multiples, one pair, and one multiple of six individuals, account for just over half of recorded interments (8). The pair, observed in the area of Mound B1, were recorded as adults and observed to be on their backs, disturbed, and without associated effects (Knight 1992:5). The second multiple was observed as five individuals, presumed adults, extended supine and stacked atop one another in a vertical shaft with an isolated skull, in association with a ceramic pipe fragment, occupying the western boundary of the grave (Knight

1992:5). The three uppermost interments were observed in association with mortuary accourtements including, from the top down, a "delicate" bowl, a large bowl with a decorated rim, and a decorated bottle (Knight 1992:5). Additional items recovered in the larger interment area include several ceramic fragments, an unidentified mineral "resembling phosphate," multiple awls, and multiple stone discoidals – suggesting the mortuary location was another repurposed former habitation area (Knight 1992:6).

Table 4.26. Burial type for the interment area South of Mound D, recovered by the AMNH in February 1930.

Burial Type South of Mound D 1930	Count
Extended	12
Adult	11
Child	1
Skull	2
Adult	2
Total	14

The majority of area interments (10) were observed with associated effects (Table 4.27). Mortuary accourtements of note include one Hemphill style bottle seriated to the Middle Hemphill style phase (A.D. 1375-1425) (Phillips 2012:339), a "probably decorated" conch shell (Knight 1992:6; Peebles 1973:70, 117), a bone pendant (Knight 1992:6), and a stone ceremonial axe (Knight 1992:6; Peebles 1973:102, 134-135, 150). Unassociated artifacts of note include a stone palette that had been recovered from the area by a local person and subsequently purchased by the research team (Peebles 1973:69) and a square vessel with stepped sides similar to the unusual fragment noted previously from the Northeast of Mound D (Knight 1992:5; Peebles 1973:69). This vessel is also remarkably similar in appearance to another recovered by James Ford and Moreau Chambers from a conical mound in Hinds County, Mississippi, during a 1927-1928 field season and by Ian Brown at the Bottle Creek site in Baldwin County, Alabama, during a 1993-1994 (Brown 2012: Figure 67; Ford 1936:118-119; Peebles 1973:71).

Table 4.27. Associated accourrements for the interment area South of Mound D, recovered by the AMNH in February 1930.

Associated Accoutrements South of Mound D 1930		
Bowl		
Bowl with decorated rim	1	
Conch shell "probably decorated" at head; bone pendant	1	
Decorated bottle	1	
Decorated bowl fragment	1	
Duck effigy bowl; small bottle	1	
Fragment of ceramic pipe	1	
Lithic material resembling "phosphate rock"	1	
Pot	1	
Stone ceremonial axe	1	
None	4	
Total	14	

In March of 1930, the AMNH conducted excavations in an area designated Southeast of Mound D, just east of Moore's 1905 work in the area, which resulted in the recovery of 13 individuals (Knight 1992:20)(Table 4.28). Of the 13, only the three children and one adolescent are provided general age designations, with all others presumed adults. Similarly, only these variants were provided burial types, all on back, with all presumed adults also likely to have been extended supine interments (Knight 1992:14-15, 20-21). Two multiple interments, both vertical pairs, are noted for the area (Knight 1992:14, 20). The first observed belong to two of the children noted for the area, with both interred on their backs, one atop the other, and absent associated effects (Knight 1992:14). The second pair was composed of two presumed adults, one atop the other and possibly the result of aboriginal disturbance (Knight 1992:20). The uppermost individual was observed with a spear under the skull and two greenstone axes under the body, while the lower interment was observed in association with a pot under the skull (Knight 1992:20). A minority of individuals (4) were observed with accourrements (Table 4.29). Notable associations include the presumed adult observed with the spear and greenstone axes and a presumed adult with a turtle effigy bowl (Knight 1992:20). A single vessel recovered Southeast

of Mound D was able to be seriated within a two-phase span by Steponaitis (1989), dating to the Moundville II/III phases (A.D. 1260-1520).

Table 4.28. Burial type for the interment area Southeast of Mound D, recovered by the AMNH in March 1930.

Burial Type Southeast of Mound D 1930	Count
Extended	13
Adult	9
Adolescent	1
Child	3
Total	13

Table 4.29. Associated accourrements for the interment area Southeast of Mound D, recovered by the AMNH in March 1930.

Burial Type Southeast of Mound D 1930	Count
Pot under skull	1
Small pot; pot (2); bowl	1
Spear under skull; greenstone axe (2)	1
Turtle effigy bowl	1
None	9
Total	13

Field methods at Moundville changed appreciably in the early 1930s and record keeping related to the subsequent inquiry South of Mound D greatly improved. The 1932 excavations south of the mound identified 173 burials, with 133 of sufficient preservation to note type (Peebles 1973:86-173) (Table 4.30). Somewhat unusually, relative to interment areas discussed thus far, there were observed 15 instances of multiple interments, with four possessing more than two individuals. The majority of interments recovered in 1932 appear in plan view to cluster into three general groups, with two groups evidencing roughly linear arrangements (Figure 4.4).

Almost half (82) of the 173 recorded interments were associated with accourtements (Table 4.31). Notable associations include two adult individuals with bear canine pendants (Peebles 1973:131, 163); one adult with a "chunk" of galena (Peebles 1973:101); two adults with evidence of red paint, with one anointing an axe (Peebles 1973:134-135, 164-167); one adult with a large turtle shell covering the skull (1973:167) and another with a turtle effigy bowl

placed in front of the skull (Peebles 1973:170); one adult with beads running from wrist to wrist under the waist with a cache of unfinished shell pendants between the right arm and body, from shoulder to hand (Peebles 1973:107); one adult with the skull of a deer above the head (Peebles 1973:171-172); and one child who also displayed fragmented pottery scattered over the chest (Peebles 1973:130-131). Nine Hemphill style ceramics were recovered during the 1932 excavations (Table 4.32). Unassociated artifacts of note include 20 duck effigies (Peebles 1973:79), 83 ceramic discs (Peebles 1973:79), 330 mammal bone awls (Peebles 1973:80), 33 bird beak awls (Peebles 1973:80), four copper fragments (Peebles 1973:82), two mica fragments (Peebles 1973:82), three samples of coal (Peebles 1973:82), and a "paint rock" (Peebles 1973:82).

Table 4.30. Burial type and count for South of Mound D interments recovered by the AMNH in 1932.

1932.	
Burial Type South of Mound D 1932	Count
Bundle	2
Adult	1
Unknown	1
Extended	99
Adult	66
Adolescent	3
Child	24
Infant	5
Unknown	1
Flexed	23
Adult	20
Child	1
Unknown	2
Isolated Skull	2
Adult	2
Prone	2
Adult	2
ND	45
Adult	23
Child	6
Infant	2
Unknown	14
Total	173

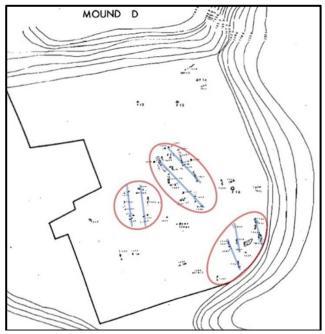


Figure 4.4. Burial locations South of Mound D, AMNH 1932 (Peebles 1973:Figure III-11).

Table 4.31. Associated accourrements from the interment area South of Mound D, recovered by the AMNH in 1932.

Associated Accoutrements, South of Mound D (1932)	Burial Count
Beads at wrist, extending under waist to other wrist (22); unfinished shell	1
pendants between right arm and body from shoulder to hand; shell, at right	
shoulder; beads and ear plug at skull; decorated bottle	
Beads at wrists; bowl	1
Beads, scattered; bear tusk pendant (very large)	1
Bone awl	1
Bone awl (4)	1
Bone implement; bone awl/needle	1
Bottle	5
Bottle (2); bat/beaver bowl; bowl (2); shell earplug; mussel shell; piece of	1
paint rock	
Bottle (2); bowl (2); bone awl	1
Bottle (2); bowl (2); pot (2)	1
Bottle; bone awl	1
Bottle; bowl (2); ceremonial sandstone axe; shell pendant	1
Bottle; bowl; axe; red paint on and around axe	1
Bottle; bowl; ceramic pipe fragment	1
Bottle; duck effigy bowl; ceramic discoidal; large sherd; shell beads and	1
ornament under skull	
Bottle; pot; bowl; string of beads around neck; fragment of shell pendant	1
Bottom half of bottle	1

Bowl	5
Bowl (2); vessels (2)	1
Bowl; Bottle	1
Ceramic disc; projectile point; conch shell fragments; beads; misc. shell	1
fragments	
Ceramic discoidal	1
Ceramic discs over chest and skull (3)	1
Ceramic spoon	1
Chunk of galena (2lbs)	1
Conch shell	1
Copper ornament at chin	1
Crushed bottle; ceramic disc	1
Decorated bottle; pot (2); bone awl	1
Decorated bottle; bowl; vessels (3)	1
Discoidal; projectile point	1
Effigy head found under chest	1
Fish effigy pot; bear canines between ankles	1
Fragment of bowl (2)	1
Frog effigy pipe	1
Frog effigy pot; "rope" at chin	1
Human effigy bowl; frog effigy pot; bottle; red paint	1
Large bone (probably turtle shell) covering skull	1
Large fragment of pot; bottom half of bottle	1
Large whetrock; fragments of undecorated pot scattered around burial;	1
woodpecker beak (2); bone awl (7); ceramic discoidal; pipe	
Limestone disc; pottery disc; projectile point; deer tines (2)	1
Pebble hammer	1
Pot	4
Pot (2); bowl; fragments of large pot along lower part of left leg; bottle;	1
bone awl	1
Pot (2); fragment of pot; bowl; part of bottle	1
Pot (3); bottle; large vessel scattered about; pebble hammer; jaw of animal found under skull	1
Pot; bone awl	1
Pot; bottle	1
Pot; bowl	1
Pot; bowl (2)	1
Pot; ceramic discoidal; stone cutting tools; bone awl	1
Pot; pot fragments	1
Shallow bowl; crushed pot	1
Shell beads (9); small ceramic discoidal; fish effigy bowl; large mussel shell	1
Shell beads (7), shiall certaine discoldar, fish chigg bowl, large mussel shell	1

over knees	
Shell beads (a quart) from both arms; copper found right rear of skull	1
Shell ornament (from around skull); shell beads (scattered near skull); bottle	1
Skull of a deer above head	1
Stone ceremonial axe	1
Turtle effigy bowl; bowl (2); pot	1
None	103
Total	173

Table 4.32. Hemphill style ceramics from the interment area South of Mound D, recovered by the AMNH in 1932.

Artifact #	Burial #	Motif	Designation	Fellows
SD805	SD1534	Winged serpent	Early Hemphill	
SD836	SD1563	Winged serpent	Early Hemphill	
SD849	SD1573	Feathers	Early Hemphill	NE599
				SD33, SD362, SD586,
				NED10, EE416, NE59,
SD362	SD1459	Raptor	Middle Hemphill	RW130
				SD472, NG10, SEH73,
SD472	SD1468	Crested bird	Middle Hemphill	SL'21
SD586	SD1496	Raptor	Middle Hemphill	EE416
SD814	SD1539	Crested bird	Middle Hemphill	
SD8	ND	Winged serpent	Late Hemphill	
				EE155, RPB(1), SWG24,
SD742	SD1525	Paired tails	Late Hemphill	WR13

Collapsing the South of Mound D mortuary data (401) there are some notable trends. The interment area South of Mound D appears to have been deliberately placed atop a former residential area, a relatively common phenomenon at Moundville (Moore 1907:341; Wilson 2005; Wilson 2010; Wilson et al. 2010). A total of 78 ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with one dating to the Moundville I phase (A.D. 1120-1260), three to the Moundville I/II phases (A.D. 1120-1400), 10 dating to the Moundville II phase (A.D. 1260-1520), and 35 dating to the Moundville III phase (A.D. 1400-1520). The South of Mound D mortuary area was created, employed, and maintained prior to and throughout the period Moundville Engraved *variety Hemphill* was made (A.D. 1325-1450) and beyond, as suggested by the presence of two

infant urns associated with the later Alabama River Phase (A.D. 1550-1650) (Moore 1907:342). Areas may have been used in rough accordance with a caretaking schema, in that interments generally manifest as clusters interiorly arranged in roughly linear rows. A similar patterning is observed within the Koger's Island cemetery, a Mississippian interment precinct with apparent ties to Moundville, with linear arrangements identified by Peebles (1971:Figure 2) and clusters delineated by Marcoux (2000:Figure 9.6) (Webb and DeJarnette 1942:212-235). Wilson and colleagues (2010:89) have proposed that these are death-based communities and representative of corporate kin-groups engaged in spatial claiming through mortuary ritual.

The area South of Mound D also seems to be generally invested in ceramic accompaniments in the course of mortuary ritual. The most commonly occurring mortuary items in the area are bowls (41), bottles (33), and pots/jars (31). Similarly, 14 individuals, a combination of adults and children, were observed with deliberately included ceramic fragments (Table 4.33). After ceramics, the most commonly occurring mortuary item is mammal bone (21). Copper is rare, with all but one specimen recovered by Moore in 1906 and only a few fragments noted in area soils (Peebles 1973:82). The only palette known for the area is the one purchased by the AMNH in 1930. Minerals of the pigment complex are similarly rare, with mica, charcoal, galena, and "red paint" occurring relatively infrequently. Mica was only observed as a mortuary accompaniment in the area North of Mound D, with the two unassociated fragments collected by the Alabama Museum of Natural History in 1932 the only ones recovered south of the mound (Peebles 1973:82). Only two instances of galena are noted south of the mound, both atypically robust accompaniments with one described as a "mass" (Moore 1907:401) and the other as a two pound "chunk" (Peebles 1973:101). Three samples of coal from unassociated contexts were noted in the area South of Mound D (Peebles 1973:82). Finally, a mass of hematite was

recovered from the area South of Mound D in 1906 (Moore 1907:402) and four total instances of red paint observed by the AMNH in 1932 including two paint rocks, one associated and one not, one singular instance of red paint, and one instance of a red painted axe head (Peebles 1973:82, 134-135, 164-167).

Table 4.33. Sherd fragments as associated accourrements in the interment area South of Mound D collapsed.

Designation	General Age	Artifacts
SDM2	Adult	Bottle; vessel fragment
SDM4	Adult	Bowl over face; sherds covering chest and abdomen
		Bowl covering skeleton; small shell beads; large
SDM10	Infant	mussel shell
		Fragment of infant skeleton in a bowl, covered by
SDM11	Infant	another bowl
SD311	Adult	Decorated bowl fragment
SD1571	Adult	Fragment of a bowl
		Bottle; duck effigy bowl; ceramic discoidal; large
SD1444	Child	sherd; shell beads and ornament under skull
SD1567	Adult	Bottom half of bottle
SD1500	Adult	Large fragment of pot; bottom half of bottle
		Large whetrock; fragments of undecorated pot
		scattered around burial; woodpecker beak (2); bone
SD1439	Child	awl (7); ceramic discoidal; pipe
		Pot (2); bowl; fragments of large pot along lower
SD1515	Adult	part of left leg; bottle; bone awl
SD1516	Adult	Pot (2); fragment of pot; bowl; part of bottle
		Pot (3); bottle; large vessel scattered about; pebble
SD1423	Adult	hammer; jaw of animal found under skull
SD1453	Adult	Pot; pot fragments

There is an interesting frequency and variation in shell accompaniments (Table 4.34). Conch shell occurs as fragments, cups, ornaments, and, in one instance, a shell ear plug. Two individuals were interred with particularly prodigious amounts of shell, one (SD1459) in the form of unfinished pendants and the other (SD1428) in the volume of shell beads adorning the arms. Finally, there are 67 infants/children noted for the South of Mound D interment area, collapsed; making the area far more representative of kin-based demographic trends than has

been observed so far. The interment area South of Mound D appears reflective of diverse social roles within a very broadly shared identity.

Table 4.34. Shell accourrements in the interment area South of Mound D collapsed.

Designation	General Age	Artifacts
SD1422	Unknown	Conch shell
		Shell beads (a quart) from both arms; copper found
SD1428	Adult	right rear of skull
		Beads at wrist, extending under waist to other wrist
		(22); unfinished shell pendants between right arm and
		body from shoulder to hand; shell, at right shoulder;
SD1459	Adult	beads and ear plug at skull; decorated bottle
		Ceramic disc; projectile point; conch shell fragments;
SD1483	Unknown	beads; misc. shell fragments
		Bottle (2); bat/beaver bowl; bowl (2); shell earplug;
SD1539	Adult	mussel shell; piece of paint rock
		Bottle; bowl (2); ceremonial sandstone axe; shell
SD1544	Child	pendant
SDM12	Adolescent	Shell beads; limestone eagle pipe between burials
SDM18	Adult	Oblong copper gorget; shell beads
SDM19	Infant	Oblong copper gorget; shell beads
SDM21	Adult	Oblong copper gorget with strung pearls
		Circular copper gorget with inset pearl; oblong copper
SDM22	Adult	gorget; shell beads
SDM23	Adult	Shell beads at wrists; copper ear spools

Excavations east of Mound D, between the monument and the ravine edge, began as a series of small tests in February and March of 1930 that identified 11 burials, with variable information provided for the individual interments, and a "large kitchen midden" (Knight 1992:8-9, 15-16, 18; Peebles 1973:174) (Table 4.35). Two children, one observed with a pot at the back of the head and one without accoutrements, and two adults, one "large" and one identified as male, were the only general ages specifically provided (Knight 1992:8-9, 16, 18). The large adult was noted as having "20 large beads around the neck" and a copper-coated wooden ear spool at each side of the head (Knight 1992:9). The adult male was observed to be absent associated effects (Knight 1992:16). A single pair, both presumed adults, was noted for the area; both were without effects and both were observed to be missing their feet (Knight

1992:9, 16). A minority of two individuals were observed with accourtements including the child and large adult (Knight 1992:9) (Table 4.28). Finally, a skull recovered in March 1930, from a presumed adult designated Burial 1, Skeleton 1, was noted to have been given to the Biology Department (Knight 1992:16).

Table 4.35. Burial type from the interment area East of Mound D, recovered by the AMNH in 1930.

Burial Type East of Mound D 1930	Count
Extended	10
Adult	8
Child	2
Prone	1
Adult	1
Total	11

Table 4.36. Associated accourrements from the interment area East of Mound D, recovered by the AMNH in 1930.

Associated Accoutrements East of Mound D 1930	
20 large beads around neck; wooden copper-coated ear plugs	1
Pot	1
None	9
Total	11

Intensive excavations conducted in 1937 identified and recorded 49 burials (Peebles 1973:176-179) (Table 4.37). The majority of interments were observed to be extended adults, with a minority of infants/children (4) observed within the sample. The area in plan view features a combination of clustering and the linear arrangements of interments (Figure 4.5). Four multiple interments are noted for the area including two pairs, one trio, and one multiple of six individuals (Peebles 1973:185-186, 192-195, 200-202, 204). Both pairs were observed without effects and include an extended adult with an adult skull and an extended individual with a bundled individual, both without general ages provided (Peebles 1973:185-186, 204). The trio was composed of three adults without associated effects or noted burial position (Peebles 1973:200-202). The final, atypically large, multiple was composed of Burials 2588-2593, all primary

extended supine interments without disturbance in a shared pit. The central interment, Burial 2589, an adult and evidencing a well-healed fracture of the right radius, was interred with two copper-stained bear canines, beads at the left wrist, and a ball of red paint (Peebles 1973:192). The central burial was flanked by Burial 2592 on one side, an adult with perforated bear canines of each side of the skull, and Burial 2588, an adult with bone points, a bone ring, and a conch shell fragment. Beside Burial 2588, but possessing an opposite orientation, was Burial 2590, an adolescent interred with beads at each ankle, beads at the left wrist, and beads and a shell gorget at the neck (Peebles 1973:192-194). Finally, at the feet, or base, of the central Burial 2589 were Burials 2591, a child interred with a flat sandstone slab over the left chest, and Burial 2593, an adult without accoutrements (Peebles 1973:193-195).

The recovery of copper-covered bear canines East of Mound D appears significant, with the only other example observed thus far recovered from within the lower levels of Mound C. Bear, especially associated with sheet copper, is a noteworthy recovery from an ontological perspective. Within the precolonial panregional Southeast, bear was a remarkably important resource in the form of oil, employed often and variably with use ranging from the preparation of foods for consumption, to the creation of paints, to insect repellent (Waselkov 2020). Bear is also commonly perceived as a form of other-than-human person whose hunting necessitates special rites and care and whose remains are capable of holding and transferring power (Hallowell 1926; Lapham and Waselkov 2020; Waselkov and Funkhouser 2020:307, 310). Similarly, it is possible that the juvenile bear femora recovered by Moore south of the mound were related to a ritualized engagement with bear as a form of other-than-human-person. Given the powerful nature of both bear and copper, it is worth considering that this multiple burial contained one or more sacrificial retainers, individuals who are chosen or elect to accompany the central figure into death.

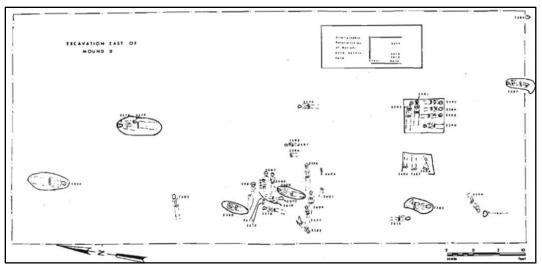


Figure 4.5. Plan view of interment area East of Mound D (Peebles 1973:Figure III-27).

Table 4.37. Burial type and count for the interment area East of Mound D 1937.

Burial Type, East of Mound D 1937	Count
Bundle	1
ND	1
Extended	26
Adult	16
Child	2
Infant	1
ND	7
Flexed	5
Adult	4
ND	1
Isolated Skull	2
Adult	2
ND	15
Adult	7
Child	1
ND	7
Total	49

Among mortuary accourrements, shell is again notably represented with one individual interred with two shell ear plugs, shell beads at the wrists and neck, and a stone disc (Peebles 1973:184)(4.38). Two individuals, one adult and one child, were interred with shell gorgets (Peebles 1973:193, 197), while one adult was interred with two mussel shells (Peebles 1973:191) and another with a mussel shell that had red paint within it (Peebles 1973:203). One individual

was observed in association with a stone pendant on the arm, a noteworthy inclusion for its rarity with only eight documented for the center, which is believed to have been the source of production for them (Phillips 2006:10). One extended adult was interred with an impressive collection of paraphernalia including copper fishhooks, worked greenstone, worked flint, bone awls, and a projectile point (Peebles 1973:202). The copper fishhooks are particularly interesting because the ethnohistoric record suggests a paucity of use, with spears, nets, and bows and arrows dominating documented procurement strategies (LaDu and Funkhouser 2019; Swanton1946:339). Among ceramics, bowls (6) just outnumbered bottles (4) and pots/jars (3). A total of four ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with three dating to the Moundville I/II phases (A.D. 1120-1400) and one dating to the Moundville II/III phases (A.D. 1260-1520).

Table 4.38. Associated Accourrements from the area East of Mound D.

Associated Accoutrements, East of Mound D	Burial Count
Bead under skull; flat stone slab over left side of chest	1
Beads at ankles, left wrist, and around neck; shell pendant under chin	1
Bear tooth (copper stained) (2); small beads at left wrist; ball of red paint	1
Bear tooth, perforated (2 - at right and left of skull)	1
Bone points; bone ring; conch shell fragment	1
Bottle; pot	1
Bottle; small frog bowl	1
Fragment of pot (2); copper fishhooks (2), between elbow and shoulder;	
pieces of worked greenstone (4) along left arm; pieces of worked flint (2) along left arm; bone awls (3) between left arm and chest; projectile point by	
left arm	1
Frog effigy bottle	1
Frog effigy bowl; copper-covered wooden ear plugs (2); a single shell bead	1
Mussel shell; red paint	1
Mussel shells (2 deposits)	1
Pot fragment against skull; fragment under head	1
Pot; stone pendant on arm just above wrist	1
Shell pendant at chin; bowl; bottle; large sherd inverted over skull	1
Stone disc (crude)	1
Stone disc; bone awl; pot; bead at neck; shell ear plugs (2); shell beads right and left wrist; bowl	1

Bowl; unfired black effigy bowl	1
None	31
Total	49

The interment areas around Mound D featured a limited variety of burial types, dominated by extended interments with only three known bundles, two recorded south of Mound D in 1932 and one recorded east of Mound D in 1937, and no evidence of cremation. Pigments were relatively rare in this area, as were medicine palettes with a total of four recovered. The most commonly occurring pigment, ostensibly also a reflection of accessibility, was red paint. Stone and bone tools, ceramics, and shell seem to dominate the assemblages. Areas to the north, south, and east appear to possess variation associated with location viability, conceived of here as the rules dictating who may appropriately utilize different areas. The area north of Mound D appears restricted, but with observed similarities to interments in the mound. For example, three of the four palettes recovered from investigations around the mound were observed within or north of the monument. Similarly, the two instances of painted bottles from area excavations came from within and north of the mound. As with Mound C, the area north of Mound D may have been reserved for exclusive use by those directly associated with the earthwork.

As is typical for the site generally, a minority of burials south of Mound D were interred with accoutrements of esoteric office. This area appears principally dominated by locally crafted ceramics and bone and stone tools. To the east of Mound D, generally, individuals are again observed with primarily stone and bone tools and ornaments, but with the inclusion of items possibly reflective of atypical abilities in hunting and conceivably signifying the area as one utilized by relatively elite corporate members. One notably ornate cluster of individuals may represent a more ritualized burial ceremony than is typical for the Mound D precinct. In sum, the Mound D ritual precinct manifests as an area controlled by a diverse kin-based corporate

leadership and is in contrast to Mound C, which appears to have operated under a pronounced esoteric leadership.

Mound E

Mound E is a large rectangular earthwork on the northeast plaza border, ranking fourth in overall size behind Mounds B, A, and R, respectively (Knight 2010:170). Moore tested the summit of Mound E with 33 trial holes but found nothing in the way of burials or corresponding ritual effects (Moore 1905:188). Trench excavations by Knight into the south flank of the mound produced evidence of three construction stages over a premound occupation featuring numerous postholes and a rectangular house basin, or pit-floor house (Knight 2010:172-173). Pit-floor style structures are commonly associated with innovations in domestic architecture radiating out of the area around Cahokia and are rarely observed at Moundville (Knight 2010:172-173). Only two others have been recorded at the site, one among the variable early architecture found north of Mound R and the other along the northwest riverbank (Knight 2010:173; Scarry 1981:87; 1995:113-115). Knight's investigation of Mound E concluded that the initial mound stage appeared to have been constructed during the establishment of the larger site plan at the center, including the plaza and palisade, in the Late Moundville I phase (A.D. 1200-1260) (Gage 2000; Knight 2010:231).

Continued excavations of the mound summit by Knight in the late 1990s observed that the second construction stage was added around A.D. 1300 and terraced to accommodate associated mound-top architecture (Knight 2010:181-182). The highest terrace, occupying the northeast quadrant of the mound surface, hosted a large structure architecturally similar to Cahokian Greathouses of the Stirling phase (A.D. 1100-1200) (Knight 2010:193). Sloping south, a second terrace occupied the southeast quadrant and hosted a large, walled compound

evidencing two rebuilding episodes (Knight 2010:187-188). Though most of the western portion of the Mound E summit has not been investigated with modern methods, it seems likely that the entire mound surface was "a compound of closely packed structures of conceivably different kinds and uses" (Knight 2010:187). Unfortunately, little of the material culture recovered from this Mound E investigation can be directly associated with Stage II architecture or associated activities (Knight 2010:231). Termination of the Greathouse appears to have involved the deliberate deposition of a thick yellow clay cap that contained a pit with three vessels, possibly a dedicatory cache (Knight 2010:252). Overlying the Stage II flank was a deposited layer of charcoal that lacked any evidence of association with a burning episode and has been interpreted as deposition from the summit (Knight 2010:174). The Mound E Stage III summit appears to have been constructed as the site character changed again, between A.D. 1400-1450 (Knight 2010:232). The recovery of a primary midden associated with Stage III, and absent associated architectural remnants, suggests the mound summit at this time was primarily a place of open-air activities (Knight 2010:232).

Seven human skeletal fragments, primarily adult lower limbs, were observed mixed with the midden that filled architectural remnants belonging to Stage II (Knight 2010:229). Fragments were recorded in three deposits: a singed infant long bone fragment was recovered from the east wall of the Greathouse, a calcined adult parietal was recovered from the south wall of the Greathouse, and a cluster of unburnt fragments were recovered from within a wall trench running interior to the south wall of the large compound (Knight 2010:228). This cluster is represented by an adult right second metatarsal, the greater trochanter of a proximal femur, a fragment of proximal tibia, and two unidentified fragments (Knight 2010:228-229). As two different interment pits within Mound D evidenced human remains deliberately mixed with feature fill, it

is interesting that the human remains observed within and associated with Mound E contexts seem to have been accidental inclusions. Accidental or not, it appears that around the late Moundville II (A.D. 1350-1400), or perhaps within the early Moundville III phase (A.D. 1400-1425) transition, Mound E activities included some amount of bone handling, possibly in conjunction with charcoal use in the area (Knight 2020:229, 231). The identification of cremated human remains is also noteworthy as a mortuary type associated with the later mantles of Mound C while being entirely absent from Mound D. No additional evidence of cremated human remains has been recovered from the Mound E area.

Notable material culture associated with Knight's investigations include greenstone fragments, sandstone fragments, sandstone saws and abraders, and pigments (Knight 2010:220-221, 223). Mound E appears to have played a prominent role in lapidary crafting at Moundville, evidencing a larger relative amount of greenstone shatter to the rest of the site and the only direct evidence of the manufacture of greenstone artifacts at Moundville (Knight 2010:220-221; Wilson 2001:122-124). Similarly, a relatively high number of Pottsville formation micaceous sandstone fragments were recovered from Mound E contexts, with almost even numbers of formal and irregular palettes comprising 16 total fragments, with four of the formal palettes displaying remnants of red, red and cream, and, somewhat unusually, black paint (Knight 2010:221). Aspects of the pigment complex, primarily muscovite mica, coal, and red and yellow ochers, were also recovered in high quantities relative to the rest of the site (Knight 2010:228). Galena, however, was conspicuously absent (Knight 2010:228).

Notable differences in ceramic vessel type, and presumably use, are also observed between Stage II and Stage III contexts. Stage II evidenced no Hemphill style ceramics and an unusually high relative portion of utility wares to service wares (Knight 2010:231). Stage III

contexts evidenced prominent connections to the Central Mississippi Valley, an atypical abundance of Hemphill style ceramics, and a higher relative rate of service to utility wares (Knight 2010:230-231). In fact, the Stage III midden evidenced 97 specimens of Hemphill style ceramics, the most from a single midden context recovered from the site to date (Knight 2010:201, 206). Unfortunately, of the over 150 specimens of *variety Hemphill* recovered from Mound E contexts only four were able to undergo seriation by Phillips (2012) (Knight 2010:Table 5.2) (Table 4.39). Finally, Knight's excavations also recovered 51 ceramic discs, all of which seem to be composed of reworked sherds, lack perforation or decoration, and, excluding the four largest, may have been employed as tokens (Knight 2010:223-225). Knight (2010:225) speculates that the four atypically large discs recovered were possibly employed as special purpose tablets (Knight 2010:225).

Table 4.39. Hemphill style ceramics from Mound E contexts recovered by Knight.

Artifact #	Motif	Designation	Fellows
			SD27, E2216, EE182,
E2009	Hand and eye	Early Hemphill	EE234
			EE182, EE234, SD27,
E2216	Fingertips and thumb	Early Hemphill	E2009
E3740	Center circle and fingers	Early Hemphill	NE128
E1232	Scalps	Middle Hemphill	NR9

The Alabama Museum of Natural History conducted extensive excavations north and east of Mound E, with smaller investigations to the northeast and south, from 1930-1932 (Peebles 1973:219). Unfortunately, no information has survived on the South of Mound E investigations, outside of the fact that they occurred and produced a shell-tempered pottery ladle (Peebles 1973:219). The AMNH conducted excavations Northeast of Mound E in February and March of 1930, recovering 11 individuals without general age, with supine burial position provided only for the first two (Knight 1992:18, 21)(Table 4.40). Three interments were observed with accourtements including two individuals with bowls and one individual with a pot/jar and

ceramic fragments from three separate vessels (Knight 1992:21). Excavators noted "bone awls, a rough discoidal stone and a whet rock or so" in addition to "a small amount of mica" in the area (Knight 1992:18).

Table 4.40. Interments and associated accourrements recovered from the interment area Northeast of Mound E 1930.

			Burial	General	
Designation	Knight 1992	S/M	Form	Age	Artifacts
NE(E)SK1	149	Single	Extended	ND	
NE(E)SK2	150	Single	Extended	ND	
					Pot; ceramic fragments (from
NE(E)SK3	191	ND	ND	ND	three separate vessels)
NE(E)SK4	192	ND	ND	ND	
NE(E)SK5	193	ND	ND	ND	
NE(E)SK6	194	ND	ND	ND	
NE(E)SK7	195	ND	ND	ND	
NE(E)SK8	196				
NE(E)SK9	197				
NE(E)SK10	198	ND	ND	ND	Bowl
NE(E)SK11	199	ND	ND	ND	Bowl

Under the direction of David and James DeJarnette, the area north of Mound E was almost completely excavated (Peebles 1973:222). The 1929-1930 excavations were conducted in accordance with earlier methods, with burials only briefly noted in association with mortuary accoutrements (Peebles 1973:222). A minimum of 94 individuals were observed. Information on a minority of 24 are available in Jones's field notes. A single individual provided the general age of adult (Knight 1992:6-8, 10, 14) (Table 4.41). A minority of 10 individuals were observed as single interments, with the remaining 14 individuals noted within three multiple burials. The first encountered consisted of a trio of presumed adults, at least one of whom was positioned flexed. Two individuals were observed with accoutrements including a bowl and a pot/jar with a bowl (Knight 1992:7). The second was a disturbance of at least seven individuals absent associations (Knight 1992:7). The third and final multiple was composed of four individuals, all supine, with one associated with a bottle and bowl (Knight 1992:7). Two individuals, both single interments observed without effects, were noted as missing the skull (Knight 1992:7-8). A total of nine

individuals were observed with associated effects, most of them variable ceramic inclusions (Table 4.42).

Table 4.41. Burial type and count for the interment area North of Mound E 1930.

Burial Type North of Mound E 1930	Count
Disturbed	7
Extended	8
Flexed	1
ND	7
Skull	1
Total	24

Table 4.42. Associated accourrements for the interment area North of Mound E 1930 (Jones).

Associated Accoutrements North of Mound E 1930	Count
"Only paint and awls in association with quite a few perforated	
shells"	1
Bottle; bowl	1
Ceramic pipe; awl	1
Decorated bowl	1
Five crushed pots	1
Pot; bowl (with break)	1
Pot; decorated bowl	1
Two crushed pots	1
Vessel	1
None	15
Total	24

A summary of the 1929-1930 excavations provided to Christopher Peebles by E. H. Chapman notes an additional 19 interments with accoutrements, though they regrettably focus on the accoutrements to the exclusion of any details about the individuals (Peebles 1973:224). Notable associated mortuary assemblages include one burial with two sandstone discoidals, a ceramic disc, a pot sherd, a bowl and bottle, and an unusual vessel partially covered in white pigment; an undecorated bowl with red paint; a square-sided vessel (similar to that recovered around Mound D); a burial with two sandstone ceremonial axes and 30 small triangular points; and a burial with a fish effigy bowl (Peebles 1973:224, Figure IV-3, 228, Figure IV-6) (Table 4.43). Notable unassociated artifacts recovered include equal numbers of bowls (26) and bottles

(26); frog, duck, human, and fish effigy bowls; an atypical bottle with several shell beads inside; a painted bottle (with a similar form recovered west of Mound R); another square-sided vessel; a formal rectangular palette with remnants of white paint; a greenstone ceremonial axe and fragments; a shell dipper with one edge worked to represent fingers; and several hundred shell beads (Peebles 1973:Table IV-1). One bottle in particular, NE80, depicts a raptor almost identical in execution to the stone pipe recovered by Moore south of Mound D in 1906 (Moore 1907:Figure 83).

Table 4.43. Associated Accourtements recovered by the AMNH 1929-1930 (Chapman).

Associated Artifacts, North of Mound E 1929-1930	Burial Count
Bottle	1
Bowl	3
Bowl; undecorated bottle	1
Ceramic pipe	1
Decorated bottle	2
Decorated bottle; undecorated bottle; bowl	1
Fish effigy bowl	1
Pot	1
Pot; ceramic pendant	1
Sandstone ceremonial axe (2); small triangular projectile points (30)	1
Sandstone discoidals (2); ceramic discoidal; pot sherd; undecorated bottle;	
undecorated bowl; decorated bowl	1
Square vessel	1
Undecorated bottle	2
Undecorated bowl	1
Undecorated bowl with red paint	1
Total	19

The Alabama Museum of Natural History resumed work in the area in early 1932, with all interments completely recorded (Peebles 1973:253). A total of 95 individuals were recovered from investigations, with extended interments dominating the sample (Table 4.44). Notable deviations in dominant type include three children recorded as bundled inclusions with an extended adult, all without accourrements (Peebles 1973:281), and an adult isolated skull recovered with two isolated mandibles, also without accourrements (Peebles 1973:271-272).

Three infants are recorded, one as a particularly well-appointed multiple interment with an extended adult. Associated accoutrements with the infant included a beaded rim bowl, pot, and shell beads at both wrists and ankles and chin. The adult individual was similarly appointed with three pots, one of which contained shells; three bowls, one with a beaded rim; a human effigy bowl; a bottle; and a human effigy head (Peebles 1973:273). A second infant, interred single, was recovered with a "toy" bottle – the smallest known *variety Hemphill* bottle (NE458) recovered to date, and with a similar vessel recovered from the south of Mound D (SD15) (Phillips 2012:416, 418). Unfortunately, no information about the individual associated with vessel SD15 is provided by Moore (1906:352, Figure 12). The third infant was recovered alone with a pot inverted over the skull (Peebles 1973:285-286). Of the 10 children recovered only three evidenced associated accoutrements, all of them ceramics or ceramic fragments. Four children belong to two multiple interments and constitute the entirety of the burial: two pairs of children, one without accoutrements and one with each in association with a vessel.

Table 4.44. Burial type and count for the interment area North of Mound E.

Burial Type North of Mound E 1932	Count
Bundle	3
Child	3
Extended	55
Adult	45
Adolescent	1
Child	3
Infant	2
ND	4
Flexed	2
Adult	2
Isolated Mandible	2
ND	2
Isolated Skull	1
Adult	1
Prone	1
Adult	1
ND	31
Adult	15

Child	4
Infant	1
ND	11
Total	95

Roughly one-third of individuals recovered (31) from North of Mound E possessed associated accoutrements (Table 4.45). The most commonly occurring mortuary items in the area are bowls (18) and bottles (18) with equal frequency, with pots/jars following (11). Fourteen Hemphill style ceramics were recovered and seriated with results tentatively suggesting the use life for the area spanned the Early, Middle, and Late Hemphill style phases (A.D. 1325-1450) (Table 4.46). A total of 35 ceramics recovered from North of Mound E were able to be seriated within a twophase span by Steponaitis (1989), with one dating to the Moundville I phase (A.D. 1120-1260), one dating to the Moundville I/II phases (A.D. 1120-1400), two dating to the Moundville II phase (A.D. 1260-1400), 23 dating to the Moundville II/III phases (A.D. 1260-1520), seven dating to the Moundville III phase (A.D. 1400-1520), and one dating to the Moundville III/IV phases (A.D. 1400-1650). Notable interments include an adult with a turtle effigy, bottle, copper ornament, and paint (regrettably, no color is provided) (Peebles 1973:260); an extended adult with a copper-coated wooden ornament and a bone awl (Peebles 1973:288); two extended adults with embossed copper ear plugs, a pot, bottle, and a large mussel shell between them (Peebles 1973:283); an extended adult with two copper-coated ear plugs (Peebles 1973:291); an extended adult with a shell ear plug and whetrock (Peebles 1973:275); a flexed adult with a pot where the skull should have been (Peebles 1973:267); an adult with 10 stone cutting tools, multiple bowls, bottles, and pots, and a whetrock (Peebles 1973:284).

Four interments representing five individuals evidenced copper accoutrements, with three individuals observed in possession of ornaments composed entirely of copper and two with ornaments coated in copper. Two of the interments evidencing copper accoutrements, the copper

coated ornament (Peebles 1973:287) and the embossed copper ear plugs (Peebles 1973:283), featured pairs of extended adults and constitute two of 13 multiples recorded for the area. The only multiple burial to host more than three individuals was the extended adult interred with bundled children. Unassociated artifacts of note include 33 whetrocks, 102 pebbles hammerstones, 68 sandstone tools, 143 awls, a bear "leg," 16 ivory billed woodpecker beaks, "two bags" of mussel shell, two noted instances of mica, and the only noted instance of galena associated with the Mound E precinct (Peebles 1973:Table IV-2). Finally, somewhat atypical bone tools were recovered in the area including an awl seated within another awl acting as a handle, a bone tube, and an incised unspecified bone (Peebles 1973:253, 256).

Table 4.45. Associated accourrements for the interment area North of Mound E.

Associated Accoutrements, North of Mound E	Burial Count
Bone awl; copper coated wood	1
Bottle	2
Bottle ("toy") (NE458 Phillips 2012:418); shells	1
Bottle fragment	1
Bottle; animal effigy bowl; discoidal; pebble hammer	1
Bottle; bowl	1
Bowl	2
Bowl with beaded rim; pot; shell beads at both wrists and ankles and chin	1
Bowl with beaded rim; small jasper point; beads at wrist (4); unfinished	
shell pendant near skull	1
Copper coated ear plug (2); bottle (NE599 Phillips 2012:227)	1
Copper ear plug (2); pot; bottle (NE592 Phillips 2012:338); small bowl;	
large mussel shell	1
Decorated bottle	1
Decorated bottle placed in right hand, crushed in place (NE596 Phillips	
2012:363)	1
Decorated bottle; bowl with beaded rim; bottle; fish effigy bowl	1
Decorated pot	1
Fragment of large decorated bowl; fragment of large yellow bowl under	
skull; concretion at right arm	1
Pot	1
Pot (2); pot with shells in it; bowl (2); bowl with beaded rim (2); bottle;	
human effigy bowl; human effigy head	1
Pot (inverted over skull)	1
Pot where skull should have been	1
Shell ear plug; whetrock	1

Small bottle; decorated bottle	1
Small bottle; shallow bowl	1
Small bowl over skull	1
Stone cutting tool (10); large bowl; poss. effigy bowl; bottle (2) (NE582	
Phillips 2012:376); small pot; whetrock	1
Stone cutting tool; bone awl (2)	1
Tiny shell bead; small triangular; bone awl (2)	1
Turtle effigy; bottle; copper ornament; paint	1
Whetrock; awl (bird bone)	1
None	64
Total	95

Table 4.46. Hemphill style ceramics recovered from North of Mound E.

Artifact #	Burial #	Motif	Designation	Fellows
NE128	ND	Center symbol and fingers	Early Hemphill	C2, SD13, O16
NE599	NE1673	Feathers	Early Hemphill	NE599, SD849
NE80	ND	Raptor	Early Hemphill	WR81, NG3
NE59	ND	Winged serpent	Middle Hemphill	NE90
				SED27, NE90,
NE592	NE592	Center symbols and bands	Middle Hemphill	Rho164
NE60	ND	Crested bird	Middle Hemphill	O6
NE61	ND	Hand and eye design	Middle Hemphill	O18
NE90	ND	Winged serpent	Middle Hemphill	ND"B," NE59
NE127	ND	Winged serpent	Late Hemphill	
NE145	ND	Raptor	Late Hemphill	SWG63, SL'1
NE458	NE1624	Center symbols and bands	Late Hemphill	SD15
NE582	NE1651	Winged serpent	Late Hemphill	
NE596	NE1665	Winged serpent	Late Hemphill	
NE79	ND	Center symbols and bands	Late Hemphill	

The Alabama Museum of Natural History conducted excavations in the area east of Mound E, in the area between the mound and ravine east of the mound, during December 1931 and January 1932 (Peebles 1973:293). In March 1932, the entire area east and southeast of the mound was investigated with a series of trenches (Peebles 1973:293, Figure IV-28). In total, 226 burials were recovered during these investigations (Table 4.47). Infants and children are reasonably well represented within the sample with 44 observed. As with the area north of Mound E, bundles, flexed positions, and isolated bones are a distinct minority. That stated, it should also be noted that fewer than half of interment types east of Mound E were able to be

observed. Generally, this area appears to conform to patterns observed north of Mound E in that it does not appear heavily invested in body processing in the course of mortuary ceremonialism and reinforces that the isolated remains found in association with mound summit contexts were likely brought to the Mound E summit with a substantial amount of preprocessing, where they were further handled in conjunction with other mound top activities.

Table 4.47. Burial type and count for the interment area East of Mound E.

Burial Type, East of Mound E	Count
Bundle	2
Adult	2
Extended	81
Adult	52
Adolescent	1
Child	11
Infant	4
ND	13
Flexed	4
Adult	2
ND	2
ND	137
Adult	82
Adolescent	1
Child	21
Infant	8
ND	25
Isolated Skull	2
Adult	1
Infant	1
Total	226

Almost half of interments (103) east of Mound E evidenced associated accourrements (Table 4.48). Notable associations include an extended adult with three shell ear plugs, shell beads around the neck, and a large conch shell inverted over the skull (Peebles 1973:376); a multiple burial of an adult and child with a bowl scattered throughout the grave (Peebles 1973:325); an adult with a notable amount of animal bones and pottery fragments mixed with the grave fill (Peebles 1973:360); an adult with notable amounts of shell in the grave fill (Peebles

1973:360-361); a child with shell beads along the body (Peebles 1973:360); a multiple burial of two extended adults with one directly associated with three bottles, a small bowl, and a large ceramic disc (possibly similar to those recovered from mound summit contexts); and a multiple burial of two adults, with one in possession of a large bowl, greenstone axe, and several sheets of mica below the skull and the second with an early Hemphill cylindrical bowl (EE182) and an undecorated bowl. The early Hemphill style vessel is notable for observed similarities in the execution of the hands with the depicted hands on the Rattlesnake and Willoughby discs (Peebles 1973:340; Phillips 2012:204). Nine individuals were interred with shell ornaments, including gorgets, pendants, ear plugs and unspecified ornaments. Five individuals, ranging in age from adult to infant, evidenced two shell beads at the back of the skull. Copper is very poorly represented with only three individuals evidencing copper accoutrements, all ear plugs (5 total). The pigment complex is also poorly represented, with only two individuals interred with paint or painted objects. No formal palettes were recovered in this area, though there is note of a child with an unspecified rectangular stone included as an accoutrement under the skull (Peebles 1973:368).

Table 4.48. Associated accourrements recovered from the interment area East of Mound E.

Associated Accoutrements, East of Mound E	Burial Count
Animal bones and pottery fragments mixed with the pit fill	1
Beads	1
Beads (2)	1
Beads around each wrist; beads around neck; bowl ("toy")	1
Beads around neck (10); shell gorget on chest	1
Beads back of skull (2); bowl; pot	1
Beads; bone awl (4); stone disc under skull; stone disc; bottom of bottle;	
shell beads (36) from ankles	1
Beaver effigy bowl	1
Bone hair pins around skull	1
Bottle	11
Bottle (2); bowl; fragment of bowl	1
Bottle (3); small bowl; small vessel; large ceramic disc	1
Bottle (4) (EE7 Phillips 2012:336); bowl; small bowl	1

Bottle (EE155 Phillips 2012:394); small bowl	1
Bottle (EE391 Phillips 2012:415); fragments of a large bowl	1
Bottle (EE4 Phillips 2012:426); beads back of skull (2)	1
Bottle (red and white)	1
Bottle; bowl	1
Bottle; bowl (red); bowl; pot; pottery fragments	1
Bottle; bowl; large bowl fragment	1
Bottle; fragment of vessel	1
Bottle; part of bowl; bead under hip	1
Bottle; shell beads near skull	1
Bottle; whetrock; rectangular stone	1
Bowl	2
Bowl (heavy ware)	1
Bowl scattered throughout grave	1
Bowl with beaded rim	1
Bowl with beaded rim; bottle; bone tool; fragment of pot; shell beads	
just back of skull (2); fragment greenstone axe under chest	1
Bowl, inverted over skull	1
Bowl; projectile point; beads at both wrists, a pint of beads at both	
ankles	1
Bowl; tiny discoidal; bone awl; animal jaw (2)	1
Clam shell effigy bowl; bowl	1
Copper ear plug (2); large shell gorget (2); small shell gorget; bear tooth	1
Crude greenstone discoidal under skull	1
Crushed bowl	2
Crushed bowl	1
Decorated bottle	1
Decorated bottle (EE1 Phillips 2012:374); notched rim bowl	1
Decorated bottle (EE75 Phillips 2012:365); undecorated bottle; notched	
rim bowl	1
Decorated bowl (EE182 Phillips 2012:204); undecorated bowl	1
Decorated bowl (EE3 Phillips 2012:275); long bone awl (2)	1
Ear plug; copper coated ear plug	1
Effigy bowl	1
Effigy bowl (2)	1
Fish effigy bowl	1
Fish effigy bowl; bottle	1
Fish effigy vessel; bottle	1
Fragments of bottle	1
Fragments of large bowl over skull; fragments of bottle	1
Frog effigy bowl	2
Gastropod shells around ankles	1
Gorget (shell?) on chest	1
Gypsum ear drop near skull; small shell beads around neck (17)	1
Large bowl; greenstone axe; several sheets of mica below skull	1
Large bowl; greenstone axe; several sheets of mica below skull	1

Large fragment; animal effigy bowl	1
Large pot fragment under skull; small bowl	1
Large pot; large bowl	1
Large pottery fragment under skeleton	<u>-</u> 1
Limestone discoidal back of skull	1
Lots of shell in grave fill	1
Most of a bottle	1
Most of bottle; small axe; mass of red paint	1
Most of large crude bowl	1
Part of large bowl over skull	1
Pebbles hammer; greenstone axe (2)	1
Pot (2)	1
Potsherd under skull; decorated bottle	1
Pot; small bowl; bottle (EE126 Phillips 2012:411); shell beads (15)	1
Shallow bowl	1
Shell beads (5) under skull; ceramic disc; bowl (EE234 Phillips	1
2012:208); mussel shells (2)	1
Shell beads along the body	1
Shell beads around neck (25)	1
Shell beads back of skull (2); bowl with beaded rim; large pottery	
fragment under skull; bone awl; discoidal with red paint; yellow paint	
rock; red paint	1
Shell disc under chin	1
Shell ear plug (2)	2
Shell ear plug; copper coated wooden ear plug (2); decorated bowl;	
fragments of a bowl	1
Shell ear plugs (3); shell beads around neck; large conch shell inverted	
over skull	1
Shell pendant near skull	1
Shell plug coated with black substance	1
Small bottle; lump of red pigment	1
Small bowl (EE416 Phillips 2012:299)	1
Small bowl; most of a vessel	1
Small bowl; small vessel; fragment of large vessel	1
Small greenstone ceremonial axe	1
Undecorated bowl (2)	1
Whetrock; pitted stone	1
Worked shell object (5); shell gorget under chin; woodpecker beak; shell	
at ear	1
None	124
Total	226

As with the area North of the mound, the most commonly occurring mortuary items to the east of Mound E are bowls (54) and bottles (39), with pots/jars forming a distinct minority

(6). Fourteen Hemphill style ceramics were recovered from the area, all of which were seriated by Phillips (2012) (Table 4.49). A total of 124 ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with two dating to the Moundville I/II phases (A.D. 1120-1400), six dating to the Moundville II phase (A.D. 1260-1400), 82 dating to the Moundville II/III phases (A.D. 1260-1520), and 34 dating to the Moundville III phase (A.D. 1400-1520). That Late Hemphill style phase (A.D. 1420-1450) ceramics are also particularly prolific in this area further suggesting that the interment location was one that remained quite active until the dissolution of the mortuary program in the Moundville III phase (A.D. 1400-1520). Interesting trends include 23 individuals, again a combination of adults and children, observed with deliberately included ceramic fragments (Table 4.50).

Three individuals evidenced ceramics covering the skull while another three were observed with ceramics placed under the skull. Unassociated items of note include 51 stone discoidal fragments, one stone disc and two stone disc fragments, 38 unspecific bone awls, two bear bones and three bear teeth, a shell pendant and shell ear plug, two bags of pottery clay and shell temper, a pottery tool, and one instance each of red, yellow, and green paint (Peebles 1973:Table IV-3). That this is the first green paint observed in contexts described thus far suggests it is a remarkably controlled substance. The "green paint" recovered at Moundville is derived from the mineral glauconite and may have necessitated additional processing to generate a workable pigment (Knight personal communication). As with mound summit investigations, no galena was reported for East of Mound E.

Table 4.49. Hemphill style ceramics recovered East of Mound E.

Artifact #	Burial #	Motif	Designation	Fellows
EE182	EE1281	Hand and eye	Early Hemphill	SD27, EE234
EE234	EE1316	Hand and eye	Early Hemphill	SD27, EE182
	EE1181-			D6, O6, NE60,
EE3	1183	Crested bird	Middle Hemphill	Rho338

EE343	ND	Scalps	Middle Hemphill	
EE416	EE1406	Raptor	Middle Hemphill	SD586
		Center symbols, bands,		
EE7	EE1185	and fingers	Middle Hemphill	
	EE1181-			
EE1	1183	Winged serpent	Late Hemphill	
EE126	EE1261	Hands	Late Hemphill	SWG52, WP'39
				EE155, WR13,
				RPB(1), SD742,
EE155	EE1275	Paired tails	Late Hemphill	SWG24
EE166	ND	Paired tails	Late Hemphill	SD9, EE166, RPB(4)
EE25	ND	Winged serpent	Late Hemphill	
EE391	EE1394	Center symbols and bands	Late Hemphill	
	EE1181-			
EE4	1183	Turtle/bundle	Late Hemphill	SD8, Q2743, RPB(4)
				SD42, SWM185,
EE75	EE1225	Winged serpent	Late Hemphill	NE596

Table 4.50. Ceramic vessel fragments included with interments in the area East of Mound E.

Designation	General Age	Artifacts
EE1360	Adult	Animal bones and pottery fragments mixed with the pit fill
		Beads; bone awl (4); stone disc under a skull; stone disc;
EE1336	ND	bottom of bottle; shell beads (36) from ankles
EE1227	Adult	Bottle (2); bowl; fragment of bowl
EE1234	Adult	Bottle; bowl (red); bowl; pot; pottery fragments
EE1321	Adult	Bottle; bowl; large bowl fragment
EE1265	Adult	Bottle; fragment of vessel
EE1394	Adult	Bottle; fragments of a large bowl
EE1202	ND	Bottle; part of bowl; bead under hip
EE1243	Child	Bowl scattered throughout grave
		Bowl with beaded rim; bottle; bone tool; fragment of pot;
		shell beads just back of skull (2); fragment greenstone axe
EE1213	ND	under chest
EE1199	Adult	Bowl, inverted over skull
EE1300	ND	Fragments of bottle
EE1299	ND	Fragments of large bowl over skull; fragments of bottle
EE1291	Adult	Large fragment; animal effigy bowl
EE1254	Adult	Large pot fragment under skull; small bowl
EE1276A	Adult	Large pottery fragment under skeleton
EE1283	Adult	Most of a bottle
EE1326	Adult	Most of bottle; small axe; mass of red paint
EE1348	Child	Most of large crude bowl
EE1222	Adult	Part of large bowl over skull
EE1263	Adult	Potsherd under skull; decorated bottle

		Shell beads back of skull (2); bowl with beaded rim; large pottery fragment under skull; bone awl; discoidal with red
EE1377	Adult	paint; yellow paint rock; red paint
		Shell ear plug; copper coated wooden ear plug (2);
EE1277A	Adult	decorated bowl; fragments of a bowl
EE1399	Child	Small bowl; most of a vessel
EE1387	Adult	Small bowl; small vessel; fragment of large vessel

Finally, one of the most immediately striking aspects of the East of Mound E mortuary practice is the phenomenon of multiple interments in the area. Almost half of all individuals recovered from the area East of Mound E were interred with at least one other individual (Table 4.51). At least 30 multiple interments occupy the area East of Mound E, with just over half (16) housing two individuals. Multiple interments featuring three people are also unusually common for the area (8), as are those featuring four or more (6). A notable multiple of three interments included a child associated with five unspecified worked shell objects, a shell gorget, and a woodpecker beak; and two adults who were similarly well appointed with one evidencing two shell beads at the back of the skull, a bowl with beaded rim, a large pottery fragment under the skull, a bone awl, a discoidal with red paint, a yellow paint rock, and red paint while the second adult was interred with a bowl, small discoidal, bone awl, and two unidentified animal jaws (Peebles 1973:366-367).

Table 4.51. Counts for single and multiple burials for the interment area East of Mound E.

Single vs. Multiple Interments, East of Mound E	Count
Multiple	113
Adult	70
Child	15
Infant	7
ND	21
Single	112
Adult	69
Adolescent	2
Child	17
Infant	6
ND	18
ND	1

ND	1
Total	226

Four of the multiple interments were atypically large, featuring a minimum of five individuals. In burial number order, the first group featured a central interment (EE1233) without mortuary goods, but with three adult individuals (EE134-EE136) in an unarticulated mass at the feet and associated with a bottle, two bowls, and a pot. Numerous vessel fragments, some with human head rim effigies, were recovered within the pit fill (Peebles 1973:299, 322). Four additional adults (EE1237, EE1245-EE1247) were associated with the interment, but unfortunately their relative position within the pit was not recorded (Peebles 1973:299). The second interment was composed of five individuals (EE1324-EE1328) and featured a well-accompanied adult (EE1326) with a bottle that evidenced remarkable use-wear in that it was fractured and missing pieces, a small axe, bone awl, and mass of red paint, and a child (EE1328) with a small ceremonial greenstone axe (Peebles 1973:352-353). An adult with a bowl and an adult and child without accoutrements completed the feature (Peebles 1973:352-354). Peebles (1973:300) notes that all individuals appear to have been disturbed by later activity.

The last two of the notable multiples are similar in that they consist of an elaborate central burial with between eight and nine "tightly packed" surrounding individuals. One featured a central burial (EE1332) accompanied by two copper ear plugs, two large shell gorgets, one small shell gorget, a bone awl, and a bear tooth (Peebles 1973:355). It was surrounded by a mass of eight extended adults accompanied by an unknown number of beads, four bone awls, two stone discs, one of which was positioned under a skull, and numerous beads (36) that were recovered from the areas of the ankles for the group (Peebles 1973:355). The interment also included one child without accompaniments and two infants, one with gastropod shells around the ankles and one with two beads at the back of the skull, a bowl, and a pot (Peebles 1973:356-

357). The second "tightly packed" cluster consisted of an adult individual (EE1358) accompanied by an ear plug and a copper coated ear plug with nine adult interments described as "the worst jumble of the whole place," all without accoutrements (Peebles 1973:359).

The Mound E precinct appears generally representative of an area hosting esoteric practice, and around which affiliated ritual practitioners and corporate elites were interred. It seems possible that Mound E was an activity platform for the esoteric manipulation of stone, with an emphasis on paint and palettes. The interment areas around Mound E manifest similar characteristics to those observed around Mounds C and D in that the North of the mound may be restricted and reserved as space for individuals atypically affiliated with the group controlling the monument. The area North of Mound E is notable for the recovery of the only palette recovered off mound, a formal rectangular palette with remnants of white paint recovered as an unassociated artifact North of Mound E 1929-1930 excavations (Peebles 1973: Table IV-1), and the only noted instance of galena, recovered from an unassociated context during the 1932 excavations (Peebles 1973: Table IV-2). The area north of the monument also evidenced relatively high quantities of unassociated artifacts, suggesting that it too was a repurposed residential area. The recovery of bags of clay, shell temper, and a pottery tool from North of Mound E contexts suggests the area was, at some point, also involved in the manufacture of local ceramics. Similarly, the area east of Mound E appears to share characteristics with the area east of Mound D in that the sample interred in this location appears generally reflective of relatively elite corporate-kin group members and with an overt investment in ceramics and shell accoutrements. Emblems of esoteric office, including copper, pigments, and palettes, uncommonly occur as included mortuary items. In fact, copper was infrequently observed generally, with noted instances principally occurring in the form of ear plugs (9/11), and

frequently (6) as copper-coated wooden ornaments. It is possible that the East of Mound E interment area represents relatively elite corporate membership that were allowed to access a supported ritual area for interment. Similarly, it is possible that the proliferation of multiple burials was a way to maintain family groups in an area potentially utilized by multiple kin-based entities. It is regrettable that better records do not exist for some of the larger multiple interments east of Mound E, as it seems possible some of the "jumbles" are previous interments that have been repositioned for new inclusions.

Mound F

Mound F is a smaller earthwork located along, and assisting in the definition of, the eastern plaza margin (Knight 2010:259). Moore placed 11 trial holes into the summit of the mound and observed that burials were isolated to the northeast corner of the summit, which was subsequently excavated to a depth of four feet on average (Moore 1905:188). A total of 19 poorly preserved and highly fragmentary remains were identified, though Moore notes this number may be artificially deflated by mound erosion (Moore 1905:188) (Table 4.52). Moore provides details for the nine individuals in possession of accoutrements, all of whom are assumed to be adult primary extended interments (Peebles 1974:43). In notable contrast to Mounds C, D, and E, there is no evidence of body-processing or bone-handling associated with Mound F. Similarly, the sample itself is unusually diminutive compared to within mound mortuary contexts assessed thus far. In sum, the Mound F mortuary sample is largely notable for how inconspicuously it manifests, including associated accoutrements.

Table 4.52. Burial type for the interment area East of Mound F.

Burial Type Mound F	Count
Extended	7
Adult	7
ND	12
Adult	2

ND	10
Total	19

Associated mortuary items are entirely confined to ceramics with the single exception of a highly polished, blackened, soapstone pipe (Moore 1905:Figure 95.) (Table 4.53). Moore (1905:193-194) notes that decoration on the pipe is similar to multiple specimens recovered from Georgia. Bottles (5) are most numerous within the assemblage, with bowls (2) and pots/jars (1) following. Three Hemphill style ceramics were recovered, with all able to be seriated by Phillips (2012) (Table 4.54). Of the 10 vessels associated with burials, eight were analyzed by Steponaitis (1983a:250) who observed that two vessels were decidedly of nonlocal origin, one from the Gulf Coast and one from the Central Mississippi Valley, with three more of questionable origin (Knight 2020:260). Only two ceramics were able to be seriated within a twophase span by Steponaitis (1989), with one dating to the Moundville I/II phases (A.D. 1120-1400) and one dating to the Moundville II phase (A.D. 1260-1400). No copper, medicine palettes, pigments, or shell were reported by Moore for the Mound F excavations. Unassociated artifacts of note include two large ceramic discs crafted from vessel fragments (Moore 1905:188-189), noted by Knight (2010: 260) as comparable to the unusually large disc recovered from Mound E, one of which had a series of five small holes drilled around the margin (Moore 1905:190); a broad-mouthed water-bottle bearing "a rude attempt to delineate a human head" (Moore 1905:193); a small owl effigy on four legs (Knight 2010:260; Moore 1905:194); and a figurine with two projections on the head, and visible evidence that two more had broken off (Knight 2010:260; Moore 1905:188-190).

Table 4.53. Associated accourrements for interments within Mound F.

Associated Accoutrements Mound F	Count
Decorated bottle (F3/m5 Phillips 2012:213)	1
Shallow bowl	1
Undecorated bottle	2

Undecorated bottle; decorated bottle	1
Undecorated bottle; soapstone pipe	1
Undecorated pot; decorated bowl	1
Undecorated vessel	2
None	10
Total	19

Table 4.54. Hemphill style ceramics from Mound F.

Artifact #	et # Burial # Motif Designation		Fellows	
F3	FM1	Bilobed arrow	Early Hemphill	NR11
F10	Recovered apart	Fleshed head	Middle Hemphill	
F4	Recovered apart	Paired tails	Middle Hemphill	SD362

Knight conducted excavations into the western flank of Mound F in the fall of 1993 and 1996, observing three constructions stages atop a premound midden (Knight 2010:260-262). Primary midden, including flank midden, associated with mound contexts was generally absent, though secondary midden was observed to have been employed as fill in Stage I and near the Stage III surface (Knight 2010:265). Investigations into the second and third stages of construction found them both centered within the late Moundville II phase (A.D. 1325-1400) and with evidence that the final occupation of the summit featured a structure that was razed upon termination (Knight 2010:264-265). Notable ceramics recovered included additional probable imports from the Central and Lower Mississippi Valley (Knight 2010:267, 270). Though no mica was recovered from burial contexts, 32.8 grams were recovered from flank excavations (Knight 2010:277). Knight (2010:278) also notes that despite a lack of medicine palettes recovered from burial or flank excavations, Mound F evidenced high quantities of pigment-producing elements relative to the rest of the site. Finally, in December of 1933 the AMNH conducted a small series of excavations in the area east of Mound F resulting in the recovery of 11 burials and five artifacts (Peebles 1973:15, 42). Unfortunately, no information is available for these interments (Peebles 1973:15).

Mound F burials are notable in their relative conservatism, though while potentially emphasizing outside connections in ceramic crafting. Burials are likely contemporaneous with architecture occupying the final summit, within the late Moundville II phase (A.D. 1325-1400) (Knight 2010:260, 279). Mound F also appears as one of the earthworks, along with the southern aspect of the site including Mounds H, I, J, and K, to have been discontinued by the end of the Moundville II phase (A.D.1400). As Mound F is principally utilized during the necropolis period (A.D. 1300-1450) of site use and possesses evidence of atypical levels of pigment manufacture, there is a suggestion that individuals associated with the monument were perhaps strongly connected with medicine-making occurring at the center during that time and that a significant component of the practice was the creation of empowered paints. Mound F manifests as a monument controlled by an esoteric group, but in a remarkably different manner than was observed with Mound C (Figure 4.6).

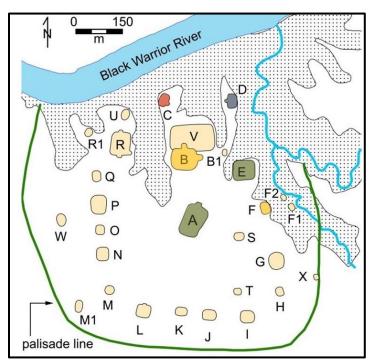


Figure 4.6. Map of Moundville showing variable social roles on the Moundville landscape with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green (Copyright John H. Blitz 2008, used with permission).

Mound S

Mound S is one of the two smaller mounds at Moundville (the other being Mound T) somewhat atypically situated within the layout at the site and relative to the plaza (Knight 1994:10). Mound S was investigated by the Alabama Museum of Natural History in 1937, with the specific intention to produce soil profiles to aid in the recontouring of the monument (Knight 2010:318). Though it currently resembles a small truncated pyramid, earlier documentation highlights only a shapeless mass on the landscape (Knight 1994:10). A sample of 137 ceramics was produced by the 1937 excavations and later analyzed by Knight (1994) who observed that the majority appear to belong to either the late Moundville I phase (A.D.1200-1260) or the Moundville III phase (A.D. 1400-1520) (Knight 1994:10; Table 3). Unusual ceramics associated with the landform include coarse sherds from a rare oversize vessel type with similar forms recovered from Mounds Q and R (Knight 2010:243, 256).

The Roadway excavations investigated blocks 50+50-47+00, to the east of Mound S (Figure 4.7). The first three blocks, 50+50-49+50, were observed to lack post molds, wall trenches, and burials but did result in the recovery of three in situ artifacts including a stone discoidal and two ceramic discoidals from the 49+50 block (Peebles 1973:939). Block 49+00 evidenced scattered post molds and several artifacts including four pebbles hammers [pebble hammerstones], a pebble implement, a stone discoidal, and five small triangular projectile points (Peebles 1973:Table X-18). Blocks 48+50 and 48+00 evidenced at least six structures, over 100 artifacts, and 57 interments (Peebles 1973:911) (Figure 4.7).

Of note is Structure 16b, a T-shaped construction of atypically large dimensions and unassociated with interments (Peebles 1973:927-928). Artifacts recovered apart from burials are dominated by bone and stone tools, with a noteworthy paucity of shell (Table 4.55). Notable

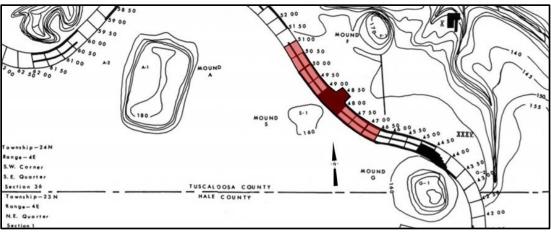


Figure 4.7. Roadway excavation blocks 50+50-46+50 East of Mound S (Peebles 1973:Figure I). items associated with the excavation blocks include two instances of charred corn cobs, a fragment of galenite, two instances of green paint, two instances of red paint, two instances of mica, a piece of an axe made from coal, a shark tooth, 10 unspecified effigies, eight ceramic effigies, 19 ceramic discs, and 14 small triangular projectile points (Peebles 1973:Table X-17). Taken as a whole, the area East of Mound S displays a notable paucity of items generally deemed domestic in nature, including ceramic containers and pebble hammers. Instead, there is a relatively high frequency of items of possible ritual use including shell, bird and mammal claws, charred corn cobs, and pigment materials, suggesting this may have originally been a ritual precinct. Research by Wilson (2010:Figure 4.30) has situated this structure within the late Moundville I phase (A.D. 1200-1260), while further noting that burials associated with the area date to the necropolis period of site use (A.D. 1300-1450).

A total of 57 individuals were recovered from the blocks 48+50 and 48+00, generally manifesting as a series of clusters, one with linear arrangements, forming a rough semi-circle around Structure 16b (Figure 4.8) (Table 4.56). Burial type within the sample manifests somewhat unusually with the area featuring seven bundles, two prone achondroplastic individuals, and four isolated skulls. Infants and children collapsed (12) are well represented and

with interments manifesting relatively inconspicuously. Two multiple interments were observed, with both featuring two individuals. One pair is composed of an extended adult and child interred with a ceramic disc, while the other is an extended adult interred with a bottle and a bundled adult placed atop the lower legs and feet of the extended one (Peebles 1973:1069-1070, 1078, 1080).

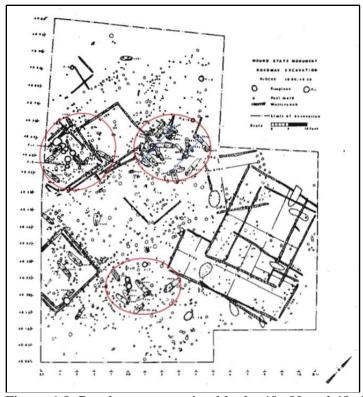


Figure 4.8. Roadway excavation blocks 48+50 and 48+00 East of Mound S (Peebles 1973:Figure I).

A distinct minority (9) of individuals were interred with associated effects. Infants, children, and adolescents are all without accourrements of any kind. Mortuary items are dominated by ceramics and bone tools, with two notably interred with bone "skewers" and crafted stone items (Table 4.57). Three individuals (Rw2848, Rw2859, and Rw2875) were observed to be impacted by architectural features including postholes in two instances, and a fire basin in the third (Peebles 1973:1056, 1062, 1069-1070). Finally, 12 individuals, from all over

the area and including adults, children, and infants, were noted to be missing several elements (Table 4.58). Among those for whom burial type could be noted, all were observed to be single extended or flexed interments. It seems this is not an issue of body processing, but of harvesting – a phenomenon noted by Moore (1905:170) in the area south of Mound D.

Table 4.55. Unassociated artifacts from blocks 48+00 and 48+50 East of Mound S.

Unassociated Items, Roadway East of Mound S	Count
Bird claw	1
Bone awl	3
Bone needle	3
Bone pin	2
Bone tool	6
Ceramic discoidal	19
Ceramic effigy	8
Ceramic pendant	2
Ceramic pipe	1
Charred cane	1
Charred corn	1
Charred corn cob (instances)	2
Charred material	1
Charred matting (instances)	2
Charred wood (instances)	4
Clay implement	1
Discoidal	1
Effigy	10
Flint "spear" point	1
Galenite	1
Green paint	2
Large flint	1
Large stone	1
Mammal claw	3
Mica	2
Pebble discoidal	1
Pebble hammer	2
Piece of antler	1
Piece of axe	3
Piece of axe made from coal	1
Piece of copper	1
Piece of stone pendant	1
Piece of stone pipe	1
Post hole filled with charred wood (instances)	1
Pottery fragments (instances)	1

Projectile point	1
Red paint	2
Shark tooth	1
Shell (instances)	2
Shell ornament	1
Shell tool	1
Small triangular point	14
Stone	2
Stone artifact	1
Stone axe	2
Stone cylinder	1
Stone discoidal	4
Stone mortar	4
Tortoise shell	1
Whetrock	1
Worked stone	1

Table 4.56. Burial type and count for interments from the roadway East of Mound S.

Burial Type, Roadway East of Mound S	Count
Bundle	7
Adult	7
Prone	2
Adult	2
Extended	31
Adult	21
Adolescent	2
Child	5
Infant	2
ND	1
Flexed	7
Adult	4
Adolescent	1
Infant	2
Skull	3
Adult	3
Child	1
ND	7
Adult	4
Child	2
Total	57

Table 4.57. Associated accourrements recovered from the roadway East of Mound S.

Associated Accoutrements, Roadway East of Mound S	Burial Count
Bottle	1

140

Bottle	2
Bottle; bowl	1
Bowl; stone discoidal (2); stone ceremonial celt; shell bead; bone	
"skewer"	1
Ceramic disc	1
Ceramic pipe	1
Greenstone axe (small); bone "skewer"	1
Pot	1
None	48
Total	57

Table 4.58. Incomplete interments from Roadway excavations East of Mound S.

		Burial	General		
Designation	S/M	Form	Age	Artifacts	Field Notes
RW2861	Single	ND	Adult		Skeleton missing from hips down
RW2865	Single	Extended	Adult		Lower right arm missing
					Entire right side from pelvis to foot
					missing, evidently cut away in aboriginal
RW2874	Single	Extended	Adult		period
RW2878	Single	Extended	Child		Fragmentary skeleton, legs down missing
					Only skull fragments, left leg, and upper
RW2881	Single	Flexed	Adult		right arm remains
					Lower arm, five ribs, left side of pelvis,
RW2883	Single	ND	Adult		left femur, and left fibular remaining
					Fragments of skull, vertebrae and ribs
RW2885	Single	ND	Child		only
					Right lower arm and hand missing, lower
				Bottle;	half of left humerus and upper half of
RW2887	Single	Extended	Adult	bowl	radius and ulna missing
					Left arm, pelvis missing, right arm
RW2888	Single	Extended	Child		fragmentary
RW2889	Single	Flexed	Infant		Left foot missing
RW2890	Single	Extended	Child		Long bones, few ribs, and skull present
RW2891	Single	ND	Adult		Bones slightly scattered and fragmentary

The area East of Mound S appears to have been utilized in the late Moundville I phase for residential and ritual purposes, with an overt investment in bone, stone, and paint. It is possible that this was a precinct controlled by specialists and their affiliates immediately prior to the construction and use of Mound F. Similarly, it is possible that the Moundville III signature observed with Mound S can be explained by the revitalization of the precinct upon the

termination of Mound F at the end of the Moundville II phase (A.D. 1400). Finally, blocks 47+00 and 46+50 were observed to contain only scattered post molds in the way of features and a single stone discoidal in the way of in situ artifacts (Peebles 1973:910).

Rhodes

A sizable residential and mortuary area was observed to the east of Mounds E and F, on the farm of Oliver Rhodes (Peebles 1973:1085; 1978:377). The Alabama Museum of Natural History conducted initial test excavation on the property in February of 1930, observing seven individuals with sparse and variable accompanying information (Table 4.59). A total of four individuals were observed with accourtements, all ceramic inclusions. The AMNH later returned to the area and excavated two tracts on the property, the Upper Rhodes site in December of 1935 and the Rhodes site in January 1936 (Peebles 1973:1085, 1146). Unfortunately, very limited placement or directional information were recorded during investigations, with subsequent abilities to orient the mortuary area on the modern landscape consequently diminished (Peebles 1973:1085).

Table 4.59. Interments and accourrements observed at the Oliver Rhodes Site, 1930.

Designation	S/M	Burial Form	General Age	Artifacts
RHOSK1	Single	ND	Adult	
RHOSK2	ND	ND	ND	
RHOSK3	ND	ND	ND	
RHOSK4	ND	ND	ND	Shallow dish
RHOSK5	Single	ND	ND	Decorated bottle
RHOSK6	Single	Extended	Adolescent	Pot
RHOSK7	Single	ND	ND	Pot

The Upper Rhodes site appears, from the little information available, situated to the north of Rhodes (and hence the designation "upper") (Peebles 1973:1087, 1146). Mortuary assemblages were observed situated within a debris-filled field replete with wall trenches, hard-packed floors, fire basins, and numerous artifacts suggesting it too was a repurposed residential

area (Peebles 1973:1146, Figure XI-6) (Table 4.60). Notable unassociated materials include two instances of mica, a limonite-coated discoidal, a fragment of graphite, a shell disc, a kaolinite pipe, a black stone projectile point, a stone bead, a coal discoidal, and a piece of charcoal (Peebles 1973:XI-5). The carved (presumably) coal discoidal is notable in its similarity to the carved coal axe recovered as an unassociated item within the Roadway excavation blocks east of Mound S.

Table 4.60. Unassociated artifacts recovered from the Upper Rhodes site.

Unassociated Items, Upper Rhodes	Count
Abrading stone	2
Bone awl	18
Bottle fragments (instances)	2
Bowl (small)	2
Bowl fragments (clustered multiples)	2
Ceramic discoidal	2
Ceramic elbow pipe	1
Charcoal	1
Coal discoidal	1
Duck's head from vessel	2
Effigy head (from vessel)	1
"Flaking tool"	1
Flint blank	1
Fragment of large pot	1
Fragment of large stone axe	1
Fragment of painted vessel	1
Fragments of greenstone celts	4
Fragments of large vessel (instance)	2
Graphite	1
Greenstone axe fragment	1
Greenstone axe fragments	3
Greenstone celt	5
Greenstone celt fragment	4
Grinding stone	1
Limonite coated discoidal	1
Mica	2
Pebble hammers	3
Petrified wood	1
Pipe (kaolinite)	1
Pitted stone	5

Pot	2
Potsherds	2
Potsherds (unspecified number)	1
Prepared conglomerate nodule ("for making discoidals")	1
Projectile point (black stone)	1
Sandstone discoidal	2
Sandstone discoidals	3
Sandstone whetrocks	2
Shell beads	2
Shell disc	1
Spatulate celt fragment	1
Stone bead	1
Stone discoidal	1
Unworked greenstone	1

A total of 117 individuals were recovered from the Upper Rhodes site (Table 4.61). If interments are clustered by proximity, emphasizing shared space, the majority appear arranged in linear rays (Figure 4.9). Six adults were notably interred as bundles, with all six belonging to multiple interments of two bundles each. A single pair possessed associated accoutrements including a Hemphill style bottle (Phillips 2012:276), a bone awl, and a shell bead (Peebles 1973:1198). Children and infants (23 collapsed) are well represented, with the majority (16) interred relatively innocuously and with accoutrements entirely confined to ceramic vessels or vessel fragments. Ritual interments include two infants who appear to have been ceremonially interred into fire basins, possibly as an aspect of the formal repurposing of the area for mortuary use. Burial URho2025, an extended infant, was recovered within a fire basin (Feature 14) with a simple bowl with beaded rim, red and yellow clay, and charcoal (Peebles 1973:1149; Steponaitis 1983a:232). The beaded rim bowl aids in chronological placement, as these first appear in the late Moundville II phase (A.D. 1300-1400) and run through the Moundville III phase (A.D. 1400-1520) (Knight 2010:47, 267). Similarly, burials URho2033 and URho2034 were extended infants interred head-to-head within a fire basin (Feature 9) without associated accourrements.

Intriguingly, Burial URho2034 was noted as being partially articulated, as the left leg was observed to be missing (Peebles 1973:1173). It seems possible that the bone-handling in the late Moundville II phase-early Moundville III phase (A.D. 1350-1450) observed on Mound E may have been, in part, related to termination and/or dedication events to the east of the mound.

Table 4.61. Burial type and count of interments associated with the Upper Rhodes site.

Burial Type, Upper Rhodes	Count
Bundle	6
Adult	6
Extended	87
Adult	48
Adolescent	1
Child	10
Infant	11
ND	17
Flexed	5
Adult	5
Isolated Skull	2
Adult	1
Adolescent	1
ND	17
Adult	11
Infant	2
ND	4
Total	117

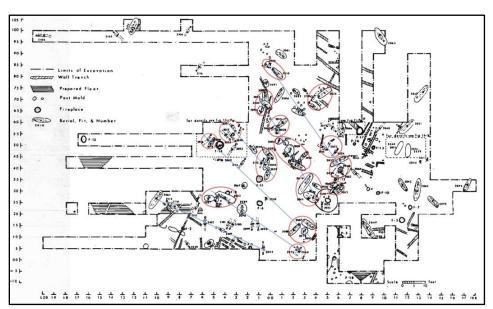


Figure 4.9. Plan view of the Upper Rhodes site excavations (Peebles 1973:Figure X-18).

In 11 instances, multiple interments were observed with three containing more than two individuals. A particularly notable multiple interment was comprised of four individuals (URho2074-URho2077) in a shared pit (Peebles 1973:1156). At a depth of 60 inches below the ground surface was interred URho2074, a flexed adult without associated accoutrements, positioned with an isolated skull (URho2075) atop the hips and situated beside URho2077, an extended child with shell beads near the hands. Immediately above this principal group, at 54 inches below ground surface, was an extended adult interred with a "large mill rock of sandstone" with red paint "on the grinding side" (Peebles 1973:1156, 1191-1192). A second noteworthy multiple interment consisted of three extended adults (URho2069-2071). The central interment (URho2070) was observed to possess a stone pipe, beads at the left leg, and fragments of a large pot, while individuals on either side were observed with a small bowl (URho2071) and a "wooden lance" (URho2069) (Peebles 1973:1188-1190).

A minority of 39 individuals were interred with accoutrements (Table 4.62). Among associated items, bowls (15) occur most commonly, followed by bottles (13) and pots/jars (8). Only three occurrences of *variety Hemphill* ceramics are noted, with all three seriated by Phillips (2012) (Table 4.63). As with Mounds E and F, connections to the Central Mississippi Valley dominate nonlocal ceramics (Steponaitis 1983a:232-233). A total of 20 ceramics recovered from Upper Rhodes were able to be seriated within a two-phase span by Steponaitis (1989), with two dating to the Moundville I phase (A.D. 1120-1260), two dating to the Moundville II phase (A.D. 1260-1520), and six dating to the Moundville III phase (A.D. 1400-1520).

Copper is conspicuously absent from the mortuary sample, as are formal palettes. Notable interments not previously mentioned include an extended adult observed with a sherd filled with

charcoal under the skull and a duck effigy bowl (Peebles 1973:1178); an extended adult with five bottles, a bowl, and a human effigy bowl (Peebles 1973:1188); a flexed adult with charcoal under the knees (Peebles 1973:1178); and an extended adult with an axe and a greenstone pendant in the shape of a monolithic axe placed over the skull, interred with an extended adult without accoutrements (Peebles 1973:1162). A total of five individuals evidenced fragments of ceramics as mortuary inclusions and five individuals were interred with shell as an accompaniment.

Table 4.62. Associated accourrements recovered from the Upper Rhodes site.

Associated Accoutrements, Upper Rhodes	Burial Count
Bone awl; mussel shells around the grave	1
Bottle	2
Bottle (5); bowl; human effigy bowl	1
Bottle (Rho338 Phillips 2012:276); bone awl; shell bead	1
Bottle; bowl	1
Bowl	1
Bowl	1
Bowl (2); awl; bottle; turkey bone	1
Bowl fragments under skull and shoulders	1
Bowl; pot; ceramic disc; bone	1
Bowl; projectile point	1
Charcoal under knees	1
Decorated bottle	1
Decorated bottle (Rho219 Phillips 2012:284)	1
Duck effigy bowl; a sherd filled with charcoal under skull	1
Fish effigy bowl; bowl	1
Fragment of large vessel under skull	1
Frog effigy pot	1
Greenstone celt fragment; stone slab	1
Greenstone pendant in shape of monolithic axe over the skull; axe	
over the skull	1
Half a bowl covering the skull	1
Half of pot with beaded rim	1
Large bowl, inverted over shoulder; bottle	1
Large "mill rock" of sandstone with red paint on grinding side	1
Pot	3

Pot (2)	1
Pot over skull	2
Pot; bowl	1
Pot; bowl; bottle	1
Shell beads around neck	2
Shell beads near hands	1
Small pot	1
Stone pipe; beads at left leg; fragments of large pot	1
Wooden lance	1
None	78
Total	117

Table 4.63. Hemphill style ceramics recovered from the Upper Rhodes site.

Artifact #	Burial #	Motif	Designation	Fellows
Rho242	ND	Hand and eye design	Early Hemphill	C4
Rho219	URho2009	Severed tails	Middle Hemphill	NEC11
Rho338	URho2089	Crested bird	Middle Hemphill	D6, O6, EE3, NE60

The Upper Rhodes mortuary sample appears to represent a kin group in a manner similar to that observed south of Mound D. The general demographic breakdown shows infants and children reasonably well represented and often without any suggestion of overt ritualization of the interment. Mortuary inclusions are generally infrequent and when occurring are principally dominated by ceramics. That charcoal is noted here in two mortuary contexts is unusual, as thus far charcoal has only occurred as an unassociated item. Finally, the Upper Rhodes site and mortuary sample appears to represent a form of residential landscape claiming by a descendant kin-based group in a manner proposed by Wilson (2008).

The Rhodes site appears to have been situated on a slightly elevated landform just south of Upper Rhodes (Peebles 1973:1088). Excavations at Rhodes recovered 107 burials and two significant architectural signatures. The first, a large structure composed of three large chambers and covering approximately 700 square feet, was associated with 40 burials (Peebles 1973:1089, 1092) (Figure 4.10). The most elaborately accompanied interments were positioned around two

fire basins, Features 2 and 3, located in the associated courtyard (Peebles 1973:1092). Nonmortuary items directly associated with the structure include a projectile point; two pipes, one of which was recovered from an undocumented fire basin; a partially crushed pot recovered from a post mold; an instance of green paint; a fragment of greenstone axe; a potsherd; an unidentified copper object; a small bottle; a small bowl; and a human effigy bowl (Peebles 1973: Table XI-3). Excavators also recovered a section of palisade, complete with a bastion, and another cluster of 67 burials, some of them being remarkably well-accompanied interments (Peebles 1973:1092, 1095). Nonmortuary associations in the section of the palisade include an instance of charred corn cobs recovered from the bottom of a post mold and a ceramic discoidal associated with a distinctly black soil (Peebles 1973:Table XI-3). Unassociated items are, regrettably, reported for the entire Rhodes area and not by section (Peebles 1973:Table XI-2) (Table 4.64). Items of note include another tabular stone pendant in the shape of a monolithic axe (previously observed as a mortuary accoutrement at Upper Rhodes and as an unassociated fragment east of Mound S), a quartz pestle, a piece of obsidian, a stone disc and stone disc fragments, and a piece of copper.

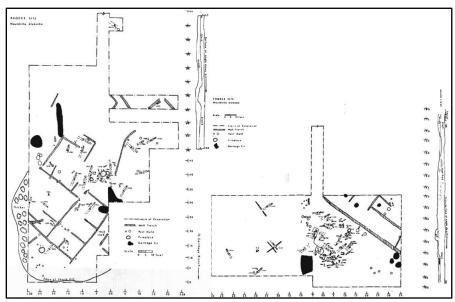


Figure 4.10. Plan view of the Rhodes site excavations (Peebles 1973:Figure XI-2, Figure XI-3).

Table 4.64. Unassociated artifacts recovered from the Rhodes Site.

Unassociated items, Rhodes Site	Count
Banded quartz	1
Bone awl	2
Bottle	1
Bowl	2
Ceramic discoidal	4
Ceramic dish	2
Ceremonial axe	1
Copper fragment	1
Miscellaneous effigy parts	3
Miscellaneous vessel parts	3
Obsidian	1
Pebble hammer	4
Quartz pestle	1
Sandstone discoidal	1
Stone disc	1
Stone disc fragments	1
Stone discoidal	2
Stone pendant (in shape of monolithic	
axe)	1
Unworked deer bone	1
Whetrock	9

Looking at the two areas separately, beginning with the structure, burials are observed to follow general trends observed thus far, with the majority conforming to extended interments though including a minority of bundles, flexed positions, and isolated skulls (Table 4.65). Infants and children (6) are poorly, and somewhat unusually, represented within the sample. Three children were interred with associated accoutrements including an extended child with a duck effigy bowl, bottle, and large vessel fragment placed on the chest (Peebles 1973:1099), an extended child with 20 tubular shell beads around the neck (Peebles 1973:1101), and an isolated child skull with six bone awls placed underneath (Peebles 1973:1103-1104). The fourth individual was presumed a child based on the size of an empty pit, with apparent evidence the interred had been anciently removed (Peebles 1973:1104-1105). The fifth child was interred

extended without accompaniments (Peebles 1973:1108). Finally, an infant was observed interred with an adult skull (Peebles 1973:1109-1110).

Table 4.65. Burial type and count for interments from the Rhodes site structure.

Burial Type, Rhodes Structure	Count
Bundle	4
Adult	4
Extended	19
Adult	14
Child	4
ND	1
Flexed	3
Adult	3
Skull	2
Adult	1
Child	1
ND	12
Adult	9
Child	1
Infant	1
ND	1
Total	40

A minority of 12 individuals were observed with associated accoutrements (Table 4.66). Notable associations include an extended adult with a bowl, a large projectile point, black glaze over the right shoulder, and three bone awls with red paint on them (Peebles 1973:1102) and a multiple of three adults, the long bones in a jumble with the three skulls situated together (Peebles 1973:1106-1107). A single recovered ceramic was able to be seriated within a two-phase span by Steponaitis (1989), dating to the Moundville II/III phases (A.D. 1260-1520). One multiple burial of three bundled adults, situated near the courtyard fire basins, represents all of the copper recovered from mortuary contexts in this section, with two individuals observed with two copper ear plugs each (Peebles 1973:1106-1107) while the third possessed two coppercovered shell ear plugs (Peebles 1973:1106). The co-occurrence of infants and children in atypical contexts in association with an unusual, and unusually large, compound structure

suggests this mortuary sample is not reflective of a residential community, but a ritual one and with likely ties to the residential group and area at Upper Rhodes.

Table 4.66. Associated accourrements for interments from the Rhodes site structure.

Associated Accoutrements, Rhodes Structure	Count
Bone awls (6) under skull	1
Bowl; large projectile point; awls (3); black glaze over right shoulder; red paint	
covering bone awls	1
Bowl; pipe; effigy duck head	1
Ceramic disc; shells in front of chin	1
Copper-covered shell ear plugs (2); perforated bear tooth	1
Copper ear plugs (2)	2
Decorated bottle; bowl; large vessel fragment on chest	1
Decorated bowl; pipe	1
Duck effigy bowl; bottle; large fragment placed on chest	1
Jasper object	1
Tubular shell beads (20) around the neck	1
None	28
Total	40

The palisade section of the Rhodes site hosted 67 interments, with the vast majority associated with a large central cluster (see Figure 4.10) (Table 4.67). Incredibly, 15 individuals were recorded as bundles, a combination of adults, children, and infants. No individuals are noted as flexed and no isolated skulls were reported for this area. Children and infants are even more of a minority (4), with all interred as aspects of multiple burials and none in association with accourtements. The area has a high relative count of multiple interments (13), many of these composed entirely of bundles (7). One multiple interment of note contained three extended adults with prodigious paraphernalia (Peebles 1973:1111-1113). Within this multiple, one individual evidenced two bottles, a bowl, and mica. Another was observed with 35 shell beads around the neck, two copper ear plugs, uncounted shell beads at both wrists, an oblong copper gorget on the chest, and large shell beads at each ankle. The third individual was observed with an oblong copper gorget on the chest, uncounted shell beads from neck to hips, nine shell beads (without

locational data), a mass of hematite with ground facets, a mass of galena, two instances of red paint with one described as "a small lump," and a "small lump" of yellow paint. Another multiple interment featured an extended adult with "bones all along and by" the skeleton, with excavators further supposing the extended interment displaced two earlier burials (Peebles 1973:1144-1145).

Table 4.67. Burial type and count for the Rhodes site palisade.

Burial Type, Rhodes Palisade	Count
Bundle	15
Adult	11
Child	1
Infant	1
ND	2
Extended	34
Adult	30
Adolescent	2
Child	1
Infant	1
ND	18
Adult	14
ND	4
Total	67

Almost half of interments (32) in the area near the palisade were in possession of associated accoutrements, including the two individuals interred with painted bottles of the moth/butterfly supernatural (Table 4.68). These bottles are similar to one observed interred in the final mantles of Mound C and with a burial described as "a single skull with a bunch of bones" that was also in possession of a small amount of mica (Moore 1905:143). One of the bottles recovered near the Rhodes palisade was observed interred with a bundled adult who was also associated with an undecorated bottle, a shell ear plug, and two shell beads and was part of a multiple interment containing another bundled adult without accoutrements (Peebles 1973:116). It is unfortunate there is no locational data for the two shell beads, as two shell beads at the back of the head were observed within the mortuary sample east of Mounds D and E. The second

individual with a painted bottle featuring the mothra design was observed to be an extended adult associated with four bowls, including one atypically small; four bottles, including the painted vessel; two awls; a whetrock; a pottery tool; yellow paint, recovered atop the chest; and clay, recovered within one of the bottles (Peebles 1973:1137).

Other notable associations include an extended adult with charred corn cobs on the pelvis (Peebles 1973:1118); an extended adult with a copper ear plug near the left ankle, a large shell bead at each ankle, a ceremonial axe of unspecific material, three whetrocks, a bone shaping tool, a stone disc, two bottles, a large vessel fragment, beads at both wrists, two copper ear plugs at the skull, a pot, shell fragments around the lower legs, numerous beads at the chin, a black glaze on the toes, hematite, and a mass of green paint – the first observed thus far in a mortuary context (Peebles 1973:1124-1125); an extended adult with six large shell beads at each ankle, small beads and perforated pearls at the wrists and around the neck, an oblong copper gorget on the chest, two copper ear plugs, a bone awl, a frog effigy pot, and a rectangular copper plate encased in cane matting (Peebles 1973:1118); and an extended adult with a pot, fragment of a bowl, two shell beads at the back of the skull, a stone cutting tool, a bowl, a greenstone slab with a bear tooth on top, and galena (Peebles 1973:1117). A total of six individuals were associated with copper accoutrements including ear plugs, oblong gorgets, and an encased plate. Similarly, six individuals were associated with the pigment complex with observed materials including mica, yellow paint, hematite and red paint, green paint, charcoal, galena, and an unidentified black substance similar to that observed with an individual interred in association with the Rhodes structure and in the interment area East of Mound E where an extended adult was found in association with a shell ear plug coated in a black substance (Peebles 1973:307).

Table 4.68. Associated Accourrements, Rhodes site palisade segment.

Table 4.68. Associated Accoutrements, Rhodes site palisade segment. Associated Accoutrements, Rhodes Palisade	Burial Count
Beads at ankles	1
Bottle	1
Bottle (Rho110 Phillips 2012:242)	1
Bottle (Rho141 Phillips 2012:371); pottery fragments; pebble hammer	1
Bottle, pot, bowl, ceramic disc	1
Bottle; bowl	1
Bottle; shell beads around neck; spool-shaped beads at wrists	1
Bottles (2); bowl; mica	1
Bowl	1
Bowl (3); painted bottle (mothra); small bowl; bottle (3); awl (2); whetrock; pottery tool; yellow paint; clay	1
Broken pot; pebble hammer	1
Charred corn cobs on pelvis	1
Clam shell effigy	1
Clam shell effigy bowl; bowl; bottle (Rho164 Phillips 2012:249)	1
Copper ear plug near left ankle; large shell bead at each ankle; ceremonial axe; whetrocks (3); bone shaping tool; stone disc; bottle (2); large vessel fragment; beads at both wrists; copper ear plugs (2) at skull; pot; shell fragments about shins; mass of beads at chin; black glaze on toes; hematite; mass of green paint	1
Copper ear plug; fragment of bottle; awl	1
Crushed pot scattered throughout pit	1
Fragment of a large pot; bottle; bowl	1
Fragments of pot under skull	1
Frog effigy bowl; shell beads near skull	1
Greenstone axe; awl	1
Large pottery fragment on right knee; bottle; small bottle ("toy"); vessel; pot; bowl; copper ear plug	1
Large pottery fragment; small bowl ("toy"); whetrock; pot with shell inside; shell beads right side of chin; charcoal	1
Large shell beads (6) at each ankle; small beads and perforated pearls at wrists and neck; oblong copper gorget on chest; copper ear plugs (2); bone awl; copper plate encased in cane matting; frog effigy pot	1
Oblong coper gorget on chest; shell beads from neck to hips; shell beads (9); mass of hematite with ground faces; mass of galena; small lump of red paint; small lump of yellow paint; red paint	1
Pot	1
Pot (reshaped into bottle)	1
Pot; Fragment of a bowl; shell beads back of skull (2); stone cutting tool; bowl; greenstone slab; bear tooth; galena	1

Shell bead by skull	1
Shell beads around neck (35); copper ear plugs (2); shell beads; oblong	1
copper gorget on chest; large shell beads (7) at each ankle	
Small bottle ("toy"); vessel	1
Undecorated bottle; painted bottle (mothra); shell ear plug; shell beads (2)	1
None	35
Total	67

No palettes, formal or informal, are noted as accoutrements in this area. All Hemphill style ceramics recovered from mortuary contexts within the Rhodes site were observed in the area around the palisade and show a clear emphasis on the Middle Hemphill phase (A.D. 1375-1425) (Phillips 2012:230) (Table 4.69). A total of 15 ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with one dating to the Moundville I phase (A.D. 1120-1260), two dating to the Moundville I/II phases (A.D. 1120-1400), one dating to the Moundville II phase (A.D. 1260-1520), and five dating to the Moundville III phase (A.D. 1400-1520). The type and distribution of esoteric copper accoutrements associated with war medicines, including an encased axe and oblong gorgets, suggests this interment area was a ritual controlled one and vested in esoteric war medicines.

Table 4.69. Hemphill style ceramics recovered from the interment area near the palisade at the Rhodes site.

Artifact #	Burial #	Motif	Designation	Fellows
Rho1	ND	Hand and eye design	Early Hemphill	
Rho242	ND	Hand and eye design	Early Hemphill	C4
Rho110	Rho1947	Winged serpent	Middle Hemphill	
				ND"B", NE59,
Rho164	Rho1969	Winged serpent	Middle Hemphill	NE90
Rho219	URho2009	Severed tails	Middle Hemphill	NEC11
Rho338	URho2089	Crested bird	Middle Hemphill	D6, O6, EE3, NE60
Rho141	Rho1956-1957	Winged serpent	Late Hemphill	RW152

The Upper Rhodes mortuary sample manifests in a manner similar to that observed south of Mound D, demographically reflective of a kin-based group and occupying a former residential area. The Rhodes site mortuary sample near and within the large multi-room structure, in

contrast, appears to represent a ritual community in association with a special structure. Seriation of ceramic accoutrements recovered from the Rhodes site interments suggests concerted engagement in the Moundville mortuary program within the Moundville II/III phases (A.D. 1260-1520), during the height of the mortuary program at the center. Upper Rhodes and Rhodes may represent groups related through practice, with the two working in concert on the landscape. The Rhodes site mortuary sample located near the palisade bears similarities to interments within Mound C in that the sample appears dominated by practitioners specializing in the use of copper and the generation of empowered pigments, some of which appear to be intensely controlled substances. Mortuary clusters are observed to take a roughly circular shape just inside the remnants of the former palisade, with some locations repetitively utilized and evidencing the displacement of older interments. It is possible that a mortuary area vested in esoteric war medicines was deliberately placed near the easternmost section of the former palisade in an effort to provide a new manner of protection for the site. It should be noted, however, that the palisade appears to have been removed in the middle Moundville II phase around A.D. 1300 and some amount of time had likely passed between the removal of the structure and mortuary ritual engagement in the area (A.D. 1350-1450) (Knight 2010:362).

Mound G

Mound G is located along the southern aspect of the eastern row of the plaza periphery and is among the larger monuments at the center (Knight 2010:279). Moore investigated the Mound G summit with 25 trial holes, all without material result (Moore 1905:194). Excavations by Knight, in 1993, located a substantial flank midden on the north side of the monument and observed four stages of mound construction atop a premound, and preplaza, structure. This premound architectural signature probably articulates with a group of Moundville I phase (A.D.

1120-1260) domestic structures excavated to the north, within the Moundville Roadway, that appear arranged as a cluster of three roughly linear rows (Knight 2010:283-285; Wilson 2010:Figure 4.19). The genesis of the mound, Stage I of construction, appears to have occurred early in the Moundville II phase (A.D. 1260-1400) with the cessation of mound use occurring early in the Moundville III phase (A.D. 1400-1520) (Knight 2010:297).

Fauna recovered from the north flank midden show patterns of elite conspicuous utilization and consumption of both local and exotic animals including black bear, bison, shark, sandhill crane, red-tailed hawk, and peregrine falcon (Jackson and Scott 2010:345; Knight 2010:301). The recovery of peregrine falcon is highly unusual for west-central Alabama, with notable comparable examples coming from Cahokia, in samples from Mound 51, and Etowah (Jackson and Scott 2010:345). Plant use associated with the mound, particularly within the late Moundville II stage (A.D. 1325-1400), shows a relatively high rate of corn processing (Knight 2010:301). Scarry (2003:123) has proposed that elites associated with the monument during this period of site use may have been utilizing local fields and, thus, transporting more unshelled corn to the site than is observed elsewhere and in earlier contexts. The recovery of charred corn cobs in association with Structure 16b, the large late Moundville I phase (A.D. 1200-1260) building within the Roadway east of Mound S, and within a Moundville II phase (A.D. 1260-1400) mortuary context at the Rhodes site palisade segment, east of Mound F, suggests that corn cobs possess a history of variable ritual use in this area. It is possible that corn processing associated with Mound G was conducted deliberately, associating the those controlling the monument with consumption and ritual use of the plant and in an area with a history of practice.

Knight's investigations produced 84 sherds of *variety Hemphill* ceramics, with five seriated by Phillips (2012) (Table 4.70). Assessing all recovered ceramics, Knight (2010:297)

observed that late Moundville II phase (A.D. 1350-1400) Mound G summit activity included, in addition to corn processing, the regular use and breakage of Hemphill style ceramics. The character of summit activities appears to have changed in the Moundville III phase (A.D. 1400-1520), with utility wares for cooking and storage suddenly dominating the ceramic assemblage (Knight 2010:298). Other notable ceramics recovered during investigations included a cane matting impressed salt pan, commonly observed within northern Gulf Coast contexts, and a sherd of Angel Negative Painted, likely from the Tennessee-Cumberland region (Knight 2010:286-287).

Table 4.70. Hemphill style ceramics recovered from Mound G.

Artifact #	Motif	Designation	Fellows
G1010	Center symbol with bands and fingers	Early Hemphill	SD7, G1014
G1014	Center symbol with bands and fingers	Early Hemphill	SD7, G1010
G614	Crested bird	Early Hemphill	NG3
G628	Scalp	Middle Hemphill	NR9
G639	Winged serpent	Middle Hemphill	NE90

Reporting on the lapidary and pigment complexes associated with the monument, Knight (2010:298-299) notes that greenstone, mica, sandstone saws, and palettes were infrequently encountered. Two formal palette fragments were recovered during investigations, with one bearing notable similarity to a palette recovered from Mound C (Knight 2010:298; Moore 1905:146). Bone implements are similarly underrepresented with only three examples including a bone awl, a drilled box turtle carapace, and a utilized drum fish spine (Knight 2010:299). The pigment complex is represented by one fragment of galena, possessing multiple wear facets; red ferruginous rock, found scattered throughout the north flank midden from Stage II through Stage IV; and four occurrences of coal (Knight 2010:300). No skeletal remains were encountered in the course of the investigation; nor were isolated fragments encountered (Knight 2010:300).

Multiple areas around Mound G were excavated by the Alabama Museum of Natural History from 1930-1934 (Peebles 1973:381-382). Beginning in 1930, the AMNH tested areas to the north and east of the mound in a concerted effort to collect mortuary items for display (Peebles 1973:381). Unfortunately, and in accordance with methods employed at the time, the overt emphasis was placed on recording mortuary accompaniments, not the individuals themselves (Peebles 1973:383). Excavations to the north of Mound G were conducted in January of 1930 and resulted in the recovery of 19 individuals for whom we have variable information (Knight 1992:1-3) (Table 4.71). The majority of individuals recovered (12) were observed within two multiple interments. The first encountered consisted of a prone adult associated with a small bowl, a duck effigy bowl, a jar evidencing paint, a crushed vessel, and a decorated vessel and three disturbed children without effects (Knight 1992:1). The second multiple interment consisted of six adults and two children without associated effects, and with no notation of burial position recorded (Knight 1992:2). A minority of six individuals were observed with associated accoutrements (Table 4.72). Notable associations include an adult observed with a formal palette under the skull, that retained remnants of paint on one side, in addition to shell beads at both wrists and ankles (Knight 1992:2; Peebles 1973:386); the prone adults with a jar evidencing paint (Knight 1992:1); and two individuals with their heads resting on ceramic vessel fragments, a child whose head was observed in a "fragment of a large pot" and an adult who was similarly positioned with the "head resting on a small piece of pot" (Knight 1992:1-2).

Table 4.71. Burial type and count for the interment area North of Mound G 1930.

Burial Type North of Mound G 1930	Count
Extended	1
Adult	1
ND	17
Adult	8
Child	6
ND	3

Prone	1
Adult	1
Total	19

Table 4.72. Associated accourrements recovered from the interment area North of Mound G 1930.

Associated Accoutrements North of Mound G 1930	Count
Decorated bowl (NG3 Phillips 2012:130); decorated bottle	1
Formal palette under skull, remnants of paint on one side; shell beads at wrists (15L, 13R) and ankles	1
Fragment of large pot; decorated bottle; decorated bottle positioned over	
skull (covering); skull resting on pot fragment and sandstone fragment	1
Head in fragment of large pot	1
Small bowl; duck effigy bowl; small paint bowl; crushed vessel; decorated	
vessel	1
Undecorated bottle	1
None	13
Total	19

Continued excavations in the area north of Mound G ran sporadically from December 1930 through April 1934 (Peebles 1973:388, 391). Unassociated items from the area are limited with respect to both quantity and diversity, tentatively suggesting this interment location was not atop an area with significant occupation history or size. Unassociated materials of note include clamshell, fish, and frog effigy vessels, a stone pendant, and 17 bone awls (Peebles 1973:386, Table V-1) (Table 4.73). The clamshell effigy, an unusual effigy style, and the frog effigy vessel are particularly notable because two similar vessels of each were recovered as mortuary inclusions within the Rhodes Palisade sample.

Table 4.73. Unassociated materials recovered from North and Northeast of Mound G.

Unassociated artifacts, North and Northeast of Mound G	Count
Axe fragment	1
Bird head effigy	1
Bone awl	17
Bottle	1
Clamshell effigy vessel	1
Duck effigy head	1
Fish effigy vessel	1

Flints	N/A
Frog effigy bowl	1
Human effigy head	1
Miscellaneous effigy vessel	1
Pipe	1
Pitted stone	3
Pot	1
Stone discoidal	2
Stone pendant	1
Tooth awl	1
Unworked greenstone	1
Whetrock	1

A total of 56 burials were recovered from the area North of Mound G between December 1930 and April 1934 (Peebles 1973:391) (Table 4.74). Regrettably, data on burial type or general age for the majority of individuals recovered north of Mound G are not available. The diminished sample does appear generally reflective of larger area trends, with a majority conforming to single extended interments and a minority of divergent variations in practice. That infants and children are poorly represented may be a consequence of material-centric early methods, location viability, or both. Mortuary samples recovered from northern aspects of mound precincts discussed thus far have generally manifested as restricted areas for affiliated populations. Multiple burials north of Mound G are a minority, at least among the last 21 interments for whom such information is noted, with only three occurring and with all accoutrements limited to two individuals. Of note is a multiple interment of an adult (NG1889) and an adolescent (NG1890) both extended prone and without associated accoutrements; the adult is noted to be achondroplastic (Peebles 1973:388, 401; see also Chronister 2006).

Table 4.74. Burial type for the interment area North and Northeast of Mound G 1934.

Burial type, North and Northeast of Mound G 1934	Count
Extended	9
Adult	4
Infant	1

ND	4
Flexed	1
Child	1
Prone	2
Adult	1
Adolescent	1
ND	44
Adult	1
ND	43
Total	56

A total of 20 individuals were observed interred with accoutrements (Table 4.75).

Notable associations include an individual with beads at both wrists, a copper pendant on the chest, beads around the neck, and graphite (Peebles 1973:396); an individual with two decorated bottles, one of which contained (unidentified) bones (Peebles 1973:384, 386); an individual with a greenstone axe, beads around the neck, an oblong copper gorget, and unspecified shells (Peebles 1973:397); an individual with a formal palette with remnants of red paint, spool-shaped beads, and globular shell beads (Peebles 1973:386); and an individual with a duck effigy bowl, shells with bits of reeds under them, and the lower beak of an ivory billed woodpecker (Peebles 1973:397). Three individuals were interred with copper accoutrements including a pendant, an oblong gorget, and ear spools. The interred formal palette is the first observed within a mortuary context since Mounds C and D and their associated northern interment areas. The pigment complex in this area is sparse, represented by single occurrences of graphite and red paint, with mica and galena noticeably absent.

The most commonly occurring ceramics from the area north of Mound G, with data derived from Steponaitis (1983:250-251), are bowls (9), closely followed by bottles (8) and two jars. Nine ceramics recovered were able to be seriated within a two-phase span by Steponaitis (1989), with two dating to the Moundville I/II phases (A.D. 1120-1400), one dating to the Moundville II phases (A.D. 1260-1400), three dating to the Moundville II/III phases (A.D. 1260-

1520), and three dating to the Moundville III phase (A.D. 1400-1520). Four Hemphill style ceramics were recovered north of Mound G, with seriation available for three and with each belonging to a different style phase (Phillips 2012) (Table 4.76). Notably, no individuals were observed interred with ceramic discs and a single individual evidenced the inclusion of a ceramic fragment as an associated accoutrement.

Table 4.75. Associated accoutrements recovered from North and Northeast of Mound G.

Associated Accoutrements, North and Northeast of Mound G	Burial Count
Beads around neck	1
Beads at left wrist (10) and right wrist (8); copper pendant on chest; beads	
around neck; graphite right hand	1
Bone awl; shells at feet	1
Copper ear plugs	1
Decorated bottle	1
Decorated bottle (2) (one of which contained bone fragments)	1
Decorated bottle (NG10 Phillips 2012:335); decorated bowl	1
Decorated bottle (NG30 Phillips 2012:380); dish; large sherd; whetrock	1
Decorated bowl (NG3 Phillips 2012:130); decorated bottle	1
Decorated jar; undecorated bowl; duck effigy bowl; decorated bowl (2)	1
Duck effigy bowl; shells with bits of reeds under them; lower beak of ivory	
billed woodpecker	1
Formal palette, remnants of red paint on one side; spool-shaped beads; globular shell beads	1
Greenstone axe; beads around neck (16); oblong copper gorget; shells	2
Human effigy bowl; undecorated bowl	1
Pot	1
Shell beads at both wrists and at head	1
Small bottle	1
Spool-shaped beads	1
Undecorated pot; undecorated bottle	1
None	36
Total	56

Table 4.76. Hemphill style ceramics recovered from the interment area North of Mound G.

Artifact #	Burial #	Motif	Designation	Fellows
NG3	B8	Crested bird	Early Hemphill	NE80, O10
NG10	B20	Insect (?)	Middle Hemphill	SD472, SEH73, SL'21
NG30	B1007	Winged serpent	Late Hemphill	

An area described as a field east of Mound G was tested by Moore in 1906 with 29 trial holes, encountering two burials without associations (Moore 1907:343). The Alabama Museum of Natural History conducted tested excavations east of Mound G in late January and early February of 1930, recovering 16 individuals (Knight 1992:3-5) (Table 4.77). Of those recovered, the majority (10) were observed within three multiple interments. The first group, a multiple of four adolescents, was composed of two flexed individuals, two extended individuals, and an isolated skull all without associated effects (Knight 1992:3). The second multiple interment observed was composed of four extended adults, again without accoutrements (Knight 1992:4). The third and final multiple was composed of two adults, without burial type reported and both interred with notable effects (Knight 1992:4). The first of the pair encountered was observed in association with a greenstone axe atop chest, 16 shell beads around head and neck, and an oblong copper gorget under skull (Knight 1992:4). The second of the pair was observed in association with "about 300 small shell beads at each wrist, in festoons about 4 inches long" (Knight 1992:4). A minority of six individuals were observed with associated accoutrements, with one adult observed in possession of copper ear plugs (Knight 1992:3) (Table 4.78). Finally, excavators noted the existence of "lots of [nonhuman] bones" east of Mound G and speculated at the possibility of "kitchen middens" in the area (Knight 1992:3).

Table 4.77. Burial type for the interment area East of Mound G in 1930.

Burial Type East of Mound G 1930	Count
Extended	8
Adult	6
Child	1
Adolescent	1
Flexed	4
Adult	2
Adolescent	2
ND	3
Adult	2
ND	1

Skull	1
Adolescent	1
Total	16

Table 4.78. Associated accourtements from the interment area East of Mound G in 1930.

Associated Accoutrements East of Mound G 1930	Count
"About 300 small shell beads at each wrist, in festoons about 4 inches long"	1
"Rough stone on the skull and a shell at the mouth"	1
Copper ear plugs	1
Decorated bottle (NG10 Phillips 2012:335); decorated bowl	1
Greenstone axe atop chest; shell beads around head and neck (16); oblong copper gorget under skull	1
Undecorated pot; undecorated bottle	1
None	10
Total	16

Areas to the east of Mound G were also investigated as part of the AMNH Roadway investigations from 1939-1940 (Figure 4.11). Excavation blocks 46+50-45+00, immediately abutting the area east of Mound S, were observed to contain variable architectural features including wall trenches, post molds, and fire basins but were found to lack burials (Peebles 1973:908, 910). Block 44+50 was observed to contain at least four structures, four fire basins, and nine burials (Peebles 1973:904). In situ artifacts included two ceramic effigies, two stone discoidals, red paint, a projectile point, two stone axe fragments, four ceramic discoidals, four small triangular points, three pebbles hammers, and a piece of a "knife" (Peebles 1973:Table X-13). Block 44+00 was observed to contain at least two partially excavated structures and 11 burials (Peebles 1973:900). In situ artifacts included four small triangular points, three bone needles, two stone discoidals, fragments of a stone disc, four ceramic discoidals, two stone mortars, a bear claw, two deer antlers, two instances of charred acorns, a pottery tool, bone tools, and a bird claw (Peebles 1973:Table X-12). Block 43+50 was observed to contain four burials, scattered post molds, a segment of wall trench, and a cluster of fire basins (Peebles 1973:895, 897). In situ artifacts included a small bone awl, a ceramic discoidal, three small triangular

points, a stone bead, a stone discoidal, and a ceramic effigy (Peebles 1973:Table X-11). Finally, the block segment 43+00-40+50 went unexcavated as it encompassed a segment of the informal roadway employed at the site at that time (Peebles 1973:895).

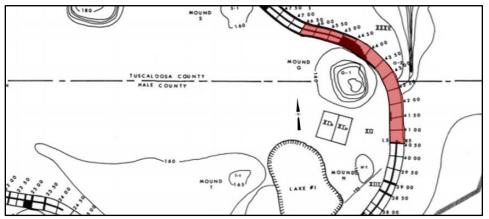


Figure 4.11. Roadway excavation blocks 46+00-40+50, North and Southeast of Mound G (Peebles 1973:Figure I-1).

The area east of Mound G appears to represent an ancestral residential location that predates both Mound G and the plaza (Wilson 2008:68) (Figure 4.12). A total of 24 individuals were recovered from the Roadway excavations east of Mound G, specifically Roadway excavation blocks 43+50-44+50 (Table 4.79). Unassociated items are relatively innocuous with material of note including an instance of red paint and two instances of shells. The distinct lack of ceramics is a consequence of investigators electing not to document instances of in situ pottery fragments (Peebles 1973:792) (Table 4.80). Notably, no infants and only three children were recorded in this area, all observed to be flexed single interments and with one in possession of an accompaniment, a pot (Peebles 1973:1044, 1046-1047). In fact, the pot noted with the child was the only mortuary accompaniment observed for the area. The other two children interred without accoutrements were also among the 12 individuals in the area missing elements in a manner similar to that observed east of Mound S (Table 4.81).

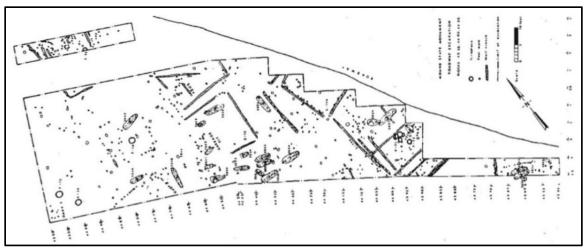


Figure 4.12. Plan view of Roadway excavation blocks 43+50-44+50 (Peebles 1973:Figure X-16).

Table 4.79. Burial type and count for the interment area associated with Roadway excavation blocks 43+50-44+50 East of Mound G.

Burial Type, Roadway East of Mound G	Count
Bundle	1
Adult	1
Extended	12
Adult	10
Adolescent	2
Flexed	6
Adult	3
Child	3
Skull	1
Adult	1
ND	4
Adult	4
Total	24

Table 4.80. Unassociated artifacts from Roadway investigations East of Mound G, blocks 43+50-44+50.

Unassociated Items, East of Mound G	Count
Bird claw	1
Bone awl	3
Bone needle	3
Bone tool	1
Ceramic discoidal	9
Ceramic effigy	5
Charred material	1
Charred wood (instances)	1

Mammal claw	1
Pebble hammer	4
Piece of antler	2
Piece of axe	2
Projectile point	3
Red paint	1
Shell (instances)	2
Small triangular point	11
Stone discoidal	5
Stone mortar	2

Table 4.81. Burials recovered from the Roadway excavations East of Mound G with missing elements noted in excavation notes.

		Burial	General	
Designation	S/M	Form	Age	Field Notes
				Skull and right arm missing, only
RW2824	Single	Extended	Adolescent	fragments of left long bones
RW2828	Single	Flexed	Child	Hands and feet missing
RW2832	Single	ND	Adult	Scraps of bone present
RW2839	Single	Flexed	Adult	Hands, feet, most of ribs missing
				Fragments of long bones and skull all that
RW2840	Single	Extended	Adult	were observed
RW2841	Single	ND	Adult	Feet and lower leg all that remained
RW2842	Single	ND	Adult	Foot and lower legs all that remained
				Skull and long bones observed, all
RW2843	Single	Bundle	Adult	fragmentary
RW2845	Single	Extended	Adult	Feet, hands, and shoulder area missing
RW2846	Single	Extended	Adolescent	Skull and one tibia all that remained
RW2930	Single	Extended	Adult	Ribs, hands and feet missing
				Parts of skull and long bones all that
RW2931	Single	Flexed	Child	remained

The area to the south of Mound G was excavated in January of 1934 and originally designated to be used as an in situ museum display (Peebles 1973:404-405). Initially divided into two strips, labeled south and southwest of Mound G, burials within the area designated for the museum display were left in situ while all others were removed unrecorded (Peebles 1973:404). The observation that burials were co-occurring with a cluster of architectural remnants led to the expansion of the excavation tract and the documentation of archaeological features and materials

within the exposed area (Peebles 1973:404). Unfortunately, this has led to a map with large voids in the area labeled south of Mound G where construction efforts superseded recording (Peebles 1973:Figure V-7) (Figures 4.13 and 4.14). Additionally, although two garbage-filled pits were recorded south of Mound G, no record was made of the artifacts recovered from these pits (Peebles 1973:408).

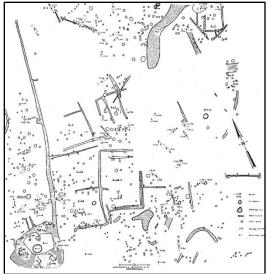


Figure 4.13. Plan view of interment areas South and Southwest of Mound G (Peebles 1973:Figure V-7).

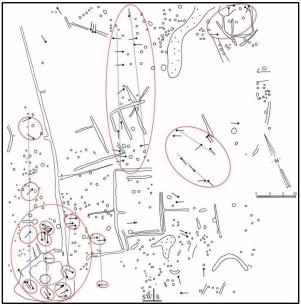


Figure 4.14. Revised plan view of interment areas South and Southwest of Mound G, highlighting possible mortuary schema of clustered linear rows (Peebles 1973:Figure V-7).

Excavations in the area south of Mound G recovered 53 individuals, though it seems an unknown number went unrecorded (Peebles 1973:405) (Table 4.82). Burials appear to follow an area schema, arranged in linear clusters. Children and infants collapsed (17) account for just over 30 percent of the sample. Atypically ritualized interments include a single extended infant with a copper pendant (Peebles 1973:420) and an infant interred on the chest of an extended adult with galena and an unspecified discoidal (Peebles 1973:412). Among burials for whom such information was available, the majority were observed to conform to extended single interments. Six interments were recorded as multiples, all of them pairs. An additional pair of note includes an extended adult with shell beads and a shell gorget interred with a second extended adult associated with five pints of shell beads scattered over the right arm and chest, a decorated bottle, and a copper pendant (Peebles 1973:417-418).

Table 4.82. Burial type and count for the interment area South of Mound G.

Burial Type, South of Mound G	Count
Extended	38
Adult	23
Child	9
Infant	4
ND	2
Flexed	2
Adult	2
ND	13
Adult	6
Adolescent	1
Infant	4
ND	2
Total	53

A minority of 13 individuals were associated with mortuary items (Table 4.83). The only additional notable associations were a single extended adult with a stone gorget and half of a pot (Peebles 1973:418) and four individuals interred with vessel fragments, a combination of adults and a child. Two ceramics were able to be seriated within a two-phase span by Steponaitis

(1989), with one dating to the Moundville II phase (A.D. 1260-1400) and one dating to the Moundville II/III phases (A.D. 1260-1520). No Hemphill style ceramics and no formal palettes were observed in the area (Steponaitis 1983a:251).

Table 4.83. Associated accourtements recovered from the area South of Mound G.

Associated Accoutrements, South of Mound G	Burial Count
Shell beads (5 pints), scattered over right arm and chest; decorated bottle;	
copper pendant	1
Small, undecorated bowl; human effigy bottle	1
Copper pendant	1
Discoidal (made from curved base of pot)	1
Discoidal; galena	1
Pot fragment, under skull	1
Large pottery fragment	1
Pottery fragments	1
Shell beads, scattered; shell gorget between burials	1
Stone discoidal; ceramic disc	1
Stone gorget; half a pot	1
Undecorated pot; small decorated bowl; duck effigy bowl	1
Whetrock	1
None	40
Total	53

The excavation area labeled Southwest of Mound G yielded 73 burials, a wall trench running north to south, extending 30 meters in length and varying between 30 and 45 centimeters in width, several artifacts, several structures, and one fire basin (Peebles 1973:434) (Figure 4.11). In situ artifacts include a piece of limestone, a small stone discoidal, a ceramic discoidal, a mass of red paint, two fragments from a large bottle, a clay pipe, and a smooth stone with paint on it (Peebles 1973:435-439). The robust linear feature appears to have been a screen with affixed architecture along the eastern side that predated burials in the area, with the latter dating broadly to the necropolis period (A.D. 1300-1450). The screen lines up, along an east-west axis, with the late Moundville I phase (A.D. 1200-1260) domestic architecture cluster associated with the

premound occupation of Mound G. This alignment suggests the two may have been contemporaneous and an aspect of the enacted delineation of space by late Moundville I phase (A.D. 1200-1260) ancestral communities in the area (Funkhouser 2014).

Burials are dominated by extended adults, with bundles conspicuously absent (Table 4.84). Three infants are recorded, all unaccompanied by mortuary items, with one noted as having been disturbed and with skeletal remains described as "scattered" (Peebles 1973:449, 464-466). An unusually high number of children (17) are reported for the area, contributing to 23 percent of the sample. Three were associated with multiple burials, all of which contained pairs (Peebles 1973:442, 445, 447). Eight instances of multiple interments are noted for the area, with five of them containing pairs. One group of three (SWG1787-1789) was composed of an adolescent without associated accoutrements (Peebles 1973:463) featuring an extended adult associated with a bottle, ceramic fragments, and an unknown number of projectile points; and an extended adult with shell beads at the chin, an axe fragment, an unspecified discoidal, and a bottle (Peebles 1973:464). The second group (SWG1750-1753) was, regrettably, heavily impacted by 19th- and 20th-century cultivation practices (Peebles 1973:452-453). A single individual (SWG1751) described as "4.8 feet long" was associated with a pot and bottle (Peebles 1973:453). The final, larger multiple interment featured three extended adults, all without accoutrements (Peebles 1973:454).

Table 4.84. Burial type and count for the interment area Southwest of Mound G.

Burial Type, Southwest of Mound G	Count
Extended	51
Adult	26
Adolescent	6
Child	12
Infant	2
ND	5
Flexed	3
Adult	3

Prone	1
Adult	1
Skull	4
Adult	2
Child	1
ND	1
ND	14
Adult	2
Adolescent	1
Child	4
Infant	1
ND	6
Total	73

A minority of 26 individuals were associated with accoutrements (Table 4.85). Notable associations include a single extended child, observed to have a post hole impacting the right side of the body, with an informal palette with paint on the inverted side and a large freshwater snail shell (Peebles 1973:458); an extended child observed with three pots and two Hemphill style bowls who was interred with an extended adult evidencing an unspecified discoidal and an unknown number of shells (Peebles 1973:441-442); an extended child associated with an unknown number of shells paired with an extended adolescent interred with a bottle, vessel fragment, and mass of red paint (Peebles 1973:447); a single extended adult with a small bowl, a fish effigy bowl, two bottles, unspecified paint, and mica (Peebles 9173:469); and an extended adult with shell beads and an ornament, composed of sheet copper molded around a six inch segment of rib, at the neck and a mass of green paint (Peebles 1973:446). The only other instance of green paint within a mortuary context observed thus far was one particularly well-appointed individual interred near the Rhodes site Palisade segment (see p.152). Seven individuals were observed with shell inclusions including beads, freshwater shells, and mussel shells.

The most commonly occurring ceramics, with data derived from Steponaitis (1983:251-252), are bowls (11), followed by an equal number of bottles (9) and jars (9). A total of 22

ceramics recovered from the area were able to be seriated within a two-phase span by Steponaitis (1989), with three dating to the Moundville II phase (A.D. 1260-1400), eight dating to the Moundville II/III phases (A.D. 1260-1520), 10 dating to the Moundville III phase (A.D. 1400-1520), and one dating to the Moundville IV phase (A.D. 1520-1650). Six Hemphill style vessels were recovered, with all seriated by Phillips (2012) (Table 4.86). All recovered *variety Hemphill* vessels date to the Middle and Late Hemphill style phases (A.D.1375-1450). Finally, seven individuals were interred with vessel fragments as a mortuary accompaniment.

Table 4.85. Associated accourrements from the interment area South and Southwest of Mound G.

Associated Accoutrements South and Southwest of Mound G	Burial Count
Bottle (SWG24 Phillips 2012:400); pot	1
Bottle (SWG63 Phillips 2012:289); pottery fragments; projectile points	1
Bottle; bowl (SWG52 Phillips 2012:413)	1
Bottle; vessel fragment; mass of red paint	1
Bowl	1
Decorated bowl (2)	1
Discoidal; shells	1
Duck effigy bowl	1
Informal palette, remnant paint; large freshwater snail shell at right shoulder	1
Large fragment of bowl; fragments of bowl with human effigy head	1
Large fragment of pot	1
Pot	1
Pot; shell beads under chin	1
Pot; vessel fragment	1
Pottery fragments (placed on either side of skull)	1
Sheet copper molded around a section of rib bone found in front of chin with	
shell beads; mass of green paint	1
Shell beads at chin; fragment of axe; discoidal; bottle (SWG62 Phillips	
2012:384)	1
Shells at left hand	1
Small bone object (partially finished); partially finished piece of wood	1
Small bottle; effigy bowl; fragments of large pot	1
Small bowl; fish effigy bowl; small bottle; bottle; paint; mica	1
Small pot; decorated bowl (2) (SWG2 Phillips 2012:341) (SWG3 Phillips	
2012:302); pot (2)	1
Snail shells; mussel shells	1
Stone ceremonial axe	1
Undecorated bottle (where skull should have been); pot	1
Whetrock	1

None	47
Total	73

Table 4.86. Hemphill style ceramics recovered from Southwest of Mound G.

Artifact #	Burial #	Motif	Designation	Fellows
SWG2	B1717	Stylized tails	Middle Hemphill	SD59, SD87, NR24
				ND4, EE343, SL'8,
SWG3	B1717	Scalps	Middle Hemphill	NR38
SWG63	B1788	Raptor	Middle Hemphill	SD71, O9
				SD742, EE115, WR13,
SWG24	B1751	Tails	Late Hemphill	RPB(1)
SWG52	B1801	Hands	Late Hemphill	EE126
SWG62	B1789	Tails	Late Hemphill	RPB(4), EE166

Contextualizing mortuary and excavation data for the Mound G precinct, the mound and associated interments appear broadly reflective of a diverse corporate kin-based group actively engaged with site-level activities including corn processing and the use and breakage of Hemphill style ceramics. Materials that appear related to esoteric medicine-making, including copper, medicine palettes, aspects of the pigment complex, are relatively sparse. The interment area north of Mound G manifests similarly to areas north of Mound C, D and E in that it appears to represent a social segment with atypical ties to the monument and its leadership. To the east, within Roadway excavation blocks 43+50-44+50, were several structures that appear to articulate with a larger, pre-plaza, community plan and that may have included the segregation of space with a particularly large wall segment. Interments in this area are, with a single exception, without accourrements and with many subjected to variable degrees of exhumation. The lack of even fragmentary human remains in association with Mound G contexts, summit or flank, suggest leadership controlling the monument may not have been directly involved in bone extraction in the area east of the monument. Finally, interments in the areas south and southwest of Mound G were also observed to intrude upon architectural remnants that appear characteristic of a previous residential area. Associated accoutrements in the area are found to be variable, with a minority of individuals capable of accessing controlled ritual items or unrestricted relatively elite items; the majority of individuals appear to have been interred without effects. In sum, the area manifests as a location controlled by a diverse corporate kin-based group with some members capable of accessing knowledge and training for specialist engagement, in a manner somewhat similar to Mound D.

Mound X

Mound X was an early Moundville I phase (A.D. 1120-1200) monument situated on the southeastern aspect of the terrace, essentially located east of Mounds G and H. First investigated by Jean Allan and Joseph Vogel in 1983, Mound X was observed to manifest as a dense white clay mass with organic deposits. The palisade was later erected atop, or through, the monument (Blitz 2016:61; Vogel and Allan 1985) A 2004 investigation of the mound remnant by Blitz (2007:22) observed that it possessed at least five stages including an initial construction event atop the premound surface, a yellow-brown clay stage, a white clay stage, an episode of mound fill and associated features, and a final yellow clay stage. Associated with the summit occupation were red pigments, ground hematite, informal palettes, and a number of micaceous sandstone fragments (Blitz 2007:23). A fragment of a formal palette was recovered from the plow zone just off-mound (Blitz 2007:23). No mortuary ritual has been recovered in association with the mound or immediate area.

Blitz's (2007:24, 2016) investigation into the monument concluded that the mound was principally engaged during the Moundville I phase (A.D. 1120-1260), with a clear emphasis on the early aspect of the phase prior to the implementation of the diagrammatic ceremonial center around A.D. 1200 (Blitz 2007:24). During the early Moundville I phase (A.D. 1120-1200) the Moundville landscape was inhabited by a widespread array of structures, many exhibiting a

hybrid style emphasizing a blending of traditional and emergent architectural styles (Blitz 2016:60-61; Davis 2014; Lacquement 2007). Around A.D. 1200, in the beginning of the late Moundville I phase (A.D. 1200-1260), the palisade was erected and the landscape transformed through the dedicated coordination of area use emphasizing inter- and intra-community collaboration. Mound X was resituated with the enactment of the new site plan and became integrated into the palisade, with the feature cutting through the monument in what Blitz (2016:68) argues was "repressive erasure, an intentional act of selective forgetting." The recovery of palette and pigment materials in an area of conspicuous terraforming suggests an early investment in the use of ritualized stone and empowered paints, both methods for transferring and controlling power and an aspect of the renewal of medicines. The transformation of monument use observed with the enactment of the current site plan may be related to the palisade's perceived ability to provide appropriate protection. It is possible that electing to impose the defensive perimeter into the early mound was an enveloping and repurposing, with the monument empowering the palisade's ability to achieve a maximum level of efficacy.

Mound H

Mound H is the easternmost mound of the southern periphery mound group and quite small relative to mounds discussed thus far. Observing the monument, Moore noted that it had been appreciably diminished by cultivation and concerted pilfering (Moore 1905:194). Moore and his team managed to locate an intact deposit within the mound that contained four burials, two of them atypically well-appointed (Moore 1905:194-198) (Tables 4.87 and 4.88). The first burial identified, designated Burial 1 by Moore, was a primary extended interment covered in some 700 shell beads clustered around the thoracic cavity and right shoulder, arm, and wrist (Moore 1905:105). This individual was also found to possess a sheet-copper ornament with shell

beading, similar to those recovered from Mound C. A second sheet-copper gorget with shell beading and a jasper arrow point were recovered apart from human remains (Moore 1905:195). Burial 2 was described as "a powerfully built, but not especially tall, adult male" (Moore 1905:196). This individual was found interred with a medicine palette bearing a considerable amount of red paint; shell beads at both ankles, knees, wrists and forearms and at the neck; a copper axe; 13 sheet copper symbol badges at the right elbow; copper-coated wooden plugs at each ear; and a copper hair ornament (Moore 1905:197-198). Moore also identified one extended interment without accoutrements and one aboriginal disturbance consisting of an isolated skull and femur (Moore 1905:198). Finally, Moore identified a shell drinking cup apart from human remains (Moore 1905:198).

Table 4.87. Burial type and count, Mound H.

Burial Type, Mound H	Count
Extended	3
Adult	3
ND	1
Adult	1
Total	4

Table 4.88. Associated accoutrements recovered from Mound H.

Associated Accoutrements, Mound H	Count
Palette, remnants of red pigment; shell beads (16) at ankles; spool-shaped shell	
beads at knees; copper axe; large shell beads (7) with many spool-shaped shell	
beads at right wrist; copper symbol badges (13) at right elbow; large shell beads	
(8) and many spool-shaped shell beads at left wrist and forearm; shell beads at	
neck; copper ear plug (2); copper hair ornament; circular copper gorget	1
Shell beads (14) at ankles; shell beads (8) on right wrist; spool-shaped beads	
(407) on chest; tubular shell beads (266) on right shoulder; circular copper	
gorget with pearls around neck; copper ear plug; copper ornament at head; shell	
fragment near right shoulder	1
None	2
Total	4

The Alabama Museum of Natural History excavated the area southeast of Mound H in March of 1930, recovering 31 interments and 105 artifacts (Knight 1992:18-20; Peebles

1973:46). Unfortunately, no information is available on the unassociated artifacts (Peebles 1973:46). Variable information was provided on observed interments, with only three children and one adult specifically noted for the area (Table 4.89). A single multiple of three was noted, an interment composed of three individuals, who were presumably adults, all without associated effects (Knight 1992:19).

Table 4.89. Burial type and count, Southeast of Mound H 1930.

Burial Type Southeast of Mound H 1930	Count
Extended	3
ND	3
ND	28
Adult	1
Child	3
ND	24
Total	31

A minority of 14 individuals were observed with associated effects (Table 4.90). Notable associations include a child interred with a bottle, two bowls, and a stone slab on their feet (Knight 1992:19); a probable adult with a ceremonial greenstone axe underneath its skull and a decorated bowl with two ferruginous concretions inside (Knight 1992:19); a probable adult with a copper ear plug and a bone pendant (Knight 1992:18); and a probable adult observed with a decorated bottle, a pot/jar, and a formal palette (Knight 1992:19). The most commonly occurring ceramics, with data derived from Steponaitis (1983:252-253), are bowls (11), followed by bottles (8) and jars (5). Eight ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with one dating to the Moundville I phase (A.D. 1120-11260), three dating to the Moundville I/II phases (A.D. 1120-1400), four dating to the Moundville II/III phases (A.D. 1260-1520), and two dating to the Moundville III phase (A.D.1400-1520). The investigations recovered two Hemphill style ceramics, both seriated by Phillips (2012:271, 392) (Table 4.91).

Table 4.90. Associated accourrements Southeast of Mound H 1930.

Burial Type Southeast of Mound H 1930	Count
Base of pot with four legs	1
Bottle	1
Bottle; bowl with notched rim (2); "stone slabs over the feet"	1
Bowl with notched margin; bowl	2
Bowl; bottle	1
Ceremonial greenstone axe underneath skull; ceramic fragment; decorated bowl	
with two ferruginous concretions inside	1
Copper ear plug; bone pendant	1
Decorated bottle	1
Decorated bottle; large pot	1
Decorated bottle; pot; formal palette	1
Pot	1
Small piece of ferruginous sandstone	1
Stone disc under skull; decorated bowl (2)	1
None	17
Total	31

Table 4.91. Hemphill style ceramics recovered from the area Southeast of Mound H.

	were the remaining style committee recording the wrong sommense of recomment.					
Artifact #	Burial #	Motif	Designation	Fellows		
				SD472, NG10,		
SEH73	B869	Crested bird	Middle Hemphill	SL21		
		Tails around a central		EE7, NEC11,		
SEH74	B869	symbol and "fingers"	Late Hemphill	Rho219, Q2743		

The Alabama Museum of Natural History engaged in trenching of the monument for restoration efforts in 1937 and produced a small assemblage later analyzed by Knight (2010:318). Diagnostic ceramics included a fragment of fabric marked salt-pan ware and local types that suggest a concerted engagement with the monument in the Moundville II phase (A.D. 1260-1400) (Knight 2010:318-319). Areas to the east and south of Mound H were investigated as part of the Moundville Roadway excavations in 1939 (Figure 4.15). Blocks 40+00-39+00, immediately abutting the area east of Mound G, were investigated with a series of trenches that observed nothing in the way of features or artifacts (Peebles 1973:895). Block 38+50, to the south of the mound, was investigated with two trenches that were observed to lack features but

did contain a cluster of in situ artifacts including two ceramic effigies, a stone axe fragment, four pebble hammers, a ceramic discoidal, and a fragment of stone disc (Peebles 1973:894-895, Table X-10). Block 38+00 was investigated with a single trench and produced a single artifact, a ceramic effigy (Peebles 1973:894). Finally, block 37+50, investigated with two trenches, produced only a few scattered post molds (Peebles 1973:894).

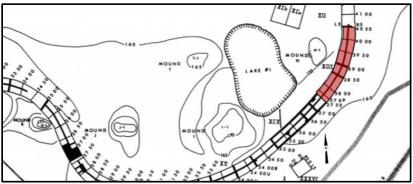


Figure 4.15. Roadway excavation blocks 40+00-37+50 east and south of Mound H (Peebles 1973:Figure I-1).

Mound H manifests somewhat unusually relative to other monuments along the southern periphery including Mounds I, J, K, and L in the relatively limited Moundville I phase signal manifesting in conjunction with the monument (Knight 2010:318-319). Mound H, like Mounds G and F, appears to have been principally engaged during the Moundville II phase (A.D. 1260-1400). A notable similarity is observed between the individual in Mound H designated Burial 1 and the extended adult (SG1731) from south of Mound G, both with atypically high quantities of shell covering the right arm and chest and both with copper gorgets (Moore 1905:105; Peebles 1973:417-418). Like Mound G, Mound H also produced an atypical salt-pan fragment (Knight 2010:286, 318). The Mound H precinct also manifests with notable similarities to Mound C in the inclusion of similar esoteric items with interments and the high level of control exerted over the area as reflected in a relative lack of peripheral interments. From this perspective, it appears that Mound H was similarly engaged in the control of esoteric war powers.

Finally, Moore's assessment that one individual appeared "powerfully built, but not especially tall" is a notable one that may allow for additional clarification of esoteric medicinemaking. First, it is worth highlighting that although C.B. Moore had no formal training in medicine or anatomy, his companion and secretary Dr. Milo Miller, a medical doctor by training, was available to aid in the analysis of burials (Knight 1984:3). That Burial 2 was described as powerfully built but short of stature suggests the evaluation was principally based on assessment of hypertrophy, or robusticity in size and appearance of both entire elements and specific tendon and ligamentous attachment sites. In her analysis of Lubbub Creek's copper-clad Burial 20, Hill (1981:230) notes that the individual was atypically robust in size, citing relative hypertrophy of the humoral head and proximal aspects of the thoracic cavity, and general robusticity of the long bones as proxies for derived relative estimations of size. The degree of relative size and robusticity noted by Moore at Moundville and Hill at near-by Lubbub Creek are not reflective of individuals regularly fasting in an effort to divine and secure supernatural aid. The ability to achieve such significant body mass requires regular access to nutritional resources, especially protein and carbohydrates. I suspect esoteric war medicines may have been conducted by a tethered pair of practitioners, those responsible for securing aid through fasting and visions and those responsible for securing the war trophies necessary to facilitate the renewal of war medicines. It is possible that individuals interred within Mound H and C represent half of an esoteric elite, specifically responsible for the control of accoutrements as a source of power and including the acquisition of trophies for the renewal of powers (Figure 4.16).

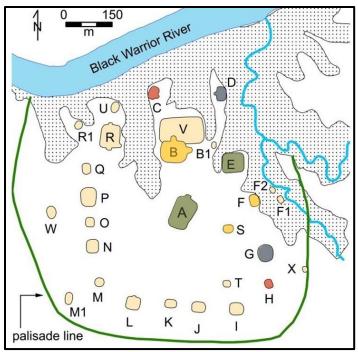


Figure 4.16. Map of Moundville showing variable social roles on the Moundville landscape with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green (Copyright John H. Blitz 2008, used with permission).

Administration Building

An area to the southeast of Mound I was selected as the location of the site administration building and was investigated prior to its construction in the spring of 1940 (Peebles 1973:787). Excavations observed five structures, nine fire basins, 13 burials, and 60 in situ artifacts (Peebles 1973:787) (Figures 4.17 and 4.18) (Tables 4.92 and 4.93). Of the five structures identified by Peebles (1973:787), three have been classified by Wilson (2008:67-68, Figure 4.18) as late Moundville I phase (A.D. 1200-1260) domestic architecture with superimposed Moundville II-III phase (A.D.1260-1520) burials. Notable in situ materials recovered from the area include five ceramic discs, two stone discoidals, a charred corn cob, a lump of hematite and instance of red paint, and 16 small triangular projectile points (Peebles 1973:Table IX-2). Unassociated items recovered in the area include three red paint rocks, four greenstone celt fragments, two hematite

fragments, three sandstone abraders, a stone discoidal, a pottery "object," and a small triangular projectile point (Peebles 1973:Table IX-3).

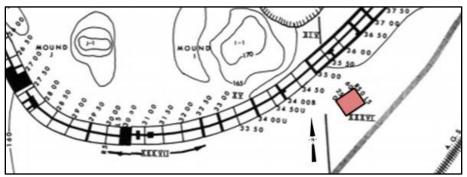


Figure 4.17. Administration Building excavations (Peebles 1973:IX-1).

Table 4.92. In situ artifacts recovered from Administration Building excavations.

In situ artifacts	Count
Bone awl	3
Bone bead	1
Bone needle	2
Bone tool	1
Bottle	1
Cane	1
Ceramic discoidal	5
Ceramic effigy	3
Ceramic pipe	1
Charred corn cob	1
Charred fibrous material	1
Lump of hematite	1
Pebble discoidal	1
Pebble hammer	3
Petrified wood	1
Projectile point	1
Red paint	1
Sandstone axe fragment	1
Small triangular point	16
Stone discoidal	2
Stone mortar	1
Stone tool fragment	1
Worked bone	1
Worked stone	4
Worked stone axe	1

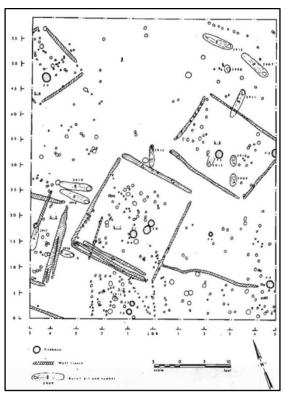


Figure 4.18. Plan view of Administration Building excavations (Peebles 1973:IX-1).

Table 4.93. Burial type and count for interments recovered from the area designated for the Moundville Administration Building.

Burial Type, Administration Building	Count
Bundle	3
Adult	3
Extended	7
Adult	5
Child	2
Flexed	1
Adolescent	1
Skull	1
Adolescent	1
ND	1
Adult	1
Total	13

Of the 13 burials recorded, three were observed to be bundled adults, with two (AD2909 and AD2910) located within the architectural remnants of Structure 5 (S5) (Table 4.94). Only three individuals were associated with accourrements, two extended adults, one with a worked flat stone (Peebles 1973:799-800) and one with two small projectile points and a shell bead

(Peebles 1973:802-803), and one extended child interred with a bottle (Peebles 1973:801). A single vessel was able to be seriated within a two-phase span by Steponaitis (1989), dating to the Moundville II/III phases (A.D. 1260-1520). No individuals recovered from the Administration Building area were noted as missing elements. The area displays general uniformity to the site-wide mortuary program, with a majority of extended primary interments and minority of bundles, flexed positions, or isolated elements. The enactment of the relatively standardized site-wide mortuary program taken in tandem with the existence of children without overt ritualization in interment execution or associated accoutrements suggests this area is primarily reflective of a corporate kin community utilizing an ancestral residential area for community mortuary ritual in a similar manner to that observed at Upper Rhodes.

Table 4.94. Associated accourrements recovered from the area designated for the Moundville Administration Building.

Associated Accoutrements, Administration Building	Count
Bottle	1
Flat worked stone	1
Small triangular points (2); shell bead	1
None	10
Total	13

An area of proposed Roadway, blocks 37+00-35+00, was excavated northeast of the Administration Building between Mound H, to the east, and Mound I, to the west (Figure 4.19). Block 37+00, abutting the Roadway segment south of Mound H, was observed to contain wall trench segments and post holes scattered throughout (Peebles 1973:893-894). Artifacts recovered in situ included a lump of hematite, two small triangular points, and a stone palette (Peebles 1973:894). The recovery of the palette is also notable as a palette fragment was recovered in nearby block 38+50, south of Mound H, in a cluster of in situ artifacts that included two ceramic effigies, a stone axe fragment, and a ceramic disc (Peebles 1973:894-895, Table X-10). Block 36+50, excavated as a series of four trenches, evidenced at least three structures, three fire

basins, and a pebble hammer and "pottery tool" in situ (Peebles 1973:893). Block 36+00, investigated with three trenches, evidenced an abundance of wall trenches and post molds and a single in situ ceramic effigy (Peebles 1973:892).

Block 35+50, excavated in three trenches with several additional units, was observed to contain numerous wall trench segments, two burials, and a single in situ ceramic effigy (Peebles 1973:891-892) (Table 4.95). The two burials recovered from this area were observed to be flexed adults, but with only the crania and long bones observed. That these individuals were noted as flexed while simultaneously missing most skeletal elements suggests additional aspects of the interment, including pit shape, prompted this designation in the field and reinforces that elements were being harvested from what were originally primary fleshed interments. Finally, block 35+00 was investigated with four trenches and evidenced only a few scattered post molds, a single wall trench segment, and a stone axe in situ (Peebles 1973:891).

Table 4.95. Burials recovered from Roadway excavation block 35+50.

Designation	S/M	Burial Form	General Age	Field Notes
				Skull, femurs and tibia all
RW2818	Single	Flexed	Adult	that remained
				Skull and long bones all
RW2819	Single	Flexed	Adult	that was observed

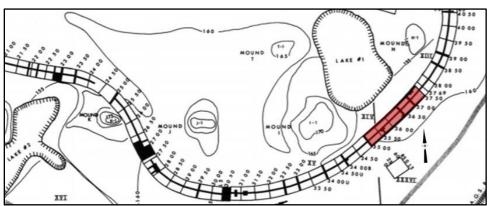


Figure 4.19. Roadway excavation blocks 37+00-35+00 between Mound H and I (Peebles 1973:Figure I-1).

Mound T

Mound T, like Mound S, is a low mound located at or just inside the plaza-periphery group (Knight 1998:47; Knight and Steponaitis 1998:5). The monument underwent restoration efforts and formal excavation in the 1930s, but no published information exists for the collection (Knight 2010:317). The purpose of the mound and its temporal span remain unknown (Knight and Steponaitis 1998:5).

Mound I

Mound I is located along the southern aspect of the plaza periphery and owes its present dimensions to a recontouring effort undertaken by the Alabama Museum of Natural History in 1937 that targeted the southern monuments (Knight 2010:320). The mound was observed by Moore (1905:198) to be badly affected by cultivation practices and erosion. Moore's team investigated the summit with 17 trial holes, reporting that it had not been used for mortuary purposes (Moore 1905:198). Trenching of the monument by the Alabama Museum of Natural History in 1937 revealed four construction stages and no evidence of mortuary activity (Knight 2010:320). An analysis of diagnostic ceramics recovered from the reconstruction efforts suggests a use-life spanning from the late Moundville I through the early Moundville II phases (A.D. 1260-1325) (Knight 2010:320). No Hemphill ceramics are known for this area, reinforcing that the mound was effectively decommissioned just prior to the proliferation of the local style at the center (Knight 2010:320, 325, Figure 7.1).

Excavations east and south of Mound I were undertaken by the Alabama Museum of Natural History in late 1930 (Peebles 1973:20). A total of 51 individuals and over 100 unassociated materials were recovered from the area east of the monument, tentatively suggesting another example of spatial claiming by an affiliated descendant community, ritual or

residential. A total of five interments and a small collection of unassociated materials were recovered from the area south of Mound I. Unfortunately, none of these locations have been reported on.

Roadway blocks 34+50-31+50 were located south of Mound I (Figure 4.20). Block 34+50, abutting the area north of the Administration Building, was investigated with a single trench that contained only a few scattered post molds (Peebles 1973:890). Block 34+00 Back, a label reflecting a briefly implemented change to the reference system, was investigated with two trenches and evidenced two burials and one in situ stone discoidal (Peebles1973:890). The interments recovered from block 34+00 Back 35+50 are represented by a flexed adult absent both hands and feet and an isolated adult skull; no accoutrements were observed in association with either. Block 34+50 Up evidenced a few post molds, one short wall trench segment, and a small stone axe and stone discoidal in situ (Peebles 1973:889-890). Block 34+00 Up, excavated in two trenches, evidenced scattered post molds, wall trench segments, and an in situ ceramic discoidal (Peebles 1973:889). Blocks 33+50 and 33+00 were investigated with a single and double trench respectively, with both evidencing only scattered post molds (Peebles 1973:889). Block 32+50 was investigated with two trenches and evidenced scattered post molds, one wall trench segment, and four in situ artifacts including two ceramic discoidals, a small greenstone celt, and a pebble hammer (Peebles 1973:888). Block 32+00, investigated with a single trench, evidenced fragments of a pot associated with a post mold and wall trench pattern (Peebles 1973:888). Finally, Block 31+50 was investigated with a single trench and evidenced post mold and wall trench patterns, including the corner of a building, and an in situ ceramic discoidal (Peebles 1973:888).

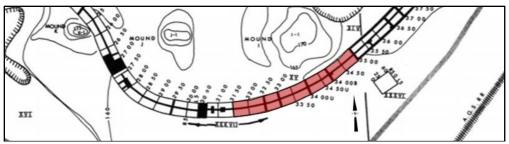


Figure 4.20. Roadway excavation blocks 34+50-31+50 were located south of Mound I (Peebles 1973:Figure I-1).

Mound I was built and employed prior to the establishment of the Hemphill art style or the mortuary program at the center, and this likely explains the relative low numbers of both in conjunction with the earthwork or surrounding area. Mound I is also one of the first to be discontinued, with or shortly after Mounds J and K appear to have terminated practice by A.D. 1350 (Knight 2010:362-363). It is regrettable no additional information on the monument is currently available.

Mound J

Mound J, as with Mound I, was recontoured by the Alabama Museum of Natural History in 1937. Moore observed an irregularly sided monument affected by erosion (Knight 2010:318; Moore 1905:198). Moore's team investigated the summit with 19 trial holes but found only a small collection of human bone fragments just below the summit surface (Moore 1905:198). Flank trenching by the Alabama Museum of Natural History in 1937 revealed two construction stages, but no additional evidence of burials (Knight 2010:320). As with Mound I, Mound J appears to have possessed a use-life principally clustered from the late Moundville I through early Moundville II phases (A.D. 1260-1325). A single *variety Hemphill* sherd, unfortunately not seriated by Phillips (2012), was observed within the Mound J assemblage (Knight 2010:320, 325, Figure 7.1).

Roadway excavations in area South of Mound J include blocks 31+00-28+00. Block 31+00, investigated with a single trench and several additional units, evidenced a structure, a triple fire basin, and two in situ artifacts including a pottery tool and a ceramic discoidal (Peebles 1973:885, 888). Blocks 30+50 and 30+00, situated southeast of Mound J, were excavated as a greatly expanded single trench and evidenced several structures, nine fire basins, 21 burials, and numerous artifacts (Peebles 1973:878, 881-885) (Figures 4.21 and 4.22). In situ artifacts, most of which were recovered in the courtyard area between the structures, included a stone "spear point," a pebble hammer, six small triangular projectile points, a mass of green paint, two duck effigies and an unidentified effigy, two stone axes, two ceramic pipe fragments, galenite, two instances of red paint, and a ceramic discoidal (Peebles 1973:885, Table X-9). That galena and green paint are present is notable as these appear to be highly controlled substances that suggest area activity may be ritual, not residential, in nature.

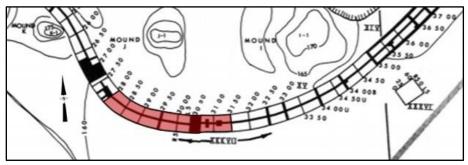


Figure 4.21. Roadway excavation blocks 31+00-28+00 South of Mound J (Peebles 1973:Figure I-1).

Burials were dominated by adult primary extended interments, with bundles, flexed positions, and isolated elements forming a distinct minority (Table 4.96). Infants and children are also a distinct minority, with only two children reported for the area. One extended child was observed interred in the only multiple burial recovered, a pair with an extended adolescent, and one of the few interments located within a structure (Peebles 1973:1033). The second child was interred extended and single (Peebles 1973:1034). No burials in this area were in possession of

associated accoutrements. If the burials recovered from Roadway blocks 30+50 and 30+00 do represent a ritual population, perhaps they were one comporting themselves with an austerity somewhat analogous to the mortuary sample observed in association with Mound F. As was observed in East of Mound S and Roadway excavation block 35+50, several individuals (6) were noted as missing numerous elements (Table 4.97).



Figure 4.22. Roadway excavation blocks 30+50-30+00 South of Mound J (Peebles 1973:Figure X-14).

Table 4.96. Burial type and count from Roadway excavation blocks 30+50 and 30+00.

Burial Type, Blocks 30+50 and 30+00 South of Mound J	Count
Bundle	1
Adult	1
Extended	18
Adult	14
Adolescent	2
Child	2
Flexed	1
Adult	1
Skull	1
Adult	1
Total	21

Table 4.97. Burials recovered from Roadway excavation block blocks 30+50 and 30+00 missing elements.

Designation	S/M	Burial Form	General Age	Field Notes
RW2795	Single	Extended	Adult	Left hand and most ribs missing
				Left hand and kneecap missing,
RW2807	Single	Extended	Adult	remaining bones present but

				fragmentary
RW2808	Single	Extended	Adult	Hands and feet missing
RW2812	Single	Extended	Adult	Fragmentary skull plus legs observed
				Fragmentary long bones and the skull
RW2813	Single	Extended	Adult	all that remained
				Long bone fragments all that was
RW2814	Single	Extended	Adult	observed

Block 29+50 was investigated with two trenches and evidenced a few post molds, two wall trench segments, and a small stone axe in situ (Peebles 1973:878). Block 29+00 was investigated with a single trench and evidenced only scattered post molds and three wall trench segments (Peebles 1973:878). Blocks 28+50 and 28+00 were both investigated with a single trench and evidenced only scattered post molds (Peebles 1973:878). The evidence is quite tenuous, but it seems possible the Mounds I and J represent a pair in the way Mounds A and B and Mounds E and F may be pairs, with Mound J manifesting as a monument possibly controlled by esoteric crafters and Mound I acting as the affiliated renewal or activity platform they engaged with in a dedicated manner. It is possible that esoteric crafting, evidenced principally through controlled pigment use and bone handling, is the other half of esoteric medicine-making at Moundville, a point that will be elaborated on in subsequent sections.

Mound K

Mound K is located along the southern periphery of the plaza and, like Mounds I and J, was recontoured by the Alabama Museum of Natural History in 1937 (Knight 2010:318). One of the first individuals to record recovered material culture from the mound was James Middleton, who collected fragments of an informal palette, with evidence of hematite on both sides, from the eastern boundary of the summit plateau in 1882 (Steponaitis 1983b:139-140). The palette fragment manifests as a wedge shape, a possible consequence of ritualized destruction (Moore 1907:Figure 89; Peebles 1973:Figure VII-4; Steponaitis 1983b:140). The palette is also

significant as the noted existence of paint on both surfaces is rare, with Mound K being the first explicitly reported instance occurring thus far. Middleton also noted the presence of a pond at the base of the monument and a trench in the northern section of the summit, a remnant of an earlier investigation by unknown parties (Steponaitis 1983b:135).

Moore described the monument in 1905 as having been significantly impacted by erosion (Knight 2010:320; Moore 1905:198). Moore's team investigated the Mound K summit with 11 trial holes that produced a fragment of a formal palette, with cream colored paint on one side and red paint on the other, and an eccentric vessel but no evidence of interments (Knight 2010: 320-321; Moore 1905:198-99). Trenching by the AMNH in 1937 observed between three and four construction stages, but no definitive burials (Knight 2010:321). Diagnostic ceramics recovered from these investigations suggest a dominant occupation within the late Moundville I phase (A.D. 1200-1260) with some amount of continuance into the early Moundville II phase (A.D.1260-1400) and cessation of use occurring by A.D. 1350 (Knight 2010:321, 362). As with Mound I, no *variety Hemphill* ceramics were recovered from Mound K investigations (Knight 2010:Figure 7.1).

Roadway blocks 27+50-22+00 were investigated north and northwest of Mound K in 1939. Block 27+50 evidenced three burials, at least two structures, and a single small triangular projectile point in situ (Peebles 1973:877) (Table 4.98). Burials were all observed to be single extended interments, featuring one adult and two children, and missing elements. Block 27+00, situated to the southwest of Mound J, was almost entirely excavated and produced several structures, eight fire basins, 18 burials, and several in situ artifacts (Peebles 1973:869, 871) (Table 4.99). The majority of burials appear associated with, and to post-date, area architecture seriated by Wilson (2008:Figure 4.29) to the late Moundville I phase (A.D. 1200-1260) (Peebles

1973:872, 874) (Figure 4.23). In situ artifacts include another instance of green paint, a piece of copper, a paint rock, two ceramic discoidals, a pottery tool, three pebbles, a ceramic effigy, two stone discoidals, two small triangular points, and a large projectile point (Peebles 1973:Figure X-8). As with interments recovered from blocks 30+50 and 30+00, infants are not reported for the area and children are a distinct minority. Collapsing blocks 27+50 through 26+50, three children are reported for 24 total interments, though all are single and without overt ritualization.

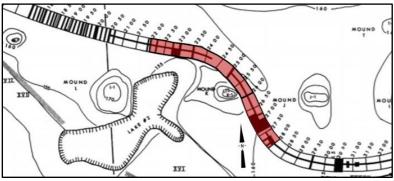


Figure 4.23. Roadway excavation blocks 27+50-22+00 southeast, east and north of Mound K (Peebles 1973:Figure I-1).

Table 4.98. Burials recovered from Roadway excavation blocks 26+50-27+50.

		Burial	General		
Designation	S/M	Form	Age	Artifacts	Field Notes
					Hands, feet, most of vertebrae,
					ribs, and part of lower left leg
RW2771	Single	Extended	Child		missing
				Bottle	Only femurs and tibia
RW2772	Single	Extended	Adult	(2)	remaining
					Only a few fragments of long
RW2773	Single	Extended	Child	Bottle	bones remaining

A minority of eight individuals were interred with accoutrements (Table 4.100). Notable mortuary associations are confined to a group of four adjoining single extended adult interments (noted on Figure 4.24). The central interment (Rw2775) was observed in possession of copper ear plugs at each side of the skull (Peebles 1973:1022-1023) and positioned directly superior to an individual (Rw2776) interred with a stone axe. The central figure was flanked by an individual (Rw2774) interred with two bowls, one of them a frog effigy (Peebles 1973:1021-

1022), on the right side and an individual (Rw2777) interred with stone ceremonial axe and five small triangular points on the left (Peebles 1973:1023). Finally, here too a number of individuals were observed to be missing elements (Table 4.101).



Figure 4.24. Roadway excavation block 27+50 Southeast of Mound K (Peebles 1973:Figure X-13).

Table 4.99. Burials recovered from Roadway excavation block 27+00.

Burial Type, Block 27+00 south of Mound J	Count
Extended	12
Adult	11
Adolescent	1
Flexed	1
Adult	1
Skull	3
Adult	1
Adolescent	2
ND	2
Child	1
Adolescent	1
Total	18

Table 4.100. Burials recovered from Roadway excavation block 27+00.

Associated Accoutrements	Burial Count
Bowl	1
Bowl; frog effigy bowl	1
Copper ear plugs each side of skull	1
Large bowl	1
Stone axe	1

Stone ceremonial axe; small triangular points (5)	1
Bottle	2
None	10
Total	18

Table 4.101. Burials recovered from Roadway excavation block 27+00.

		Burial	General	xeavation block 27	
Designation	S/M	Form	Age	Artifacts	Field Notes
					Small piece of skull,
					parts of lower left arm,
					femur, parts of lower
				Copper ear plugs	legs and both feet
RW2775	Single	Extended	Adult	each side of skull	observed
					Only parts of leg
RW2776	Single	Extended	Adult	Stone axe	remaining
				Stone ceremonial	
				axe; small	
				triangular points	Skull and scattered
RW2777	Single	Extended	Adult	(5)	fragments all remaining
					Only skull, left femur,
					and right tibia in
RW2778	Single	Extended	Adolescent	Bottle	evidence
					Some ribs, both feet, and
RW2780	Single	Extended	Adult		right hand missing
					Most of ribs, left hand,
RW2783	Single	Flexed	Adult		and both feet missing
					Most missing; remainder
RW2784	Single	Extended	Adult		in pieces
					Only long bones
RW2787	Single	Extended	Adult		observed
					Only a few bones
RW2791	Single	ND	Child		fragments remaining

Block 26+50 was investigated with several trenches and evidenced at least two structures, four fire basins, three burials, and a small triangular projectile point in situ (Peebles 1973:868-869) (Table 4.102) Block 26+00 was investigated with a single trench and evidenced only a few scattered post molds and a small triangular point and two stone discoidals in situ (Peebles 1973:867). Block 25+50 was investigated with a single trench but evidenced no cultural materials or features (Peebles 1973:867). Block 25+00 was investigated with two trenches and evidenced two partial wall trenches (Peebles 1973:867). Block 24+50 was occupied by an extent

roadway and therefore went unexcavated (Peebles 1973:867). Block 24+00 was investigated with a single trench and with only scattered post molds observed (Peebles 1973:867). Block 23+50 was investigated with two trenches and evidenced two fire basins and several post mold and wall trench patterns (Peebles 1973:866). Block 23+00 was investigated with a single trench and evidenced several wall trench and post mold patterns and at least one fire basin (Peebles 1973:865, Figure X-9).

Table 4.102. Burials recovered from Roadway excavation block 26+50.

Designation	S/M	Burial Form	General Age	Artifacts	Field Notes
RW2792	Single	Skull	Adult		
					Skull and long bones
RW2793	Single	Bundle	Adult		present
				Flint	
				projectile	
				point;	
				ceramic	
RW2794	Single	Flexed	Adult	discoidal	

Block 22+50 was a larger scale excavation effort that resulted in several wall trench segments, two fire basins, and several in situ artifacts (Peebles 1973:861). One completely excavated structure, Structure 9 (S9), evidenced a packed floor with a lighter clay than the surrounding area and an unusual square fire basin with indented corners (Peebles 1973:858, 856, Figure X-12). The location of the structure, being equidistant between Mound K and L, the packed colored floor, unusual fire basin, and concerted effort to keep the area free of debris led Peebles (1973:863-865) to speculate that the structure had a ceremonial function as a sweat house. Ryba (1997:38-42) has convincingly argued that Peebles's assessment of the structure as possessing a single construction episode and, therefore, profoundly atypical architectural features, was faulty. Wilson (2008:65), similarly disagreed with Peebles's structural assessment, though on the grounds that similar square fire basins have been recorded as an aspect of early

Mississippian domiciles. He classified the structure as an instance of early domestic architecture. Block 22+00 evidenced two fire basins and several partial wall trenches (Peebles 1973:858).

Mound K and the surrounding precinct manifests an unusual esoteric signal in the recovery of a ritually terminated informal palette fragment with paint on both sides, a formal palette fragment with paint, unassociated copper, copper mortuary accoutrements, and proximity to an atypical but probably ceremonially-based structure. The size of the monument, being relatively small, is in keeping with general trends among plaza periphery monuments that observe spatially reduced terraforming among esoteric specialists (Mounds C, F, H, J, and K) relative to activity platforms (Mounds E and I) and monuments appearing to represent diverse corporate leadership (Mounds D and G). Finally, in the manner that monuments engaged in esoteric crafting and activity may be paired, corporate leadership and esoteric control with an overt emphasis in war powers may also represent another pairing – group leadership paired with leadership in warfare and represented, thus far, by Mounds C and D, H and G, and, though evidence is very tenuous along the southern periphery, Mounds K and L.

Mound L

Mound L is located to the southwest of the plaza and forms the southern periphery. As with Mounds I, J, and K, Mound L was recontoured by the Alabama Museum of Natural History in 1937 (Knight 2010:318). Moore tested the entire summit plateau with 25 trial holes, without material result (Moore 1905:199). Both Moore's investigation and trenching conducted by the AMNH observed that Mound L possessed a single construction stage (Knight 2010:321). Chronologically diagnostic ceramics from the 1937 investigation suggest a strong late Moundville I phase (A.D. 1200-1260) occupation (Knight 2010:321). Like Mound S, Mound L appears to possess a latent, or fallow, period during the Moundville II phase (A.D. 1260-1400)

and a renewal of use in the Moundville III phase (A.D. 1400-1520) (Knight 2010:322). Finally, the Alabama Museum of Natural History investigated the area south of Mound L in September of 1938 (Peebles 1973:20-21). The most commonly occurring ceramics, with data derived from Steponaitis (1983:253), are equal numbers of bottles (5) and bowls (5) followed by jars (2). Five ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with three dating to the Moundville II/III phases (A.D. 1260-1520) and two dating to the Moundville III phase (A.D. 1400-1520). Five Hemphill style ceramics were recovered from these excavations, with all seriated by Phillips (2012:182, 268, 285, 324, 329) and all but one belonging to the Middle Hemphill period (A.D. 1375-1425) (Table 4.103).

Table 4.103. Hemphill style ceramics from interment area South of Mound L.

Artifact #	Burial #	Motif	Designation	Fellows
SL'31	B3014	Winged serpent	Early Hemphill	SD34, NR30, WR81
SL'1	B3001	Crested bird	Middle Hemphill	O6
SL'14	B3010	Hand and eye design	Middle Hemphill	SD71
SL'21	B3012	Paired tails	Middle Hemphill	SEH73, SD472
SL'8	ND	4 hands and 4 scalps	Middle Hemphill	SD71, NR38

Roadway excavations were conducted for blocks 21+50-19+00 north and west of Mound L (Figure 4.25). Block 21+50 was investigated with two trenches and evidenced three structures, one burial, and a ceramic discoidal, three effigies, and a pebble hammer in situ (Peebles 1973:855-856). The burial, RW2770, was a single extended (complete) adult without accoutrements. Block 21+00 was investigated with a single trench that evidenced the corner of a structure and a pebble hammer in situ (Peebles 1973:855). Block 20+50 was investigated with two trenches that evidenced numerous wall trenches and post molds, one fire basin, and no in situ artifacts (Peebles 1973:855). Block 20+00 was investigated with four trenches that evidenced several structures, but no burials or in situ artifacts (Peebles 1973:854). Block 19+50 was investigated with four trenches and evidenced scattered wall trench segments and post

molds. A single pebble hammer was recorded in situ (Peebles 1973:854). Finally, block 19+00 was also investigated with four trenches and evidenced several structures and a fire basin, with a stone discoidal and a piece of vulcanite recovered in situ (Peebles 1973:853-854).

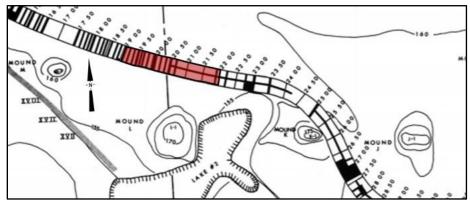


Figure 4.25. Roadway excavation blocks 21+50-19+00 South of Mound L (Peebles 1973:Figure I-1).

The lack of burials in association with Mound L and the surrounding area is likely the result of monument use principally occurring prior to the mass enactment of the mortuary program. The temporal span of engagement for Mound L manifests atypically, with concerted use in the late Moundville I phase (A.D. 1200-1260) and a strong signal in the Moundville III phase (A.D. 1400-1520) but with little diagnostic of the intermediary (Knight 2010:320). The larger size of the monument is in keeping with other mounds that appear controlled by diverse corporate groups including Mounds D and G. It is possible that the southern monuments, Mounds L, J, K, and I, represent the same set of four observed among the eastern monuments, Mounds E, F, G, and H with each set containing esoteric medicine-makers specializing in control and paired with diverse corporate leadership and esoteric medicine-makers specializing in crafting paired with an activity or renewal platform (Figure 4.26).

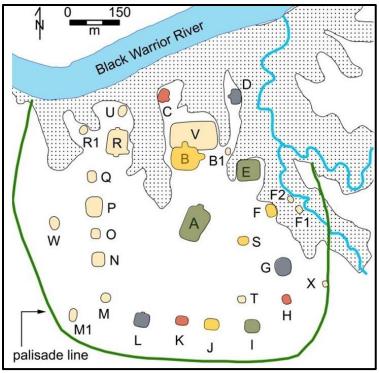


Figure 4.26. Map of Moundville showing variable social roles on the Moundville landscape with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green (Copyright John H. Blitz 2008, used with permission).

Mound M

Mound M, located on the southwest corner of the plaza periphery, is among the smallest mounds at the site (Knight 2010:322). Badly affected by erosion by the time of his visit, Moore investigated the summit with 13 trial holes but observed that all were without material result (Moore 1905:199). David DeJarnette conducted a series of excavations into the southeastern flank of the mound in the early 1970s, with the results of this investigation later analyzed by Astin (1996) (Knight 2010:322). The analysis identified a possible premound midden and two construction events with a slope midden between them (Astin 1996:30; Knight 2010:322). Originally designated the "grey zone" by excavators, this primary midden was a charcoal laden soil containing charred bone, large potsherds, greenstone shatter, flakes, and a polished stone discoidal (Astin 1996:26). From the assessment of recovered ceramics, Mound M appears to have been principally constructed during the late Moundville I and early Moundville II phases

(A.D. 1200-1325) with a second addition within the Moundville II phase (A.D. 1325-1400) (Astin 1996:62, 85). The premound midden is likely associated with the strong early Moundville I phase (A.D. 1120-1200) signature recovered in the area (Knight 2010:323).

Three variety Hemphill sherds were recovered from Mound M, all from disturbed contexts (Astin 1996:62). In interesting contrast to Mound F, which displayed a high frequency of nonlocal ceramics from the Central Mississippi Valley, the majority of non-local ceramics recovered from Mound M are associated with the Lower Mississippi Valley (Astin 1996:80). An additional connection to the Lower Mississippi River Valley comes from two effigy panther pipes made of limestone, recovered in the mid-19th century from a drainage ditch put near the base of the mound (Knight 2010:322; Steponaitis and Knight 2004:177). Final nonlocal lithics of significance were two fragments of Mill Creek chert, bearing connections to Cahokia, including a biface and a blade-like flake (Astin 1996:72, 86; Knight 2020:315). Similar fragments of Mill Creek chert were recovered from the nearby early Moundville I phase (A.D.1120-1200) mound 1Tu50 (Steponaitis 1992:7). The pigment complex at Mound M is represented by a single instance of both mica and limonite, two occurrences of charcoal, and 17 specimens of hematite (Astin 1996:65-66). Three sandstone fragments were identified as possible paint palettes, though sandstone abraders and saws are conspicuously absent from the recovered sample (Astin 1996: Table 8, 86). Finally, an isolated mandible was recovered from the lower flank of the mound in the southwest corner (Knight 2010:323). No other human remains are known to be associated with the monument.

Returning to Moundville in 1906, Moore conducted excavations in an area designated "the field near Mound M" and reported a remnant conical clay mound located approximately 100 meters to the southwest of the monument (Moore 1906:343). Moore's team spent two days

investigating the area, resulting in the recovery of 59 burials, though few were observed to be in possession of accoutrements (Moore 1906:343, 345). Two Hemphill style ceramics were recovered from Moore's investigations of the area, with both seriated by Phillips (2012:200, 217) to the Early Hemphill period (A.D.1325-1375) (Table 4.104). An atypical terraced vessel was also recovered, with similar forms from the area South of Mound D and North of Mound E (Moore 1906:357; Peebles 1973:69, 71). Finally, a single burial was noted to be in possession of a copper-coated wooden ear plug (Moore 1906:402).

Coring of the small remnant mound, now designated Mound M1, was undertaken by Gage and Jones in 2000 (2001). These investigations concluded that Mound M1 was a monument erected atop an erosional remnant (Gage and Jones 2001:90). The resultant stratigraphic profile evidenced two charcoal lenses surrounding a burned deposit in the lowermost levels that was covered by a midden (Gage and Jones 2001:Figure 39). Though bone was recovered from these investigations, the context suggests it to be midden debris and not mortuary related (Gage and Jones 2001:88). Subsequent investigation by John Blitz in the summer of 2006 (Thompson 2011:130, 137-138) indicates the area was repetitively engaged with during the height of the mortuary program, during the Moundville II (A.D. 1260-1400) and Moundville III (A.D. 1400-1520) phases.

The Alabama Museum of Natural History investigated areas southeast, south, and southwest of Mound M in December of 1930 and January of 1931 (Astin 1996:32; Peebles 1973:21-22, Figure I-1 designations XVI, XVII, and XVIII respectively). To the southeast of the mound 12 burials and two artifacts were recovered, to the south 13 burials and 51 artifacts, to the southwest, in the area of Mound M1, 137 burials and 274 artifacts (Astin 1996:32; Peebles 1973:21-22). That the southwestern/M1 area possessed both a high number of interments and

artifacts further suggests the former is atop a ritual or residential area. Unfortunately, this material has not been analyzed nor reported and no published material exists for the interments, artifacts, or structural remains that were recovered.

The most commonly occurring ceramics for the area South of Mound M, with data derived from Steponaitis (1983:254), are jars (2) followed by a single bowl. A single vessel was able to be seriated within a two-phase span by Steponaitis (1989), dating to the Moundville II/III phases (A.D. 1260-1520). The most commonly occurring ceramics for the area Southwest of Mound M, or in the area of Mound M1, with data derived from Steponaitis (1983:254-255), are bowls (22), followed by bottles (14), with jars (4) forming a distinct minority. Twenty-two ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with two dating to the Moundville I/II phases (A.D. 1120-1400), six dating to the Moundville II phase (A.D. 1260-1520), five dating to the Moundville III phase (A.D. 1400-1520), and one dating to the Moundville III/IV phases (A.D. 1400-1650). Three Hemphill style ceramics were recovered from these investigations, with all seriated by Phillips (2012:134, 156, 359) and with the majority placed in the Early Hemphill period (A.D. 1325-1375).

Table 4.104. Hemphill style ceramics from interment area South and Southwest of Mound M.

Artifact #	Burial #	Motif	Designation	Fellows
SM30	B1033	Crested bird	Early Hemphill	
SWM15a	ND	4 hands and 4 arm bones	Early Hemphill	SD88
SWM188	ND	Circles and c.h. bands	Early Hemphill	
SWM5	B14	Bilobed arrow	Early Hemphill	
SWM185	B983	Winged serpent	Late Hemphill	

Roadway blocks 18+50-15+00 were investigated north and northwest of Mound M in 1939 (Figure 4.27). Blocks 18+50, 18+00, and 17+50 were all investigated with three trenches, with all evidencing various structural remnants. No in situ artifacts and no burials are reported

for this area (Peebles 1973:852-853). Blocks 17+00 and 16+50 were part of an extant roadway in 1939 and, as such, were unable to be investigated (Peebles 1973:852). Block 16+00 was investigated with four trenches and evidenced only a fire basin and a single ceramic discoidal in situ (Peebles 1973:852). Block 15+50 was investigated with three trenches and evidenced a single extended adult interred with two bowls and a bottle, missing the right lower leg and both hands and feet (Peebles 1973:853-852). Block 15+50 was investigated with three trenches and evidenced scattered post molds, a wall trench segment, a fire basin, and two ceramic discoidals and a ceramic effigy in situ (Peebles 1973:851). Finally, Block 15+00 was opened as a large excavation block (Figure 4.28) and evidenced a structure, 39 interments, and several in situ artifacts including two effigies, two stone discoidals, red paint, a piece of rock crystal, two bowls, three copper fishhooks, green paint, and a crude stone discoidal (Peebles 1973:842, Table X-6).

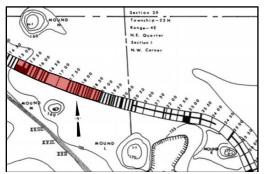


Figure 4.27. Roadway excavation blocks 18+50-15+00 North of Mound M (Peebles 1973:Figure I-1).

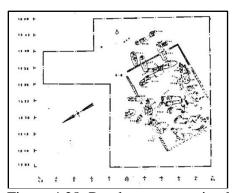


Figure 4.28. Roadway excavation block 15+00 North of Mound M (Peebles 1973:Figure I-1).

Burials recovered from Roadway block 15+00 generally conform to other interment areas at the site with a majority manifesting as extended primary interments, with bundles, flexed positions, and isolated skulls forming a minority in burial type (Table 4.105). Many interments (25) were located within the observed structure, designated Structure 8 and dated to the late Moundville I phase (A.D. 1200-1260) by Wilson (2008:54, 64) (Peebles 1973:845, Table X-5). The area appears to have been repeatedly utilized for interments, manifesting in multiple levels of intrusive burials (Peebles 1973:843, 847). Though the temporal span between burials is unknown, 17 individuals were observed to pre-date the structure and 22 individuals observed to post-date it, potentially making it one of the oldest interment areas at the site (Peebles 1973:Figure X-8, 847-848).

Of the 14 interments suspected to pre-date Structure 8, a bundled infant appears ritually interred without accourrements outside the structure (Peebles 1973:1005-1006). A minority of three individuals were observed to possess accourrements, all ceramic accompaniments (Table 4.106). A single multiple interment, a pair of extended adults with one in possession of a bottle and bowl while the other was absent associations, was observed among pre-Structure 8 interments (Peebles 1973:1007-1008).

Table 4.105. Burial count and type from Roadway block 15+00, Pre-Structure 8.

Burial Type, Block 15+00 Pre-Structure 8	Count
Bundle	1
Infant	1
Extended	10
Adult	7
Adolescent	2
Child	1
Flexed	2
Adult	1
Child	1
Skull	1
Adult	1
Total	14

Table 4.106. Associated accourtements from Roadway block 15+00, Pre-Structure 8.

Associated Accoutrements, Block 15+00 Pre-Structure 8	Count
Bowl; pot	2
Large bowl; bowl	1
None	11
Total	14

A total of 25 individuals appear to post-date Structure 8, with burial type again represented by a majority of extended interments though with an increase in multiples (4), all of them pairs and adults and/or adolescents (Table 4.107). The interments of infants (0) and children (4) are noteworthy in two instances, one interred with a small "toy" bowl (Peebles 1973:1009) and an extended child interred within the structure with a copper ear plug, pot, and bowl (Peebles 1973:1005-1006, 1015). Other notable associations include an extended adult, located outside the structure, with a "copper strip running from the right ear to the left shoulder," an effigy bowl, and a *variety Hemphill* bottle seriated to the Late Hemphill style phase (A.D.1425-1450) (Peebles 1973:1005; Phillips 2012:369); a single extended adult observed with a stone pendant (Peebles 1973:1009); and a single extended adult with a "crude" stone disc placed atop the chest and a bottle (Peebles 1973:1010-101) (Table 4.108). Finally, the vast majority of individuals (30), including adults and children, were observed to be missing elements (Table 4.109).

Table 4.107. Burial count and type from Roadway block 15+00, post Structure 8.

Burial Type Block 15+00 Post Structure 8	Count
Bundle	3
Adult	2
Child	1
Extended	20
Adult	14
Adolescent	4
Child	2
Flexed	2
Adult	1
Child	1

Total 25

Table 4.108. Associated Accourrements from Roadway block 15+00, post Structure 8.

Associated Accoutrements Block 15+00 Post Structure 8	Count
Bottle; ceramic disc (2)	1
Bottle; large fragment under skull; pot; bowl	1
Bottle; stone pendant	1
Bowl	2
Bowl (2); small bowl; stone disc	1
Copper strip around skull from right ear to left shoulder;	
effigy bowl; bottle (RW152 Phillips 2012:369)	1
Crude stone disc center of chest; pot	1
Pot (2); bowl	1
Pot; bowl; copper ear plug	1
Small bowl	1
Stone discoidal	1
None	13
Total	25

Table 4.109. Burials recovered from Roadway excavation block 15+00.

Designation	General Age	Field Notes
		Both feet, both hands, most ribs and vertebrae, and right arm
RW2723	Adolescent	missing
RW2724	Adult	Parts of upper and lower leg only
RW2725	Adult	Hands and feet missing
RW2726	Adult	Left foot and hand missing
RW2727	Adolescent	Parts of upper arms, few ribs, pelvis, and femur present
RW2728	Adolescent	Only parts of skull, one vertebra, and part of leg observed
		Right hand, entire left arm and hand, most of vertebrae and
RW2729	Adult	ribs, and toes of both feet missing
		Right lower arm, pelvis, right upper arm, right lower leg and
RW2730	Adult	foot, most of vertebrae, and left foot missing
RW2731	Adult	Skull and long bone present
RW2733	Adult	Both hands and feet missing
RW2734	Adult	Only skull, vertebrae, ribs, and arms present
		Part of ribs and lower arms missing, both hands and feet
RW2737	Adult	missing
RW2738	Adolescent	Both hands missing
RW2740	Adult	Only hands and feet missing
RW2741	Infant	Parts of skull and few scattered bones observed
RW2742	Child	Hands and feet missing
RW2743	Adult	Both hands and all toes missing
RW2744	Adult	Left hand and toe bones missing
RW2745	Adult	Both hands and feet missing
RW2746	Child	Hands, feet, small lower leg bones, and collar bones missing

RW2748	Adult	Both hands and left foot missing
RW2750	Adult	Only part of pelvis, both legs, and left arm observed
		Parts of skull and most of torso including lower arms and
RW2751	Adult	hands, all ribs and vertebrae and left toe bones missing
		Only leg bones and small part of lower left arm and small
RW2755	Adult	piece of pelvis present
RW2756	Adolescent	Skull, four vertebrae, and legs all observed as present
		Most of ribs, lower left arm, left leg, both hands and feet
RW2757	Adult	missing
		Small pieces of skull and pelvis, both legs and right foot
RW2758	Adult	observed
		Parts of skull, few vertebrae, ribs, right arm, part of pelvis,
RW2759	Adult	and right leg observed
		All of vertebral column, most of ribs, entire right arm, both
RW2760	Child	hands and feet missing
RW2761	Child	All ribs, both hands, and right forearm missing

The Mound M area appears to have been formally codified early in the site's history, with a strong early Moundville I phase (A.D. 1120-1200) component in the area, likely associated with the monument's premound midden, and pre-Structure 8 burials in the 15+00 block of the Roadway tract. Materials associated with the mound show a concerted emphasis on the late Moundville I phase (A.D. 1200-1260) that includes possible evidence of bone-handling, minimal use in the Moundville II phase (A.D. 1260-1400), and abandonment by the Moundville III phase (A.D. 1400-1520). Evidence of what appears to be bone-handling occurring in conjunction with pigment producing minerals, limestone cat pipes, and evidence of long-distance connections in the importation of nonlocal ceramics concentrated within the Moundville I phase (A.D. 1120-1260) suggests the monument leadership was engaged in early esoteric crafting. That the majority of near-mound interments were located to the southwest of the monument tentatively suggests significance in directionality and a long-standing relationship to Mound M1. Few Hemphill ceramics were recovered from the areas around Mound M, with most seriated to the Early Hemphill period (A.D. 1325-1375), conforming to the relatively weak Moundville II phase (A.D. 1260-1400) signal reported by Astin (1996:61-62). Unfortunately, little information is

available on the interments or their associations. Investigations by Thompson (2011), however, have aided our understanding of the landscape they were placed upon, which appears to have been routinely utilized within the Moundville II/III phases for variable activities.

Structure 8 of block 15+00 of the Moundville Roadway was observed to house both atypical material culture in situ including green paint, red paint, a rock crystal, and three copper fishhooks and a dense cluster of 39 burials, with the majority appearing to have been deliberately disturbed in an effort to harvest ancestral elements with a concerted emphasis on hands and feet. It is worth noting that the pre-structure mortuary sample was situated due west of Mound X and, given the early Moundville I phase (A.D.1120-1200) presence in the area, that may have been deliberate. The recovery of an isolated human mandible in the southwest corner of the lower levels of Mound M suggests some amount of bone-handling was an early component of esoteric practice in the area.

Mound N

Mound N is a relatively large monument, located along the western segment of the plaza periphery. Moore investigated the summit with 25 trial holes, all without material result (Moore 1905:199). Regrettably, Mound N has not been well investigated and our understanding of the monument is limited. Returning to Moundville in 1906, Moore investigated the area west of the mound with 27 trial holes (Moore 1907:344). These investigations recovered eight interments, with only one observed in possession of accoutrements (Moore 1907:344-345). Unfortunately, nothing else is mentioned of the interments outside of the fact that they existed. The Alabama Museum of Natural History conducted excavations north of Mound N in 1933 and recovered three burials and one artifact (Peebles 1973:23). Again, no reported information exists for these burials.

The Moundville Roadway excavation blocks 14+50-12+00 run just west of Mound N (Figure 4.29). Block 14+50 was investigated with four trenches that evidenced three discoidals in situ, no other cultural features were observed (Peebles 1973:842). Block 14+00 was investigated with three trenches and evidenced scattered post molds and a fire basin, no burials or in situ artifacts were recovered (Peebles 1973:842). Block 13+50 was investigated with four trenches and evidenced scattered post molds and a single wall trench segment (Peebles 1973:841). Block 13+00 was investigated with four trenches and evidenced four burials, two fire basins, scattered wall trenches and post molds belonging to at least three structures, and a stone discoidal in situ (Peebles 1973:839, 841) (Table 4.110). Although Wilson (2008:62, 64) has classified the majority as early domestic architecture, he notes that one small rigid post structure may date to considerably later in the site's history.

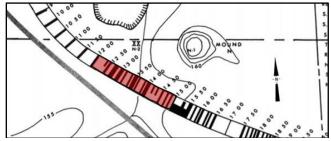


Figure 4.29. Roadway excavation blocks 14+50-12+00 West of Mound N (Peebles 1973:Figure I-1).

Block 12+50 was almost entirely excavated and produced 12 burials, numerous wall trenches and post molds, two fire basins, and two effigies and a ceramic discoidal in situ (Peebles 1973:838-839) (Figure 4.30). The majority of interments (8) constitute one large multiple burial of several bundles (Table 4.111). All interments appear to have been adults without accoutrements with none noted as missing elements. Wilson (2008:62, 64) has seriated the structures as principally dating to the late Moundville I phase (A.D. 1200-1260). Finally, block

12+00 was investigated with three trenches, evidencing a few scattered post molds only (Peebles 1973:838).

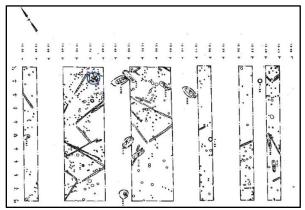


Figure 4.30. Roadway excavation blocks 12+50 and 13+00 West of Mound N, with the bundle cluster highlighted (Peebles 1973:Figure I-1).

Table 4.110. Burials recovered from Roadway excavation block 13+00.

Designation	S/M	Burial Form	General Age	Artifacts	Field Notes
					Skull and long bones all
RW2819	Single	Flexed	Adult		that was observed
RW2820	Single	Flexed	Adult	Cup	
RW2821	Single	Skull	Adult		
RW2832	Single	ND	Adult		Scraps of bone present

Table 4.111. Burials recovered from Roadway excavation block 12+50.

Burial Type, Roadway block 12+50	Count
Bundle	8
Adult	8
Extended	2
Adult	2
Flexed	1
ND	1
Skull	1
Adult	1
Total	12

Mound N is a poorly understood monument. Still, the area around the mound does not appear to have been heavily invested in mortuary ritual nor in bone handling. No Hemphill style ceramics are reported for this area (information for the area designated north of N¹ will be provided in tandem with information on the area west of Mound O). It seems possible that

Mound N is roughly contemporaneous with Mound M and possessed a relatively substantial late Moundville I phase (A.D. 1200-1260) component, a limited Moundville II phase (A.D. 1260-1400) engagement, and was abandoned by the Moundville III phase (A.D. 1400-1520). Unfortunately, the limited information available allows for only a tentative assessment of the near-mound mortuary sample, but it is possible this is an austere ritual group in the manner of Mound F and the Roadway blocks 30+50 and 30+00 situated southeast of Mound J. Finally, I suspect that Mounds M and N form another pairing of esoteric crafting with an activity or renewal area, respectively (Figure 4.31).

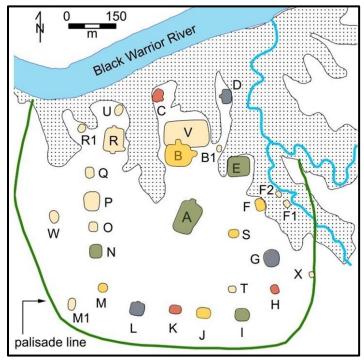


Figure 4.31. Map of Moundville showing variable social roles on the Moundville landscape with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green (Copyright John H. Blitz 2008, used with permission).

Mound O

Mound O is a smaller monument, centrally located along the western plaza periphery.

The mound was initially investigated in 1869 by Nathaniel Lupton who sunk an eight-foot shaft into the center of the summit, with a four-foot-wide trench extending to the eastern edge that was

taken to a depth of four feet before being abandoned due to negative results (Moore 1905:200; Steponaitis 1983a:130). Lupton's investigations into the summit observed at least three stages of mound construction, each evidencing "clusters" of burials that appear related to the construction stage (Steponaitis 1983a:130-131). Lupton records that the monument was approximately 16 feet tall and notes interments observed within the central summit test pit two "partial" skeletons at three feet, the remains of three or more individuals at eight feet, and the remains of "several skeletons" at 16 feet, or at ground surface (Steponaitis 1983a:130-131). Artifacts recovered from Lupton's investigations included beads, mussel shells, charcoal, mica, and pottery (Steponaitis 1983a:130).

Moore investigated the monument in 1905, initially with a series of nine test pits that resulted in mortuary effects almost immediately and led him to extensively excavate the summit to a minimum of 4-5 feet (Moore 1905:200). Moore noted 42 instances of human remains, excluding bits of bone fragments scattered throughout, but only provided details for 27 (Moore 1905:218; Peebles 1973:47). Though a few burials were encountered in the northeast and southeastern corners, the majority were recovered along the western aspect of the mound summit excluding the southwest corner (Moore 1905:218). Combined with Lupton's recoveries, the total burial count for the monument is approximately 50 individuals (Table 4.112). The proliferation of interments within the monument seems to have resulted in a considerable amount of disturbance, with Moore (1905:201, 206, 212-213, 217) noting eight specific instances.

Table 4.112. Burials recovered from Mound O including Lupton (1869) and Moore (1905).

Burial Type, Mound O	Count
Bundle	1
Adult	1
Cremation	1
ND	1
Extended	11

Adult	11
Skull	1
Adult	1
ND	36
Adult	9
ND	27
Total	50

Of the 27 burials that Moore provides information on, 22 were observed in association with accoutrements (Table 4.113). In total, Moore (1905: 200-201, 204, 206, 212) documented the recovery of nine formal palettes, the most recovered from a single location at the site. Three palettes are noted as bearing pigment on both sides (Moore 1905:204, 206, 212). A single formal palette displayed white, cream, and pink coloring on one face and red on the other (Moore 1905:206). Copper is specifically noted 13 times, with seven copper coated wooden ear plugs (Moore 1905:200-201, 205, 206-207), three copper gorgets with two encased (Moore 1905:201, 217), a hair ornament (Moore 1905:213), and two instances of unassociated sheet copper fragments (Moore 1905:217). A single shell gorget was observed within the mound but disintegrated upon attempted recovery (Moore 1905:204).

Additional interments and artifacts of note include an extended adult with a mass of glauconite, or green paint, on the chest (Moore 1905:201; Peebles 1973:50); a cup, recovered apart from remains, containing a mass of glauconite with a mussel shell containing red paint situated atop the glauconite (Moore 1905:211-212); two pipes recovered with human remains nearby, one a possible limestone panther from the Lower Mississippi River Valley and the other a kneeling human figure, and possible captive, of red claystone believed to have been made in or around Cahokia (Emerson et al. 2003: 301; Moore 1905: 214-215; Reilly 2004; Steponaitis and Knight 2004:117); an individual interred with a ball of manganese oxide (Moore 1905:217; Peebles 1973:51); an individual interred with a mass of galena and a circular sheet copper gorget

with a central swastika design (Moore 1905:217; Peebles 1973:49); and a pit with multiple interments, at the opening of which was placed an atypically large chert weapon (Moore 1905:212; Steponaitis 1992:7).

The most commonly occurring ceramics, with data derived from Steponaitis (1983:255-256), are bottles (11) followed by bowls (6). Eight ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with one dating to the Moundville I phase (A.D. 1120-1260), one dating to the Moundville II phase (A.D. 1260-1400), five dating to the Moundville II/III phases (A.D. 1260-1520), and one dating to the Moundville III phase (A.D. 1400-1520). Six *variety Hemphill* ceramics were recovered from Mound O, four from mortuary contexts (Table 4.114). All recovered Hemphill style vessels were seriated by Phillips (2012) with half belonging to the Early Hemphill Period (A.D. 1325-1375) and half belonging to the Middle Hemphill Period (A.D. 1375-1425).

Table 4.113. Associated accoutrements recovered from Mound O by Moore in 1905.

Associated Accoutrements, Mound O	Count
Black ball of psilomelane, hydrated oxide of manganese containing considerable	
quantities of cobalt oxide	1
Bottle	1
Bottle (O9 Phillips 2012:297)	1
Bottle, bowl, galena, circular copper gorget, vessel	1
Bottle, formal palette with white, cream, and pink pigment on one side with red	
pigment on the other, stone disc with unidentified pigment on one side	1
Bottles (2) (O10 Phillips 2012:135)	1
Bowl	1
Ceremonial flint near surface of pit	1
Copper hair ornament	1
Copper-clad wooden cylinder	1
Cup, vessel, bowl	1
Effigy bowl, bottle	1
Formal palette with red pigment on one side and white on the other	1
Formal palette with red pigment on one side and white on the other, formal palette,	
shell gorget, bottle (O6 Phillips 2012:273)	1
Glauconite	1
Large shell beads (9)	1
Large shell beads at wrists, large shell beads at ankles, copper fragments and pearls	1

below chin, copper ear plugs	
Pot, bowl	1
Sheet copper hair ornament, mass of lead sulphide, large shell beads at end of	
femur (5), shell beads near lower end of skeleton	1
Shell beads, chert projectile point	1
Stone disc, formal palette with cream colored pigment on one surface and red	
pigment on the other, copper ear plugs (2), stone disc (2)	1
Vessel, bottle (O18 Philips 2012:331), cup filled with glauconite, mussel shell	
filled with red pigment, irregular palette with red paint on one surface	1
None	5
Total	27

Table 4.114. Hemphill style ceramics recovered from Mound O by Moore in 1905.

Artifact #	Burial #	Motif	Designation	Fellows
				SE16, NE80,
O10	B21/OM10	Crested bird	Early Hemphill	NG3
O16	Apart	Ogees	Early Hemphill	SD13, NE128
		Radial T-bars w/diagonal		
		cross hatching bands and		
O20	Apart	finger bars	Early Hemphill	
O18	F2/OM2	Hands and eyes	Middle Hemphill	SD71
				D6, SD93, EE3,
O6	B14/OM1	Crested bird	Middle Hemphill	NE60, Rho338
				SD71, WR8,
O9	B19/OM17	Raptor	Middle Hemphill	NE80

Moore investigated the eastern base of Mound O in 1905, recovering one extended adult without accoutrements, an infant interred with an eccentric nonlocal bowl that may represent a symbolic scalp, an amphibolite discoidal, and a ceramic pendant with a design (Moore 1905:218; Peebles 1973:47, 51; Steponaitis 1983a:256). Mound O manifests as a ritual cohort with a concerted investment in the control of esoteric paraphernalia including hypertrophic chert weapons, carved pipes, palettes, and powerful paints. Like Mound M, Mound O appears to possess an early Moundville I phase (A.D. 1120-1200) ceramic signature associated with initial landscape use (Steponaitis 1992:9). Mound O interments are notable for both the volume of burials and for the relative proliferation of esoteric items. Contrasted with the interments recovered from Mound C, observed to have hosted a remarkably high number of encased copper

accoutrements and a relative minority of palettes, Mound O was observed to contain a relatively high number of palettes and minority of encased copper accoutrements. Both mounds feature cremations, an unusual occurrence at the site; round and rectangular palettes; and a ceramic assemblage highlighting connections to community potters.

Roadway blocks 11+50-8+00 were investigated west of Mound O in 1939. Block 11+50 was investigated with a single trench and evidenced only a stone axe in situ (Peebles 1973:838) (Figure 4.32). Blocks 11+00 and 10+50 were both investigated with a single trench and only evidenced a few scattered post molds (Peebles 1973:837-838). Block 10+00 was investigated with a single trench and evidenced a stone discoidal and a small triangular projectile point in situ (Peebles 1973:837). Blocks 9+50 and 9+00 were both investigated with single trenches that proved completely sterile (Peebles 1973:837). Blocks 8+50 and 8+00 were not excavated (Peebles 1973:837).

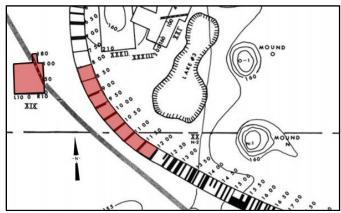


Figure 4.32. Roadway excavation blocks 11+50-8+00 Southwest of Mound O and excavation block N^I (labeled XIX) (Peebles 1973:Figure I-1).

Finally, the Alabama Museum of Natural History excavated an area just west of the roadway west of Mound O, designated North of N¹. A total of 24 burials and 42 artifacts were recovered during these investigations, though there is no reported information from this work (Peebles 1973:23). Among recovered ceramics, with data derived from Steponaitis (1983:23),

bottles (4), bowls (4), and jars (4) occurred in equal numbers. Three ceramics were able to be seriated within a two-phase span by Steponaitis (1989), all dating to the Moundville III phase (A.D. 1400-1520). Two *variety Hemphill* sherds were recovered from the area with both seriated by Phillips (2012:233-234) to the Middle Hemphill style phase (A.D. 1375-1425) (Table 4.115).

Table 4.115. Hemphill style ceramics recovered from the area North of N¹.

Artifact #	Burial #	Motif	Designation	Fellows
NN'18	B2134	Winged serpent	Middle Hemphill	RW878
NN'38	B2136	Winged serpent	Middle Hemphill	RW878

Individuals associated with Mound O appear invested in the esoteric control of ritualized stone and empowered paints, with an emphasis in war medicine. Notable similarities between Mounds O and M include a strong early Moundville I phase (A.D. 1120-1200) signature and the atypical use of large chert weapons and carved stone pipes. The surrounding area appears to have hosted a ritual cohort actively engaged in the initial settlement of the terrace in the early Moundville I phase (A.D. 1120-1200), the reorientation of the landscape in the late Moundville I – early Moundville II phases (A.D. 1200-1300), and establishment and florescence of war medicine in the middle and late Moundville II phase (A.D. 1300-1400). The ceramic assemblage, particularly the emphasis on Middle Hemphill period (A.D. 1375-1425) ceramics, suggests that Mound O was probably discontinued in the early Moundville III phase (A.D. 1400-1520).

Mound W

"Mound W" was a small rise, originally located to the west of Mounds P and O, that was wholly excavated by Maurice Goldsmith between 1939 and 1940 (Barrier 2007:27; Johnson 2005:3; Peebles 1973:4; Walthall and Wimberly 1978:122-123) (Figures 4.33 and 4.34). The Depression Era excavations of Mound W recovered 71 burials intruding into the feature, most of which were found along the southeast section, and 311 artifacts including mortuary accoutrements (Johnson 2005:22; Peebles 1973:30) (Table 4.116). Of these 71 interments, 22

were observed to be in possession of accoutrements (Johnson 2005:24). Atypically, flexed burials (15) were observed to predominate among the few individuals with noted interment type (22) and no infants nor children are reported for the area. Among notable interments are two "precedent" burials (Johnson 2005: 31-32). The first, observed associated with the hardpan clay layer preceding accretional levels, was an individual for whom we have no additional data, interred to the northeast of the landform and with a shell tempered ceramic disc (Johnson 2005:31, Figure 12). The second, observed with the first accretional level and located in the center of the landform, was an extended adult observed with four bone tools, 31 galena beads, and an atypical ceramic vessel seriated to the Moundville I/II phases (A.D. 1120-1400) (Johnson 2005:32, Figure 13). Additional notable effects include an individual with green paint; an individual with shell beads and a shell ornament; an individual with shell beads, a copper-coated wooden ear plug, a bottle, a cup, a large pot, and a large conch shell; an individual with large shell beads, a bowl, and red paint; and three individuals with ceramic discs (Johnson 2005:Table 12) (Table 4.117).

Table 4.116. Burial type and count for interments recovered from Mound W.

Burial Type, Mound W	Count
Extended	7
Adult	7
Flexed	15
Adult	15
ND	49
Adult	5
ND	44
Total	71

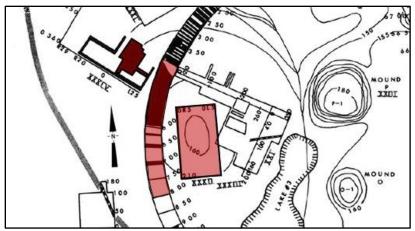


Figure 4.33. Excavation areas for Mound W, Roadway excavation blocks 7+50-4+00 West of Mound W, and the Museum Parking Area (Peebles 1973:Figure I-1).

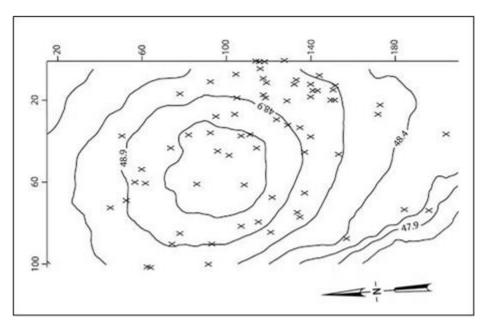


Figure 4.34. Interments recovered from Mound W (adapted from Johnson 2005:Figure 10) (Funkhouser 2014).

Table 4.117. Associated accoutrements recovered from Mound W.

Burial Type	Count
Bone tools, galena beads, bowl	1
Bottle, bowl	2
Bowl	1
Bowl fragments, copper coated wooden earplugs	1
Bowl, large shell beads, red paint	1
Bowl, shell beads	1
Ceramic cup	1

Ceramic cup/bowl, shell beads, copper coated wooden earplug, bottle, large pot,	
large conch shell	1
Ceramic discoidal	3
Copper coated wooden earplugs	1
Flint projectile points	1
Green paint	1
Large pottery fragments	1
Large shell beads	1
Pot	1
Shell beads	2
Shell beads, shell ornament	1
Small shell beads	1
None	49
Total	71

One of the first comprehensive studies of Mound W feature was made by Walthall and Wimberly (1978) who reported that 82% of the grog-tempered sherds coming from Moundville were coming from the Mound W excavations and that another 12% were coming from areas to the north and northwest of the mound (Johnson 2005:13). Subsequent analysis by Johnson (2005) showed that Mound W was the accumulated result of between four and five occupations dating from the Early to Late Moundville I phase (A.D. 1120-1260). Notable in situ materials recovered from the Mound W excavations include three bear teeth, two of them pendants; four instances of burned fabrics; one instance of burned basketry; three instances of charred corn cobs; 13 effigy fragments; three instances of green paint; four instances of red paint; five instances of mica; a coal discoidal; a chalk discoidal and chalk tool; and 79 instances of projectile points/knives, which is incredibly unusual for the center (Johnson 2005:Table 11; Knight 2010:55) (Table 4.118). Four ceramics from Mound W contexts were seriated within a two-phase span by Steponaitis (1989), with two dating to the Moundville I/II phases (A.D. 1120-1400), one dating to the Moundville II phase (A.D. 1260-1400), and one dating to the Moundville II/III phases (A.D. 1260-1520).

Table 4.118. In situ materials recovered from Mound W.

In situ materials recovered from Mound W	Count
Bear tooth	1
Bear tooth pendant	2
Bone awl	16
Bone ornament fragments	1
Bone pin	2
Bone scraper tool	1
Burned basket fragments	1
Burned fabric	4
Ceramic discoidal	29
Chalk discoidal	1
Chalk tool	1
Charred corn cobs	3
Coal discoidal	1
Complete vessel	1
Copper fragments	2
Core	2
Daub	2
Deer antler fragments	4
Effigy fragment	13
Green paint	3
Greenstone celt/axe fragment	13
Ground silt stone axe fragment	2
Hammerstone	20
Iron fragment	1
Mica	5
Mussel shells	1
Nutting stone	6
Pestle, ceramic	2
PP/K	79
Red pigment	4
Sandstone grinding slab	6
Shell beads	1
Shell ornament	3
Shells	2
Stone abrader	4
Stone bowl fragments	1
Stone discoidal	10
Stone scraper	2

Wood fragments	1
Worked pebble	1
Worked sandstone	1

Research on the Mound W assemblage by Barrier (2007:52, Table 3) focused on the analysis of oversized jars, a total of 111 oversized rims, recovered from Mound W contexts.

Barrier (2007:65, 67) then compared his frequencies at Mound W with data collected by Wilson (2005) and found that the inhabitants of Mound W, the Roadway area west of Mound P, and the Roadway area north of Mound Q stored comparable amounts of surplus foods in oversized jars, perhaps at atypical levels relative to other areas. Barrier (2007:77) concluded that this may have been done in an effort to contribute to a public economy, or the dissemination of resources above the household level. This work also highlights the antiquity of the western aspect of the center and the unique role these areas played in the early history of the landscape with respect to stored surplus.

Three excavations, in 1931, 1934, and 1936, were conducted in the area South of Mound W (Peebles 1973:30). These investigations recovered at least 11 interments, though no published reports exist for these burials. The most commonly occurring ceramics, with data derived from Steponaitis (1983:2262-263), are bowls (16), followed by bottles (10) and jars (5). Eleven ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with three dating to the Moundville II phase (A.D. 1260-1400), five dating to the Moundville II/III phases (A.D. 1260-1520), and three dating to the Moundville III phase (A.D. 1400-1520). A single Hemphill style vessel was recovered in the area South of Mound W (Table 4.119). A vessel fragment recovered from excavations of Mound W brings the total occurrence of Hemphill in the Mound W area to two, both seriated by Phillips (2012:149, 175) to the early Hemphill style period (A.D. 1325-1375).

Table 4.119. Hemphill style ceramics recovered from Mound W area.

Artifact #	Burial #	Motif	Designation	Fellows
		Radial T-bars w/diagonal		
SW62	B2388	cross hatching bands	Early Hemphill	
				SD7, NE80,
				NE128, NG3,
W(sherd)		Raptor	Early Hemphill	O10, NR17

Roadway blocks 7+50-4+00 were excavated west of Mound W in 1939. Block 7+50 was investigated with two small trenches that proved to be sterile (Peebles 1973:837). Block 7+00 was investigated with a single trench but evidenced only scattered post molds (Peebles 1973:837). Block 6+50 was investigated with a single trench and evidenced post molds and wall trenches (Peebles 19173:837). Block 6+00 was investigated with a single trench and evidenced a fire basin centered between two parallel rows of post molds, a single extended (complete) adult without accourrements, and a small triangular projectile point in situ (Peebles 1973:835, 837). Block 5+50 was extensively excavated and evidenced four structures, one fire basin, and a copper ornament and fragments of a large pot in situ (Peebles 1973:832-835). Block 5+00 was completely excavated and evidenced an "L" shaped structure, one fire basin, four burials without accoutrements, and four in situ artifacts including a pebble hammer, two ceramic discoidals, and a stone pipe fragment (Peebles 1973:832-833) (Table 4.120). Block 4+50 was entirely excavated and evidenced four structures (Structures 2 through 5), three fire basins, and three in situ artifacts including a pebble hammer, ceramic effigy, and a projectile point (Peebles 1973:825-832). Block 4+00 was almost entirely excavated and evidenced numerous structural features, several fire basins, four burials, and eight in situ artifacts including a stone discoidal, two small triangular projectile points, a pebble hammer, a piece of pottery "utensil," an instance of mica, a fragment of ceramic pipe, and a ceramic discoidal (Peebles 1973:817, 820, 822, 825, Table X-4) (Table 4.121).

Table 4.120. Interments recovered from Roadway Block 5+00.

Designation	S/M	Burial Form	General Age	Field Notes
RW2700	Multiple	Extended	Adult	Skull missing
RW2701	Multiple	Extended	Child	Skull and mandible missing
RW2703	Single	Flexed	Adult	
				Parts of skull, mandible, a few ribs
RW2704	Single	Extended	ND	and long bones present

Table 4.121. Interments recovered from Roadway Block 4+00.

Designation	S/M	Burial Form	General Age	Artifacts
RW2696	Single	Flexed	Adult	
RW2697	Single	Flexed	Adult	
RW2698	Single	Extended	Adult	Small triangular point
RW2699	Single	Extended	ND	

Finally, in 1941 an area west of Mound W that was designated as a parking area for the museum was investigated by Maurice Goldsmith (Peebles 1973:738). In total, the Museum Parking Area evidenced four complete structures, several midden areas, 11 fire basins, 18 burials, and 149 materials recovered in situ outside mortuary contexts (Peebles 1973:741, 743, 745) (Figure 4.35) (Tables 4.122 and 4.123). In addition to materials recovered in situ, 34 fragmented greenstone celts, 15 pieces of worked stone, three flint fragments, five shells, mica, and a ceramic discoidal were recovered from excavation back-dirt piles (Peebles 1973:745, Table VIII-2). A single extended adult (MPA3010) was observed with materials including a bottle, a projectile point, three small triangular projectile points, a stone discoidal, a triangular stone palette, 38 flint chips, three small greenstone celts, a ceramic pipe, a stone pipe, a large ball of red paint, and two pierced bird claws (Peebles 1973:760). A total of 10 individuals were noted to be missing elements (Table 4.124).

Table 4.122. Materials recovered in situ from the Museum Parking Area.

Unassociated Materials, Museum Parking Area	Count
Antler tool	2
Bone needles	1
Ceramic discoidal	15
Ceramic effigy	6

Ceramic pipe	1		
Chalk implement	1		
Charred corn cobs (instances)	3		
Coal	1		
Flint discoidal	2		
Flint scraper	2		
Fragment of an axe	1		
Greenstone axe fragment	1		
Greenstone celt fragment	4		
Greenstone discoidal	1		
Greenstone tool fragment	1		
Limestone discoidal	1		
Mica Mica	3		
Pebble hammer	27		
Point of stone knife			
Pottery clay "lump"	1		
Pottery tool	2		
Projectile point	6		
Red paint	1		
Shark's tooth fragment	1 19		
Small triangular projectile point			
Stone discoidal	5		
Stone implement	1		
Stone mortar	14		
Stone ornament			
Stone pendant			
Tortoise shell tool	1		
Vessel fragment			
Whetstone			
Worked flint			
Worked stone	17		

Table 4.123. Burial type and count for the Museum Parking Area.

Burial Type, Museum Parking Area	Count
Extended	11
Adult	8
Child	3
Flexed	3
Adult	2
Child	1
Skull	1

Child	1
ND	3
Adult	3
Total	18



Figure 4.35. Excavation block associated with the Museum Parking Area (Peebles 1973:Figure VIII-2).

Table 4.124. Interments missing elements from the Museum Parking Area.

			General	
Designation	S/M	Burial Form	Age	Field Notes
				All small bones missing; only skull,
MPA3001	Single	Extended	Child	pelvis, and long bones present
MPA3003	Single	Extended	Child	Hands and ribs missing
MPA3008	Single	Extended	Adult	Most small bones missing
MPA2993	Single	ND	Adult	Only parts of one leg observed
MPA3002	Single	Extended	Adult	Ribs missing
MPA3009	Single	Extended	Adult	Right arm missing
MPA3010	Single	Extended	Adult	Right food and both hands missing
MPA3007	Single	Extended	Adult	Skull missing
			·	Skull, pelvis, ribs, small bones from hands
MPA3000	Single	ND	Adult	and feet all missing
MPA2995	Single	ND	Adult	Two unassociated long bones only

-		
		4 1 - 1 - 1
		material oncerved
		material observed

Mound W appears to possess a use pattern typical of early areas, with termination occurring with increasing integration of the site layout in the late Moundville I phase (A.D. 1200-1260) followed by intrusive interments in subsequent periods. Mound W, like Mounds M and O, possessed an atypically robust early Moundville I phase (A.D. 1120-1200) component (Johnson 2005:73-74; Knight 2010:323). The recovery of a central, early, interment with 31 galena beads and the observation of multiple instances of green paint (glauconite) suggest the Mound W area may have been a restricted one and further highlights, in conjunction with the green paint recovered from late Moundville I phase (A.D. 1120-1200) structures observed in the Roadway, that empowered green paint, presumably used to create black paint, was an aspect of controlled practice during the establishment of the site plan. The recovery of unassociated coal and chalk discoidals is similar to the coal discoidal recovered as an unassociated item from the Upper Rhodes site and the carved coal axe recovered as an unassociated item within the Roadway excavation blocks east of Mound S. That carved coal is also restricted to late Moundville I phase (A.D. 1200-1260) features suggests black was a symbolically important color during the early establishment of the center and that this continued into later periods.

Mound W manifests with a pronounced early engagement in the Moundville I phase (A.D. 1120-1200). Mound W material signatures, both mortuary and unassociated, appear indicative of participation in early esoteric medicines and an investment in surplus storage above the household level. The lack of reported infants and children within the mortuary sample taken in tandem with the recovery of restricted items suggests the mortuary group may have been a ritual one, rather than residential, and that early ritual activity at the center and the storage and, presumably growth, of surplus were related in some fashion.

Mound P

Mound P is an imposing monument located to the north of Mound O along the western margin of the plaza periphery (Knight 2010:234). Moore's team investigated the summit with 20 trial holes in 1905, reporting "no sign of burials or of pits" (Moore 1905:218). In 1988 Boyce Driskell investigated the monument with a narrow trench in the eastern flank, observing four successive levels and evidence of a burned structure (Knight 2010:236). In the summer of 2009, Robert Clouse directed the excavation of two units into the southwest corner of the western flank of the mound, observing considerable impact from mound wash (Porth 2011:23). Notable materials include a formal rectangular palette fragment with red pigment that was recovered in association with strata dating to the early Moundville II phase (A.D. 1260-1325), a Mill Creek chert hoe fragment was retrieved from within the disturbed soil zones, and flaked Bangor chert recovered from Moundville I phase (A.D. 1120-1260) contexts (Porth 2011:99-100).

A magnetometer survey by Chet Walker in 2009 led the subsequent Fall field school to place nine units on the southeastern corner of the mound summit north of the 1988 trench (Porth 2011:21). Excavations exposed a partial structure on the terminal summit with associated materials suggesting a Moundville III phase (A.D. 1400-1520) engagement. A concentration of modified stone was observed in association with a razed structure occupying the terraced southern portion of the summit (Porth 2011:102). Pigments recovered from the 2009 flank and mound summit investigations suggest variable pigment complex activities occurring on the summit, with pigment quality hematite scattered throughout and a small amount of mica, coal, and galena recovered from Moundville III phase (A.D. 1400-1520) summit use (Porth 2011:Table 5.15, 106).

Finally, in 2012 the University of Alabama led investigations into Mound P, placing three units at planned points of impact for the erection of a staircase on the west flank, two units looking for midden on the north flank, and two units to investigate observed terracing on the summit (Porth 2017:118, 142). Unit 1, at the base of the west flank, evidenced two single adult interments within a soil stage described as mixed midden and construction (Porth 2017:350-351, Table 4.1). Upon recognition that the remains were human and constituted an interment, excavations were halted, and the burials covered; no additional information on skeletal indicators or associated accoutrements was derived (Porth 2017:351). The stratigraphic position of the interments tentatively suggests they belong to the early Moundville III phase (A.D. 1400-1450) occupation of the monument (Porth 2017:167-168).

Notable materials recovered from the 2012 investigations include nine palette fragments, five formal and four informal (Porth 2017:257, Table 7.7); red and yellow pigments, a small amount of coal, four small galena crystals, and 17 instances of mica (Porth 2017:258); three pieces of copper including a piece of scrap, a rolled piece, and an embossed oblong symbol badge (Porth 2017:264, 268); and three pendant fragments including one of yellowish-brown ferruginous shale engraved with chevrons and a stylized ogee, one of red ferruginous shale engraved as a rattlesnake tail, and a pendant blank (Porth 2017:261, 263). The symbol badge was associated with a bull shark tooth, with both recovered from the late Moundville III phase (A.D. 1450-1520) banded midden on the north flank. It is entirely dissimilar from those recovered from Mounds D and H but is strikingly similar to ones recovered by C.B. Moore (1899:Figure 66, Figure 67) at Thirty Acre Field along the Alabama River (Porth 2017:265, 267). One formal palette recovered from early Moundville III phase (A.D. 1400-1450) contexts on the west flank displayed red paint on both faces (Porth 2017:273). A total of eight clay ornaments including two

clay beads, three ear plugs, and three pendants were recovered (Porth 2017:263-264). One of the pendants was observed to have been crafted from temperless clay into a deer astragalus (Porth 2017:263). Finally, four small stone discs, three clay pipe fragments, a quartz stemmed projectile point, three shell beads, and three pieces of marine shell scrap were also recovered from Mound P contexts (Knight 2010:155; Porth 2017:267, 270, Table 7.1). On the whole, the nature of Mound P appears to have changed considerably around A.D. 1400, with Porth (2017:273) concluding that altered outside connections prompted a new engagement with associated materials that were "used to reproduce elite institutions that emphasized social interactions focused on individual display and public performances."

Though no investigations have been conducted in the area east of Mound P, isolated finds have resulted in the cataloging of three interments and eight artifacts including two pebble hammers, two pitted stones, and four ceramic discoidals (Peebles 1973:658). Interments included a single adult, child, and isolated skull all without effects (Table 4.125). Excavations in the area west of Mound P were conducted by the Alabama Museum of Natural History in preparation for the Jones Archaeological Museum in 1936 (Peebles 1973:474 (Figure 4.36). Proximity to Mound W and overlap in associated architecture, materials, and burials suggests the areas are related ones (Johnson 2005:75). An unfortunate combination of inexperienced excavators and extreme rainfall resulted in poor in-field recording, and the ability to reconstruct the area west of Mound P has been subsequently impacted (Peebles 1973:474-475). The excavation team recovered a total of 395 burials, several structural signatures, and a large wall trench segment running east to west, varying between three and five feet wide and extending approximately 80 feet long; unfortunately, depth was not recorded (Peebles 1973:478). A total of 42 unassociated artifacts were recovered with notable materials including a shark tooth pendant, a shell ornament, an

instance of green paint, four instances of red paint, charred corn cobs painted red, a broken "double pot" containing bones, and a figurine "used as a pendant" (Peebles 1973:VI-1) (Table 4.126).

Table 4.125. Burial count and type recovered from the area East of Mound P.

Designation	S/M	Burial Form	General Age	Artifacts
1042	Single	Extended	Child	None
1043	Single	Flexed	Adult	None
1044	Single	Skull	ND	None

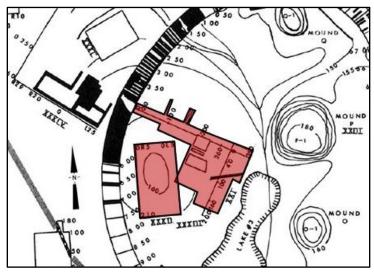


Figure 4.36. Area designated West of Mound P (XXI) showing the position of the trench and Mound W (XXXII) (Peebles 1973:Figure I-1).

Table 4.126. Unassociated artifacts recovered from the area West of Mound P.

Unassociated Artifacts	Count
Antler	2
Bone awl	3
Bone bead	1
Bottle	1
Bowl	5
Broken "double pot" containing	
bones	1
Burned clay	1
Ceramic discoidal	2
Ceramic Pipe	1
Charred corn cobs painted red	
(instance)	1
Discoidal	2
Figurine "used as a pendant"	1

Fishhook	1
Fullers earth	2
Green paint	1
Greenstone axe fragment	3
Misc. lithic fragments	1
Red paint	4
Shark tooth pendant	1
Shell bead	1
Shell ornament	1
Stone pipe	1
"Toy" pot	1
Whetrock	4

Christopher Peebles (1973:Figure VI-1) situated the relative position of the trench on his master map for the site, and depicted the feature running in the direction of Mound W (Figure 4.37). Regrettably, only half the interments recovered were able to be situated on the field map of the area, so it may be impossible to know if the linear feature was intended to segregate the mortuary sample. Mound W interments are observed to cluster to the southeast in a manner suggesting relatedness with the southern group specifically. It is possible that interments to the south of the screen represent individuals affiliated with Mounds W and O while individuals north of the screen possessed stronger ties to Mound P (Peebles 1973:Figure VII-1) (Figure 4.38). A total of 89 individuals could be placed in the southern section of the internment area (Table 4.127). The southern section also hosts a strikingly atypical burial pit with 38 tightly-packed extended and semi-flexed individuals, and with ceramic accourtements seriated to the late Moundville I and early Moundville II phases (A.D. 1200-1325) (Steponaitis 1983a:Figure 33). This would make the south pit west of Mound P one of the earliest interment areas at the site.

The area designated "south pit" was observed to extend almost a meter below the ground surface, with the lowermost burials also observed to be the most ornately accompanied (Figure 4.39) (Table 4.127). Infants (1) and children (3) were infrequently reported and restricted to

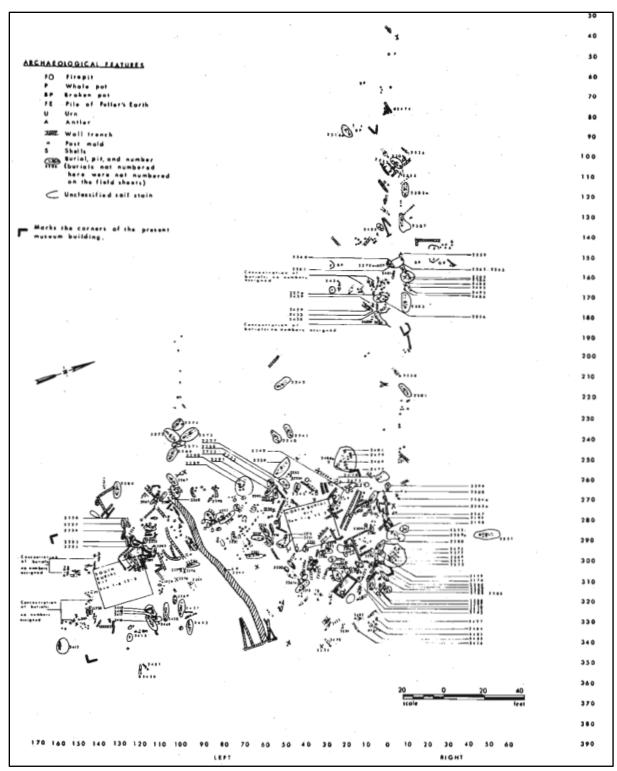


Figure 4.37. Area West of Mound P (Peebles 1973:Figure VII-1).

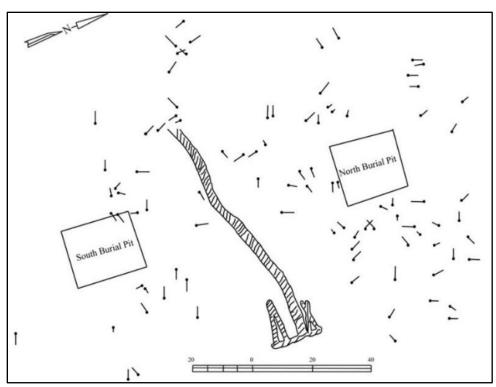


Figure 4.38. Area West of Mound P emphasizing interments clustered around the screen (based on Peebles 1973:Figure VII-1).

upper levels, with all occurring at or above 14 cm below surface (converted). Bundles and isolated skulls were atypically numerous in this area, as were multiples. Seven multiples were reported for the south pit, two of them pairs of adult bundles absent accoutrements (Peebles 1973:619-620). Additional multiples included an adult bundle and child bundle without accoutrements (Peebles 1973:604-605); a pair of adults, one extended and one flexed, absent effects (Peebles 1973:609); a vertical pair with one disturbed adult interred with a fish effigy and an extended adult positioned above and associated with a bottle, a conch shell effigy, and a fish effigy (Peebles 1973:618-619); and two triple interments of two extended adults with a bundled adult, both associated with notable accoutrements (Peebles 1973:610,612-615).

Table 4.127. Burial type and count from the South Pit area West of Mound P.

Burial Type, WP South Pit	Count
Bundle	10
Adult	8

Child	1
ND	1
Extended	16
Adult	14
Child	1
Infant	1
Flexed	2
Adult	2
ND	5
Adult	5
Skull	5
Adult	3
Child	1
ND	1
Total	38

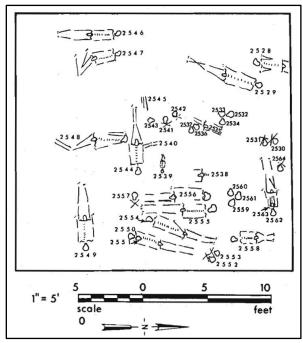


Figure 4.39. South Pit in the interment area west of Mound P (Peebles 1973:Figure VII-3).

The deepest interment, recorded at 36 inches below ground surface and likely one of the earliest, was a single extended adult (WP2549) observed with a copper ear plug, copper axe, copper dagger, and copper pendant on the chest (Peebles 1973:610). At a higher elevation to this individual, to the north, was a multiple of three, the primary appearing to be an extended adult

(WP2553) carefully situated within an area covered in matting (Peebles 1973:613-614). Accoutrements associated with this individual include a bottle, a crushed bowl, seven copper pendants, one small rough stone disc, three copper ear plugs, one bone and one copper fishhook, five distinct groups of beads, two shell discs, a pipe, a mass of green sand and another of green paint, and a bear tooth. Buried alongside the primary extended interment (WP2553) was a bundle (WP2552) interred with a fragment of stone disc, pearl beads, and a clay pipe (Peebles 1973:612-613). Within the same mat-filled section, but at a slightly higher elevation, was an extended adult (WP2550) interred with a bottle, two pottery fragments, copper ear plugs, a stone pipe, 32 large shell beads, an unidentified shell "object", a stone tool, and what appears to have been a decapitated head placed atop the chest (WP2551) (Peebles 1973:611-612). Designated Burial 2551, this isolated adult skull possesses evidence of scalping and includes the mandible and first three cervical vertebra (C1-C3), suggesting that this was fleshed at the time of deposition and possibly a war trophy (Funkhouser 2014). One of the best-known regional examples of the inclusion of extra fleshed elements is Burial 20 at the Lubbub Creek site on the Tombigbee River who, similarly, appears to have been interred with fleshed war trophies.

Above this group was an extended adult (WP2554) interred with a formal palette and galena (Peebles 1973:614), followed by an isolated adult skull (WP2532) observed with a paint bowl, disc, fragment of pot, yellow paint, and fragment of paint (Peebles 1973:603). A total of 10 interments were reported at a depth of between 15-16 inches below ground surface, including the second triple multiple, composed of an extended adult without accoutrements, a bundled adult without accoutrements, and an extended adult with a pot and a formal palette with paint placed under the skull (Peebles 1973:614-615). The last 10 centimeters (converted) of the burial pit featured the majority of the bundles recovered (8 of 10); a single extended child observed

with beads around the neck and right arm, an unidentified stone, and the only Hemphill style ceramic vessel recovered from the entire mortuary area west of Mound P (Peebles 1973:615, 617); and a single extended adult with an owl effigy, bottle, and shell beads at the right arm and both ankles (Peebles 1973:608). The child with beads covering the neck and right arm with the *variety Hemphill* vessel, being reminiscent of the adults somewhat similarly positioned with beads covering the right arm in Mound H and south of Mound G and may represent ties between the areas. The Hemphill style bottle was seriated by Phillips (2012:319) to the Middle Hemphill period (A.D. 1375-1425) (Table 4.129). The only other evidence of the Hemphill ceramic tradition in the area are the early Hemphill style period (A.D. 1325-375) sherd and bottle recovered from within Mound W and South of Mound W, respectively. The inclusion of fish effigies in the south pit, a diagnostic indicator of the Moundville III phase (A.D. 1400-1520), suggests the interment area remained active for more than a century after its initial establishment (Knight 2010:49).

Table 4.128. Associated Accourrements from the South Pit area West of Mound P.

Associated accoutrements, South Pit West of Mound P	Count
Bottle	3
Bottle (2)	1
Bottle; "paint" bowl; disc; fragment of pot; yellow paint; fragment of paint	1
Bottle; bowl; copper pendant (7); small rough stone disc; copper ear plug (3); bone fishhook; copper fishhook; beads (6) at chin; shell disc (2); pipe; "numerous" shell beads around right and left legs; mass of green sand in back of skull; green paint; bear	
tooth	1
Bottle; conch shell effigy; fish effigy	1
Bottle; fragments (2); copper ear plugs; stone pipe; large shell beads (6) at right wrist; large shell beads (9) on pelvis; large shell beads (5) at left wrist; large shell beads (8) at left ankle; shell object at left ankle; large shell beads (4) at left foot; stone tool at left of skull	1
Copper ear plug; copper axe; copper dagger; pendant (cross) on upper chest	1
Copper fragments and beads right side of skull	1
Decorated bottle (WP208 Phillips 2012:319); beads around neck and right arm; rock above left shoulder	1
Effigy bowl	1

Effigy bowl; pot	1
Formal palette with paint under skull; pot	1
Formal palette; galena	1
Fragments of stone disc; pearl beads at left wrist; clay pipe	
Owl effigy; bottle; shell beads right arm; shell beads both ankles	1
None	20
Total	37

Table 4.129. Hemphill style ceramics recovered from the area West of Mound P.

Artifact #	Burial #	Motif	Designation	Fellows
				D3, SD32, SD71, SL ¹ 8
WP208	B2558	Hand and eye design	Middle Hemphill	SL ¹ 14, O9, NR19, NR38

The remaining 52 individuals who could be placed south of the screen conform somewhat more typically to site-wide trends (Table 4.130). Infants (3) and children (7) are better represented, but with five observed in potentially ritualized contexts. The first is a single extended child interred with eight "crude clay figurines" on the chest (Peebles 1973:517). It is possible these were what have come to be called "Caspers," which appear as crude human-like figurines with faces and that may possess significant ritual importance (this will be discussed in greater detail in the next section on Mound Q) (Knight 2010:69-70). The second, a child associated with an unknown number of beads and two shell ear plugs in a paired multiple with an extended adult observed with a large, decorated bowl inverted over the head and a painted bowl (Peebles 1973:566,576). The third, an extended infant, was observed with 25 beads around the feet and 12 around the arms in a paired multiple burial with an extended adult observed with a formal palette evidencing galena and white lead paint under the skull, 13 beads at the wrists, two copper ear plugs, beads around the neck, and green paint (Peebles 1973:776, 779). The last two were both single extended infants, one with potsherds and yellow paint (Peebles 1973:522) and one with a frog effigy vessel (Peebles 1973:516).

Table 4.130. Burial type and count for interments from West of Mound P South.

Burial Type, West of Mound P South	Count
Bundle	2
Adult	2
Extended	31
Adult	21
Child	4
Infant	3
ND	3
Flexed	2
Adult	2
ND	17
Adult	8
Child	3
ND	6
Total	52

Finally, a total of four multiples were reported among those interments that could be placed in the south, all of them pairs. A distinct minority of 12 individuals were observed with accourtements, with all notable inclusions previously mentioned (Table 4.131). The recovery of unassociated and associated esoteric materials suggests the mortuary area south of the screen was controlled by a ritual group and their affiliates and is probably related to Mound W and the individuals controlling Mound O.

Table 4.131. Burial type and count for interments from West of Mound P South.

Associated accoutrements, West of Mound P South	Count
Beads around feet (25); beads around left (4) and right (8) arms	1
Beads; shell ear plugs (2)	1
Bottle; bone awl (3); ceramic discoidal; shells (6) by right hand; stone by right	
hand	1
Broken urn over head; small bottle	1
Crude clay figurines on chest (8)	1
Decorated large bowl; painted bowl	1
Formal palette under skull; beads at left (4) and right (9) wrists; copper ear plug	
(2); beads around neck; galena on disc; white lead paint on disc; green paint	1
Fragment of greenstone axe; pot	1
Frog effigy bowl	1

Pebble hammer	1
Potsherds; yellow paint	1
Small "toy" pot	1
None	40
Total	52

A total of 146 interments could be placed north of the screen, with 16 observed within the interment area designated "North Pit" (Figure 4.40) (Table 4.132). The deepest interment, at 32 inches below ground surface, was a multiple of two adults (WP2182-2183), both interred prone and with one (WP2182) described as "on face with knees bent and feet against hips" and the other (WP2183) associated with a stone disc and an unspecified stone (Peebles 1973:492). Nearby and at a depth of 30 inches was an extended infant interred with a ceramic fragment under the arm (Peebles 1973:493). Three multiples, all of them pairs, were reported for the north pit including the prone adults, an extended adult with a clam shell effigy and part of a pot paired with a bundled adult interred with three undecorated pots (Peebles 1973:490-491), and an adult of known burial type and without accoutrements who was interred with an extended infant with a small bowl inverted over the skull (Peebles 1973:493-494).

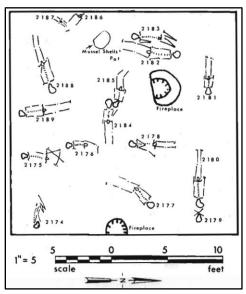


Figure 4.40. North Pit in the interment area West of Mound P (Peebles 1973:Figure VII-2).

Table 4.132. Burial type and count for interments from the North Pit West of Mound P.

Burial type, North Pit West of Mound P	Count
Bundle	1
Adult	1
Extended	8
Adult	4
Adolescent	1
Child	1
Infant	2
Flexed	4
Adult	2
Child	1
ND	1
ND	1
Adult	1
Prone	2
Adult	2
Total	16

Two infants and two children were reported including, in addition to the infant with a small bowl and child with ceramic fragment, an extended infant with mussel shells between the knees (Peebles 1973:489) and a flexed child interred with an undecorated bottle and small bowl (Peebles 1973:493). Accountrements, on the whole, appear largely innocuous and suggest the north pit may be reflective of a kin-based group affiliated with nearby Mound P (Table 4.133). Unfortunately, very little is able to be reported for the area as a consequence of area excavation methods. For example, though two fire pits are noted in the North Pit, manifest problems in recording to scale in the field has resulted in an inability to situate them relatively or provide detailed assessment for them (Peebles 1973:479).

Table 4.133. Associated accourrements from the North Pit west of Mound P.

Associated accoutrements, North Pit West of Mound P	Count
Clam shell effigy; part of bowl	1
Deer scapula at right hip	1
Large undecorated pot; undecorated pot (2)	1
Mussel shell between knees	1

Pottery fragment under arm	1
Small bowl inverted over skull	1
Stone discoidal; stone	1
Undecorated bottle; small bowl	1
None	8
Total	16

Of the 130 remaining individuals that could be situated north of the screen, burial type was noted for just over half (69) with the majority (55) observed to conform to site-wide trends (Table 4.134). A total of 25 infants and children are reported for the area. One single extended infant, interred with a stone gorget on the chest, a ceramic discoidal, and a conch columella, was the only infant/child observed with accoutrements. A total of seven multiples were reported for the area, all of them pairs except one composed of three extended adults and two extended adolescents (Peebles 1973:621, 623-624). Within this multiple of five, only a single adult (WP2569) was observed in possession of accoutrements including an undecorated pot, a bone implement, and a pipe fragment with "tobacco inside" (Peebles 1973:621). Pairs reported for the area include an adult and infant without accourrements (Peebles 1973:499, 505-506); an extended adult interred with another individual without demographic data, both absent accoutrements (Peebles 1973:508); an extended adult with a small bowl and green paint interred with an adult absent accourrements (Peebles 1973:528-529); two extended adults without accoutrements (Peebles 1973:534); an infant interred with an extended adult observed to have 11 deer scapula positioned at the feet (Peebles 1973:538); and an extended adult observed with a spoon interred with a bundled child without accoutrements (Peebles 1973:588-589).

A distinct minority of 18 individuals was observed with associated items (Table 4.135). Notable associations not previously mentioned include a single adult with two copper ear plugs and an undecorated pot (Peebles 1973:513-514); a single extended adult with a broken ceramic disc, ceramic fragments including part of a pot, two bone awls, a bird claw, red paint, and a

garfish snout (Peebles 1973:536); a single adult with a terrapin shell above the skeleton (Peebles 1973:539-540); and a single extended individual of unknown age interred with a pile of clay (Peebles 1973:514). The recovery of a garfish snout is noteworthy as such items possess possible ritual significance as scratchers and bloodletters (Peres and Deter-Wolf 2016). Scratching is also well documented ethnohistorically and ethnographically as an aspect of community-centric renewal rituals (see Chapter 2).

Table 4.134. Burial type and count of interments from West of Mound P, North.

West of Mound P, North	Count
Bundle	5
Adult	3
Child	2
Extended	55
Adult	40
Adolescent	2
Child	7
Infant	4
ND	2
Flexed	4
Adult	4
ND	61
Adult	20
Child	6
Infant	6
ND	29
Prone	1
Adult	1
Skull	4
Adult	4
Total	130

Table 4.135. Associated accoutrements from West of Mound P, North.

West of Mound P, North	Count
Bird beak awl	1
Bottom half of bowl above skull	1
Broken disc; pottery fragments; bone awl (2); bird beak awl; fragment of pot; red	
paint; bird claw; mica; garfish snout	1
Copper ear plugs (2); undecorated pot	1
Decorated bottle; large sherd above skull	1

Deer scapula at feet (11)	1
Pile of clay	1
Pot	2
Projectile point; awl (2)	1
Sandstone discoidal	1
Small bottle; green paint	1
Small triangular point; deer antler "flakers"	1
Spoon	1
Stone gorget on chest; pottery discoidal; conch columella	1
Terrapin shell above skeleton	1
Undecorated pot	1
Undecorated pot; bone implement; pipe fragment "tobacco inside"	1
None	112
Total	130

A total of 161 individuals could not be placed on the west of Mound P field map (Table 4.136). Regrettably, only 86 individuals possess a recorded burial type, but of these the majority (68) conform to expectations. The sample includes a total of 36 infants and children with a minority of six children, and no infants, observed in association with accoutrements.

Associations include a single child observed with bowl fragments inverted over the skull and extending to the pelvis (Peebles 1973:498-499); a child with a discoidal stone (Peebles 1973:540); an extended child with a pot, ceramic disc, and four bone implements (Peebles 1973:543); an extended child with a ceramic disc (Peebles 1973:544); an extended child with a ceramic disc, a small undecorated pot, and a whetstone (Peebles 1973:548); and a child interred with two undecorated pots, a small bowl, and a small bottle (Peebles 1973:550). Two multiples were reported among interments that could not be placed on the field map, both of them pairs observed with accoutrements. The first pair was composed of an extended adult associated with mica interred with an extended adult that lacked accoutrements (Peebles 1973:549). The second pair, an extended adult observed with a fragment of a pot over the hips and a ceramic disc

interred with an extended adult associated with a fragment of a pot over the hips and a fragment of a pot under the skull (Peebles 1973: 629).

A minority of 31 individuals were interred with accoutrements (Table 4.137). Notable associations include an adult isolated skull with copper fragments observed at the back (Peebles 1973:630); an extended adult interred with a decorated bowl, fragments of a large shallow bowl, and red paint (Peebles 1973:544); a flexed adult observed with a magnolia seed (Peebles 1973:575); a single extended adult interred with a pipe fragment under the skull and a stone pipe below the feet (Peebles 1973:631); and an extended adult observed with an undecorated bottle, flint chips, a stone "tool sharpener," a whetstone, two ceremonial axes, an engraved bear canine, two unmodified bear canines, four bone "flint flakers," and an unknown incisor (Peebles 1973:564-565). The projectile point crafting paraphernalia in association with four bear canines suggests this individual (WP2414) may have possessed special abilities. On the whole, that esoteric accompaniments are rare and infants and children relatively common, it suggests these factors were part of the decision-making process for who was carefully included in the area and who was not.

Table 4.136. Burial type and count for interments whose location is unknown in the area West of Mound P.

Burial Type, Location Unknown West of Mound P	Count
Bundle	6
Adult	3
Adolescent	1
Child	1
ND	1
Extended	68
Adult	50
Adolescent	1
Child	10
Infant	3
ND	4
Flexed	8

Adult	5
Adolescent	1
ND	2
ND	75
Adult	33
Child	12
Infant	7
ND	23
Skull	4
Adult	2
Child	1
ND	1
Total	161

Table 4.137. Associated accoutrements for interments whose location is unknown in the area West of Mound P.

West of Would 1.	Coun
Associated Accoutrements, Location Unknown West of Mound P	t
Bone awl	1
Bottle	2
Bowl	1
Bowl fragments inverted over skull and extending to pelvis	1
Bowl with serrated edges	1
Copper fragment back of skull	1
Decorated bowl; fragments of large shallow bowl; red paint	1
Deer antler	1
Discoidal stone	1
Fragment of pot over hips; fragment of pot under skull	1
Fragment of pot over hips; pottery discoidal	1
Magnolia seed	1
Mica	1
Mussel shell	1
Pipe fragment under skull; stone pipe below feet	1
Pot	1
Pot with "etched rim;" undecorated pot	1
Pot; pottery discoidal; bone implement (4)	1
Pottery discoidal	1
Pottery discoidal; small undecorated pot; whetstone	1
Pottery discoidal; stone discoidal; pottery fragment under skull	1
Sherds	1
Small "toy" pot under chin	1
Toy turtle effigy	1
Undecorated bottle; flint chips; stone "tool sharpener;" whetstone; ceremonial axe (2);	1

engraved bear canine; bear canine (2); bone "flint flakers" (4); "other" incisor	
Undecorated bowl	1
Undecorated bowl; decorated bowl	1
Undecorated pot (2); small bowl; small bottle	1
None	132
Total	161

Burials located to the west of Mound P seem to be segregated in accordance with a large linear feature running east-west. Those interments that could be placed south of the screen possess such similarities with burials from Mound W that it seems likely these two areas, specifically, shared a relationship. The area designated "South Pit" may reflect a spatially designated area for an elite aspect of early medicine-making at the center, and in a manner roughly analogous with that observed at Lubbub Creek. Generally, burials north of the screen were observed to lack accourrements or evidence of overt ritualization of the interment. Those observed in association with mortuary items potentially reflective of abilities in medicinemaking include the adult with green paint, the adult with the garfish snout, and the adult from the multiple of five with possible tobacco remnants. The most commonly occurring ceramics recovered from west of Mound P, with data derived from Steponaitis (1983:256-258), are bowls (26) followed closely by bottles (22), then jars (12). A total of 37 ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with nine dating to the Moundville I phase (A.D. 1120-1260), seven dating to the Moundville I/II phases (A.D. 1120-1400), five dating to the Moundville II phase (A.D. 1260-1400), seven dating to the Moundville II/III phases (A.D. 1260-1520), and nine dating to the Moundville III phase (A.D. 1400-1520). It is possible that these interments reflect, as with Mounds D and G, the ability of individuals associated with a diverse corporate group to access specialist training and materials.

Roadway blocks 3+50-0+00 were investigated in the area west of Mound P in 1939 (Figure 4.41). Block 3+50 was extensively excavated and evidenced part of a multi-room

structure designated Structure 1 and several in situ artifacts including two unidentified effigies, three duck effigies, a human effigy, a frog effigy pipe, three stone discoidals, a stone axe and the fragment of another, two instances of copper, one occurrence of mica, two antlers, and a pebble hammer (Peebles 1973:816-817, Table X-3). Block 3+00 was extensively excavated and evidenced a "hodgepodge" of wall trenches including part of Structure 1, five burials, and four artifacts in situ including a piece of copper, the distal end of a stone "knife," a stone discoidal, and a pot (Peebles 1973:814, Figure X-2, 816, Table X-2) (Table 4.138).

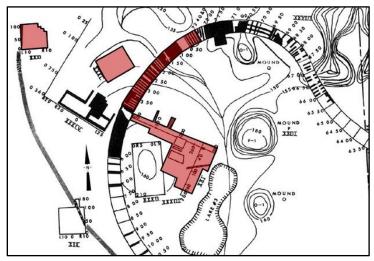


Figure 4.41. Excavation areas West of Mound P (XXI), Roadway Blocks 3+50-0+00, North and Northwest of Mound W (XXXI), and West of P^I (XXII) highlighted (Peebles 1973:Figure I-1).

Table 4.138. Interments recovered from Roadway Block 3+00.

Designation	S/M	Burial Form	General Age	Artifacts
				Copper ornament on each side of
RW2687	Single	Extended	Adult	skull; pot
				Small cup; small point (2); shark
RW2688	Multiple	Flexed	Adult	teeth
RW2689	Single	Extended	Infant	
RW2690	Single	Extended	ND	Bowl
RW2693	Multiple	Flexed	Child	Copper ear plug

Block 2+50 was extensively investigated and evidenced numerous structural features, one single extended interment without accourrements, and one "crudely worked" greenstone fragment in situ (Peebles 1973:814). Block 2+00 was investigated with three trenches but was

observed to be entirely sterile (Peebles 1973:814). Block 1+50 was investigated with two trenches but evidenced only a discoidal and pebble hammer in situ (Peebles 1973:813). Block 1+00 was extensively investigated and evidenced no structural features, five burials, and seven in situ artifacts including vessel fragments, a stone pendant fragment, a ceramic discoidal, a small triangular point, a stone discoidal, a greenstone implement, and a "crude" stone disc (Peebles 1973:813, Table X-1) (Table 4.139). Block 0+50 was extensively investigated but evidenced only four burials (Peebles 1973:811) (Table 4.140). Finally, block 0+00 was investigated with five trenches but evidenced nothing (Peebles 1973:811). The recovery of esoteric items including copper, mica, and a stone effigy pipe suggest the area is related to nearby Mound W.

Table 4.139. Interments recovered from Roadway Block 1+00.

Designation	S/M	Burial Form	General Age	Artifacts
RW2672	Multiple	Extended	Adult	Large vessel fragment over face
RW2673	Multiple	Extended	ND	Bottle
RW2674	Multiple	Extended	ND	
RW2675	Multiple	Extended	ND	
RW2684	Single	Extended	ND	

Table 4.140. Interments recovered from Roadway Block 0+50.

Designation	S/M	Burial Form	General Age	Artifacts
RW2676	Multiple	Extended	ND	
RW2677	Multiple	Extended	ND	
RW2678	Single	Extended	ND	
RW2679	Single	Extended	Adult	Stone effigy pipe

In early 1934 the Alabama Museum of Natural History excavated an area just outside the western park boundary on the private property of Mr. Griffin (Peebles 1973:761). In the area designated Northwest of Mound W excavations recovered a subrectangular structure, Structure 1, with at least three conjoined rooms (Peebles 1973:Figure VIII-3) (Figure 4.42). Excavations recorded five interments and four artifacts in situ including an unfinished stone axe, ceramic effigy head, bone awl, and a pitted stone (Peebles 1973:763-764). For all that the layout of

Structure 1 is atypical, associated materials appear relatively mundane (Peebles 1973:761) (Table 4.141).

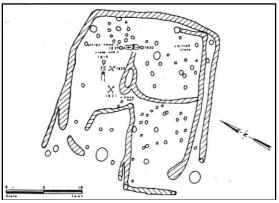


Figure 4.42. Area designated Northwest of Mound W (Peebles 1973:Figure VIII-3).

Table 4.141. Unassociated materials recovered from the areas North and Northwest of Mound W.

Unassociated Materials, North and Northwest of Mound W	Count
Bone awls	2
Ceramic discoidal	3
Ceramic fragment	1
Flint celt	1
Greenstone celt fragments	7
Pebble	1
Peebles hammers	9
Pitted stones	9
Projectile point	1
Sandstone axe fragments	2
Sandstone discoidals	2
Silicious stone fragments	1
Unidentified object	1
Unworked greenstone	2
Whetrocks	9

A total of 13 interments were observed in the area Northwest of Mound W, including those recovered from Structure 1 (Tables 4.142 and 4.143). The five burials associated with the structure manifest very atypically, being composed of two multiples, both pairs of adults, and a single child (NWW1821). A lone adult (NWW1830) was observed with accourtements including

a duck effigy bowl and a large ceramic fragment (Peebles 1973:786). The child was observed interred with a duck effigy bowl and bottle (Peebles 1973:784).

The additional eight interments also manifest in an atypical manner. The majority (5) belong to one mass bundle, with the attached excavation note describing a small pit with a cache of parallel long bones without associated accoutrements (Peebles 1973:785). Of the remaining interments, one "adult burial" (NWW1818) was observed to be a single adult long bone near a midden pit (Peebles 1973:783); a single extended adult was observed to be impacted by a wall trench (Peebles 1973:785-786); and one lone skull was observed at the top of a pit feature (Peebles 1973:785). Three ceramics recovered from the Northwest of Mound W were able to be seriated within a two-phase span by Steponaitis (1989), with all dating to the Moundville I/II phases (A.D. 1120-1400). The inclusion and chronological position of the effigy vessels tentatively suggests the structure was utilized for mortuary ritual in the late Moundville I and early Moundville II phase (A.D. 1200-1325) (Steponaitis 1983a:113, 263-264).

Table 4.142. Burial type and count from the area Northwest of Mound W.

Burial Type, Northwest of Mound W	Count
Bundle	5
ND	5
Extended	4
Adult	4
Skull	1
Adult	1
ND	3
Adult	2
Child	1
Total	13

Table 4.143. Associated accourrements recovered from the area Northwest of Mound W.

Associated Accoutrements, Northwest of Mound W		
Duck effigy bowl, bottle	1	
Duck effigy bowl, large ceramic fragment	1	
None	11	
Total	13	

In the area designated North of Mound W excavators recovered several fire basins, a few wall trench segments, some unusual post molds, 43 burials, and four unassociated artifacts including a greenstone discoidal, a fragment of a stone discoidal, a mass of green paint, and a piece of charcoal (Peebles 1973:764). The post molds were observed side-by-side, with charred corn cobs at the base of one and charred textiles at the base of the other (Peebles 1973:764). As it appears highly likely the areas Northwest and North of Mound W are related, unassociated materials outside the structure may reflect a deliberate effort to keep it free of certain debris.

Burials in the area designated North of Mound W were observed to be concentrated in the southwest quadrant of the excavation block (Peebles 1973:764) (Table 4.144). Burial type was observed to conform more to site-wide trends, though flexed burials and isolated skulls are curiously absent here. A total of eight children are noted for the area, seven of them single interments. The eighth child was observed in a pair with an extended adult in possession of a pebble hammer. This pair constitutes the only reported multiple in the area (Peebles 1973:769). The majority of children were observed to be interred with accoutrements (6/8) including a crushed pot and ceramic fragment (Peebles 1973:778), a fragment of pot and a small whet rock (Peebles 1973:774-775), a large ceramic fragment and a fragment of a duck effigy vessel (Peebles 1973:774), a pot (Peebles 1973:773), two pots (Peebles 1973:779), and two pots and half of a stone axe (Peebles 1973:779-780). On the whole, materials associated with children manifest as rather mundane and in similar contexts.

Table 4.144. Burial type and count for interments recovered from the area North of Mound W.

Burial Type, North of Mound W	Count
Extended	36
Adult	26
Adolescent	1
Child	7
ND	2

ND	7
Adult	4
Child	1
ND	2
Total	43

A total of 26 individuals were observed with mortuary accoutrements, including the six children previously mentioned (Table 4.145). Notable associations include an extended adult interred with the bottom of a bottle, a pitted stone, and mica and a small mass of bentonite clay at left hand (Peebles 1973:767); an extended adult with the remainder of the duck effigy vessel interred with the reported child (Peebles 1973:781); an extended adult interred with a tiny piece of copper above the skull, two large bottles with the necks broken off, and a ceramic fragment (Peebles 1973:776); an extended adult interred with an unknown number of shell beads (Peebles 1973:771-772); and an extended adult interred with a small mass of bentonite clay (Peebles 1973:781-782). Ceramics (17 whole vessels) are dominated by pots (8), followed by bottles (5), and bowls (4). A total of 13 individuals, both adults and children, were interred with partial vessels or fragments of vessels. The most commonly occurring ceramics recovered North of Mound W, with data derived from Steponaitis (1983:262), are jars (10), followed by bowls (6) and bottles (4). Seven ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with two dating to the Moundville I/II phases (A.D. 1120-1400), two dating to the Moundville II phase (A.D. 1260-1400), two dating to the Moundville II/III phases (A.D. 1260-1520), and one dating to the Moundville III phase (A.D. 1400-1520). The one duck effigy vessel with a head, allowing it to be seriated, appears of the type associated with the late Moundville II phase (Steponaitis 1983a:262).

Table 4.145. Associated accoutrements recovered from the area North of Mound W.

Associated Accoutrements, North of Mound W	Count
Bottle, ceramic fragment	1
Bottom of bottle, pitted stone, mica at left hand, small mass of bentonite at left hand	1

Ceramic discoidal	1
Ceramic fragment	1
Crushed bottle, ceramic fragment	1
Crushed pot	1
Crushed pot, ceramic fragment	1
Crushed pot, ceramic fragment, small bottle	1
Duck effigy bowl	1
Duck effigy bowl, "unusual" bowl	1
Duck effigy vessel (head missing - later found with 1850)	1
Fragment of pot, small whetrock	1
Fragment of pot, stone hammer	1
Large bottle (2) (neck broken missing on both), ceramic fragment, tiny piece of copper	
above skull	1
Large ceramic fragment	1
Large ceramic fragment, ceramic fragment	1
Large ceramic fragment, part of duck effigy vessel	1
Pebble hammer	1
Pot	3
Pot (2)	2
Pot (2), 1/2 a stone axe	1
Shell beads	1
Small mass of bentonite	1
None	17
Total	43

The Northwest Mound W area manifests as one with relatively early interments, the vast majority of which were observed without accoutrements. The area has a large and atypical structure, within which infants/children appear infrequently and in a potentially ritualized fashion. The area North of Mound W manifests as one with a principally Moundville II phase (A.D. 1260-1400) engagement and with an associated material signature suggestive of a kin-based corporate group, within which some individuals may have had access to esoteric training and materials. Taken together, the areas Northwest and North of Mound W are reminiscent of Structure Rhodes and Upper Rhodes and may represent both a ritual and residential population, respectively.

A separate series of excavations took place west of Mound P in early 1936 and was subsequently designated West of Mound P¹ (Peebles 1973:632) (Figure 4.43). Investigations recovered several architectural features, a garbage pit, two fire basins, and 35 burials arranged along a roughly linear axis (Peebles 1973:632). A wide trench observed at the western boundary of the excavation block has been interpreted by Peebles (1973:632, 634) as likely belonging to the palisade. Unfortunately, depth was not recorded for the feature (Peebles 1973:634). Unassociated artifacts include a piece of sandstone, a fragment of sandstone disc, a grooved piece of sandstone, a pitted stone, a piece of pitted stone, a fragment of greenstone axe, and a fragment of polished greenstone (Peebles 1973:636).

Burials West of Mound P¹ generally conform to area trends, with extended adults (19) dominating the sample (Table 4.146). Only two infants/children are reported for the area including one child without accoutrements paired with an extended adult without accoutrements (Peebles 1973:648-649) and one infant skull interred without accoutrements (Peebles 1973:637). A total of four multiples were reported, three of them pairs including the extended adult and extended child without accoutrements, an extended adult without accoutrements and a bundled adult with a decorated bottle (Peebles 1973:649-650), and an extended adult with a Hemphill style bottle interred with an extended adult associated with a frog effigy vessel and whose long bones were noted as missing (Peebles 1973:654-655). The fourth multiple was badly disturbed but appeared to have contained three adults of indeterminate burial type associated with a Hemphill style bottle, a bone tool, a pot, and a frog effigy pot (Peebles 1973:646, 648).

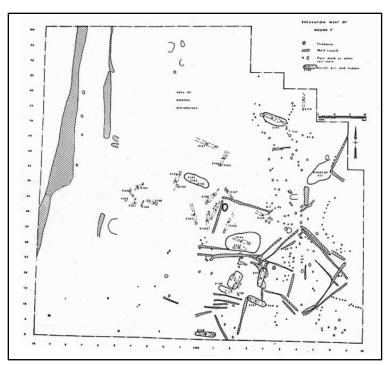


Figure 4.43. Area designated West of P¹ (Peebles 1973:Figure VII-2).

Table 4.146. Burial type and count for interments recovered from the area West of Mound P¹.

Burial type, West of Mound P	Count
Bundle	1
Adult	1
Extended	20
Adult	19
Child	1
Flexed	4
Adult	4
Prone	2
Adult	2
Skull	1
Infant	1
ND	7
Adult	4
ND	3
Total	35

A total of 14 individuals were interred with accourtements (Table 4.147). Notable associations include a single extended adult interred with two bone awls, mica under the awls, and a terrapin shell on the right tibia (Peebles 1973:640-641); a single extended adult interred

with a bowl inverted over the skull, a small fish effigy bowl inside a larger fish effigy bowl, two crushed pots and two vessel fragments (Peebles 1973:637); a single extended adult interred with a bowl and part of a deer antler with mica scattered in the grave (Peebles 1973:650); a single flexed adult interred with a large "wad" of unfired potters clay (Peebles 1973:652); a single flexed adult observed with mica fragments at the feet (Peebles 1973:652, 654); a single extended adult with "perforated bear teeth" around the neck (regrettably no mention is provided of how many) and a charred corn cob in the mouth (Peebles 1973:644, 646); and a single extended adult interred with a small incised bowl, 17 projectile points over and around the skull, seven bone awls, five small bone needles, a copper piece over the left shoulder, a conch shell, a large clam shell over the left side of the face, an otter incisor over the left shoulder, a deer scapula over the left hand, and mussel shells over the left and right hands (Peebles 1973:641, 644).

The most commonly occurring ceramics, with data derived from Steponaitis (1983:258), are bottles (3), followed by bowls (2) and one jar. Seven ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with one dating to the Moundville II/III phases (A.D. 1260-1520) and six dating to the Moundville III phase (A.D. 1400-1520). Three Hemphill style ceramics were recovered as mortuary accoutrements in the area, with all seriated by Phillips (2012) to the Late Hemphill style phase (A.D. 1425-1450) (Table 4.148). When taken in tandem with the fish and frog effigies recovered, this suggests the area may have been principally engaged with during the Moundville III phase (A.D. 1400-1520) and by a ritual group, potentially the one that appears to be controlling Mound P after A.D. 1400. Finally, four adults had missing elements with one noted as headless, one as missing the lower left arm and hand, one missing the long bones, and one for whom only femurs were observed (Peebles 1973:639-639, 646, 655, 652).

Table 4.147. Associated accoutrements for interments recovered from West of Mound P¹.

Associated Accoutrements, West of P ¹	Count
Bone awls (2); mica under awls; terrapin shell on right tibia	1
Bottle (WP ¹ 30 Phillips 2012:404)	1
Bottle (WP ¹ 39 Phillips 2012:410)	1
Bottle	1
Bottle (WP ¹ 19 Phillips 2012:367); bone tool; pot; frog effigy pot with remains of three	
skeletons	1
Bottle fragment over stomach	1
Bowl, inverted over skull; small fish effigy bowl inside a larger fish effigy bowl; crushed	
pot (2); fragment of vessel (2)	1
Bowl; part of deer antler; mica scattered in grave	1
Frog effigy	1
Large "wad" of potters clay (unfired)	1
Mica fragments at feet	1
Pebble hammer	1
Perforated bear teeth around neck; charred corn cob in open mouth	1
Small incised bowl; projectile points over and around skull (17); bone awls (7); small bone	
needles (5); copper piece over left shoulder; conch shell; large clam shell over left side of	
face; otter incisor over left shoulder; deep scapula over left hand; mussel shells over left	
and right hand	1
None	21
Total	35

Table 4.148. Associated accourrements for interments recovered from West of Mound P¹.

Artifact #	Burial #	Motif	Designation	Fellows
	B2152-			EE75, NG30,
WP'19	2154	Winged serpent	Late Hemphill	RW152
WP'30	B2165	4 tails with raptor head	Late Hemphill	
WP'39	B2171	Hands	Late Hemphill	

Mortuary ceremonialism flourished in the areas around Mound P in variable and dynamic fashion for well over a century. Interments located to the west of the monument appear segregated, with those south of the observed linear feature potentially articulating with interments from Mound W and belonging to the same group responsible for activities affiliated with Mound O. In the area designated South Pit, the lowermost interments may represent early esoteric medicine-making associated with the great conjunction of the formal site arrangement around A.D. 1200. Interments north of the feature were generally observed to lack accountements

or evidence of overt ritualization of the interment and appear to represent kin-based groups.

Noted occurrence of the Hemphill art style, including but not limited to ceramics, is very rare in the area.

Areas Northwest and North of Mound W manifest with a relatively strong Moundville II phase (A.D. 1260-1400) signature. A large and atypical structure with a minority of interments was observed in the Northwest, while a mortuary group associated with a material signature generally suggestive of a kin-based corporate group was observed in the North. The areas taken together are seen to manifest similarly to Structure Rhodes and Upper Rhodes, east of Mounds E and F, and may represent both ritual and kin-based communities, respectively. Finally, the area west of P¹ appears to have been principally engaged during the Moundville III phase (A.D. 1400-1520) and by a ritual community.

Mounds M, O, and P were all observed associated with an early Moundville I phase (A.D. 1120-1200) component and notable similarity in material culture including Mill Creek chert, stone pipes and/or ceramics from the Lower Mississippi River Valley, and Bangor chert from the Central Tennessee Valley. Though little investigation has centered on Mound N, it seems likely that this monument generally tracks on those trends and suggests that the western row may represent the earliest established aspect of the formal plaza arrangement. The western segment, Mound M paired with Mound N and Mound O with Mound P, displays the same repetitive pattern observed to the east and south, with esoteric crafting (Mound M) paired with a broad surface platform (Mound N) and esoteric control (Mound O) paired with community leadership (Mound P). Moundville appears to have changed dramatically with the advent of the Moundville III phase (A.D. 1400-1520), evidenced by the discontinuation of Mounds G, H, M and N (in addition to southern Mounds J, K, and L that appear to have ceased function by A.D.

1350); the substantial changes in summit use evidenced from Mounds E and P; the establishment of a possible medicine lodge on the northeast corner of Mound V (Lankford 2016); the florescence of the Hemphill ceramic tradition into something distinctly local (Phillips:230); and the harvesting of ancestral elements from area mortuary contexts, with what appears to be a concerted emphasis on the southern aspect of the landscape.

Mound Q

Mound Q is a smaller monument located on the northwest plaza periphery (Knight 2010:72). Moore's observation of the mound in 1905 noted that that the northern section had been destroyed; this is now understood to be a nineteenth-century extraction episode for fill (Knight 2010:72-73; Moore 1905:219). Moore's crew investigated the summit with nine trial holes, recovering an owl effigy rim adornment and a small copper gorget bearing a six-pointed star, or symbolic scalp (Moore 1905:219). Mound Q was the only monument Moore returned to in 1906, and this time "the summit plateau of Mound Q was fairly riddled by us with trial holes" (Moore 1907:337). Again, no evidence of mortuary ritual was observed in conjunction with the mound (Moore 1907:337).

Vernon Knight excavated four areas of Mound Q with a series of field schools from 1989-1994, including two separate investigations of the summit and investigations into the west and north flanks (Knight 2010:73-75). Flank investigations observed five construction stages, evidence of a premound midden dating to the early Moundville I phase (A.D. 1120-1260), and materials dating the terminal occupation of the summit to the early Moundville III phase (A.D. 1400-1450) (Knight 2010:116-117). Summit investigations targeting architecture observed multiple atypical, conjoined structures dating to the early Moundville II phase (A.D. 1260-1325), evidence of variation in employed architectural technology in structures dating to the Late

Moundville II phase (A.D. 1325-1400), and the possibility of pit features including but not limited to Burial 1 dating to early Moundville III phase use (Knight 2010:166, 96-99).

Notable recovered lithic materials include nine occurrences of sheet copper debris encountered in several flank and summit contexts (Knight 2010:157, Table 4.26); 17 palette fragments from 12 different specimens (Knight 2010:148); 109 instances of mica, distributed through both summit and flank contexts (Knight 2010:158); 161 pieces of unmodified pigmentgrade red ferruginous rock from all contexts (Knight 2010:158); nine recorded instances of green paint all from summit contexts (Knight 2010:158, Table 4.27); and seven occurrences of crystalline galena, the majority (5) from summit contexts (Knight 2010:158-159). Three of the palette fragments, all of them formal, were observed to host unifacial pigment (Knight 2010:148). In three instances green paint was observed caked to the inner surface of potsherds, possibly acting as special containers for pigment (Knight 2010:158, Table 4.27). Two samples of galena were recovered from north flank contexts dating to the early Moundville III phase (A.D. 1400-1450). The remainder were recovered in late Moundville II and early Moundville III phase (A.D. 1325-1450) summit contexts (Knight 2010:158-159). A single instance of graphite and four instances of small lumps of unmodified coal (Knight 2010:158); a red ferruginous shale hand and eye stone pendant (Knight 2010:156); and a Mill creek chert biface fragment (Knight 2010:144) were also recovered from Mound Q contexts.

Recovered ceramic materials include two ear plugs, one in secure midden contexts dating to the early part of the late Moundville II phase (A.D. 1325-1400) (Knight 2010:Figure 4.52, 155); a rude clay bead; and 44 ceramic discs, with 41 resultant from reworked sherds (Knight 2010:151). Untempered ornament fragments possessing a similarity to an unassociated pendant recovered by Moore (1905:Figure 137) from the field east of Mound O and nine free standing

figurines, similar to those recovered with the child in the South Pit located West of Mound P, were also recovered from Mound Q contexts (Knight 2010:155, 159). One particularly notable figurine, from contexts dated to late Moundville II phase (A.D. 1325-1400), was observed to have been formed around a wad of yaupon leaves (Knight 2010:160). Finally, 149 *variety Hemphill* ceramics were recovered, with just over half (76) associated with late use contexts (Knight 2010:Table 4.1, 4.3, 4.5, 4.9, and 4.11). Unfortunately, only 10 of these were able to undergo seriation by Phillips (2012:131, 157, 236, 237, 307, 309, 333, 350, 354), with half dating to the Middle Hemphill style phase (A.D. 1375-1425) (Table 4.149).

Table 4.149. Hemphill style ceramics recovered from Mound Q.

Artifact #	Burial #	Motif	Designation	Fellows
Q1085		Crested bird	Early Hemphill	
		Circles and cross		
Q1568		hatching bands	Early Hemphill	O20, NR1
Q1082		Scalps	Middle Hemphill	NR9
Q1153		Scalps	Middle Hemphill	NR9
Q1399		Winged serpent	Middle Hemphill	
Q1982		Winged serpent	Middle Hemphill	NN'38, RW878
Q364		Seashell eye	Middle Hemphill	O18, SD71
Q2743	Burial 1	Paired tails	Late Hemphill	SEH74
Q35		Winged serpent	Late Hemphill	SD1, SD6
Q87		Winged serpent	Late Hemphill	

Several instances of drilled bone were noted including a turkey coracoid with a perforation on the posterior surface with what appears to be adhesive around it, a large bird humerus drilled completely through the shaft in at least two places, the unfused epiphysis of a deer tibia ground down and with a central small hole drilled as though for use as a bead, and a flattened fragment of mammal bone with a drilled perforation (Knight 2010:158). A recovered turkey carpometacarpus was observed with a hole drilled through its proximal end, suggesting it may have functioned as part of a turkey wing feather fan (Knight 2010:156). Ocher-caked or stained animal bone was found in three instances including a distal end of a deer ulna, a fragment

of turkey humerus and a small piece of unidentified large mammal bone evidencing other thickly caked on the surface, with Knight (2010:158) speculating they may have been used to stir or mix pigments. Additional recovered implements of note included a fragment of large fossil shark's tooth, possibly a woodcarving tool (Knight 2010:153); a single marine shell bead (Knight 2010:155); and sharpened fish spines, with Jackson and Scott suggesting use as a tattooing instrument (Knight 2010:153).

The assessment of recovered fauna suggests patterns of consumption reflective of a group that is fundamentally residential in nature, but evidencing engagement with atypical resources including cougar, bear, and domestic dog; a variety of turtles; and raptors (MNI=6), one of which could be identified to species as a red-tailed hawk (Jackson and Scott 2010:339, 341; Knight 2010:167). Patterns of turkey recovered from Mound Q contexts suggest a preference for, and apparent ability to secure, an atypical relative number of male turkeys, with Jackson and Scott (2010:339) noting that this may be indicative of early domestication efforts. It is possible that wild poults were raised at Moundville, both as a subsistence resource and for materials related to esoteric crafting. Assessment of the botanical remains from Mound Q suggests overt participation in the preparation and consumption of maize relative to other areas, with the exception of Mound G (Knight 2010:166). Plant remains of potential ritual significance include a recovered tobacco seed and the yaupon leaf impressions observed within the notable ceramic "Casper" (Knight 2010:166).

In 1992 scattered human bone and a burial were recorded from excavations on the monument summit (Knight 2010:74). The recovered burial belonged to an extended child, between eight and nine years of age based on dental eruption. Pathological assessment noted dental carries and hypoplastic defects of the dental enamel (Knight 2010:161). The grave fill for

the interment was observed to contain a gray micaceous sandstone pendant, generally resembling the two-hole bar gorgets of the Hopewellian era (Knight 2010:156). An additional pit feature, Feature 12, was observed to possess a small fragment of a copper-clad wooden artifact, that may have been part of an ear plug, and a *variety Hemphill* bottle. This has been interpreted as a possible exhumation, manifesting similarly to the pits observed in association with Mound V (Knight 2010:156).

A total of 39 individual pieces of human bone were found scattered within Mound Q, dating from the early Moundville III - early Moundville III phases (A.D. 1260-1450). A full 44% of these represent cranial elements, while axial elements are entirely missing from the sample. Of postcranial elements, 71 percent of identifiable fragments (10 of 14 total) were derived from the lower extremities (Knight 2010:161). All individuals appear to have been adults or adolescents based on an assessment of recovered dentition. A single temporal bone belonging to a subadult was also recovered (Knight 2010:161). None of the recovered fragments were observed to be burned, calcined, or otherwise modified in any obvious way (Knight 2010:161). In his assessment of the material, Knight (2010:163) notes a similar pattern observed at Chucalissa, a Mississippian site located outside of modern-day Memphis, Tennessee, where excavators located an ash lens full of assorted, and fragmented, human remains belonging to a minimum of 34 individuals. It seems quite likely these remains represent the handling of war trophies (Knight 2010:165).

Moore investigated the area immediately north of Mound Q in 1905 and 1906. Excavations in 1905 resulted in the recovery of a single extended adult with a small pot and the notation that "a number of other burials were without artifacts" (1905:219-220). Moore (1907:344) referenced the 1905 excavations north of Mound Q in his publication on the second

field season, noting the previous investigation resulted "in the finding of skeletons without artifacts in association." Regrettably, no additional information is reported. Excavations in 1906 observed four single extended adults without accourtements (Moore 1907:344).

Roadway blocks 72+00-67+50 were investigated north of Mound Q in 1939. Block 72+00 was extensively excavated but only evidenced a single extended individual without accoutrements (Peebles 1973:954-955) (Figure 4.44). Blocks 71+50-70+50 evidenced numerous structural features, burials, and several in situ artifacts with the majority forming three distinct clusters (Figure 4.45). Block 71+50 evidenced one large rectangular building designated Structure 20, 14 burials, and 17 in situ artifacts including a cluster, or artifact group, composed of two bottles, two pots, an unidentified bone awl, and a set of unidentified claws (Peebles 1973:953-954) (Table 4.150). Additional, unclustered, in situ artifacts from block 71+50 include three antler tools, a turkey spur awl, an instance of red paint, two instances of green paint, three bone needles, an unidentified bone tool, and a ceramic disc (Peebles 1973:Table X-23). With the exception of a single antler tool, Structure 20 was observed to be without in situ material culture (Peebles 1973:954).

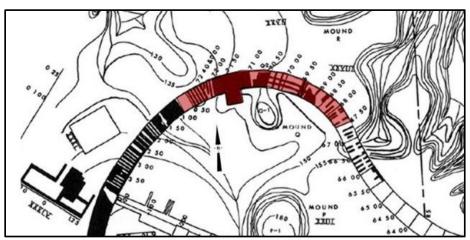


Figure 4.44. Roadway excavation blocks 72+00-67+50 North of Mound Q (Peebles 1973:Figure I-1).

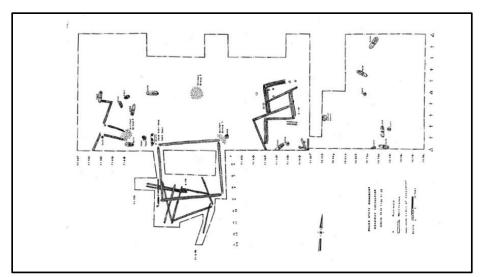


Figure 4.45. Roadway excavation blocks 71+50-70+50 North of Mound Q (Peebles 1973:Figure X-28).

Table 4.150. Burials recovered from roadway block 71+50.

Designation	S/M	Burial Form	General Age	Artifacts
RW2660	Multiple	Extended	ND	
RW2661	Multiple	Extended	ND	
RW2662	Multiple	Extended	ND	Bottle
RW2663	Multiple	Bundle	ND	
RW2664	Multiple	Bundle	ND	
RW2665	Multiple	Bundle	ND	Bottle
RW2666	Single	Extended	ND	
RW2667	Multiple	Bundle	ND	
RW2668	Single	Extended	Adult	
RW2670	Single	Extended	ND	
RW2671	Single	Extended	Child	Broken cup
RW2680	Single	Extended	Adult	
RW2681	Single	Prone	Adult	

Block 71+00 was extensively investigated and evidenced a large structure designated Structure 19, three interments, and four in situ artifacts including a pottery tool, pebble hammer, a tortoise shell "tool," and ceramic disc with a perforation in the center, and two artifact groups (Peebles 1973:949, 951, Table X-21) (Table 4.151). Artifact group two, recovered in a possible courtyard area, was composed of two unidentified bone awls, a bone needle, an unidentified bone tool, a stone knife, and instance of green paint (Peebles 1973:Table X-22). Artifact group one, recovered at the corner of Structure 19, was composed of an instance of red paint, a pottery

tool, an antler, mica, white clay, the skull of an unknown small animal, and a ceramic swan effigy (Peebles 1973:Table X-20). Block 70+50 was extensively investigated and evidenced seven interments, a large cache of mussel shells approximately two feet in diameter, and eight in situ artifacts including a "crude" stone disc, a large ceramic fragment, a projectile point, a ceramic disc, a stone pipe, an axe fragment, a "crude" ceramic disc, and a stone bead; no structural features were observed in the investigated area (Peebles 1973:947, 949, Table X-19) (Table 4.152).

Table 4.151. Burials recovered from roadway block 71+00.

Designation	S/M	Burial Form	General Age
RW2656	Single	Skull	ND
RW2657	Single	Extended	Adult
RW2659	Single	Skull	ND

Table 4.152. Burials recovered from roadway block 70+50.

Designation	S/M	Burial Form	General Age	Artifacts
RW2650	Single	Extended	Adult	
RW2651	Single	ND	Skull	Bowl
RW2652	Single	Extended	Adult	
RW2653	Single	Extended	ND	
RW2654	Single	Extended	Adult	
RW2655	Single	Skull	ND	
RW2658	Single	Extended	Child	

Block 70+00 was extensively investigated and evidenced five burials and two in situ artifacts including a stone discoidal and a broken pipe. No structural features were observed (Peebles 1973:947) (Table 4.153) (Figure 4.46). Block 69+50 was investigated with four trenches and evidenced structural remnants, one burial, and three in situ artifacts including a stone discoidal, a stone scraper, and a stone disc (Peebles 1973:945, 947). Block 69+00 was investigated with six trenches and evidenced a pair of parallel wall trenches, seven burials, a cache of mussel shells, and six in situ artifacts including a cache of pebbles, a shell "implement,"

a broken stone disc, a piece of worked flint, another cache of mussel shells, and a ceramic discoidal (Peebles 1973:945) (Table 4.154).

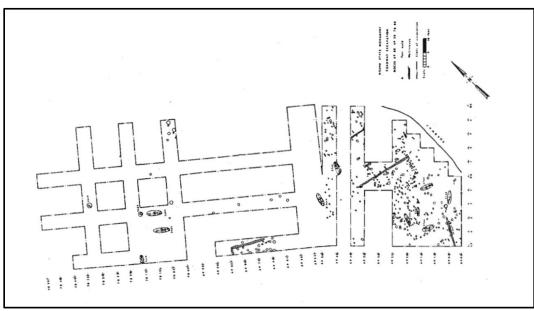


Figure 4.46. Roadway blocks 70+00-69+00 North of Mound Q (Peebles 1973:Figure X-27).

Table 4.153. Burials recovered from roadway block 70+00.

Designation	S/M	Burial Form	General Age	Field Notes
RW2648	Single	Extended	Adult	
RW2649	Single	Extended	Child	
RW2682	Single	Extended	Adult	
RW2683	Single	Skull	ND	
				Skull, ribs, humeri, and one
RW2685	Single	Extended	ND	radius present

Table 4.154. Burials recovered from roadway block 69+00.

		Burial	General		
Designation	S/M	Form	Age	Artifacts	Field Notes
					Only bones observed
					were mandible, right
					arm, both femurs, and
RW2762	Single	Extended	Adult		right tibia
					Few ribs and vertebrae
					present, lower arms,
					hands and feet missing;
RW2763	Single	Extended	Child		rest of skeleton present
					Mandible, piece of
					pelvis, femora, and tibiae
RW2764	Single	Extended	Adult		all the bones observed

					Only small piece of skull
RW2765	Single	Extended	Infant	Cup; bowl	and right femur remained
				Ceramic disc;	Only parts of both legs
RW2766	Single	Extended	Child	bowl	and right arm observed
					Only skull and lower legs
RW2767	Single	Extended	Adolescent	Fragment of pot	observed
					Only part of skull and
				Bowl; ceramic	piece of right femur
RW2768	Single	Extended	Adult	effigy pipe	observed

Block 68+35, truncated to conform to the curved roadway, was extensively investigated and evidenced several post molds, one single extended adult interment with only the lower long bones remaining, and four in situ artifacts including three ceramic discs and a piece of mica (Peebles 1973:944-945). Block 68+00, also truncated, was investigated with three trenches, and was found to lack structural remains and burials but evidenced three in situ artifacts including a stone discoidal, an effigy rattle, and a ceramic discoidal (Peebles 1973:944). Finally, block 67+50 was extensively investigated but evidenced only a stone disc in situ (Peebles 1973:943).

Mound Q was observed to display an awesome emphasis in empowered pigments and bone-handling (Knight 2010:148, 158). Mica, implicated in pigment complex as an additive to paint, was noted as both abundant and ubiquitous (Knight 2010:158). Green paint, observed as isolated instances and in association with ceramic fragments, occurs more frequently within Mound Q than any other location at the site. Human skeletal material appears largely confined to adult cranial elements and lower limbs and is suggestive of war trophies (Knight 2010:161). Harvested ancestral material, in contrast, shows a general concentration on elements of the hands, lower arm, and feet and are of all age ranges. Knight (2010:169) notes that perhaps the most comparable example of similar engagement in crafting is observed in the premound occupation of the Kunnemann Mound at Cahokia (Knight 2010:169).

Mound Q manifests as concerted engagement in esoteric crafting, probably collaborating in a paired working relationship with Mound C. The position of Mound Q on the Moundville landscape taken in tandem with evidence of a premound midden dating to the early Moundville I phase (A.D. 1120-1260) and recovered Mill Creek chert, suggests the monument may have been meaningfully allied, and for some time, with the collective represented by the western segment (Mounds M, N, O, and P). Mortuary ceremonialism around Mound Q manifests in association with atypical structures and materials including mica and green paint. It seems quite likely that the individuals comprising the mortuary sample recovered from the Roadway blocks north of Mound Q were meaningfully related to the individuals working atop the monument. The recovery of a ceramic swan effigy within Artifact Group 1 from Roadway block 71+00 is particularly notable in light of the swan bone recovered from Mound D.

Mound R

Mound R is the third largest monument at the site, behind Mounds A and B, and forms the northwest corner of the plaza periphery mound group (Knight 2010:238). Moore investigated the mound summit with 27 trial holes that "gave no indication of its former use as a place of burial" (Moore 1905:220). Investigations into the western flank of the monument in 1993, combined with later soil coring, suggest the mound possesses nine construction stages, with the majority of construction and use concentrated within the late Moundville II through early Moundville III phases (A.D. 1325-1450) (Gage 2000; Knight 2010:249). In stark contrast to Mounds M, O, P, and Q, all of which evidenced a significant premound occupation, Mound R was erected atop a debris-free field, with a suspected genesis in late Moundville I phase (A.D. 1200-1260) (Knight 2010:258). Engagement with the monument appears to have discontinued around A.D. 1450 (Knight 2010:256).

Materials recovered from Mound R appear overwhelmingly local and include the same rare, oversize coarse ware observed from Mounds S and Q (Knight 2010:256-257). The monument does not appear to be engaged in the pigment complex in any meaningful way (Knight 2010:257-258). No palette fragments have been noted from Mound R contexts and pigments are limited to red ferruginous rock, four instances of mica, and tiny bits of unmodified coal (Knight 2010:258). Flaked stone debitage was observed to be both local and atypically abundant relative to other mound summit contexts, suggesting that Mound R summits may have been loci for the manufacture of flaked stone implements such as arrow points (Knight 2010:256-257).

Moore investigated the area West of Mound R in both 1905 and 1906, reporting a total of 62 interments and providing details for 11 of them (Moore 1905:240-241; 1907:344; Peebles 1973:659) (Table 4.155) (Figure 4.47). A single infant is specifically noted for the area, though comparisons to the mortuary sample recovered from South of Mound D tentatively suggest other infants and children were present (Moore 1907:344). Two multiple interments are reported for the area including a flexed adult interred with the aforementioned infant resting on the left arm (Moore 1907:344) and a multiple of three adults, two extended without accoutrements and one prone with a bottle, in a pit feature (Moore 1907:403). Only seven individuals were reported with accoutrements (Table 4.156). Notable associations include an extended adult interred with a ceramic pipe, a pot fragment, a heat-treated Tuscaloosa gravel point, several small fragments of sheet copper under the legs, 103 heat-treated gravel pebbles and six heat-treated gravel points at the feet, one heat-treated gravel drill at the feet, and two bottles (Moore 1905:241); and an extended adult interred with shell beads at the neck, sheet copper ear plugs with bone pins at each side of the head, seven bone awls, and three small celts (Moore 1907:404; Peebles

1973:691). A polished bone piercing implement, with six total notches observed; a thin disc of limonite with scratches on both faces; and a small stone chisel were recovered apart from human remains (Moore 1906:241).

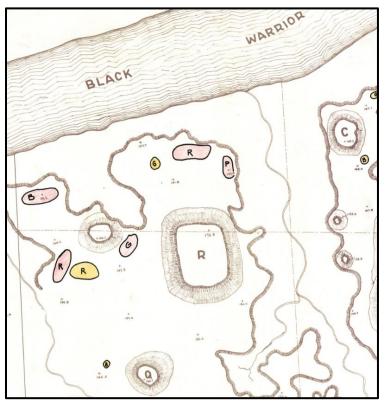


Figure 4.47. Excavation areas around Mound R (Map of Mound Park Situated near Moundville Alabama by G.W. Jones & Sons 1930, depicts rich (R), poor (P), good (G), and burials without artifacts (B) by location).

Table 4.155. Burial type and count from West of Mound R 1905-1906.

Burial type, West of Mound R 1905-906	Count
Extended	6
Adult	6
Flexed	3
Adult	2
ND	1
Prone	1
Adult	1
ND	52
Infant	1
ND	51
Total	62

Table 4.156. Burial type and count from West of Mound R 1905-1906.

Associated Accoutrements, West of Mound R 1905-906	Count
Ceramic ear plug near leg	1
Ceramic pipe, pot fragment, jasper point, sheet copper fragment, 103 jasper	
pebbles, 6 jasper projectile points, jasper drill, bottle (2)	1
Fish effigy bowl, bowl, awl, fragment	1
Mussel shell beads at neck	1
Pot	1
Shell beads at wrist	1
Small celt, small shell beads at neck, sheet copper ear plugs, 7 bone awls, 2	
small celts	1
None	55
Total	62

In early 1930 the Alabama Museum of Natural History conducted excavations in the area west of Mound R. Excavations in February of that year recorded seven individuals, with a single individual associated with a pot/jar and ceramic fragments (Knight 1992:12) (Table 4.157). One multiple of three extended individuals, including two adults and one child all without associated accoutrements, was noted in the area (Knight 1992:12). Additional testing west of the mound identified another 17 interments, with seven in possession of accoutrements (Peebles 1973:661-670) (Table 4.158). Unfortunately, no information is available for most of the individuals. Notable associations include two individuals with copper ear plugs, two Hemphill style bottles, and a hematite fragment. An engraved bowl and a formal palette were observed to have been deliberately broken and distributed among burials, a phenomenon also observed in the area North of Mound W with a duck effigy vessel (Peebles 1973:665, Figure VII-4). Unassociated artifacts of note include a bone pendant, 150 shell beads, a copper ear plug, 16 vessels, and three ceramic discoidals (Table 4.159).

Table 4.157. Interments and artifacts noted for the area Southwest of Mound R, February 1930.

Designation	Burial Form	General Age	Artifacts
WRSK1	Extended	ND	Pot; ceramic fragments
WRSK2	Flexed	ND	
WRSK3	ND	Child	
WRSK4	Extended	Adult	

WRSK5	Extended	Adult	
WRSK6	Extended	Child	
WRSK7	Extended	ND	

Table 4.158. Interments and artifacts noted for the area West-Southwest of Mound R, January-March 1930.

Designation	Artifacts
Burial 1	Pot
Burial 5	Copper ear plugs (3)
Burial 6	Bowl
Burial 8	Copper ear plugs (2); beads at both wrists
Burial 10	Bottle (WR13 Phillips 2012:402); hematite fragment
Burial 15	Bowl
Burial 17	Bottle (WR10 Phillips 2012:313)

Table 4.159. Unassociated materials for the area West-Southwest of Mound R, February 1930.

Unassociated Materials, West- Southwest of Mound R	Count
Bone awl	6
Bone pendant	1
Bottle	3
Bowl	7
Ceramic discoidal	3
Copper ear plug	1
Deer antler	1
Dishes	2
Greenstone axe	2
Greenstone axe fragments	5
Miscellaneous bone	2
Pot	4
Projectile point	1
Sandstone discoidal	1
Shell beads	150
Sherd	1
Small triangular point	1
Stone discoidal	2

The Alabama Museum of Natural History returned to the area West of Mound R in December of 1930, recovering 37 interments (Table 4.160). Notable unassociated materials recovered in the area include seven effigy heads, 21 bone awls, a galena cube, and one lot of shell beads (Peebles 1973:Table VII-1) (Table 4.161). Though Mounds P and Q do not appear to

have been heavily invested in shell accourrements or use, the area West-Southwest of Mound R apparently was. Burials were somewhat better accounted for in the December investigation, with all interments encountered subsequently reported though the details are sparse. Of the 13 individuals with recorded age assessment, seven were noted as infants (3) or children (4) with all but two, both single infants without accourrements, interred with what may be atypically powerful materials. These include a single extended child interred with a frog effigy bowl, a human effigy bottle, two additional bowls, a Hemphill style bottle (WR59 Phillips 2012:145), and an axe fragment (Peebles 1973:674); two children forming a paired multiple, one interred with a copper coated wooden object at the right elbow and the other with a copper bead and ornament at left side of skull and a duck effigy bowl (Peebles 1973:674, 676); and two infants, one of whom was observed with a human effigy bowl and large stone, within a multiple of three with an extended adult interred with two pots (Peebles 1973:676, 678). A total of six multiples were reported for the area, all of them pairs without demographic data excepting the paired children and adult and two infants previously mentioned. A single pair without demographic data evidenced accoutrements including a pot, two bowls, two bottles, and a fragment of a frog effigy vessel (Peebles 1973:682).

Table 4.160. Burial type and count for the area West of Mound R, December 1930.

Burial type, West of Mound R December 1930	Count
Extended	5
Adult	2
Adolescent	1
Child	1
ND	1
Flexed	4
ND	4
ND	26
Adult	4
Adolescent	2
Child	2

Infant	4
ND	14
Skull	2
ND	2
Total	37

Table 4.161. Unassociated materials for the area West of Mound R, December 1930.

Unassociated Materials, West of Mound R December 1930	Count
Bottle	1
Ceramic discoidals	5
Effigy heads	7
Miscellaneous ceramic fragment	1
Bone awl	21
Greenstone axe fragments	6
Greenstone axe	1
Pebble hammers	7
Pitted stones	6
Stone mortar	1
Whetstone	1
Sandstone	1
Stone discoidal	4
Galena cube	1
Shell beads (lot)	1
Miscellaneous discoidals	9

A minority of 13 individuals were observed associated with accoutrements (Table 4.162). Notable accoutrements not already mentioned include a single extended adolescent interred with red paint (Peebles 1973:686) and an individual without demographic data interred with a stone disc under the skull, though no mention is made of incising or paint (Peebles 1973:681). Finally, a total of eight Hemphill style vessels are noted as recovered from the area West-Southwest of Mound R, with six seriated by Phillips (2012) and with all three periods represented (Steponaitis 1983a:260-261) (Table 4.163). Two of the *variety Hemphill* bottles seriated to the Early Hemphill Period (A.D. 1325-1375). WR59 and WR81 were observed in association with frog and human effigy bowls and may have been heirloomed. The most commonly occurring

ceramics from West of Mound R, with data derived from Steponaitis (1983:260-261), are bottles (18), followed by bowls (13) and jars (9). A total of 15 ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with one dating to the Moundville I/II phases (A.D. 1120-1400), two dating to the Moundville II phase (A.D. 1260-1400), four dating to the Moundville II/III phases (A.D. 1260-1520), and eight dating to the Moundville III phase (A.D. 1400-1520).

Table 4.162. Associated accoutrements for the area West-Southwest of Mound R, December 1930.

Associated Accoutrements, West-Southwest of Mound R 1930	Count
Bone awls (6)	1
Bottle	2
Copper bead and ornament at left side of skull; duck effigy bowl	1
Copper coated wooden object at right elbow	1
Duck effigy bowl	1
Frog effigy bowl; human effigy bottle; bowl (2); bottle (WR59	
Phillips 2012:145); fragment of axe	1
Human effigy bowl, large stone	1
Pot, bowl (2); bottle (2) (WR81 Phillips 2012:176); fragment of frog	
effigy bowl	1
Pot; large rock	1
Pots	1
Red paint	1
Stone disc under skull	1
None	24
Total	37

Table 4.163. Hemphill style ceramics recovered from the area West-Southwest of Mound R.

Artifact #	Burial #	Motif	Designation	Fellows
WR28		Ogees	Early Hemphill	SD13, O16, NR(sherd)
WR59	B1045	Pseudo-raptor	Early Hemphill	SE8, WR59
WR81	B1065	Winged serpent	Early Hemphill	SD34, SL ¹ 31, NR30
				D3, SD32, SD71, EE126,
				SWG52, SL ¹ 8, SL ¹ 14, WP208,
WR10	B17	Hand and eye design	Middle Hemphill	WR8, NR19, NR38
				D3, SD32, SD71, SL114, SL18,
WR8	В9	Hand and eye design	Middle Hemphill	O9, WR10, NR19, NR38
		Tails around a		
		central symbol and		
WR13	B10	"fingers"	Late Hemphill	SD742, EE155, SWG24

In 1951 Walter B. Jones and Tom DeJarnette excavated two areas West of Mound R in advance of the construction of the Erskine Ramsay Picnic Shelter for Negroes (Knight 2021; Peebles 1973:728). A total of seven interments were recovered from the Knoll Southwest of Mound R, the majority conforming to site-wide trends and all observed without accourrements (Peebles 1973:729) (Table 4.164). Another 10 interments were recovered from the Picnic Building Area (PBA) (Peebles 1973:729) (Table 4.165). The PBA excavations also recovered at least eight interments belonging to enslaved people (Peebles 1972:729). A single infant was noted for the area, occurring in a paired multiple with an extended adult, both without accoutrements (Peebles 1973:735-736). Two multiples were reported for the area, the second a pair of extended adults, one of whom was observed with a duck effigy bowl and shallow bowl placed above the skull (Peebles 1973:736-737). A total of five individuals were observed in association with accourrements. Notable associations not previously mentioned include two individuals with Hemphill style ceramics (Peebles 1973:734-735) and a single extended adult interred with a dish (Peebles 1973:735). Both variety Hemphill vessels were seriated by Phillips (2012), with both appearing to date to the Late Hemphill period (A.D. 1425-1450) (Table 4.166).

Table 4.164. Burial type and count, Knoll Southwest of Mound R.

Burial type, Knoll Southwest of Mound R	Count
Extended	6
Adult	4
Adolescent	1
Infant	1
ND	1
Adult	1
Total	7

Table 4.165. Interments recovered from the Picnic Building Area West of Mound R.

Designation	S/M	Burial Form	General Age	Artifacts
RPB1	Single	Extended	Adult	
RPB2	Single	Extended	Adult	

				Bottle (RPB1 Phillips
RPB3	Single	Extended	Adult	2012:396)
RPB4	Single	Flexed	Adult	Dish
				Bottle (RPB4 Phillips
RPB5	Single	Extended	Adult	2012:386)
RPB6	Multiple	Extended	Adult	
RPB6a	Multiple	Extended	Infant	
				Ceramic fragments above
RPB7	Single	Extended	Adult	skull
				Duck effigy bowl and
RPB8	Multiple	Extended	Adult	shallow bowl above skull
RPB9	Multiple	Extended	Adult	

Table 4.166. Hemphill style ceramics, Picnic Building area West of Mound R.

Artifact #	Burial #	Motif	Designation	Fellows
				SD742, EE155, SWG24,
RPB(1)	В3	Paired tails	Late Hemphill	WR13
RPB(4)	B5	Paired tails	Late Hemphill	EE166

The University of Alabama's first archaeological field schools were offered by David L. DeJarnette in the Spring semesters of 1956 and 1957 and saw a return to the area west of Mound R (Knight 2021). DeJarnette investigated the western land strip near the river with modern methods and a series of test units (Kelly 2013:9; Knight 2013:78-79). Recovered features included a midden-filled pit, architectural remnants, a hearth, and two possible burials (Kelly 2013:9). A combination of innocuous and restricted artifacts were recorded including ceramic fragments, fauna, flaked stone debitage, fired clay, mica, hematite, and an unidentified black stone with drilled holes (Kelly 2013:9).

Most recently, Petrina Kelly (2013) investigated monument R1, a multistage platform mound located to the west of Mound R (Figure 4.48). Excavations identified three major stages of mound construction, with each observed to possess architectural signatures in association with summit use (Kelly 2013:14-15). Although a scattering of postholes was observed in association with the premound surface, they did not conform to a structural pattern (Kelly 1993:15). Ceramics recovered from the initial occupation of the area suggest an early Moundville I phase

(A.D. 1120-1200) occupation; corresponding with similarly early dates for the construction of Mounds X and W and premound areas associated with Mounds M, O, and P (Kelly 2013:30, 33). The Stage I mound summit evidenced two structures, one atop the other and sharing an east-west orientation (Kelly 2013:17, 19). The Stage II summit evidenced post-holes and a clay-lined hearth, suggesting general similarity in use for the two platforms as a possible residence (Kelly 2013:21) Ceramics recovered from both Stage I and Stage II summits suggest a shared Late Moundville I phase (A.D. 1200-1260) engagement and occupation (Kelly 2013:40). Nonlocal ceramics from Stages I and II highlight outside connections with coastal Louisiana, northern Mississippi and the Chattahoochee, Ohio, and the Lower Mississippi river valleys (Kelly 2013: 29-30, 40, 63). The Ohio River Valley connection comes via a fragment of Angel Negative Painted and seems particularly noteworthy from such an early context. A fragment of Angel Negative Painted, probably originating from central Tennessee, was also recovered from Knight's investigations of Mound G (Knight 2010:287). Restricted and esoteric materials associated with these early stages includes a galena cube, the only calcite bead recovered from Moundville, mica, yellow pigment grade tabular ferruginous sandstone, and a Mill Creek hoe chip (Kelly 2013: Table 7, 63).

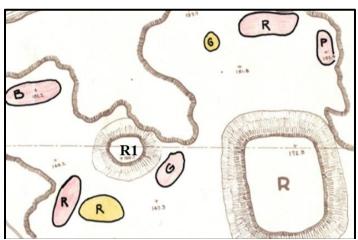


Figure 4.48. Mound R1 (Map of Mound Park Situated near Moundville Alabama by G.W. Jones & Sons 1930).

The third stage, and terminal summit, evidenced two midden-filled pits, one of which may have originally served as a burial pit in a manner similar to those observed with terminal, Moundville III phase (A.D. 1400-1520) occupation of Mounds Q and V (Kelly 2013:22). Labeled Feature 52, the pit was observed to host an assortment of ceramic fragments, miscellaneous fauna, and charcoal flecking (Kelly 2013:22). At the base of the feature, excavators observed two human bone fragments, a femoral fragment and a portion of a right temporal, and an oblong sheet-copper pendant (Kelly 2013:23, 59, Figure 32). Restricted materials recovered from Stage III features include mica and red pigment grade tabular ferruginous sandstone (Kelly 2013: Figure 7). The ceramic assemblage associated with the Stage III summit suggests a Moundville III phase (A.D. 1400-1520) engagement (Kelly 2013:40, 44). Mound R1, like Mound S to the southeast, appears to have been utilized in the Moundville I phase (A.D. 1120-1260), potentially abandoned for a period during the Moundville II phase (A.D. 1260-1400), and revitalized within the Moundville III phase (A.D. 1400-1520) before final termination by the end of the Moundville III phase (A.D. 1520) (Kelly 2013:41). A midden to the east of the monument appears contemporaneous to terminal summit engagement and was observed to contain nonlocal ceramics indicating connections to southern Alabama and the Mississippi River Valley (Kelly 2013:46). Finally, an excavation trench opened on the south side of the monument, to access and assess monument stratigraphy, produced a noteworthy sample of glauconite (Kelly 2013: 13, Table 7).

Moore investigated the "ridge north of Mound R," now designated Mound U, in 1905, ultimately electing to excavate the entire area to a depth of about four feet on average (Moore 1905:220). In total, Moore excavated and provided data for 64 burials, with a collection of particularly ornate interments noted in the northeast corner and with repetitive use negatively

impacting previous interments observed (Moore 1905:220; Peebles 1973:724) (Table 4.167). Moore's investigation of what appears to be a midden mound noted multiple refuse pits, some quite sizable, a possible cooking pit, multiple "flat fire-places" with one described as brick-like, a pot-shaped deposit with strips of charred cane, and a deposit of textiles and charcoal (Moore 1905:220-221). Deer remains and "the usual midden refuse" including "a number of rough discoidal stones, hammer-stones, pebbles, hones, pitted stones, and a great number of fragments of polished celts" were observed scattered throughout the mound (Moore 1905:221). Unassociated materials of note include one unbroken celt of volcanic rock, two fragments of formal palettes, a single small jasper point, a small stone pipe, two small pieces of hematite with wear facets, and a single fragment of quartzite (Moore 1905:221). Ceramic materials of note include several atypically large vessel fragments of coarse shell-tempered ware recovered from throughout the mound, several bird head effigies including an owl, several ceramic discoidals, and a ceramic ornament with holes for suspension (Moore 1905:222). Finally, Moore (1905:222) reports two bone awls, multiple deer tines, and a variety of mussel shells among mound debris.

Interments recovered from the area generally conform to expectations. A single infant and 12 children are reported for the area, with three possessing notable associations. A single extended child was observed interred with a cup, a shell cup, a bottle, and an effigy bowl; a single child was observed with two shell beads; and a child without accoutrements was paired with an extended adult associated with shell beads, a shell gorget, a sheet copper fragment, two copper-covered wooden beads at either side of the skull, and a copper fishhook (Moore 1905:223, 227-228; Peebles 1973:725-726). Regrettably, no locational information is available for the beads, as two shell beads at the back of the head were also observed among the interments South of Mound D, East of Mound E, and North of Mound G. Two multiples were

reported for the area including the previously mentioned pair and a cluster of approximately seven adults generally associated with a bowl, pieces of sheet copper, and a shell gorget (Moore 1905:228).

Table 4.167. Burial type and count, North of Mound R in 1905.

Burial type, North of Mound R 1905	Count
Bundle	3
Adult	2
Child	1
Extended	38
Adult	36
Child	2
Flexed	3
Adult	2
Child	1
Skull	1
ND	1
ND	19
Adult	10
Child	8
Infant	1
Total	64

A minority of 20 individuals were observed in association with mortuary accoutrements (Table 4.168). Notable associations include a single extended adult observed with charcoal, a copper fragment in the area of the feet, and a bottle (Moore 1905:223; Peebles 1973:725); an adult observed with a formal palette, with red pigment on one side and white on the other, and 12 shell beads atop the disc (Moore 1905:235; Peebles 1973:727); an adult observed with a fragment of shell gorget on the chest (Moore 1905:236; Peebles 1973:727); and an adult interred with a bottle, a vessel fragment, a sheet copper fragment, shell beads, a feline effigy pipe of Lower Mississippi River Valley origins, and an immense carved stone duck effigy bowl (Moore 1905:236-240; Peebles 1973:727). Steponaitis and Knight (2004:177) have proposed that the

remarkable stone vessel may have been employed in temple and ritual engagement to hold ritual offerings.

Table 4.168. Associated accoutrements recovered North of Mound R in 1905.

Associated Accoutrements, North of Mound R 1905	Count
Shell beads (2)	1
Bottle	3
Bottle, bowl	2
Bottle, dish	1
Bottle, fragment, sheet copper fragment, shell beads, feline effigy pipe, duck	
effigy bowl	1
Bottle, pot, bowl	1
Bowl	3
Ceramic pipe	1
Charcoal, copper fragment at feet, bottle	1
Cup, shell cup, bottle, effigy bowl	1
Polished celt fragment, hammerstone	1
Sheet copper fragments, shell gorget, bowl	1
Shell beads, shell gorget, sheet copper fragment, copper-covered wood beads	
(2), copper fishhook	1
Shell gorget fragment on chest	1
Palette with red pigment on one side and white on the other and shell beads	
(12) on disc	1
None	44
Total	64

The Alabama Museum of Natural History conducted preliminary investigations in the area north of Mound R in early 1930, producing one extended adult interment observed in association with a pot and seven unassociated materials (Peebles 1973:692). Unassociated items included a formal palette with paint, a plate, two pots, and two bottles (Peebles 1973:692). In early 1931 larger scale operations were undertaken north of the monument, initially recovering 37 interments to the northwest of the monument (Peebles 1973:692, Figure VIII-I) (Table 4.169). Notable unassociated materials recovered from the area include an instance of mica, a paint cup, a hematite discoidal, a miniature axe, and 24 fragments of greenstone (Table 4.170).

Of the nine individuals for whom demographic information is noted, four are recorded as infants with only one observed in association with an accourtement, a bottle (Peebles 1973:709). One infant was paired with a flexed individual, both without accoutrements (Peebles 1973:715), one was represented by a skull only (Peebles 1973:716), and one manifests simply as a single interment (Peebles 1973:698). Five total multiples were noted for the area including two pairs, one cluster of three individuals, and two clusters of four individuals. The second pair was without demographic data, but both were observed in association with accourrements, one with a bottle, a fragment of a duck effigy bowl, and a ceramic discoidal, and the other with a duck effigy bowl (Peebles 1973:709-710). The cluster of three included three individuals without demographic data, one with a bowl and another with a copper ornament at the chin. The third individual was without associations (Peebles 1973:710-711). The first cluster of four included three individuals without demographic data, with one observed with three bottles, a bowl, and shell beads at the left wrist, and an adolescent observed with a duck effigy bowl and an axe on the chest (Peebles 1973:701, 703, 707). The second cluster of four was composed of one individual without demographic data observed with two pots and an axe above the head with three isolated skulls, one of which was with a bottle that had the neck broken off (Peebles 1973:701, 704-705).

Table 4.169. Burial type and count, Northwest of Mound R in 1931.

Burial Type, Northwest of Mound R 1931	Count
Extended	6
Infant	1
ND	5
Flexed	1
ND	1
Skull	5
Infant	1
ND	4
ND	25

Adult	2
Adolescent	3
Infant	2
ND	18
Total	37

Table 4.170. Unassociated materials Northwest of Mound R in 1931.

Unassociated Materials, Northwest of Mound R 1931	Count
Bone awl	9
Bottle	3
Bowl	1
Ceramic pipe	1
Discoidal fragment	4
Duck effigy head	1
Greenstone axe fragment	24
Hematite discoidal	1
Human effigy head	3
Large ceramic fragment	3
Mica	1
Miniature axe	1
Miscellaneous stone discoidals	3
Mortar	1
Paint cup	1
Pitted stones	2
Pot	1
Stone discoidal	4
Stone fragment	7
Unworked greenstone	1
Whetrock	1

A majority of 24 individuals were observed with associated affects (Table 4.171).

Notable associations include a single interment without demographic data observed with copper-covered wooden ornaments at both sides of the head and at the wrists (Peebles 1973:704); a single interment without demographic data observed with two copper ear plugs, a bottle, and a duck effigy bowl (Peebles 1973:712); a single adult observed with a deer antler above the skull, a crushed bowl containing some amount of copper, and fragments of a ceremonial axe, parts of a

stone slab, and shell scattered throughout the burial (Peebles 1973:698); and a single interment without demographic data observed with shell "eardrops," shell beads around the neck, a bowl, and a pot (Peebles 1973:715). The interment observed with scattered materials manifests in a manner reminiscent of interments within Mound D, featuring the deliberate inclusions of bone in the feature fill, and of the interment South of Mound D featuring an adult observed with a deer skull above the skull of the interment.

Table 4.171. Associated accourrements, Northwest of Mound R 1931.

Associated Accoutrements, Northwest of Mound R 1931	Count
Bottle	2
Bottle with neck broken off	1
Bottle; bowl	1
Bottle; part of a duck effigy bowl; ceramic discoidal	1
Bottles (3); bowl; shell beads left wrist	1
Bowl	2
Bowl; bottle	2
Bowls (2); duck effigy bowl	1
Bowls (3); pebble hammer; effigy human head; pots (2)	1
Copper-covered wooden ornaments both sides of head and at	
wrists	1
Copper ear plugs (2); bottle; duck effigy bowl	1
Copper ornament at chin	1
Crushed bowl (apparently had copper inside); fragments of	
ceremonial axe scattered throughout burial; parts of a stone	
slab scattered throughout burial; deer antler above skull;	
shells scattered throughout burial	1
Duck effigy bowl	1
Duck effigy bowl	1
Duck effigy bowl; axe on chest	1
Duck effigy bowl; bottle; axe fragment; bowl	1
Frog effigy bottle; small bottle; shell beads at head	1
Pot; ceramic fragment	1
Pots (2); axe above head	1
Shell eardrops; shell beads around neck; bowl; pot	1
None	13
Total	37

Continued AMNH excavations to the northeast of Mound R observed 11 interments (Table 4.172). Unassociated materials of note recovered in the area include two instances of mica

and a shell cup (Table 4.173). A single infant without accoutrements was recorded in the area (Peebles 1973:720). Two multiples were noted for the area, both pairs without demographic information and all four individuals observed with accoutrements. One pair featured an individual with a small paint pot and an individual with a bowl, a bottle, and a vessel fragment (Peebles 1973:719). The second pair featured an individual with a bowl and an individual with a "quantity" of shells (Peebles 1973:720).

A majority of individuals (7) were observed with accoutrements (Table 4.174). The only notable association not previously mentioned belonged to a single interment positioned prone and observed with beads scattered from chest to skull, copper fragments scattered in the grave, and a small bone implement (Peebles 1973:717). This manifests somewhat similarly to the prone individual with a copper symbol badge interred in Mound D.

Table 4.172. Burial type and count, Northeast of Mound R in 1931.

Burial Type, Northeast of Mound R 1931	Count
Extended	5
Adult	1
ND	4
Flexed	1
Adult	1
ND	4
Infant	1
ND	3
Prone	1
ND	1
Total	11

Table 4.173. Unassociated materials Northeast of Mound R in 1931.

Unassociated Materials, Northeast of Mound R 1931	Count
Bone awls	1
Bottle	1
Bowl	2
Duck effigy bowl	1
Duck effigy head	1
Frog effigy bowl	1

Greenstone axe fragment	6
Human effigy head	1
Leg from a pot	1
Mica	2
Miscellaneous beads	1
Miscellaneous stone discoidal	1
Pebble hammer	3
Pitted stone	3
Shell cup	1
Stone discoidals	2
Whetrock	1

Table 4.174. Associated accourtements, Northeast of Mound R in 1931.

Associated Accoutrements, Northeast of Mound R 1931	
Beads scattered from chest to skull; copper fragments scattered in	
grave; small bone implement	1
Bowl	1
Bowl; bottle; fragment	1
Pebble hammer	1
Pitted stone (2); large stone	1
Quantity of shells	1
Small paint pot	1
Stone discoidal; bottle; bowl	1
None	3
Total	11

A final area north of the monument, for which we have no specific locational information, evidenced three interments without associated accoutrements, including one flexed adult and two individuals without demographic data (Peebles 1973:696). Unassociated materials recovered from the area include two bone awls, three greenstone axe fragments, two pitted stones, and one sandstone discoidal (Peebles 1973:Table VII-2). Assessing ceramics recovered from investigations North of Mound R collapsed, the most commonly occurring ceramics, with data derived from Steponaitis (1983:258-260), are bottles (27), followed by bowls (21), jars (11), and one conical vessel. A total of 36 ceramics were able to be seriated within a two-phase span by Steponaitis (1989), with two dating to the Moundville I/II phases (A.D. 1120-1400), 11 dating

to the Moundville II phase (A.D. 1260-1400), 14 dating to the Moundville II/III phases (A.D. 1260-1520), three dating to the Moundville III phase (A.D. 1400-1520), and one dating to the Moundville IV phase (A.D. 1520-1650). A total of 14 Hemphill ceramics recovered from the area north of Mound R, generally, were able to undergo seriation by Phillips (2012) with the majority (10) conforming to the Early Hemphill period (A.D. 1325-1375) (Table 4.175).

Table 4.175. Hemphill style ceramics recovered from North of Mound R.

	able 4.173. Hempinii style ceraniics recovered from North of Mound R.			
Artifact #	Burial #	Motif	Designation	Fellows
NR				
(sherd)		Ogees	Early Hemphill	SD13, NE128, 016
		3 sets of 3 "fingertips"		
		around central symbol w/		
NR1		cross hatched bands	Early Hemphill	
NR11	B14	Bilobed arrow	Early Hemphill	
		Radial T-bars w/diagonal		
NR114	B1109	cross hatched bands	Early Hemphill	
NR17	В33	Winged serpent	Early Hemphill	
		Stylized forearm bones		
		and upside-down fleshed		
NR25	B1088	heads	Early Hemphill	SEH9
NR30	B58	Winged serpent	Early Hemphill	SD34, SL ¹ 31, WR81
		Concentric circles and		
NR6	B8	diagonal line	Early Hemphill	SW62
		4 skulls, 2 hand and		
		forearm bones, and 2		
NR9	B11	scalps	Early Hemphill	SD88, SWM15a
NR99	B1103	Winged serpent	Early Hemphill	
			Middle	
NR19	B10	Hand and eye design	Hemphill	SD71
				D3, SD32, SD71,
	B1094-		Middle	SL ¹ 8, SL ¹ 14 O9,
NR38	1096	Scalps with hand and eye	Hemphill	WP208, NR19, WR8
NR24	B38	Wings	Late Hemphill	
NR40	B1087	Crested bird	Late Hemphill	NE145

An area northwest of Mound R, was investigated by the University of Michigan Museum of Anthropology in the summer of 1979, subsequent to research in the area by David DeJarnette

in 1973 and 1974, with the aim of understanding area chronology and subsistence strategies (Scarry 1980:1). Excavations observed a complex deposit of three sets of multiple superimposed sand floors, some separated by significant midden deposits, under a burnt daub layer that appeared to represent a wall fall (Scarry 1980:5). Relative and absolute dating for the area suggests everything stratigraphically below the daub layer dates to the Moundville I phase (A.D. 1120-1260) (Scarry 1980:7-8). A semi-subterranean structure and associated midden were observed beneath the lowermost deposit of the third set of floors (Scarry 1980:6). A similar structure was observed in association with the premound occupation of Mound E, with both believed reflective of Cahokian architectural innovation (see pg. 112-113). Four small pieces of copper, concentrations of mica, and ceramics from the Lower Mississippi River Valley were among materials of note recovered from area excavations (Knight 2010:157-158, 250; Scarry and Scarry 1995:83).

An area south of Mound R was investigated by Blitz and Thompson in the fall of 2005 with a series of shovel test pits in an effort to delineate the extent of a large midden identified in the area and any associated features (Thompson 2011:119). The investigation revealed a host of notable materials including palette fragments, pigment quality hematite, quartz, sandstone saw fragments, a galena cube, a coal pendant fragment, and mica (Thompson 2011: Table 26). Ceramics were observed to date principally to the Moundville II phase (A.D. 1260-1400), although with evidence of Moundville III phase (A.D. 1400-1520) engagement, and exhibited a relatively high abundance of serving wares and *variety Hemphill* ceramics (Thompson 2011: 202, 208, Table 20). The area South of Mound R seems to have also been the location of considerable lithic reduction activity for local Tuscaloosa Gravel Chert, non-local Fort Payne Chert, and quartzite (Thompson 2011:105, Table 11). Taken in conjunction with investigations

of Mound R1, to the west, the areas proximal to Mound R appear to have been engaged with by individuals with atypical relative access to esoteric materials.

Finally, Moundville Roadway blocks 67+00-62+00 run just south of the ravine separating the west and east aspects of the northern section of the site (Figure 4.49). Block 67+00 was investigated with six trenches but evidenced only two post molds (Peebles 1973:943). Block 66+50 was investigated with six trenches and evidenced scattered post molds and wall trenches (Peebles 1973:943). Block 66+00 was extensively investigated and evidenced scattered post molds and one wall trench (Peebles 1973:942). Block 65+50 was investigated with three trenches but evidenced only a few scattered post molds (Peebles 1973:942). Blocks 65+00-62+00 were unexcavated as an extant roadway covered the majority of the area (Peebles 1973:942). Maurice Goldsmith excavated a small area outside of the Roadway right-of-way in 1940, recovering three adult interments without accoutrements (Peebles 1973:728).

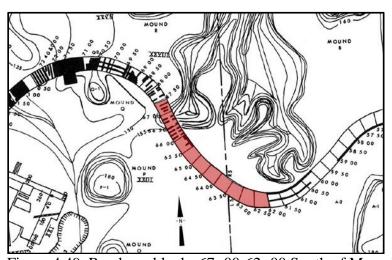


Figure 4.49. Roadway blocks 67+00-62+00 South of Mound R (Peebles 1973:Figure I).

Mound R appears to have been minimally engaged with from its genesis in the late Moundville I phase (A.D. 1200-1260) through the early Moundville II phase (A.D. 1260-1325), with use and construction of the edifice principally concentrated in the late Moundville II and early Moundville III phases (A.D. 1325-1450). Situated on the northern Moundville landscape

between monuments (Mounds Q and C) that appear to have hosted esoteric specialists engaged in remarkable war powers from the latter end of the early Moundville II into the early Moundville III phase (A.D. 1300-1450), Mound R may have acted as an activity platform for esoteric and community engagement in the northern section. Materials recovered from summit and flank contexts suggest a concerted investment in local stone and flaked projectile points in later periods.

Mortuary ceremonialism around Mound R was observed to be variable, with complexity likely related to sustained engagement. In his assessment of the interments West of Mound R, Moore (19005:240; 1906:344) noted that variability in depth appeared related to chronological engagement in the area and that "a number of disturbed bones" were observed, suggesting the area West of Mound R, like East of Mound E, was repetitively utilized to the extent it negatively impacted previous interments. Comparisons between the West of Mound R and North of Mound D can be made in the relative profusion of heat-treated Tuscaloosa gravel chert. Investigations West of Mound R, including Mound R1, observed unassociated materials that appear esoteric, including an unusual quantity of shell beads, a copper ear plug, and galena cubes. Observed associated materials similarly suggest esoteric practice and include a formal palette distributed among multiple interments, six copper ear plugs, a copper bead, and copper-covered ornament noted for the area. Ceramics recovered from the interment area suggest it was principally engaged from the late Moundville II through Moundville III phases (A.D. 1325-1520).

Excavations north of the monument by Moore, the Alabama Museum of Natural History, and the University of Michigan Museum of Anthropology (UMMA) have highlighted areas of early occupation and esoteric engagement bordering the ravine north of the mound. The area designated North of Mound R and investigated by the AMNH in 1931, at the ravine edge to the

east, was observed to host esoteric paraphernalia including a paint pot, mica, and a shell cup. Mound U, centrally situated along the ravine, appears to have been a midden mound with interments. That the most ornately accompanied burials were situated to the northeast may be an example of directional significance, as the Mound V summit was observed to host the earthen lodge in the northeast corner and the northeast corner of the Mound E summit was occupied by the Cahokia Greathouse. Areas investigated by the AMNH in 1931, the Mound R1 investigations in 2011 and 2012, and the UMMA investigations in 1979 North of Mound R evidenced a mortuary area and strong Moundville I phase (A.D. 1120-1200) occupation signatures including a multistage platform mound and a pit house structure. Associated and unassociated items recovered appear suggestive of esoteric engagement and include copper, mica, galena, glauconite, a paint cup, and coal and hematite discoidals.

The area around Mound R appears to have possessed a substantial history of use, with concentrated emphasis in mortuary ceremonialism probably dating to the late Moundville II and early Moundville III phases (A.D. 1325-1450). The areas North and West of Mound R manifest as early ritual areas in a manner similar to west of Mound O, including Mound W and the southern aspect of the area west of Mound P. Interment areas around the monument manifest similarly to those observed around Mound E and Rhodes by the palisade in that some specific locations are repetitively employed to the detriment of previous interments and suggest a concerted effort to engage in corporate and spatial affiliation. The spatially restricted nature of the areas North and West of Mound R suggest approval to access. It is possible that interment areas around Mound R belong to different communities, principally ritual, who were allowed access to the shared landscape in a manner generally similar to that observed in the mortuary areas around Mound E (Figure 4.50).

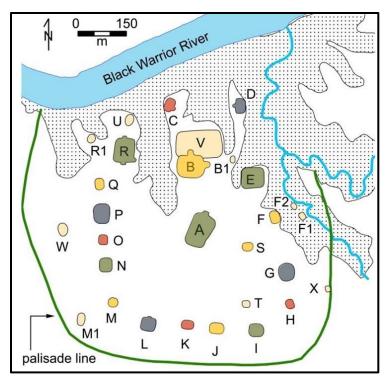


Figure 4.50. Map of Moundville showing variable social roles on the Moundville landscape with war leaders in red, vision seekers in yellow, corporate leaders in blue, and renewal platforms in green (Copyright John H. Blitz 2008, used with permission).

MEDICINE AT MOUNDVILLE

This research argues that esoteric medicine-making, conceived here as powers principally engaged in the crafting and care of ritual materials such as those ethnohistorically and ethnographically observed as components of medicine bundles, should be viewed as a form of esoteric scholarship. This scholarship is believed to possess a shared foundational rule structure and material correlates that can then be tracked through time and space, with variation in application related to the training and abilities of the medicine-maker(s) and the needs and traditions of the area community. An intrasite assessment of the Moundville mortuary program from spatial, representational, and broad ontological perspectives emphasizing applied categories of esoteric medicine-making has allowed for a distinction between kin-based and ritual mortuary communities. At the level of the site, and taken in tandem with recent research at the center, this appears to highlight repeating pairs of mounds, with each two sets of pairs forming a composite segment of four monuments that include esoteric medicine-makers specializing in the control of powers, represented by Mounds C, H, K, and O; esoteric medicine-makers specializing in crafting empowered paraphernalia with an emphasis on bone-handling and the pigment complex, represented by Mounds F, J, M, and Q; esoteric and community activity areas, represented by Mounds E, I, N, and R; and diverse community leadership, represented by Mounds D, G, L, and P (Figure 4.51).

The oldest aspect of the plaza-periphery alignment appears to be the western section, represented by Mounds M, N, O, and P. Parallels to Lubbub Creek, through probable trophy taking, observed along the western aspect suggest an early, though relatively modest,

engagement with war medicines at the center. A dramatic infusion of methods, materials, and perhaps personnel around A.D. 1300 appears to have also resulted in the establishment of the site-wide mortuary program. Mortuary areas around the monuments appear fundamentally affiliated, from both spatial and material perspectives. Kin-based spatial claiming is principally observed among periphery areas, including the Upper Rhodes site, the Administration Building, and north of Mound W. On the whole, the mortuary program is observed to be quite concentrated in the northern and western segments, with both segments displaying an atypically long history of death-centric engagement. From this perspective, it is possible that the composite segments also form two sets of pairs, with the north and west manifesting as similar death-centric entities paired with the eastern and southern aspects, respectively. That the northern and eastern segments may share a unique relationship is observed though the inclusion of ceramic discs and fragments as mortuary associations, the proliferation of Hemphill ceramics, and the existence of similar early pit-house structures in areas believed to be associated with community and esoteric engagement (Mounds R and E) among northern and eastern groups.

In sum, the plaza periphery mound group at Moundville appears to represent two pairs of composite segments engaged in esoteric renewal and war medicines from the late Moundville I through Moundville II phases (A.D. 1200-1400). It is possible that composite segments are fundamentally representative of diverse kin-based communities at the level of the town or hamlet within the river valley. I suspect the Moundville mortuary program was enacted as an aspect of the war medicine created at the center in the late Moundville II phase (A.D. 1325-1400), with esoteric specialists imbuing the landscape with a death-centric power derived from area ancestors. The system created with the great conjunction of the site layout around A.D. 1200,

originally manifesting as four composite segments concertedly engaged in the renewal of medicines with an emphasis in war powers, seems to have collapsed entirely by A.D. 1450.

A century of research has substantially improved our understanding of Native North American lifeways in west-central Alabama precolonial history. Recent research on landscape modification and construction, area iconography, the layout and location of early residential areas, maize preparation and consumption, and changes in monument and site use prior to abandonment have allowed for a more nuanced assessment of the Moundville site within a similarly dynamic understanding of panregional ritual practice in the later precolonial period (A.D. 1000-1500) (Briggs 2016; Davis 2014; Laquement 2009; Phillips 2012; Porth 2017). Mortuary research at Moundville has focused on specific areas of site use, employing representative approaches as codified by the Saxe-Binford Model within which individuals are seen to possess dynamic social identities that may be variably represented in death (Nelson 2014; Phillips 2006; Wilson 2008; Wilson et al. 2010). This research has assessed the entire Moundville mortuary program from ontological, spatial, and representational perspectives to better understand social identity and cohesion at the site. This analysis also worked to present mortuary data from a biosocial perspective that highlights physiological plasticity to cultural systems. Biosocial contextualization also aids in understanding the body as something fundamentally representative of the ontological systems it exists within (Agarwal and Glencross 2011).

This research argues that Eastern Woodland ceremonial centers and the paraphernalia associated with ritualism at these sites may be best understood as a concerted investment in multifaceted powers, or medicines. Particularly potent or impactful powers may have operated under the auspices of a cohort of scholars specializing in an esoteric engagement, with variability

attributable to the training and talents of the individual practitioners and the needs and traditions of the communities they lived and worked within. These powers are perhaps best understood with applied descriptors. For example, powers may be innate or constructed, beneficent or malevolent, and exist in varying degrees. Copper is an example of innate power, possessing atypical energy because it is inhabited by a spirit (Deloria 2006:149-150, 154-155; Skinner 1914). Medicine bundles are, in contrast, forms of manufactured power, composites of variable innate powers dynamically employed. Tethering the two forms is the renewal of power, typically a community-centric event that facilitates the restoration of powers via variable purification practices and engagement with sacred songs on a dedicated, ceremonial, landscape. Finally, it is possible that the interactions between powers and people were themselves dynamic and active; a relationship fundamentally collaborative in nature and based on a shared understanding of mutual obligation.

Native North American medicine has been variably applied within Southeastern archaeological literature, with an emphasis on medicine bundles, lodges, and societies (Dye 2007; Knight 1986; Lankford 2007a, 2007b, 2016; Waselkov 2020). The concept itself is broad, varying in meaning and complexity depending on context. Despite these potential difficulties, assessing precolonial ceremonial landscapes and mortuary programs from a perspective of medicine as an ontological phenomenon potentially allows for greater cultural relativity in representational assessments of ceremonial and mortuary practice. Observations of the overt ritualization of subadult interments, when approached as representational of an ontology within which infants and children are viewed as physiologically not-quite-human and are associated with accoutrements similarly understood to be formidably powerful, may allow for an enhanced understanding of interment type and an ability to distinguish between ritual and kin-based

mortuary communities. This perspective also highlights the extent to which individuals specializing in the solicitation of visions, often through fasting, and individuals specializing in the acquisition of war trophies, through engagement in violent conflict, are unlikely to be the same and suggests that these specialists may have operated as aspects of a pair. These paired efforts may be best conceptualized as acting dyadic kinds (Richardson 2013:197-199). Rather than binary dichotomies, dyads are tethered relational entities – in this case, a partnership composed of practitioners specializing in the renewal of powers generally and practitioners specializing in the construction of war powers specifically.

Medicine at Moundville is perhaps best understood as collaborative esoteric engagement with variable innate and crafted powers centered around the renewal of medicines and war medicine. Specialists, possibly operating as members of affiliative kin-based communities, appear to have engaged in the practical execution of an esoteric scholarship as component, complementary, elements working synchronously to achieve specific ends. The proliferation of mortuary ceremonialism observed at Moundville suggests specialists were also engaging with powers to protect from the dangers of death. Esoteric death-centric medicines appear to have proliferated with the departure of the residential population around A.D. 1300.

Mortuary ritual, both within-mound and off-mound, appears to have necessitated a deliberate engagement with compromised earth, or earth bearing evidence of use or midden-based refuse (Knight 1981:51; 2006:426). It is possible that compromised earth was understood to have contained remnants, or even memories, of ancestral engagement. From this perspective, the use of these soils in mortuary activity may have allowed ritual and kin-based community members an ability to facilitate collaborative ceremonial engagement with multiple generations

of ancestors. This multigenerational ceremonialism may have also allowed for atypically efficacious engagement with medicines.

For many North American Native Nations, interment within the land promotes a larger life cycle, as the dead are commonly observed to functionally become the earth, thus contributing to the lives of descendant communities in multi-faceted ways (Deloria 2003:170-171). The Ancestors are also widely observed to be knowledge-keepers, with living ancestors providing information on and remembrances of past traditional practice and deceased ancestors counted among those spirits capable of providing variable aid to descendant communities (Deloria 2003:165-183). Ancestral collaboration and guidance may have also allowed ritual and kin-based communities to maximally maintain good relations with neighboring human, non-human, other-than-human, and supernatural allies.

The plurality of voices and synchronization of roles at Moundville may have facilitated a level of dynamism at the center not commonly observed within the Eastern Woodlands at that time. Vision seekers, war leaders, and civic leaders were potentially operating as both discrete and collaborative entities. Inter and intragroup collaboration among ritual and kin-based communities appears to have been a principal component of site use as reflected in the precision of the plaza periphery layout, coordination of mound summit activities, standardization of mortuary ceremonialism, and the site-wide circulation of the Hemphill ceramic style (Davis 2014; Knight 2010:349, 360; Lacquement 2020; Peebles 1981; Phillips 2016). Manufactured medicines engaged with by specialist vision seekers and war leaders appear centered around innately empowered stone including copper, mica, locally-sourced Pottsville micaceous sandstone, and pigment grade minerals. Locally made stone palettes and non-local copper appurtenances appear to have been among the strongest, most potent, of the stone-based powers

at Moundville as evidenced by their curation within dedicated encasements (Davis 2016:249-252; Moore 1905:154; Steponaitis 2016; Steponaitis et al. 2011). Housing powerful items within cane, hide, or wood casings may have been a risk mitigation method designed to facilitate appropriate care for the object, while concomitantly protecting the specialist responsible for its care from harm.

A concerted emphasis on empowered pigments appears to have been a prominent aspect of ritual engagement at Moundville (Knight 2010:67; Peebles 1974:130, 141; Peebles and Kus 1977:438). Pigments employed at the site were derived from a variety of local and exotic resources including iron oxide, tabular ferruginous rock, glauconite, mica schist, coal, galena, and muscovite mica (Knight 2010:67-69). Pottsville micaceous sandstone palettes appear to have been used to mix and transfer pigment, likely aiding in the process of maximally empowering the paints. Bear grease is suspected to have been used as a mixing agent and, given the significant role of bear as a form of other-than-human-person, potentially aided in promoting the efficacy of the pigments (Moore 1905:147; Waselkov 2020). Empowered paint is observed ethnohistorically and ethnographically to have served as a medium with which to imbue power upon warriors, standards carried into battle, sacred poles, and statuary (Deloria 2006:178-179; Jackson 2005:73; Smith 1968:81; Steponaitis et al. 2011). The creation of powerful black pigment, via the mineral glauconite, appears to have been particularly important and highly controlled.

This research also assessed the Moundville landscape from ontological and representational perspectives. The meticulously choreographed layout of the plaza and plaza-periphery monuments appears reflective of constituent social units and their dynamic intra and intercommunity cooperative relationships (Knight 1998, 2106:29). This research attempted to combine information on excavations at Moundville with site-wide mortuary data for 3,131

interments and their associated accourrements in an effort to elucidate patterning associated with monument use and mortuary engagement. The results of this assessment conclude that the plaza periphery monuments may represent four segments, existing as two pairs. These include a north segment composed of Mounds Q, R, C, and D paired with an east segment composed of Mounds E, F, G, and H, and a south segment composed of Mounds I, J, K, and L briefly paired with a west segment composed of Mounds M, N, O, and P. Within each segment are monuments controlled by vision seekers (Mounds Q, F, J, and M) specializing in empowered pigments and bone handling; war leaders (Mounds C, H, K, and O) specializing in the acquisition of trophies and the care and control of stone-centric powers, with an emphasis on palettes and copper; and civic leaders (Mounds D, G, L, and P), the designated authority for diverse kin-based communities or towns. The fourth of the monuments in each segment (Mounds R, E, I, and N) are suspected to have principally functioned as elevated renewal or activity platforms. A repetitive pattern of intracommunity pairing is observed between vision seekers and renewal platforms (Mounds Q and R, F and E, J and I, and M and N) and war and civic leaders (Mounds C and D, H and G, K and L, and O and P), potentially visually and physically reinforcing the importance of these relationships within their respective communities. The axis monuments, Mounds A, B, and V are believed to represent site-wide leadership, generally, and another pairing of a vision seeker specializing in the renewal of medicines (Mounds B and V) with a renewal platform (Mound A), specifically.

The Black Warrior River Valley was probably home to several matrilineal families, from different matrilineal clans, forming hamlets, farms, and shared ceremonial grounds. Among the Creek, Seminole, and Yuchi, band membership and busk affiliation are dictated by residence with community members working together for the benefit of that collective (Jackson 2003:44-

48; Sturtevant 1954: 27, 7). It is possible that plaza periphery segments are representative of river valley communities, with Moundville fundamentally serving as a multi-town ceremonial ground (Scarry and Steponaitis 2016:267). It is also possible that ceremonial engagement in both renewal and mortuary activities were spatially specific, with various river valley communities engaging with both the monuments and former residential neighborhoods of their ancestors (Wilson 2008; Wilson et al. 2010).

Although mortuary activity is diffuse across the Moundville landscape, it is observed to cluster into reasonably discrete areas. Previous analyses of cross-cultural data reinforce that specialized mortuary areas are typically corporate controlled (Goldstein 1976, 1981; Parker Pearson 2000; Saxe 1970). Mortuary communities at Moundville were observed to exhibit spatial patterns of interment roughly analogous to the layout of the ancestral communities previously populating the landscape (Davis 2014: Figure 6.1). Organized into discrete clusters that featured linear segments, these may be conceived of as mortuary neighborhoods and further highlight the extent to which ritual- and kin-based communities in the Black Warrior River Valley retained those group affiliations after death (Wilson 2008, 2016; Wilson et al. 2010). These mortuary districts were observed to be dominated by ritual and kin-based groups, or some combination of the two.

Patterned repetition in mortuary district placement is observed in association with monuments composing the north (Mounds Q, R, C, and D) and east (Mounds E, F, G, and H) plaza periphery segments, further highlighting the possibility that they operated as paired entities. Ritual communities, delineated by the overt ritualization of infants and children, area demographic trends, and the frequency and distribution of esoteric or restricted materials as both mortuary accourtements and unassociated artifacts co-occurring with atypical structures, were

observed to the north of the monuments in specialist control including the Roadway blocks 71+50-70+50 to the north of Mound Q, interment areas north of Mound R, north and northeast of Mound C, and north of Mound E. Regrettably, no concerted investigations have been conducted in the areas north of Mounds F and H. Mortuary districts associated with diverse kin-based communities are, in contrast, principally associated with those monuments appearing to operate under civic leadership (Mounds D and G) and are located to the south of the mounds, including the areas south of Mound D and south and southwest of Mound G. The interment areas north, northeast, and east of Mound D and north of Mound G are interpreted as districts operating under relatively elite corporate-kin control, delineated by a lack of ritualized subadult interments, area demographic trends more reflective of kin-based groups, and the frequency and distribution of shell and ceramic accoutrements. Interment areas to the east of Mound E and west of Mound R, monuments believed employed as renewal or activity platforms, appear reflective of a combination of ritual community members and relatively elite corporate-kin group members.

Mortuary ceremonialism for the west segment (Mounds M, N, O, and P) appears regimented in a markedly different manner. The expansive area west of Mounds P and O, for example, was observed to feature multiple within-area delineations of engaged communities. This includes the use of what appears to have been a large screen that bisected the vast mortuary area designated west of Mound P and two sizable pits, one to the south and one to the north of the screen, containing several levels of multiple burials. Additional mortuary areas west of Mounds P and O include north of N¹, Mound W, the Museum Parking Area, North and Northwest of Mound W, and west of P¹. Interments associated with Mound W were observed to intrude directly into the landform and are believed to represent a ritual community, as area demographic trends are not suggestive of kin-based groups and both associated and unassociated

items recorded in the area included esoteric materials such as glauconite, galena beads, mica, and copper. Mortuary ceremonialism associated with Mound N was observed to be sparse. Investigations around the monument revealed only small clusters of mortuary engagement with 16 individuals observed to the west of the monument, including Roadway block 12+50, and three to the north. Finally, the mortuary district to the southwest of Mound M was observed to host 196 individuals, the largest group observed proximal to a vision seeker-controlled monument at the center. It is expected that a modern assessment of associated artifacts will show marked similarities with Mound W.

The southern segment (Mounds I, J, K, and L) was observed to be generally lacking in mortuary engagement relative to the rest of the site. Mound I was observed to host the largest mortuary population associated with the southern plaza-periphery monuments, with 51 individuals recovered to the east of the mound and from an area marked by compromised earth. A small mortuary population of 21 individuals was observed to the southeast of Mound J, in Roadway blocks 30+50-30+00. Area demographic trends do not appear reflective of a kin-based group and co-occur with the recovery of esoteric materials including glauconite and galena, suggesting the population was ritual in nature. A small, markedly similar, mortuary population of 24 individuals was observed to the southeast of Mound K, in Roadway blocks 27+50-26+50. Area demography combined with the recovery of glauconite and copper suggests this was also a ritual population. No mortuary activity was observed in association with Mound L. If the monument was indeed controlled by kin-based corporate leadership, this may highlight the extent to which the community did not agree with the advent of widespread mortuary ceremonialism at the center.

Ceremonial centers of the Eastern Woodlands are reflective of community cohesion and collaboration in both construction and use. The construction of the Moundville landscape in the early Moundville I phase (A.D. 1120-1200) included the creation of Mound X, premound areas identified in association with Mounds M, O, W, P, Q and R1, and numerous residential areas around the site (Davis 2014; Johnson 2005; Kelly 2013:30, 33; Knight 2010: 116-117, 238, 323; Porth 2011:99-100; Steponaitis 1992:9). During the Late Moundville I through early Moundville II phases (A.D. 1200-1300) Mound X was abandoned, and the palisade constructed through it as the residential population on the terrace dramatically increased (Blitz 2016; Wilson 2008). Moundville residential areas were codified into discrete neighborhood clusters around a dedicated plaza, as residents concomitantly began construction on the plaza-periphery and axis monuments (Blitz 2016; Knight 2010:361; Lacquement 2009). Maize production was further intensified, and the center engaged in a structured provisioning program, with the storage of surplus observed in association with Mound W, the Roadway west of Mound P, and the Roadway north of Mound Q (Barrier 2007:65, 67; Jackson et al. 2106:232). Early withinmonument mortuary activity was exclusive, and confined to Mounds O and C.

From A.D. 1300-1350, in the middle Moundville II phase, the plaza-periphery monuments rose precipitously as plaza construction was completed, the palisade decommissioned, and the residential population relocated (Knight 2010:362; Knight and Steponaitis 1998). Specialists at the center began to concertedly engage with death-centric scholarship and powers, with the construction of various mortuary areas around the monuments and the execution of a local iconographic style (Phillips 2012). Those affiliated with Mounds O, C, and H, specializing in the care and control of empowered stone with an emphasis on worked copper and paint palettes, were increasingly interred with the remarkable powers with which they

dedicatedly engaged. It is possible that these potent medicines were entombed within the mounds with the last person who was capable of caring for and adequately controlling them, a risk-mitigation method for dangerously powerful, possibly sentient, entities. Off-monument mortuary areas were dedicated to the west of Mounds O and P, including Mound W and north and northwest of Mound W, and southwest of Mound M - highlighting the antiquity of the western segment and the ties these affiliated communities had to the Moundville landscape.

From A.D. 1350-1400, in the late Moundville II phase, death-centric powers involving war trophies, local iconography, and the site-wide mortuary program flourished. As Mound Q specialists worked with war trophies to the north, a Cahokian-style greathouse was erected atop Mound E to the east (Knight 2010:363). Not everyone at the center appears to have agreed with the new emphasis and scholarship, however. As death-centric medicine proliferated, the southern segment began to fission. Engagement with Mound I, possibly the renewal and activity platform for communities represented by the southern segment, ceased as a small mortuary community nonetheless blossomed to the east of the monument. Mound K, presumed to have been controlled by war leaders who perhaps disapproved of these death-centric methods, was similarly abandoned. Despite southern dissent, mortuary ceremonialism associated with the northern, eastern, and western segments continued apace. Mortuary ritual for the diverse kin-based corporate authority associated with Mound D manifested with increasing dynamism, both within and off mound, including interment of the occasional specialist. The austere ritual practitioners associated with Mound F began an interment program within the northeast corner of the monument summit. Mortuary engagement within Mounds O, C, and H reached its pinnacle, likely the last of the mighty generations of war leaders with personal and material ties to the original Cahokian scholarship. Off-monument mortuary communities continued to grow,

presumably under the auspices of specialist vision seekers, with kin-based and ritual corporate groups interred within the compromised earth of their ancestral neighborhoods and ritual precincts (Wilson et al. 2010). Ritually-based mortuary communities began to dominate spatially restricted areas around specialist-controlled monuments, while kin-based mortuary communities proliferated around Mounds D, G, and P.

From A.D. 1400-1450, in the early Moundville III phase, specialist leadership, including all of the war leaders, began to abandon the center. Engagement with Mounds K, H, C, O, J, F, and M had ceased (Knight 2010:363). Specialists associated with Mound Q alone continued both summit occupation and construction of a minor addition of the monument (Knight 2010:363). Monuments under the control of community leadership, including Mounds D, G, P, and L, persisted. Mortuary ceremonialism continued at Mound D, occupation and construction continued with Mound G, and Mounds L and P maintained summit architecture. Occupation and minor construction also continued for Mounds R and E, the north and east segment renewal platforms, respectively. The axis monuments, Mounds A, B, and V, remained similarly engaged, with Mounds A and B evidencing summit occupation, while an earth lodge was constructed on the northeast corner of Mound V (Knight 2010:363). Mortuary activity became concentrated in areas dominated by corporate-kin communities including south of Mound D, east of Mound E, Rhodes, south and southwest of Mound G, west of Mound P, and west of Mound R.

Finally, from A.D. 1450-1520, in the late Moundville III phase, the site transformed dramatically with the dissolution of the mortuary program and the abandonment of many of the plaza-periphery monuments. The local iconographic style ceased. Mounds D, L, G, R, and E were forsaken, becoming silent additions to a landscape that increasingly served as a testament to an earlier time and manner of engagement (Knight 2010:363). Mounds B, V, P and, briefly and

to a limited extent, Q continued in active appointment, although the functionality of Mound P changed dramatically as the monument appears to have transferred from kin-based corporate to specialist control (Porth 2017). The earth lodge on Mound V was rebuilt at least once during this period (Knight 2009). This time of pronounced change in engagement with the landscape also included marked change in engagement with the Ancestors. As interments into ancestral areas became sporadic, ancestral elements appear to have been increasingly harvested, presumably, for new renewal rituals. Though war medicines were no longer being crafted and engaged with at the center, a need to participate in renewal ceremonies for maize and any extant medicine bundles may have led to a revitalization of older methods that advocated a more direct engagement with the Ancestors in the form of bone-handling.

In summary, Moundville was a well-planned ceremonial center, hosting a massive plaza and meticulously arranged periphery monuments. Conspicuous terraforming at Moundville initially followed traditions from the west, in the Lower Mississippi River Valley, where death was an unassuming feature of ceremonial landscapes. Moundville became transformed during the early 1300's, with scholarship pertaining to death-mediated medicines appearing to migrate out of the American Bottom and resulting in the creation of numerous interment areas around the center. It is possible that the ceremonial landscape at Moundville, beginning with the creation of Mound X and culminating with the articulation of the modern diagram, was deliberately constructed for the purpose of maximally facilitating the renewal of medicines including but not limited to maize. From initial habitation on the terrace to the dissolution of the center, ritual and residential communities acted in dynamic collaboration on the Moundville landscape. Medicine at Moundville was both a scholarship and practice that united participant communities within the Black Warrior River Valley, with the Moundville site appearing to have operated as a multi-town

medicine center where multiple generations of ritual and kin-based community members engaged in a vibrant collaboration with human, nonhuman, other-than-human, and supernatural allies for the betterment of all affiliative communities.

REFERENCES

Adair, James

2005 The History of the American Indians. University of Alabama Press, Tuscaloosa.

Alberti, Benjamin, and Tamara L. Bray

2009 Introduction to Animating Archaeology. *Cambridge Archaeological Journal* 19(3):337-343.

Alberti, Benjamin, Severin Fowles, Martin Holbraad, Yvonne Marshall and Christopher Witmore

2011 "Worlds Otherwise": Archaeology, Anthropology, and Ontological Difference. *Current Anthropology* 52(6):896-912.

Alt, Susan M.

2006 Cultural Pluralism and Complexity: Analyzing a Cahokian Ritual Outpost.
Unpublished Ph.D. dissertation, Department of Anthropology, The University of Illinois, Urbana-Champaign.

Alt, Susan M. (editor)

2010 Ancient Complexities: New Perspectives in Precolumbian North America. The University of Utah Press, Salt Lake City.

Alt, Susan M., and Timothy R. Pauketat

2017 The elements of Cahokian Shrine Complexes and Basis of Mississippian Religion. In *Religion and Politics in the Ancient Americas*, edited by Sarah B. Barber and Arthur A. Joyce, pp. 51-74. Routledge, New York.

Ambrose, Stanley H., Jane Buikstra, and Harold W. Krueger

2003 Status and Gender Differences in Diet at Mound 72, Cahokia, Revealed by Isotopic Analysis of Bone. *Journal of Anthropological Archaeology* 22(3): 217–226.

Anderson, David G.

2000 *Identity and Ecology in the Artic Siberia: The Number One Reindeer Brigade.* Oxford University Press, Oxford.

Argarwal, Sabrina C.

2016 Bone Morphologies and Histories: Life Course Approaches in Bioarchaeology. *Yearbook of Physical Anthropology, American Journal of Physical Anthropology* 159:130–149.

Argarwal, Sabrina C., and Bonnie A. Glencross

2011 Building a Social Bioarchaeology. In *Social Bioarchaeology*, edited by Sabrina C. Argawal and Bonnies A. Glencross, pp. 1-12. Wiley-Blackwell, Chichester.

Astin, Robyn L.

1996 Mound M: Chronology and Function at Moundville. Unpublished Master's thesis, Department of Anthropology, The University of Alabama, Tuscaloosa.

Autry, William O., Jr.

1983 Sociopolitical Dimensions of the Mississippian System in the Cumberland River Valley of Middle Tennessee and Western Kentucky: An Analysis of Mortuary Patterns and Skeletal Remains from Mound Bottom, Tennessee. Report prepared for the Library Files of the Frank H. McClung Museum, University of Tennessee, Knoxville. Copy on file, Tennessee Division of Archaeology, Nashville.

Baltus, Melissa R., and Sarah E. Baires

2012 Elements of Ancient Power in the Cahokian World. *Journal of Social Archaeology* 12(2):167-92.

Baltus, Melissa R., and Sarah E. Baires (editors)

2018 Relational Ontologies of the Indigenous Americas: Alterity, Ontology, and Shifting Paradigms. Lexington Books, Lanham, Maryland.

Baires, Sarah E.

2014 Cahokia's Origins: Religion, Complexity and Ridge-Top Mortuaries in the Mississippi River Valley. Unpublished Ph.D. dissertation, Department of Anthropology, The University of Illinois, Urbana-Champaign.

2018 Dynamic Worlds, Shifting Paradigms. In *Relational Ontologies of the Indigenous Americas: Alterity, Ontology, and Shifting Paradigms*, edited by Melissa R. Baltus and Sarah E. Baires, pp. vii-xv. Lexington Books, Lanham, Maryland.

Barrier, Casey R.

2007 Surplus Storage at Early Moundville: The Distribution of Oversize Jars at Mound W and Other Off-Mound Locations. Unpublished Master's thesis, Department of Anthropology, University of Alabama, Tuscaloosa.

Barrier, Casey R., and Megan C Kassabaum

2018 Gathering in the Late Woodland: Plazas and Gathering Places as Everyday Space. In *Investigating the Ordinary: Everyday Matters in Southeast Archaeology*, edited by Philip J. Carr and Sarah E. Price, pp. 164-184. University Press of Florida, Gainesville.

Binford, Lewis R.

1971 Mortuary Practices: Their Study and Their Potential. In *Approaches to the Social Dimensions of Mortuary Practices*, edited by James A. Brown, pp. 6-29. Memoir 25. Society for American Archaeology, Salt Lake City.

Blitz, John H.

1993 Ancient Chiefdoms of the Tombigbee. The University of Alabama Press, Tuscaloosa.

2007 Test Excavations at Mound X, Moundville (1TU500), 2004. Report on file, Office of Archaeological Research, University of Alabama, Tuscaloosa.

2008 Moundville. The University of Alabama Press, Tuscaloosa.

2016 Mound X and Selective Forgetting at Early Moundville. In *Rethinking Moundville* and *Its Hinterland*, edited by Vincas P. Steponaitis and C. Margaret Scarry, pp. 54-73. University Press of Florida, Gainesville.

Boudreaux, Edmond A., III

2007 *The Archaeology of Town Creek*. The University of Alabama Press, Tuscaloosa.

2013 Community and Ritual within the Mississippian Center at Town Creek. *American Antiquity* 78(3):483-501.

Boudreaux, Edmond A., III, Maureen Meyers, and Jay K. Johnson (editors) 2020 *Contact, Colonialism, and Native Communities in the Southeastern United States*. University of Florida Press, Gainesville.

Brain, Jeffrey P.

1989 Winterville: Late Prehistoric Culture Contact in the Lower Mississippi Valley.

Mississippi Department of Archives and History Archaeological Report No. 23. Jackson.

Brain, Jeffrey P., and Philp Phillips

1996 Shell Gorgets: Styles of the Late Prehistoric and Protohistoric Southeast. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.

Braun, David P.

1979 Illinois Hopewell Burial Practices and Social Organization in a Reexamination of the Klunk-Gibson Mound Group. In *Hopewell Archaeology: The Chillicothe Conference*, edited by David S. Brose and N'omi Grreber, pp.66-79. Kent State University Press, Kent

Briggs, Rachel V.

2015 The Hominy Foodway of the Historic Native Eastern Woodlands. *Native South* 8:112-146.

2016 The Civil Cooking Pot: Hominy and the Mississippian Standard Jar in the Black Warrior Valley, Alabama. *American Antiquity* 81(2):316-332.

Brown, Ian W.

- 1981 A Study of Stone Box Graves in Eastern North America. *Tennessee Anthropologist* 1(1):1-26.
- 2011 Festivals, Indian. In American Centuries: The Ideas, Issues, and Values that Shaped U.S. History, edited by Karen Ordahl Kupperman, pp. 101-104. Facts on File, New York.
 2012 Bottle Creek Reflections: The Personal Side of Archaeology in the Mobile-Tensaw Delta. Borgo Publishing, Tuscaloosa.

Brown, James A.

- 1971 The Dimensions of Status in the Burials at Spiro. In *Approaches to the Social Dimensions of Mortuary Practices*, edited by James A. Brown, pp. 92-112. Memoir 25. Society for American Archaeology, Salt Lake City.
- 1981 The Search for Rank in Prehistoric Burials. In *The Archaeology of Death*, edited by Robert Chapman, Ian Kinnes, and Klavs Randsborg, pp. 25-37. Cambridge University Press, Cambridge.
- 2004 The Cahokian Expression: Creating Court and Cult. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South*, edited by Richard F. Townsend and Robert V. Sharp, pp. 105–121. Art Institute of Chicago and Yale University Press, New Haven, Connecticut.
- 2006 Where's the Power in Mound Building? An Eastern Woodlands Perspective. In *Leadership and Polity in Mississippian Society*, edited by Brian M. Butler and Paul D. Welch, pp. 197-213. Center for Archaeological Investigations, Southern Illinois University, Carbondale.
- 2007 On the Identity of the Birdman within Mississippian Period Art of Spiro. In *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*, edited by F. Kent Reilly III and James F. Garber, pp. 56–106. University of Texas Press, Austin.
- 2010 Cosmological Layouts of Secondary Burial as Political Instruments. In *Mississippian Mortuary Practices: Beyond Hierarchy and the Representationist Perspective*, edited by Lynne P. Sullivan and Robert C. Mainfort Jr., pp. 30–53. University of Florida Press, Gainesville.

Brown, James A., and David H. Dye

2007 Severed Heads and Sacred Scalplocks: Mississippian Iconographic Trophies. In *The Taking and Displaying of Human Body Parts as Trophies by Amerindians*, edited by Richard J. Chacon and David H. Dye, pp. 278–298. Springer, New York.

Buchanan, Meghan E.

2018 Patterns of Faunal Utilization and Sociopolitical Organization at the Mississippian Period Kincaid Mounds Site. *Midcontinental Journal of Archaeology* 43(2):151-179.

Buchanan, Meghan E., and B. Jacob Skousen (editors)

2015 Tracing the Relational: The Archaeology of Worlds, Sprits, and Temporalities. Foundations of Archaeological Inquiry. University of Utah Press, Salt Lake City.

Byers, Martin A.

2006 Cahokia: A World Renewal Cult Heterachy. University Press of Florida, Gainesville.

Caddell, Gloria M.

1983 Floral Remains from the Lubbub Creek Archaeological Locality. In *Prehistoric Agricultural Communities in West-Central Alabama: Excavations in the Lubbub Creek Archaeological Locality*, vol. 2, edited by Christopher S. Peebles, pp. 194-271. University of Michigan. Submitted to the U.S. Army Corps of Engineers, Mobile District. National Technical Information Services, Springfield, Virginia.

Carmody, Stephen B., and Casey R. Barrier (editors)

2019 Shaman, Priest, Practice, Belief: Materials of Ritual and Religion in Eastern North America. University of Alabama Press, Tuscaloosa.

Cole, Gloria G.

1983 Environmental Background. In *Prehistoric Agricultural Communities in West-Central Alabama: Excavations in the Lubbub Creek Archaeological Locality*, vol. 1, edited by Christopher S. Peebles, pp. 10-63. University of Michigan. Submitted to the U.S. Army Corps of Engineers, Mobile District. National Technical Information Services, Springfield, Va.

Cole, Gloria G., Mary C. Hill, and H. Blaine Ensor

1982 Appendix 3: Bioarchaeological Comparisons of the Late Miller III and Summerville I Phases in the Gainesville Lake Area. In *Archaeological Investigations in the Gainesville Lake Area of the Tennessee-Tombigbee Waterway*, vol. 5, edited by Ned Jenkins, pp. 187-258. Office of Archaeological Research, Report of Investigations 12. The University of Alabama.

Colvin, Matthew, and Victor D. Thompson

2018 A Procession of Faces: Considering the Materiality of Relational Ontologies in Southern Florida. In *Relational Ontologies of the Indigenous Americas: Alterity, Ontology, and Shifting Paradigms*, edited by Melissa R. Baltus and Sarah E. Baires, pp. 41-62. Lexington Books, Lanham, Maryland.

Dalan, Rinita A.

1997 The Construction of Mississippian Cahokia. In *Cahokia: Domination and Ideology in the Mississippian World*, edited by Timothy R. Pauketat and Thomas E. Emerson, pp. 89–102. University of Nebraska Press, Lincoln.

Davis, Jera R.

2014 On Common Ground: Memory, Identity, and the Plaza at Early Moundville. Unpublished Ph.D. dissertation, Department of Anthropology, The University of Alabama, Tuscaloosa.

2016 Crafting Moundville Palettes. In *Rethinking Moundville and Its Hinterland*, edited by Vincas P. Steponaitis and C. Margaret Scarry, pp. 234-254. University Press of Florida, Gainesville.

Deloria, Vine, Jr.

2003 God is Red: A Native View of Religion. Fulcrum Publishing, Golden, Colorado.

2006 *The World We Used to Live In: Remembering the Powers of the Medicine Men.* Fulcrum Publishing, Golden, Colorado.

Deter-Wolf, Aaron, Sunny Fleming, and Sarah Levithol Eckhardt 2018 Return to the Great Mound Group: 2016 Investigations at Mound Bottom State Archaeological Area. *Tennessee Archaeology* 9(2):103-116.

Dickel, David N.

2002 Analysis of Mortuary Patterns. In *Windover: Multidisciplinary Investigations of an Early Archaic Florida Cemetery*, edited by Glen Doran, pp. 73-96. University of Florida Press, Gainesville.

Dye, David H.

2007 Ritual, Medicine, and the War Trophy Iconographic Theme in the Mississippian Southeast. In *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*, edited by F. Kent Reilly, III and James F. Garber, pp. 152-173. University of Texas Press, Austin.

2009 War Paths, Peace Paths: An Archaeology of Cooperation and Conflict in Native Eastern North America. Altamira Press, Lanham, Maryland.

2017 Animal Pelt Caps and Mississippian Ritual Sodalities. *North American Archaeologist* 38(1):63-97.

2018 Ceramic Wares and Water Spirits: Identifying Religious Sodalities in the Lower Mississippi Valley. In *Ceramics of Ancient America: Multidisciplinary Approaches*, edited by Yumi Park Huntington, Dean E. Arnold, and Johanna Minich, pp. 29-61. University Press of Florida, Gainesville.

2020 Head Pots and Religious Sodalities in the Lower Mississippi Valley. In *Shaman*, *Priest, Practice, Belief: Materials of Ritual and Religion in Eastern North America*, edited by Stephen B. Carmody and Casey R. Barrier. University of Alabama Press, Tuscaloosa.

Edmonson, Munro S.

1958 Status Terminology and the Social Structure of North American Indians. University of Washington Press, Seattle.

Emerson, Thomas E.

1997 Cahokia and the Archaeology of Power. University of Alabama Press, Tuscaloosa.

2009 Remembering Cahokia's Forgotten Goddesses. Paper presented at the 66th Annual Southeastern Archaeological Conference, Mobile.

Emerson, Thomas E., and Timothy R. Pauketat

2002 Embodying Power and Resistance at Cahokia. In *The Dynamics of Power*, edited by Maria O'Donovan, pp. 105–125. Center for Archaeological Investigations, Occasional Paper No. 30. Southern Illinois University, Carbondale.

Emerson, Thomas E., Kristin M. Hedman, Eve A. Hargrave, Dawn E. Cobb, and Andrew R. Thompson

2016 Paradigms Lost: Reconfiguring Cahokia's Mound 72 Beaded Burial. *American Antiquity* 81(3):405-425.

Ethridge, Robbie

2003 Creek Country: The Creek Indians and Their World. The University of North Carolina Press, Chapel Hill.

2010 From Chicaza to Chickasaw: The European Invasion and the Transformation of the Mississippian World, 1540-1715. The University of North Carolina, Chapel Hill.

Ethridge, Robbie, and Sheri M. Shuck-Hall (editors)

2009 Mapping the Mississippian Shatter Zone: The Colonial Indian Slave Trade and Regional Instability in the American South. University of Nebraska Press, Lincoln.

Fairbanks, Charles

1946 The Macon Earth Lodge. *American Antiquity* 12(2):94-108.

Fisher-Carroll, Rita, and Robert C. Mainfort, Jr.

2000 Late Prehistoric Mortuary Behavior at Upper Nodena. *Southeastern Archaeology* 19(2):105-119.

Fritz, Gayle J.

1990 Multiple Pathways to Farming in Precontact Eastern North America. *Journal of World Prehistory* 4(4):387-435.

Fritz, Gayle J., and Tristram R. Kidder

1993 Recent Investigations into Prehistoric Agriculture in the Lower Mississippi River Valley. *Southeastern Archaeology* 12(1):1-14.

Ford, James

1936 Analysis of Indian Village Site Collections from Louisiana and Mississippi. Anthropological Study No. 2. Department of Conservation, Louisiana Geological Survey, New Orleans. Fowler, Melvin L., Jerome C. Rose, Barbara Vander Leest, and Steven R. Ahler 1999 *The Mound 72 Area: Dedicated and Sacred Space in Early Cahokia*. Illinois State Museum, Reports of Investigations, No. 54. Illinois State Museum, Springfield.

Funkhouser, J. Lynn

2014 Death Beyond the Great Wall: Corporate Kin Groups and Segregated Space at Moundville. Paper presented at the 71st annual meeting of the Southeastern Archaeological Conference, Greenville, South Carolina.

Gage, Matthew D.

2000 Ground-Penetrating Radar and Core Sampling at the Moundville Site. Unpublished Master's thesis, Department of Anthropology, The University of Alabama, Tuscaloosa.

Gage, Matthew D., and V. Stephen Jones

2001 Remote Sensing and Core Drilling of Five Mounds at the Moundville Site. Report submitted to the Alabama Historial Commission. Office of Archaeological Services, The University of Alabama Museums, Moundville.

Galloway, Patricia

1995 Choctaw Genesis 1500-1700. University of Nebraska Press, Lincoln.

2002 Colonial Period Transformations in the Mississippi Valley: Disintegration, Alliance, Confederation, Playoff. In *The Transformation of the Southeastern Indians 1540-1760*, edited by Robbie Ethridge and Charles Hudson, pp. 225-248. University Press of Mississippi, Oxford.

Gibson, Jon L.

2001 Ancient Mounds of Poverty Point: Place of Rings. University Press of Florida, Gainesville.

Giles, Bretton

2010 Sacrificing Complexity: Renewal through Ohio Hopewell Rituals. In *Ancient Complexities: New Perspectives in Precolumbian North America*, edited by Susan Alt, pp. 73-95. University of Utah Press, Salt Lake City.

Goldstein, Lynne G.

1976 Spatial Structure and Social Organization: Regional Manifestations of Mississippian Society. Unpublished Ph.D. dissertation, Department of Anthropology, Northwestern University, Evanston, Illinois.

1980 Mississippian Mortuary Practices: A Case Study of Two Cemeteries in the Lower Illinois Valley. Northwestern University Archaeological Program, Evanston.

1981 One-Dimensional Archaeology and Multi-Dimensional People: Spatial Organization and Mortuary Analysis. In *The Archaeology of Death*, edited by Robert Chapman, Ian Kinnes, and Klavs Randsborg, pp. 53-69. Cambridge University Press, Cambridge.

2010 Aztalan Mortuary Practices Revisited. In *Mississippian Mortuary Practices: Beyond Hierarchy and the Representationist Perspective*, edited by Lynne P. Sullivan and Robert C. Mainfort, Jr., pp. 90-112. University Press of Florida, Gainesville.

Goodenough, Ward H.

1965 Rethinking 'Status' and 'Role': Toward a General Model of the Cultural Organization of Social Relationships. In *The Relevance of Models for Social Anthropology*, edited by Michael Banton, pp. 1-24. A.S.A., Monographs No. 1. Travistock, London.

Grantham, Bill

2002 Creation Myths and Legends of the Creek Indians. University Press of Florida, Gainesville.

Greenlee, Robert F.

1942 Ceremonial Practices of the Modern Seminoles. *Tequesta* 1(2):25-33.

1944 Medicine and Curing Practices of the Modern Florida Seminoles. *American Anthropologist* 46(3):317-328.

Griffin, James B.

1985 Changing Concepts of the Prehistoric Mississippian Cultures of the Eastern United States. In *Alabama and the Borderlands, From Prehistory to Statehood*, edited by R. Reid Badger and Lawrence A. Clayton, pp. 40-63. The University of Alabama Press, Tuscaloosa.

Hagan, William T

1966 *Indian Police and Judges: Experiments in Acculturation and Control.* Yale University Press, New Haven.

Hall, Robert L.

1997 An Archaeology of the Soul: North American Indian Belief and Ritual. University of Illinois Press, Urbana.

2000 Sacrificed Foursomes and Green Corn Ceremonialism. In *Mounds, Modoc, and Mesoamerica: Papers in Honor of Melvin L. Fowler*, edited by Steven R. Ahler, pp. 245–253. Illinois State Museum, Scientific Papers, No. 28. Illinois State Museum, Springfield.

Hallowell, A. Irving

1926 Bear Ceremonialism in the Northern Hemisphere. *American Anthropologist* 28(1):1-175.

Harper, Ross Kenneth

1999 To Render the God of the Water Propitious: Hunting and Human-Animal Relations in the Northeast Woodlands. Unpublished Ph.D. dissertation, Department of Anthropology, University of Connecticut, Storrs.

Harvey, Graham

2017 Animism: Respecting the Living World. Hurst and Company, London.

Hatch, James W.

1976 Status in Death: Principles of Ranking in Dallas Culture Mortuary Remains. Unpublished Ph.D. dissertation, Department of Anthropology, Pennsylvania State University, University Park.

Hawkins, Benjamin

1848 A Sketch of Creek Country, in 1798 and 1799. Georgia Historical Society Collection No. 3, Savannah.

Henry, Edward R.

2017 Building Bundles, Building Memories: Processes of Remembering in Adena-Hopewell Societies of Eastern North America. *Journal of Archaeological Method and Theory* 24:188-228.

Heywood, Paolo

2012 Anthropology and What There Is: Reflections on 'Ontology'. *The Cambridge Journal of Anthropology* 30(1):143-151.

Hendon, Julia A.

2007 Memory, Materiality, and Practice: House Societies in Southeastern Mesoamerica. In *The Durable House: House Society Models in Archaeology*, edited by Robin A. Beck, Jr., pp. 292-316. Occasional Papers No. 35. Center for Archaeological Investigations. Southern Illinois University, Carbondale.

Hill, Erica

2013 Archaeology and Animal Persons: Toward a Prehistory of Human-Animal Relations. *Environment and Society: Advances in Research* 4(1):117-136.

Hill, Mary C.

1981 Analysis, Synthesis, and Interpretation of the Skeletal Material Excavated for the Gainesville Section of the Tennessee-Tombigbee Waterway. In *Archaeological Investigations in the Gainesville Lake Area of the Tennessee-Tombigbee Waterway*, vol. 4. Office of Archaeological Research, Report of Investigations 14. The University of Alabama.

Howard, James H.

1968 *The Southeastern Ceremonial Complex and Its Interpretation*. Missouri Archaeological Society, Memoirs 6. Columbia.

Howard, James H., and Willie Lena

1984 Oklahoma Seminoles: Medicines, Magic, and Religion. University of Oklahoma Press, Norman.

Hudson, Charles

1976 The Southeastern Indians. University of Tennessee Press, Knoxville.

Ingold, Tim

2000 *The Perception of the Environment: Essays on the Livelihood, Dwelling, and Skill.* Routledge, London.

Jackson, H. Edwin

2002 An Analysis of Faunal Remains from 1TU66, Tuscaloosa Country, Alabama. Report on File, Research Laboratories in Anthropology, University of North Carolina, Chapel Hill.

Jackson, H. Edwin, and Jessica A. Kowalski

2015 Report of Investigations for the Southern Yazoo Portion of The Mississippi Mound Trail Project, 2014 Season, Issaquena, Washington, Sharkey, and Warren Counties, Mississippi. Report submitted to the Mississippi Department of Archives and History, Jackson.

Jackson, H. Edwin, C. Margaret Scarry, and Susan L. Scott

2016 Domestic and Ritual Meals in the Moundville Chiefdom. In *Rethinking Moundville* and *Its Hinterland*, edited by Vincas P. Steponaitis and C. Margaret Scarry, pp. 187-233. University Press of Florida, Gainesville.

Jackson, H. Edwin, and Susan L. Scott

2003 Patterns of Elite Faunal Utilization at Moundville, Alabama. *American Antiquity* 68(3):552-572.

2010 Zooarchaeology of the Moundville Elite. In *Mound Excavations at Moundville: Architecture, Elites, and Social Order*, by Vernon James Knight, Jr., pp. 326-347. University of Alabama Press, Tuscaloosa.

Jackson, Jason Baird

2003 Yuchi Ceremonial Life: Performance, Meaning, and Tradition in a Contemporary American Indian Community. University of Nebraska Press, Lincoln.

Jacobi, Keith P.

2007 Disabling the Dead: Human Trophy Taking in the Prehistoric Southeast. In *The Taking and Displaying of Human Body Parts as Trophies by Amerindians*, edited by Richard J. Chacon and David H. Dye, pp. 299-338. Springer, New York.

Jenkins, Ned J., and H. Blaine Ensor

1981 The Gainesville Lake Area Excavations. In *Archaeological Investigations in the Gainesville Lake Area of the Tennessee-Tombigbee Waterway*, vol. 1. Office of

Archaeological Research, Report of Investigations No. 11. The University of Alabama. Jenkins, Ned J., and Richard A. Krause

1986 *The Tombigbee Watershed in Southeastern Prehistory*. University of Alabama Press, Tuscaloosa.

Johnson, Pamela A.

2005 The Occupational History of Mound "W" at Moundville, Alabama. Unpublished Master's thesis, Department of Anthropology, The University of Alabama, Tuscaloosa.

Kassabaum, Megan C.

2014 Feasting and Communal Ritual in the Lower Mississippi Valley, A.D. 700-1000. Unpublished Ph.D. dissertation, Department of Anthropology, The University of North Carolina, Chapel Hill.

2019 Early Platforms, Early Plazas: Exploring the Precursors to Mississippian Mound-and-Plaza Centers. *Journal of Archaeological Research* 27(2):187–247.

Kelly, John E.

1997 Stirling-Phase Sociopolitical Activity at East St. Louis and Cahokia. In *Cahokia: Domination and Ideology in the Mississippian World*, edited by Timothy R. Pauketat and Thomas E. Emerson, pp. 141-166. University of Nebraska Press, Lincoln.

Kelly, Lucretia S.

2001 A Case of Ritual Feasting at the Cahokia Site. In *Feasts: Archaeological and Ethnographic Perspectives*, edited by Michael Dietler and Brian Hayden, pp. 334–367. Smithsonian Institution Press, Washington, DC.

2010 A Bird's Eye View of Ritual at the Cahokia Site. In *Anthropological Approaches to Zooarchaeology: Complexity, Colonialism, and Animal Transformations*, edited by Douglas Campana, Pamela Crabtree, Susan D. deFrance, Justin Lev-Tov, and A. M. Choyke, pp. 1-11. Oxbow Books, Oxford.

Kelly, Lucretia S., and John E. Kelly

2007 Swans in the American Bottom during the Emergent Mississippian and Mississippian. *Illinois Archaeology* 15-16:112-141.

Kelly, Petrina S.

2013 Mound R1 and the Problem of the Minor Mounds at Moundville. Unpublished Master's thesis, Department of Anthropology, The University of Alabama, Tuscaloosa.

Kidder, Tristram R.

2002 Woodland Period Archaeology of the Lower Mississippi Valley. In *The Woodland Southeast*, edited by David G. Anderson and Robert C. Mainfort, pp. 66-90. University of Alabama Press, Tuscaloosa.

2004 Plazas as Architecture: An Example from the Raffman Site, Northeast Louisiana. *American Antiquity* 69(3):514-532.

King, Adam (editor)

2007 Southeastern Ceremonial Complex: Chronology, Content, Context. University of Alabama Press, Tuscaloosa.

King, Robert T.

1976 Clan Affiliation and Leadership among the Twentieth Century Florida Indians. *Florida Historical Quarterly* 55(2):138-152.

Knight, Vernon James Jr.

- 1981 Mississippian Ritual. Unpublished Ph.D. dissertation, Department of Anthropology, The University of Florida, Gainesville.
- 1986 The Institutional Organization of Mississippian Religion. *American Antiquity* 51(4):675-687.
- 1992 Field Notes of Dr. Walter B. Jones on Moundville Site Excavations, January 21-March 26, 1930. Report on file, Office of Archaeological Research, University of Alabama, Tuscaloosa.
- 1997 Some Developmental Parallels between Cahokia and Moundville. In *Cahokia: Domination and Ideology in the Mississippian World*, edited by Timothy R. Pauketat and Thomas E. Emerson, pp. 229-247. University of Nebraska Press, Lincoln.
- 2001 Feasting and the Emergence of Platform Mound Ceremonialism in Eastern North America. In *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power*, edited by Michael Dietler and Brian Hayden, pp. 311-333. University of Alabama Press, Tuscaloosa.
- 2006a Farewell to the Southeastern Ceremonial Complex. *Southeastern Archaeology* 25:1-25.
- 2006b Symbolism of Mississippian Mounds. In *Powhatan's Mantle: Indians in the Colonial Southeast*, edited by Gregory A. Waselkov, Peter H. Wood, and Tom Hatley, pp. 421-435. University of Nebraska Press, Lincoln.
- 2009 Discovery and Excavation of the Moundville Earth Lodge. *Bulletin of the Alabama Museum of Natural History* 27:20-28.
- 2010 Mound Excavations at Moundville: Architecture, Elites, and Social Order. University of Alabama Press, Tuscaloosa.
- 2016 Social Archaeology of Monumental Spaces at Moundville. In *Rethinking Moundville and Its Hinterland*, edited by Vincas P. Steponaitis and C. Margaret

Scarry, pp. 23-43. University Press of Florida, Gainesville.

2021 Timeline: Early Archaeology at the Alabama Museum of Natural History. Report on file, Office of Archaeological Research, University of Alabama, Tuscaloosa.

Knight, Vernon James, Jr., and Judith A. Franke

2007 Identification of a Moth/Butterfly Supernatural in Mississippian Art. In *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*, edited by F. Kent Reilly, III and James F. Garber, pp. 136-151. University of Texas Press, Austin.

Knight, Vernon James, Jr., and Vincas P. Steponaitis (editors)

1998 *Archaeology of the Moundville Chiefdom*. Smithsonian Institution Press, Washington, DC.

Knight, Vernon James, Jr., and Vincas P. Steponaitis

2011 A Redefinition of the Hemphill Style in Mississippian Art. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by George E. Lankford, F. Kent Reilly, III, and James F. Garber, pp. 201-239. University of Texas Press, Austin.

Koziol, Kathryn

2010 Violence, Symbols, and the Archaeological Record: A Case Study of Cahokia's Mound 72. Unpublished Ph.D. dissertation, Department of Anthropology, University of Arkansas, Fayetteville.

Lacquement, Cameron H.

2007 Typology, Chronology, and Technological Changes of Mississippian Domestic Architecture in West-Central Alabama. In *Architectural Variability in the Southeast*, edited by Cameron H. Lacquement, pp. 49-72. The University of Alabama Press, Tuscaloosa.

2009 Landscape Modification at Moundville: An Energetics Assessment of a Mississippian Polity. Unpublished Ph.D. dissertation, Department of Anthropology, University of Alabama, Tuscaloosa.

2020 Physical Modifications to Late Prehistoric Plazas in the Southeast U.S. *Journal of Anthropological Archaeology* 58:1-10.

LaDu, Daniel, and J. Lynn Funkhouser

2019 Coles Creek Fauna Procurement Strategies: Subsistence Diversity Among Late Prehistoric Hunter-Gather-Horticulturalists in the Lower Mississippi Valley. *Southeastern Archaeology* 38:54-73.

Lame Deer, John F., and Richard Erdoes

2009 Lame Deer, Seeker of Visions. Simon & Schuster Paperbacks, New York.

Lapham, Heather A., and Gregory A. Waselkov (editors)

2020 Bears: Archaeological and Ethnohistorical Perspectives in Native Eastern North America. University of Florida Press, Gainesville.

Lankford, George E.

2007a Some Cosmological Motifs in the Southeastern Ceremonial Complex. In *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*, edited by F. Kent Reilly, III and James F. Garber, pp. 8-38. University of Texas Press, Austin.

2007b The "Path of Souls": Some Death Imagery in the Southeastern Ceremonial Complex. In *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*, edited by F. Kent Reilly, III and James F. Garber, pp. 174-212. University of Texas Press, Austin.

Larson, Lewis H.

1971 Archaeological Implications of Social Stratification at the Etowah Site, Georgia. In *Approaches to the Social Dimensions of Mortuary Practices*, edited by James A. Brown, pp. 58-67. Memoir 25. Society for American Archaeology, Salt Lake City.

Littleton, Judith, and Harry Allen

2007 Hunter–Gatherer Burials and the Creation of Persistent Places in Southeastern Australia. *Journal of Anthropological Archaeology* 26:283–298.

Linton, Ralph

1936 The Study of Man: An Introduction. Appleton-Century-Crofts, New York.

Mainfort, Robert C., Jr., J. Matthew Compton, and Kathleen H. Cande 2007 1973 Excavations at the Upper Nodena Site. *Southeastern Archaeology* 26:108-123.

Mainfort, Robert C., Jr., and Rita Fisher-Carroll

2010 Temporal Changes in Mortuary Behavior: Evidence from the Middle and Upper Nodena Sites, Arkansas. In *Mississippian Mortuary Practices: Beyond Hierarchy and the Representationist Perspective*, edited by Lynne E. Sullivan and Robert C. Mainfort, Jr., pp. 128-144. University Press of Florida, Gainesville.

Mather, David

2020 "Dear Honored Guest": Bear Ceremonialism in Minnesota. In *Bears: Archaeological* and Ethnohistorical Perspectives in Native Eastern North America, edited by Heather A. Lapham and Gregory A. Waselkov, pp. 48-70. University Press of Florida, Gainesville.

Marcoux, Jon B.

2000 Display Goods Production and Circulation in the Moundville Chiefdom: A Mississippian Dilemma. Unpublished Master's Thesis, Department of Anthropology, University of Alabama, Tuscaloosa.

2010 The Materialization of Status and Social Structure at Koger's Island Cemetery,

Alabama. In *Mississippian Mortuary Practices: Beyond Hierarchy and the Representationist Perspective*, edited by L. P. Sullivan and R. C. Mainfort Jr., pp.145-173. University Press of Florida, Gainsville.

Maxham, Mintey D.

2000 Rural Communities in the Black Warrior Valley, Alabama: The Role of Commoners in the Creation of the Moundville I Landscape. *American Antiquity* 65(2):337-354.

2004 Native Constructions of Landscapes in the Black Warrior Valley, Alabama, AD 1020-1520. Unpublished Ph.D. dissertation, Department of Anthropology, The University of North Carolina, Chapel Hill.

McKenzie, Douglas H.

1964 The Moundville Phase and its Position in Southeastern Prehistory. Unpublished Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge.

McWilliams, Richebourg G. (editor)

1981 Iberville's Gulf Journals. University of Alabama Press, Tuscaloosa.

Meltzer, David J.

2009 First Peoples in a New World: Colonizing Ice Age America. University of California Press, Berkley.

Milner, George R.

1984 Social and Temporal Implications of Variation among American Bottom Cemeteries. *American Antiquity* 49:468-488.

Mooney, James

1891 Sacred Formulas of the Cherokee Indians. Seventh Annual Report of the Bureau of Ethnology, edited by John Wesley Powell, pp. 301-398. Government Printing Office, Washington, DC.

1902 *Myths of the Cherokee*. Nineteenth Annual Report of the Bureau of American Ethnology, edited by John Wesley Powell. Government Printing Office, Washington, DC.

Moore, Clarence B.

1905 Certain Aboriginal Remains of the Black Warrior River. *Journal of the Academy of Natural Sciences of Philadelphia* 13(2):125-244.

1907 Moundville Revisited. *Journal of the Academy of Natural Sciences of Philadelphia* 13(3):337-405.

1908 Certain Mounds of Arkansas and Mississippi. *Journal of The Academy of Natural Sciences of Philadelphia* 13:481-600.

Moore, Michael C. and Kevin E. Smith

2009 Archaeological Expeditions of the Peabody Museum in Middle Tennessee, 1877-1884. Tennessee Department of Environment and Conservation, Division of Archaeology Research Series No. 16, Nashville.

Morse, Dan F.

1990 The Nodena Phase. In *Towns and Temples Along the Mississippi*, edited by David H. Dye and Cheryl Anne Cox, pp. 69-97. University of Alabama Press, Tuscaloosa.

Nelson, Ted C.

2014 Mortuary Practices, Social Status, and Wealth at the Rhodes Site in Moundville, Alabama. Unpublished Masters thesis, Department of Anthropology, University of Alabama, Tuscaloosa.

O'Brien, Greg

2002 Choctaws in a Revolutionary Age 1750-1830. University of Nebrasks Press, Lincoln.

O'Brien, Michael J., and Carl Kuttruff

2012 The 1974–75 Excavations At Mound Bottom, a Palisaded Mississippian Center in Cheatham County, Tennessee. *Southeastern Archaeology* 31(1):70–86.

Pearson, Mike Parker

1999 *The Archaeology of Death and Burial*. Texas A&M University Press, College Station.

Pauketat, Timothy R.

2004 Ancient Cahokia and the Mississippians. Cambridge University Press, Cambridge.

- 2010 The Missing Persons in Mississippian Mortuaries. In *Mississippian Mortuary Practices: Beyond Hierarchy and the Representationist Perspective*, edited by L.P. Sullivan and R. C. Mainfort Jr., pp.114-29. The University Press of Florida, Gainsville.
- 2013 An Archaeology of the Cosmos: Rethinking Agency and Religion in Ancient America. Routledge, New York.

Peebles, Christopher S.

1971 Moundville and Surrounding Sites: Some Structural Considerations of Mortuary Practices II. In *Approaches to the Social Dimensions of Mortuary Practices*, edited by James A. Brown, pp. 68-91. Society for American Archaeology, Memoir 25. Washington, DC.

- 1973 Excavations at Moundville: 1905–1951. Manuscript on file, Alabama Office of Archaeological Research, Moundville, Alabama.
- 1974 Moundville: The Organization of a Prehistoric Community and Culture. Unpublished Ph.D. dissertation, University of California, Santa Barbara.

- 1981 Archaeological Research at Moundville: 1840-1980. *Southeastern Archaeological Conference Bulletin* 24:77-81.
- 1983 Moundville: Late Prehistoric Sociopolitical Organization in the Southeastern United States. In *The Development of Political Organization in Native North America*, edited by Elisabeth Tooker, pp. 183-198. American Ethnological Society, Washington, DC.
- Peebles, Christopher S., and Susan M. Kus 1977 Some Archaeological Correlates of Ranked Societies. *American Antiquity* 42:421-448.
- Peebles, Christopher S., Margaret Schoeninger, Vincas P. Steponaitis, and C. Margaret Scarry 1971 Moundville and Surrounding Sites: Some Structural Considerations of Mortuary Practices II. In *Approaches to the Social Dimensions of Mortuary Practices*, edited by James A. Brown, pp. 68-91. Memoir 25. Society for American Archaeology, Salt Lake City.
 - 1981 A Precious Bequest: Contemporary Research with the WPA-CCC Collections from Moundville, Alabama. In *The Research Potential of Anthropological Museum Collections*, edited by Anne-Marie Cantwell, James B. Griffin, and Nan A. Rothschild, pp. 433-447. Annals of the New York Academy of Sciences No. 376. New York.

Peres, Tanya M., and Aaron Deter-Wolf

2016 Reinterpreting the Use of Garfish (Family: Lepisosteidae) in the Archaeological Record of the American Southeast. In *People with Animals: Perspectives and Studies in Ethnozooarchaeology*, edited by Lee Broderick, pp. 103-114. Oxbow Books, Oxford.

Phillips, Erin E.

- 2006 Social Status as Seen Through the Distribution of Paint Palettes, Stone Pendants, and Copper Gorgets in Moundville Burials. Unpublished Master's thesis, Department of Anthropology, The University of Alabama, Tuscaloosa.
- 2012 Social Contexts of Production and Use of Pottery Engraved in the Hemphill Style at Moundville. Unpublished Ph.D. dissertation, Department of Anthropology, The University of Alabama, Tuscaloosa.
- 2016 The Distribution of Hemphill-Style Artifacts at Moundville. In *Rethinking Moundville and Its Hinterland*, edited by Vincas P. Steponaitis and C. Margaret Scarry, pp. 99-120. University Press of Florida, Gainesville.

Phillips, Philip, James A. Ford, and James B. Griffin

1951 Archaeological Survey in the Lower Mississippi Alluvial Valley, 1940-1947. Papers of the Peabody Museum of Archaeology and Ethnology Vol. 25. Harvard University, Cambridge.

Porth, Erik S.

- 2011 Raised Ground, Razed Structure: Ceramic Chronology, Occupation, and Chiefly Authority on Mound P at Moundville. Unpublished Master's thesis, Department of Anthropology, University of Alabama, Tuscaloosa.
- 2017 Reconsidering Institutional Collapse and Social Transformation at Moundville During the Fifteenth Century. Unpublished Ph.D. dissertation, Department of Anthropology, The University of Alabama, Tuscaloosa.
- Porth, Erik S., J. Lynn Funkhouser, Susan Scott, and John H. Blitz 2017 Reconsidering Mississippian Communal Food Consumption: A Case for Feasting at Moundville. Paper presented at the 82nd Annual Meeting of the Society for American Archaeology, Vancouver, B.C., March 2017.

Powell, Mary Lucas

- 1988 Status and Health in Prehistory: A Case Study of the Moundville Chiefdom. Smithsonian Institution Press, Washington, DC.
- 1989 The Nodena People. In *Nodena, an Account of 90 Years of Archeological Investigation in Southeast Mississippi County, Arkansas*, edited by Dan F. Morse, pp. 65-95, 123-150. Research Series No. 30, Arkansas Archeological Survey, Fayetteville.
- 1991 Ranked Status and Health in the Mississippian Cheifdom at Moundville. In *What Mean These Bones: Studies in Southeastern Bioarchaeology*, edited by Mary Lucas Powell, Patricia S. Bridges, and Ann Marie Wagner Mires, pp. 22-51. University of Alabama Press, Tuscaloosa.

Richardson, Sarah S.

2013 Sex Itself: The Search for Male and Female in the Human Genome. University of Chicago Press, Chicago.

Rodning, Christopher

- 2009 Mounds, Myths, and Cherokee Townhouses in Southwestern North Carolina. *American Antiquity* 74:627–663.
- 2010 Place, Landscape, and Environment: Anthropological Archaeology in 2009. *American Anthropologist* 112:180–190.

Roksandic, Mirjana, and Stephanie D. Armstrong

2011 Using the Life History Model to Set the Stage(s) of Growth and Senescence in Bioarchaeology and Paleodemography. *American Journal of Physical Anthropology* 145(3):337-347.

Romain, William F.

2018 Ancient Skywatchers of the Eastern Woodlands. In *Archaeology and Ancient Religion in the American Mid-Continent*, edited by Brad Koldehoff and Timothy Pauketat, pp. 304-341. University of Alabama Press, Tuscaloosa.

Rose, Jerome C.

1999 Mortuary Data and Analysis. In *The Mound 72 Area: Dedicated and Sacred Space in Early Cahokia*, edited by Melvin L. Fowler, Jerome C. Rose, Barbara Vander Leest, and Steven R. Ahler, pp. 63–82. Illinois State Museum, Reports of Investigations, No. 54. Illinois State Museum, Springfield.

Ryba, Elizabeth A.

1997 Summit Architecture of Mound E at Moundville. Unpublished Master's thesis, Department of Anthropology, The University of Alabama, Tuscaloosa.

Saxe, Arthur A.

1970 Social Dimensions of Mortuary Practices. Unpublished Ph. D. dissertation, University of Michigan, Ann Arbor.

Scarry, C. Margaret

1981 The University of Michigan Moundville Excavations: 1978-1979. *Southeastern Archaeological Conference Bulletin* 24:87-90.

- 1986 Change in Plant Procurement and Production during the Emergence of the Moundville Chiefdom. Unpublished Ph.D. dissertation, University of Michigan, Ann Arbor.
- 1993 Variability in Mississippian Crop Production Strategies. In *Foraging and Farming in the Eastern Woodlands*, edited by C. Margaret Scarry, pp. 157-181. University Press of Florida, Gainesville.
- 1995 Excavations on the Northwest Riverbank at Moundville: Investigations of a Moundville I Residential Area. Report of Investigations No. 72. Office of Archaeological Services, The University of Alabama Museums, Moundville.
- 2003 The Use of Plants and Mound-Related Activities at Bottle Creek and Moundville. In *Bottle Creek: A Pensacola Culture Site in South Alabama*, edited by Ian W. Brown, pp. 114-129. University of Alabama Press, Tuscaloosa.

Scarry, C. Margaret, and John F. Scarry

1995 Artifact Analysis. In *Excavations on the Northwest Riverbank at Moundville: Investigations of a Moundville I Residential Area*, by C. Margaret Scarry, pp. 17-90. Report of Investigations No. 72. Office of Archaeological Services, The University of Alabama Museums, Moundville.

Scarry, C. Margaret, and Vincas P. Steponaitis

2016 Moundville as a Ceremonial Ground. In *Rethinking Moundville and Its Hinterland*, edited by Vincas P. Steponaitis and C. Margaret Scarry, pp. 255-268. University Press of Florida, Gainesville.

Schlanger, Sarah H.

1992 Recognizing Persistent Places in Anasazi. In *Space, Time, and Archaeological Landscapes*, edited by Jacqueline Rossignol and LuAnn Wandsnider, pp. 91–113. Plenum Press, New York.

Schroeder, Marjorie B., and Mark R. Schurr

1998 Human Subsistence at Moundville: The Stable-Isotope Data. In *Archaeology of the Moundville Chiefdom*, edited by Vernon J. Knight Jr. and Vincas P. Steponaitis, pp. 120-132. Smithsonian Institution Press, Washington, DC.

Scott, Susan L.

1982 Yarborough Site Faunal Remains. In *Archaeological Investigations at the Yarborough Site* (22CL814), Clay County Mississippi, edited by Carlos Solis and Richard Walling, pp. 140-152. Report of Investigations No. 30. Office of Archaeological Research, University of Alabama, Tuscaloosa.

1983 Analysis, Synthesis and Interpretation of Faunal Remains from the Lubbub Creek Archaeological Locality. In *Prehistoric Agricultural Communities in West Central Alabama*, by Christopher S. Peebles, pp. 272-390. U.S. Army Corps of Engineers, Mobile District. National Technical Information Services, Springfield, Virginia.

Seeman, Mark F.

1979 Feasting with the Dead: Ohio Hopewell Charnel House Ritual as a Context for Redistribution. In *Hopewell Archaeology: The Chillicothe Conference*, edited by D. Brose and N. Greber, pp. 39-46. Kent State University Press, Kent, Ohio.

Sharp, Robert V., Vernon J. Knight Jr., and George E. Lankford

2011 Woman in the Patterned Shawl: Female Effigy Vessels and Figurines from the Middle Cumberland River Basin. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by George E. Lankford, F. Kent Reilly, III, and James F. Garber, pp. 177–198. University of Texas Press, Austin.

Simon, Mary L.

2014 Re-evaluating the Introduction of Maize into the American Bottom and Western Illinois. In *Reassessing the Timing, Rate, and Adoption Trajectories of Domesticate Use in the Midwest and Great Lakes*, edited by Maria E. Raviele and William A. Lovis, pp. 97-134. Midcontinental Journal of Archaeology Occasional Papers No. 1, Illinois State Archaeological Survey, Urbana.

Skinner, Alanson

1914 Bear Customs of the Cree and Other Algonkin Indians of Northern Ontario. *Papers and Records* 12:203-209. Ontario Historical Society, Ottawa, Ontario.

Smallwood, Ashley M., Thomas A. Jennings, and Charlotte D. Pevny

2018 Expressions of Ritual in the Paleoindian Record of the Eastern Woodlands: Exploring the Uniqueness of the Dalton Cemetery at Sloan, Arkansas. *Journal of Anthropological Archaeology* 49:184-198.

Smith, Bruce D.

1978 Variation in Mississippian Settlement Patterns. In *Mississippian Settlement Patterns*, edited by Bruce D. Smith, pp. 479-503. Academic Press, New York.

Smith, Buckingham

1968 Narratives of De Soto in the Conquest of Florida. Palmetto Books, Charleston.

Smith, Kevin E.

1992 The Middle Cumberland Region: Mississippian Archaeology in North Central Tennessee. Unpublished Ph.D. dissertation, Vanderbilt University, Nashville.

Smith, Kevin E., and James V. Miller

2009 Speaking with the Ancestors: Mississippian Stone Statuary of the Tennessee-Cumberland Region. University of Alabama Press, Tuscaloosa.

Snow, Alice M., and Susan E. Stans

2001 Healing Plants: Medicine of the Florida Seminole Indians. University Press of Florida, Gainesville.

Speck, Frank G.

1909 *Ethnology of the Yuchi Indians*. University of Philadelphia Museum, Anthropology Papers No. 1. Philadelphia, Pennsylvania.

Steponaitis, Vincas P.

1983a Ceramics, Chronology, and Community Patterns: An Archaeological Study at Moundville. Academic Press, New York.

1983b The Smithsonian Institution's Investigations at Moundville in 1869 and 1882. *Midcontinental Journal of Archaeology* 8:127-160.

1989 Chronological Position of Moundville Gravelots. Report on file, Office of Archaeological Research, University of Alabama, Tuscaloosa.

2016 Moundville Palettes – Prestige Goods or Inalienable Possessions? In *Rethinking Moundville and Its Hinterland*, edited by Vincas P. Steponaitis and C. Margaret Scarry, pp.121-133. University Press of Florida, Gainesville.

- Steponaitis, Vincas P., and Vernon James Knight, Jr.
 - 2004 Moundville Art in Historical and Social Context. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and Southeast*, edited by Richard F. Townsend and Robert V. Sharp, pp. 166-181. Art Institute of Chicago and Yale University Press, New Haven.
- Steponaitis, Vincas P., and C. Margaret Scarry (editors) 2016 *Rethinking Moundville and Its Hinterland*. University Press of Florida, Gainesville.
- Steponaitis, Vincas P., Samuel E. Swanson, George Wheeler, and Penelope B. Drooker 2011 The Provenance and Use of Etowah Palettes. *American Antiquity* 76:81-106.

Sturtevant, William C.

- 1954 The Mikasuki Seminole: Medical Beliefs and Practices. Unpublished Ph.D. dissertation, Department of Anthropology, Yale University, New Haven.
- 1981a Why Southeastern Indians Slaughtered Deer. In *Indians, Animals, and the Fur Trade:* A Critique of Keepers of the Game, edited by Shepard Krech, III, pp. 155-176. The University of Georgia Press, Athens.
- 1981b Animals and Disease in Indian Belief. In *Indians, Animals, and the Fur Trade: A Critique of Keepers of the Game*, edited by Shepard Krech, III, pp. 177-188. The University of Georgia Press, Athens.
- Sullivan, Lynne P., and Robert Mainfort, Jr. (editors)
 2010 Mississippian Mortuary Practices: Beyond Hierarchy and the
 Representationist Perspective. University Press of Florida, Gainesville.

Swanton, John R.

- 1911 Indian Tribes of the Lower Mississippi Valley and Adjacent Coast of the Gulf of Mexico. Bureau of American Ethnology Bulletin No. 43. Smithsonian Institution, Washington DC.
- 1928 Religious Beliefs and Medical Practices of the Creek Indians. *Forty-second Annual Report of the Bureau of American Ethnology*, edited by J. Walter Fewkes, pp. 473-672. Smithsonian Institution, Washington DC.
- 1931 Source Material for the Social and Ceremonial Life of the Choctaw Indians. Bureau of American Ethnology Bulletin No. 103. Smithsonian Institution, Washington DC.
- 1946 *The Indians of the Southeastern United States*. Bureau of American Ethnology Bulletin No. 137. Smithsonian Institution, Washington DC.
- 2006 Chickasaw Society and Religion. University of Nebraska Press, Lincoln.

Thompson, Claire E.

2011 Ritual and Power: Examining the Economy of Moundville's Residential Population. Unpublished Ph.D. dissertation, Department of Anthropology, The University of Alabama, Tuscaloosa.

Thompson, Andrew R., Kristin M. Hedman, and Philip A. Slater

2015 New Dental and Isotope Evidence of Biological Distance and Place of Origin for Mass Burial Groups at Cahokia's Mound 72. *American Journal of Physical Anthropology* 158:341–357.

Thompson, Victor D., and Thomas J. Pluckhahn

2012 Monumentalization and Ritual Landscapes at Fort Center in the Lake Okeechobee Basin of South Florida. *Journal of Anthropological Archaeology* 31(1):49-65.

Toth, Edwin A.

1988 Early Marksville Phases in the Lower Mississippi Valley: An Archaeological Study of Culture Contact Dynamics. Mississippi Department of Archives and History Report No. 21. Jackson.

Usner, Daniel H.

1992 Indians, Settlers, and Slaves in a Frontier Exchange Economy: The Lower Mississippi River Valley Before 1783. The University of North Carolina Press, Chapel Hill.

VanDerwarker, Amber M., Dana N. Bardolph, and C. Margaret Scarry 2017 Maize and Mississippian Beginnings. In *Mississippian Beginnings*, edited by Gregory D. Wilson, pp. 29-70. University of Florida Press, Gainesville.

Van Doren, Mark (editor)

1928 Travels of William Bartram. Dover Publications, New York.

Vogel, Joseph O., and Jean Allan

1985 Mississippian Fortifications at Moundville. *Archaeology* 38(5):62-63.

Walthall, John A., and Steve B. Wimberly

1978 Mississippian Chronology in the Black Warrior Valley: Radiocarbon Dates from Bessemer and Moundville. *Journal of Alabama Archaeology* 24:118-124.

Waring, Antonio J., Jr.

1968 The Southern Cult and Muskhogean Ceremonial: General Considerations. In *The Waring Papers*, edited by Stephen Williams, pp. 30-69. Papers of the Peabody Museum of Archaeology and Ethnology 58. Harvard University, Cambridge.

Waring, Antonio J., Jr., and Preston Holder

1945 A Prehistoric Ceremonial Complex in the Southeastern United States. *American Anthropologist* 47:1-34.

Waselkov, Gregory

2020 Ethnohistorical and Ethnographic Sources on Bear-Human Relationships in Native Eastern North America. In *Bears: Archaeological and Ethnohistorical Perspectives in Native Eastern North America*, edited by Heather A. Lapham and Gregory A. Waselkov, pp. 16-47. University of Florida Press, Gainesville.

Waselkov, Gregory A., and J. Lynn Funkhouser

2020 Bear-Human Relationships in Native Eastern North America: An Overview of Archaeological and Ethnohistorical Evidence. In *Bears: Archaeological and Ethnohistorical Perspectives in Native Eastern North America*, edited by Heather A. Lapham and Gregory A. Waselkov, pp. 271-310. University of Florida Press, Gainesville.

Waselkov, Gregory A., and Marvin T. Smith (editors)

2017 Forging Southeastern Identities: Social Archaeology, Ethnohistory, and Folklore of the Mississippian to Early Historic Southeast. University of Alabama Press, Tuscaloosa.

Washburn, Cephas

1869 Reminiscences of the Indians. Presbyterian Committee of Publication, Richmond.

Watts, Rebecca

2011 Nonspecific Indicators of Stress and Their Association with Age at Death in Medieval York: Using Stature and Vertebral Neural Canal Size to Examine the Effect of Stress Occurring During Different Periods of Development. *International Journal of Osteoarchaeology* 21:568-576.

2013 Childhood Development and Adult Longevity in an Archaeological Population from Barton-upon-Humber, Lincolnshire, England. *International Journal of Paleopathology* 3:95-104.

Webb William S., and David L. DeJarnette

1942 An Archaeological Survey of the Pickwick Basin in the Adjacent Portions of the States of Alabama, Mississippi, and Tennessee. Bureau of American Ethnology Bulletin 129. Smithsonian Institution, Washington, DC.

Whitney, Cynthia, Vincas P. Steponaitis, and John W. Rogers

2002 A Petrographic Study of Moundville Palettes. *Southeastern Archaeology* 21(2):227-234.

Williams, Stephen, and Jeffrey P. Brain

1983 Excavations at Lake George, Yazoo County, Mississippi, 1958-1960. Papers of the Peabody Museum of Archaeology and Ethnology 74. Harvard University, Cambridge.

Williamson, Matthew A.

2018 Warriors, Identity, and Gender: Status and Health at the King Site. In *Bioarchaeology* of the Southeast: Approaches to Bridging Health and Identity in the Past, edited by Shannon C. Hodge and Kristrina A. Shuler, pp. 115-126. The University of Alabama Press, Tuscaloosa.

Wilson, Gregory D.

- 2001 Crafting Control and the Control of Crafts: Rethinking the Moundville Greenstone Industry. *Southeastern Archaeology* 20(2):118-128.
- 2005 Between Plaza and Palisade: Household and Community Organization at Early Moundville. Unpublished Ph.D. dissertation, Department of Anthropology, University of North Carolina, Chapel Hill.
- 2008 *The Archaeology of Everyday Life at Moundville*. University of Alabama Press, Tuscaloosa.
- 2010 Community, Identity, and Social Memory at Moundville. *American Antiquity* 75(1):3-18.
- 2016 Long-term Trends in the Making and Materialization of Social Groups at Moundville. In *Rethinking Moundville and Its Hinterland*, edited by Vincas P. Steponaitis and C. Margaret Scarry, pp. 44-53. University Press of Florida, Gainesville.

Wilson, Gregory D., and R. P. Stephen Davis, Jr.

2003 Mapping the Moundville Community: A GIS Analysis of the Moundville Roadway. Poster presented at the 60th Annual Meeting of the Southeastern Archaeological Conference, Charlotte.

Wilson, Gregory D., Vincas P. Steponaitis, and Keith P. Jacobi

2010 Social and Spatial Dimensions of Moundville Mortuary Practices. In *Mississippian Mortuary Practices: Beyond Hierarchy and the Representationist*, edited by L.P. Sullivan and R.C. Mainfort, Jr., pp. 14-29. University Press of Florida, Gainesville.

Woodrick, Anne

1981 An Analysis of the Faunal Remains from the Gainesville Lake Area. In *Biocultural Studies in the Gainesville Lake Area*, by Gloria M. Caddell, Anne Woodrick, and Mary C. Hill, pp. 91-168. Archaeological Investigations in the Gainesville Lake Area of the Tennessee-Tombigbee Waterway, Vol. 4. Report of Investigations 14. University of Alabama, Office of Archaeological Research.

Worth, John E.

2017 What's in a Phase? Disentangling Communities of Practice from Communities of Identity in Southeastern North America. In *Forging Southeastern Identities: Social Archaeology, Ethnohistory, and Folklore of the Mississippian to Early Historic Southeast*, edited by Gregory A. Waselkov and Marvin T. Smith, pp. 117-156. University of Alabama Press, Tuscaloosa.