

A REEVALUATION OF THE WPA EXCAVATION OF THE ROBBINS MOUND IN BOONE COUNTY, KENTUCKY

George R. Milner
Department of Anthropology
The Pennsylvania State University
University Park, Pennsylvania

By
and
Richard W. Jefferies
Department of Anthropology
University of Kentucky
Lexington, Kentucky

ABSTRACT

New Deal era excavation records and collections from the 1939 to 1941 investigations of the large Robbins Mound (15Be3) in Boone County, Kentucky, were reexamined to acquire new information on Adena mound construction methods, mortuary practices, and paleodemography. Computer-generated graphics proved to be a particularly effective means of investigating changes over time in the configuration of the cemetery, specifically the location of the mound's apex and its overall shape. This study of WPA era field notes and University of Kentucky Museum of Anthropology specimens demonstrates the continuing research significance of existing museum collections.

INTRODUCTION

Adena sites have long excited the imagination of professional and amateur archaeologists alike. This interest can, in part, be attributed to the presence of geometric earthworks that some have considered mysterious, calling them "sacred circles;" the existence of many large, structurally complex, conical burial mounds; and an impressive array of exotic materials often associated with graves. A focus on Adena mounds was assured once it was recognized that they were related to other elaborate mortuary manifestations elsewhere in the midcontinent, specifically the Hopewell sites of Ohio.

Work conducted since the definition of Adena in 1932 (Greenman 1932) has resulted in the recognition of a core area centered in the Ohio River Valley and including portions of Kentucky, Ohio, Indiana, and West Virginia. University of Kentucky archaeologists in the 1930s and 1940s, particularly William S. Webb, were instrumental in the early definition of Adena, especially in terms of material culture (Webb and Snow 1945). The extensive survey and excavation program supported largely by Franklin D. Roosevelt's Works Progress Administration (WPA; later the Work Projects Administration) permitted the excavation of many large Adena mounds in Kentucky, particularly in the Bluegrass and along the Ohio River, and the development of extraordinary collections of artifacts and extensive files of frequently detailed field records. Adena mounds represented one of four primary research foci for the New Deal archaeologists, the others being Archaic shell mounds and Fort Ancient and Mississippian habitation sites (Milner and Smith 1986:14-15).

Although considerable attention was devoted to the study of Kentucky Adena sites from the late 1930s through the early 1950s, there have been few recent contributions to this subject with the notable exception of work by R. Berle Clay (1980, 1983, 1984a, 1984b, 1985, 1986). This lack of attention is surprising, given the presumed importance of Adena societies in the evolution of eastern North American cultures, since they represent an early example of elaborate funerary practices.

Additional research is needed in Kentucky and elsewhere to resolve questions pertaining to the development of Adena, the organizational characteristics of this prehistoric culture, and the nature of its settlement and subsistence strategies. These ambitious objectives are best addressed by long-term projects, such as the one initiated by University of Kentucky archaeologists in 1985, that include studies of existing museum collections and new fieldwork. An important aspect of the University of Kentucky's project involved the examination of museum collections to determine if New Deal era field records and museum specimens could be used to address research questions relating to Adena mortuary practices, social organization, and mound construction.

MATERIALS AND METHODS

This paper focuses on the large Robbins Mound (15Be3) situated in the Boone County uplands near the Ohio River. It and a much smaller mound (15Be14), which was located nearby, were excavated by John B. Elliott from 1939 to 1941 as part of the Kentucky state-wide archaeological program conducted under the auspices of the WPA (Figure 1). This site is one of over 20 Boone County Adena mounds, mound complexes, and earthworks that have been reported to the Office of State Archaeology.

The large Robbins Mound was chosen for further study since it met several criteria essential for a successful reanalysis of an archaeological site. First, the excavations were conducted carefully and were well documented. Second, the field notes, skeletal remains, and artifacts were curated over the years and are available for study. Third, a detailed account of the excavations and the supervisor's interpretations was published shortly after fieldwork ended (Webb and Elliott 1942). This particular mound was also of interest since it included a large number of burials and was a complex structure consisting of multiple layers of soil representing separate building episodes.

All available artifacts, human skeletons, and field records from the Robbins Mound excavations were examined during the course of this study. The skeletons were aged and sexed according to standards currently used by physical anthropologists.

Considerable attention was directed toward the reinterpretation of mound stratigraphy. The mound had been excavated in a series of cuts, each 5 feet (1.5 m) wide, resulting in a series of 20 vertical faces extending across the mound in an east-west direction. Measurements in feet and inches were used throughout the reanalysis of the Robbins



Figure 1. Excavation of the north side of the Robbins Mound (UKMA 4638).

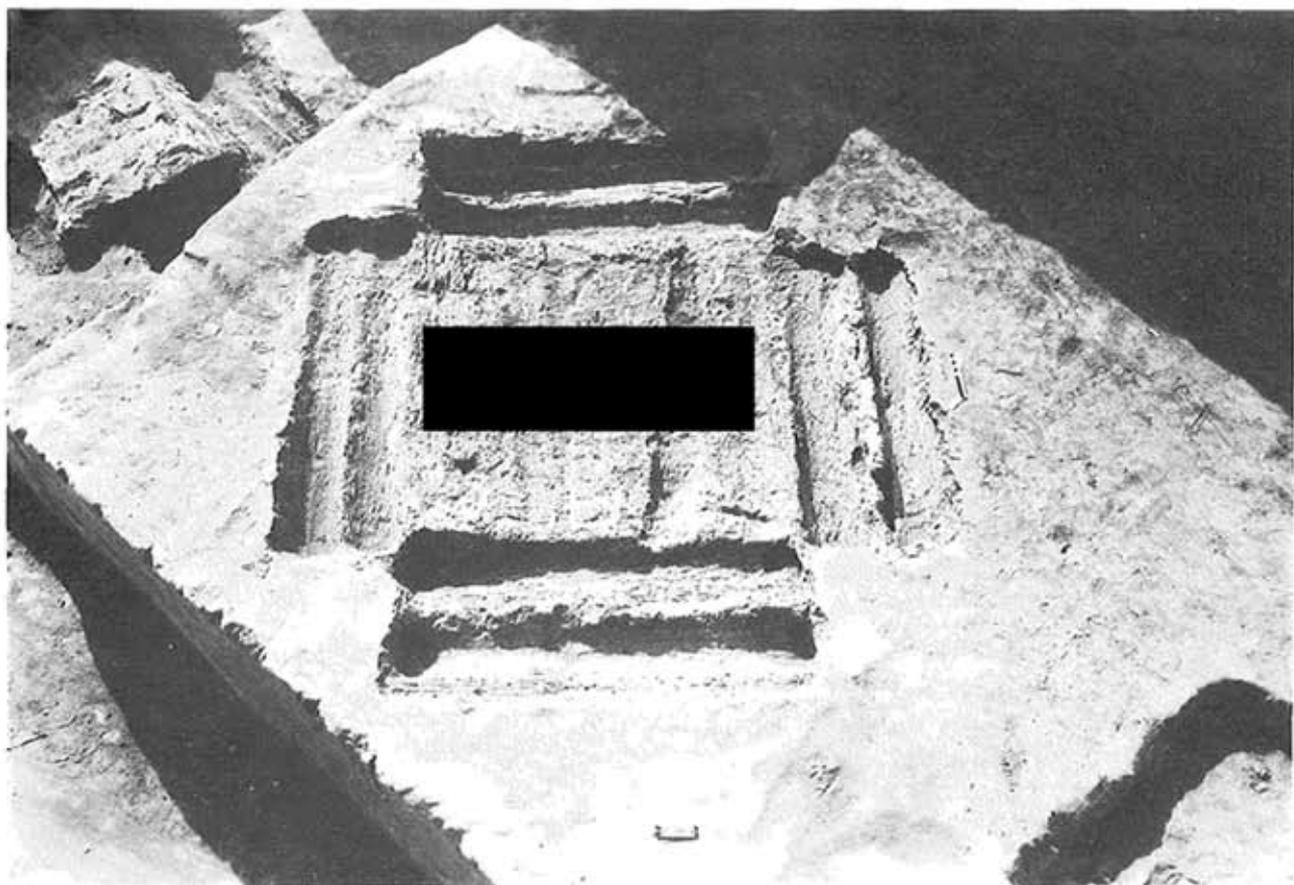


Figure 2. A log-lined tomb, Feature 32, in the large Robbins Mound (UKMA 4719).

Mound, since conversion to the metric system would have unnecessarily complicated data entry and manipulation. In addition, it should be noted that grid north as used here and by the excavators is oriented 35 degrees east of magnetic north. This represents a deviation from standard New Deal era practice, reflecting a field decision that facilitated the excavation of this particular mound (Webb and Elliott 1942:379).

Detailed profile drawings of each vertical face were made at the time of excavation. These drawings made it possible to follow soil layers from one vertical exposure to the next throughout the excavation area and allowed the authors to reconstruct the mound's stratigraphy. Corresponding fill episodes in different vertical faces were identified on the basis of the general shape of major soil zones, the dip of soil lenses, and the soil descriptions. The top elevation of each major fill zone was recorded at 2.5 foot (76 cm) intervals across the mound profiles.

The mound's east and west limits were encompassed by the profiles, but the northern and southern limits were not completely included within the excavated area. The amount of unexcavated fill, however, was minimal. In addition, the northernmost and southernmost dimensions of the mound were identified in two short trenches dug along the mound's midline. Topographic data provided information on ground surface elevation beyond the limits of the excavated area. Elevations of additional points around the mound's perimeter were extrapolated from the closest known profile and topographic data. The resulting data matrix consisted of points arranged in a grid measuring 135 x 135 feet (41 x 41 m).

ORIGINAL FINDINGS

The field supervisor who directed the Robbins Mound excavation was fully aware that the mound had a complex construction history (Webb and Elliott 1942:383-384, 488). The first construction phase consisted of removing upper soil horizons from much of the future mound area and then building a circular structure consisting of outwardly slanting, paired posts (Feature 26). The initial mortuary feature was a deposit of cremated bones within this structure. Soil was later piled inside the structure, forming a small mound (Stage 1). The structure eventually burned and its remnants were covered by a second mound (Stage 2). This sequence of events was followed by the deposition of considerable mound fill (Stages 3 to 8) and the construction of numerous mortuary features, often log-lined tombs (Figure 2). Neither the field notes nor the published site report include an adequate description of the later mound-building episodes, although a general eastward shift in the mound apex was noted (Webb and Elliott 1942:488). This lack of attention to mound building episodes in an otherwise detailed report is undoubtedly attributable to the mound's complex stratigraphy and the lack of readily distinguishable construction stages demarcated by highly distinctive fills or developed soil horizons.

Eighty-nine burial numbers were assigned in the field, and 90 skeletons were recognized as coming from mortuary features (Webb and Elliott 1942:417-420). The remains of several additional individuals were represented by calcined and highly fragmented bones on the submound structure's floor. Charles E. Snow, the physical anthropologist who studied this skeletal collection, concluded on the basis of the remains from mortuary features that young adult males (21-35 years old) dominated the skeletal series. The mound was, thus, interpreted as a cemetery principally for the "male members of the ruling class" (Snow 1942:448).

Artifacts found in association with the burials and tombs included copper bracelets, copper pendants, mica crescents, shell beads, a shell spoon, expanded bar gorgets, a cache of ovate bifaces, and stemmed projectile points. The artifact inventory compares favorably with assemblages from other Ohio River valley Adena mounds (Webb and Snow 1945).

Charcoal collected at the time of excavation and subsequently analyzed yielded a radiocarbon determination of 150 B.C. (2100+/-140 B.P.; M-2242) (Crane and Griffin 1972). This wood charcoal sample, which was obtained from the burned structure (Feature 26) at the base of the mound, dates the initial episode of mortuary activity at the site.

REANALYSIS

The first phase of the Robbins Mound reanalysis focused on the mound's stratigraphy. Although many individual soil layers were recorded in the various mound profiles, only eight major fill zones could be recognized that extended across much or all of the area encompassed by the mound. The eight mound stages, with slight vertical exaggeration, are illustrated in Figure 3. The two stages at the top of the figure are the primary and secondary mounds that were identified in the field. These are the two mounds associated with the submound structure. The illustration in the lower right corner of Figure 3 is the final shape of the mound at the time of excavation, and a large, partially filled relic collectors pit is visible. Five intermediate stages, also shown in the figure, were identified in this reanalysis.

Computer-generated graphics enhanced our ability to identify changes over time in the mound's size, shape, and apex location. The irregular surface contours observed in the computer generated maps must have been a conspicuous feature of the mound throughout much of its history, and most of the topographic highs and lows are directly attributable to the construction of tombs. For example, the ramps associated with a rectangular tomb are clearly seen in Mound Stage 4 (Figure 4). Other irregularities correspond to additional tombs often partially covered by later deposits of soil. In addition, many tomb roofs appear to have collapsed producing depressions.

The nature of mound construction changed dramatically after the building of the two initial mounds associated with the submound

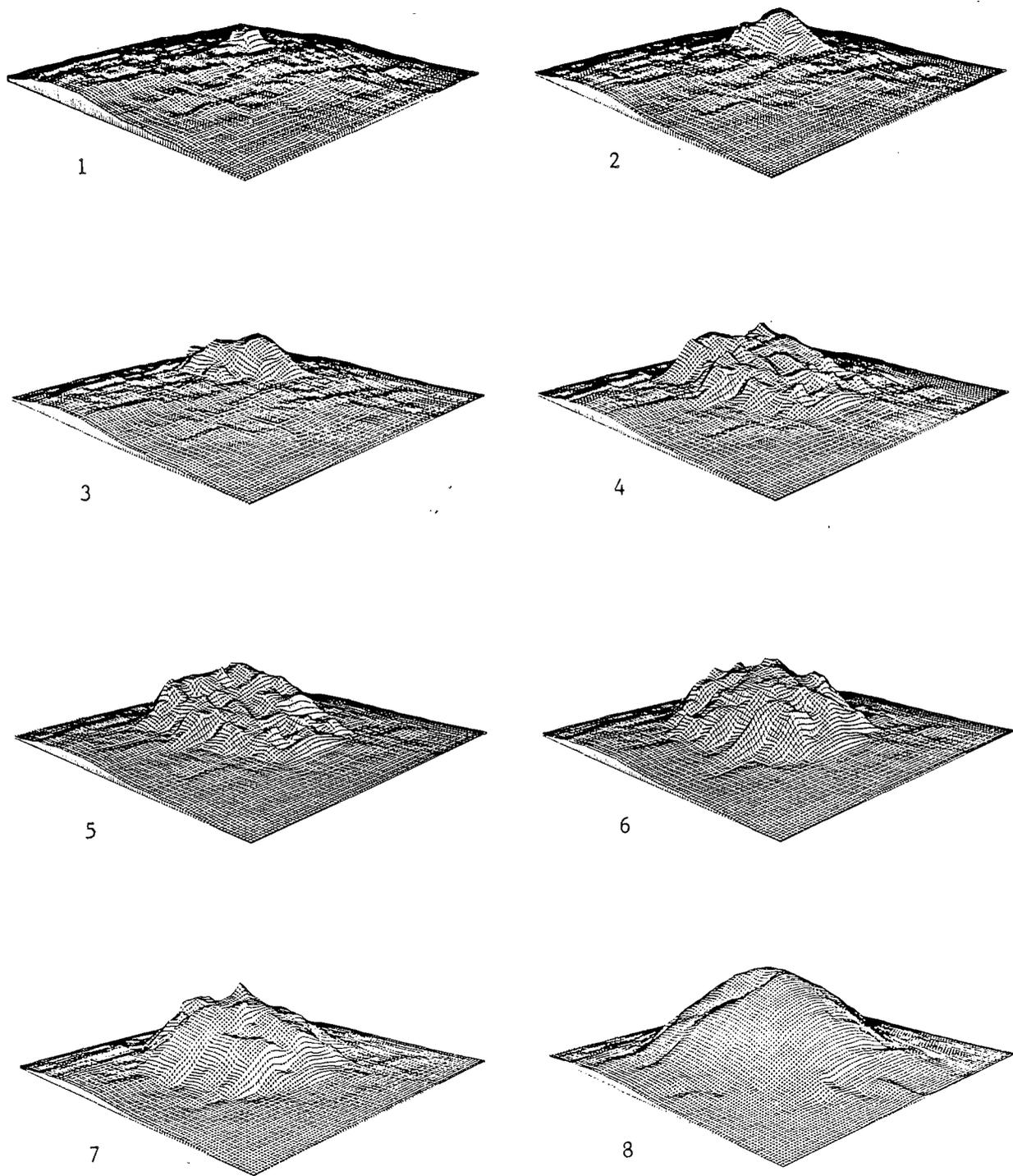


Figure 3. Eight episodes of mound construction, from the earliest (Stage 1) to the latest (Stage 8).

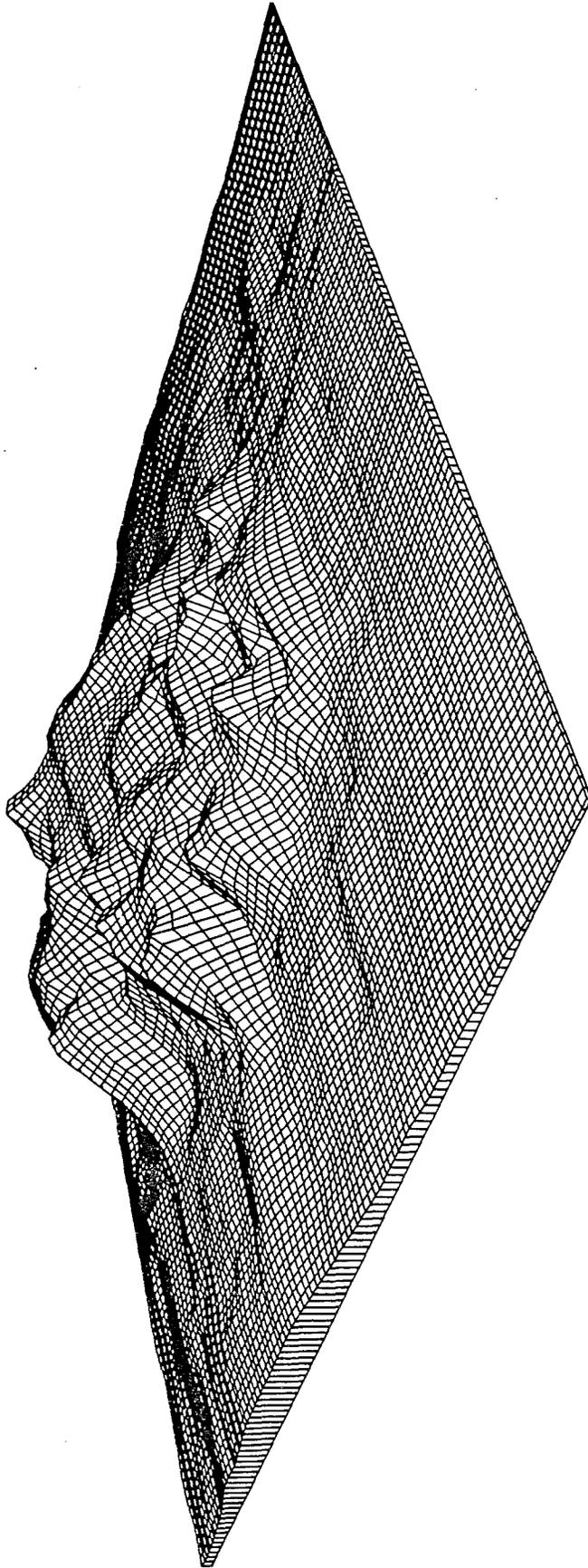


Figure 4. Robbins Mound Stage 4.

structure or its remnants. Later mound construction seems to have focused on the preparation of single tombs. This individualized process of soil deposition was periodically interrupted by the dispersal of fill laterally across much of the existing mound to form new, but still undulating, surfaces. Tombs generally were built along the sides of the mound. They were constructed by piling soil to form a level floor surrounded by higher ramps that joined the mound's flank to form a rectangular cavity, which was usually lined with logs. Thus, the tombs associated with a particular construction episode tended to encircle the mound. Burials other than those in tombs were also found within the mound. Usually these were isolated individuals placed in mound fill, on distinct mound surfaces, or in bark-lined depressions formed by the collapse of roofs belonging to earlier tombs. The terminal construction episode involved the deposition of a layer of soil that covered the entire mound. This cap probably reduced some of the surface irregularities, but many would have remained until the mound was smoothed further through years of erosion (Figure 5).

The age and sex of many of the noncremated skeletal remains from mortuary features could be estimated. The other skeletal remains were too incomplete or poorly preserved to determine age or sex, or the bones were not available for study. Overall, age and sex could be determined for 40 adult skeletons.

The reanalysis of the skeletal remains resulted in a markedly different interpretation of the age and sex structure of the group buried within the Robbins Mound than that proposed by Snow (1942). All discrepancies between the original and revised estimates of sex involved a shift from male to female. While Snow's analysis indicated that 78% of the of the unburned adult skeletons from the Robbins Mound were males, the reanalyzed sample was evenly divided between males (50%) and females (50%). Revisions in age estimates are no less significant in terms of their implications for Snow's original conclusion that the mound contained primarily young adults. In most instances where there was a discrepancy in the estimated age-at-death, the revised age was older than the original assignment.

These discrepancies are not surprising, given a general shift in recent decades in the emphasis placed by physical anthropologists on various skeletal indicators of sex and age. Males seem to be over-represented in many earlier osteological reports (Weiss 1973:58), and this tendency appears in Snow's work. For example, in a study of Mississippian period burials from Moundville, Alabama, Mary Lucas Powell (1985:161) found that when there was a discrepancy between her estimates of skeletal sex and those of Snow, the usual pattern was for a shift from male to female. Eighty-five percent of the Snow:Powell Moundville assessments of sex agreed with one another, whereas 82.5% of the Snow:Milner Robbins Mound assessments corresponded. The upward shift in the ages of many Robbins Mound skeletons is also consistent with other evidence for systematic biases in Snow's assessments of the demographic structure of prehistoric populations. For example, Snow's reexamination of the Archaic Indian Knoll skeletal remains, almost 20 years after they were originally studied (Snow 1948), resulted in an increase in the average age of the adult segment of this large skeletal series (Johnston and Snow 1961).

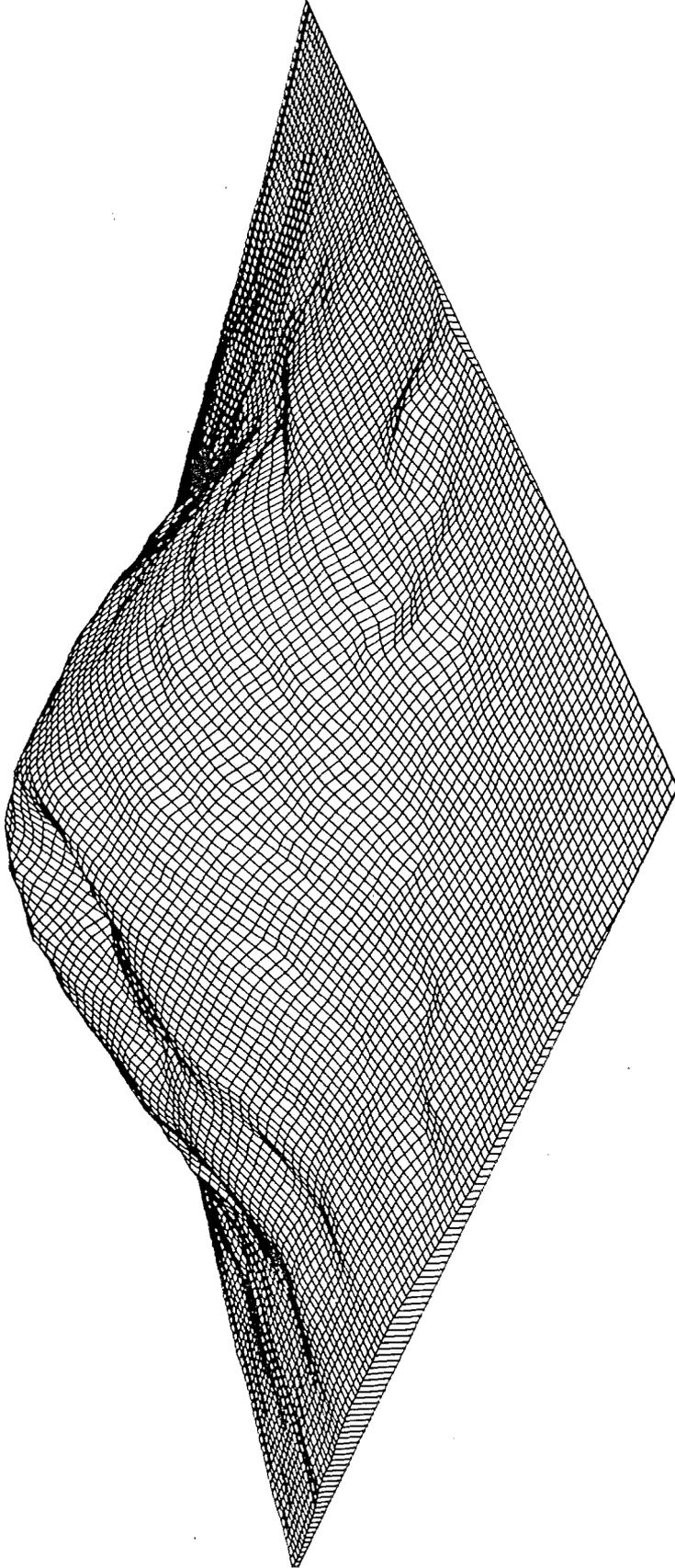


Figure 5. Robbins Mound Stage 8.

In summary, most of the individuals buried in the Robbins Mound were adults, but both young and old adults are well-represented in the collection. In addition, males and females apparently had an equal chance for burial within the mound.

An examination of feature characteristics, grave contents, and skeletal age and sex revealed three unequivocal patterns indicating differential treatment of the dead. First, adults enjoyed preferential access to mound burial. Second, sizable log-lined tombs were not part of the two initial mound building episodes, which were instead associated with a submound structure and other remains. Third, most of the skeletons with burial accompaniments (i.e., 12 of 18) were buried in rectangular tombs with associated ramps.

Part of the difficulty in identifying artifact patterning among burials is a function of small sample size, since few individuals were associated with grave goods. Only four classes of objects were found with four or more individuals. All projectile points were associated with individuals older than 15 years at the time of death, but shell beads, copper bracelets, and ochre were found with both juveniles and adults.

CONCLUSION

These results illustrate the potential for the future study of New Deal era field records and museum collections using new analytical techniques. Reexamination of the Robbins Mound field records coupled with computer-generated views of sequential mound-building episodes resulted in the identification of previously unrecognized mound construction details. These results should help future archaeologists develop excavation strategies for Adena mounds.

Additional information also was obtained on Adena mortuary practices. While it may be true that the people buried in the Robbins Mound were in Snow's (1942:448) terms "selected and honored by such interment," the skeletal series was not dominated by young adult males. Based upon the identified discrepancies between original and revised age and sex identifications, it is recommended that future paleodemographic studies of New Deal era skeletal series include reassessments of skeletal age and sex.

ACKNOWLEDGEMENTS

This research was funded by a grant from the Kentucky Heritage Council. The authors would like to thank Penelope Davis for her assistance in coding data, Jeff Williams for his many long hours working on the computer-generated graphics, and Mary Lucas Powell, R. Berle Clay, and Nancy O'Malley for their comments on various versions of this paper.