

POVERTY POINT AND THE ARCHAEOLOGY OF SINGULARITY

Tristram R. Kidder, Anthony L. Ortmann, and Lee J. Arco

Tristram Kidder is Professor and Chair in the Department of Anthropology at Washington University in St. Louis. Anthony Ortmann is an Assistant Professor in the Department of Geosciences at Murray State University. Lee Arco is a doctoral candidate in the Department of Anthropology at Washington University in St. Louis.

Some sites are exceptional for their size, particular architecture, or function they played, but some sites are simply unique. Perhaps the best example of a *sui generis* site is Stonehenge; in North America a case in point is the complex of buildings and features at Chaco Canyon. Poverty Point (Figure 1), located in northeast Louisiana, is another one-of-a-kind example. Poverty Point is a massive site set apart because it is the product of a population who relied solely on hunting, fishing, and collecting for their subsistence. Exceptional sites demand explanations that account for their uniqueness. Understanding Poverty Point requires we forego traditional models of hunter-gatherer behavior and concede that subsistence alone is not a suitable measure of how we view the history and organization of this remarkable settlement.

What Makes Poverty Point Unique?

A suite of radiocarbon dates establishes the chronology of Poverty Point; the site was occupied from roughly 3600–3100 cal years B.P. There are hundreds if not thousands of contemporary or nearly contemporary sites in eastern North America. However, none have the range of characteristics that defines Poverty Point. To take an obvious aspect one only needs to look at the site's size. The core area of Poverty Point is roughly 200 ha. This, however, is only the main occupation. The occupation area extends over slightly more than five km along the front of a low Pleistocene-age terrace overlooking the Mississippi River floodplain. Even if we contain ourselves to the minimal site core, this is more than twice the size of the next largest site in eastern North America in the period ca. 6000–3000 cal B.P. and makes it the second largest site in the East at any time prior to European contact.

Poverty Point is also singular because of its monumental earthen constructions, which are extravagant in the context of North American mound building at any time. There are four mounds within the core of Poverty Point and one each at the southern and northern boundaries of the site area. In addition, the site includes six nested earthen ridges, each estimated to be approximately 1–3 m high and 20–40 m

wide. The total length of the earthen ridges, if laid end-to-end, would be between 18–21 km. Recent work at the site demonstrates the prehistoric occupants undertook a massive program of earth moving that leveled undulating natural ridges and filled eroding gullies. Depending on the calculations used, the total volume of earth moved at Poverty Point amounts to 750,000–1,000,000 m³. Cahokia is the only pre-columbian site in the U.S. where more effort was expended on earthworks.

But this exceptionalism may be moot if the earthworks at Poverty Point accumulated over a long time. The normative perception of noncoastal hunter-gatherers in the American Southeast is that they employed seasonal mobility to cope with spatial and temporal resource variability. Furthermore, because food resources were rarely concentrated in these interior settings, group sizes were limited and population nucleation could occur only when and where food was temporarily abundant. Thus, seasonal mobility and low group size is the expected norm. As a consequence, Poverty Point has been conceived as a locus of repeated seasonal occupations by small groups. One variant of this perspective is the site was home to a recurring trade fair that brought together populations from the midcontinent to exchange goods, mates, and information. In these seasonal or recurring occupation scenarios, earthwork construction and mound building is the result of frequent small-scale labor contributions by corporate groups who expressed solidarity within or between their social units by sharing labor. In contrast, Gibson (2000, 2006, 2007) argues that the site was home to a permanent sedentary population who constructed the earthworks over a few generations. Mound building was an egalitarian project that enhanced corporate group identity and served to ritually and spatially set off the community from the outside world.

Excavations at Mound A

Investigations of Mound A at Poverty Point are changing our perceptions of hunter-gatherer mound building and how this process reflects the structure and organization of the com-

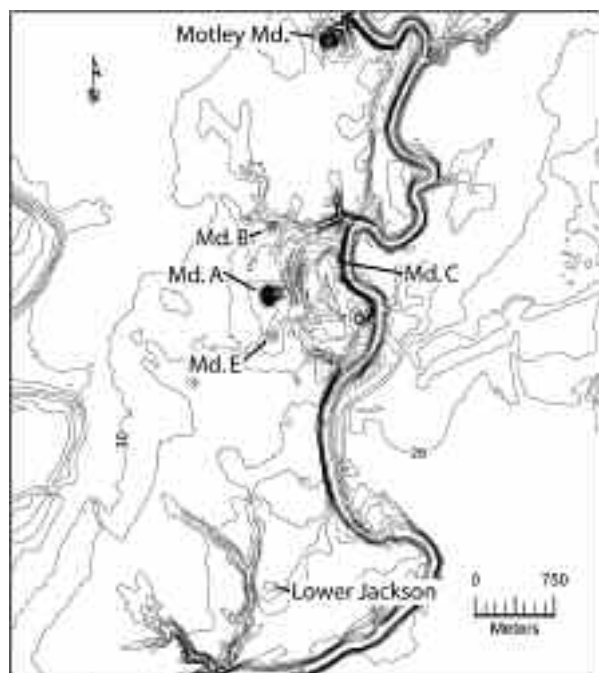


Figure 1. Map of the Poverty Point site locality in northeast Louisiana. This map illustrates the area from Lower Jackson Mound on the south to Motley on the north.

munity. Work at Mound A shows that it was built rapidly in a period of probably less than three months. Furthermore, this research indicates the mound may have been built as a ritualized recapitulation of creation mythology rather than as a platform for perishable structures or as a surface for activities.

Mound A at Poverty Point is the largest earthwork at the site and the second-largest earthen mound in eastern North America. Situated at the western edge of the ridge system, the mound is roughly T-shaped when viewed from above (Figure 2). The western half of the mound consists of an elongated cone rising 22 m above the land surface. Attached to the cone is a flat platform that stands 10 m tall. The cone is joined to the platform by a ramp-like feature. The mound stretches nearly 210 m north to south and approximately the same dimensions east to west. The total volume of the mound is ~238,000 m³. The mound has been sporadically investigated but was never the focus of concerted research efforts until we recently placed 89 cores into the mound and excavated a unit to the submound soil on the south side of the platform. Our research was also an opportunity to synthesize the limited research previously undertaken.

Prior to mound construction, the land surface consisted of a low 1–2 m deep depression. As with modern swales, this was

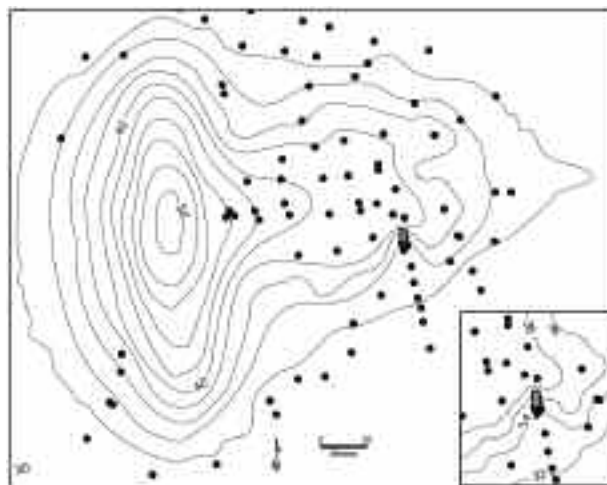


Figure 2. Contour map (contour intervals = 2 m) of Mound A at Poverty Point showing the location of cores excavated from 2001–2006; inset shows the location of the 2005 excavation.

filled with water and heavily vegetated. Analysis of core and excavation data from the submound context indicates it was a natural wetland. Radiocarbon dates show the vegetation in the swale was burned off ca. 3400–3200 cal B.P. The swale was filled with minute pieces of fired earth, carbonized and uncarbonized plant fragments, gastroliths (probably turtle or bird), and natural concretions. There is, however, not a single identifiable human made artifact at the macro- or microscopic scale. Once the vegetation was burned the swale was immediately buried beneath a thin layer of gray to white pure silt. This material, which was purposefully mined from naturally occurring E-horizon contexts, covers the entire swale and underlies the rest of the mound construction. As soon as this initial stage was deposited the rest of the mound was erected using multicolored soils in a continuous process that resulted in completion first of the cone, and then the platform. There was a very brief hiatus after which the ramp section was emplaced.

During excavations and coring we focused on examining the pace of construction. The main stage was built in a single construction effort with no discernable breaks, and it contains no floors, features, or surfaces. Likewise, no evidence is found for erosion, unconformities, or construction pauses marked by soil formation and bioturbation. This stage was created using clean silt taken from borrow areas located at distances between 50 to more than 500 m to the north and west.

Evidence that the mound was built rapidly comes from several sources. The initial stage was deposited over the submound deposits immediately after the vegetation had been burned. Intact uncarbonized roots and other plant parts were



Figure 3. Photographs of the initial mound construction of Mound A. Left: Detail of the sharp contact between the dark clay-rich silt of the swale and the overlying light-colored silt of the initial stage. Right: The initial mound construction sequence with the dark pre-mound sediments overlain by the light initial stage deposits, which are in turn covered by the multi-colored main stage mound fill. Note the presence of dark pre-mound sediments extruded upward by the weight of the overlying mound being rapidly emplaced and squeezing the still wet and plastic pre-construction material upward.

sealed from oxidation and decomposition. The boundary between the underlying dark pre-mound deposit and the initial light-colored mound stage is sharp and there is no bioturbation evident in this stage or in the interface between these deposits (Figure 3). The main stage was loaded over the initial stage so quickly that the underlying pre-mound soils were extruded through the initial stage deposit as the weight of the main mound squeezed the still plastic pre-mound sediments upward. Lacking signs of construction pauses at even the microscopic level, the main stage consists of loess-derived silt, which erodes readily. We do not have any indication in 89 cores or the excavation unit for erosion or weathering-related displacement of soils. Rainfall in northeast Louisiana averages 11.35 cm per month. Late summer and early fall are the driest time but even then there has only been one month with no rainfall in the period monitored by the instrument record. Because there is no probability for two consecutive months without rain, we feel confident the mound had to be erected in a remarkably short period of time. If it had been constructed over a longer span or in multiple stages, we would expect evidence of erosion, bioturbation, soil formation or some sign of a construction pause, none of which was found in our research. Thus, we cannot falsify the hypothesis the mound was built in less than three months.

Mound A was put up quickly, which has significant implications for the social organization of a population dependent on hunting and gathering. The labor effort for building Mound A alone suggests a population larger than any known example from the ethnographic record. Moreover, Mound A is only one of a number of earthworks at the site. While the mounds were not all raised at once, available evidence indicates Mound A was built at the time the ridges were con-

structed. Gibson (2000) suggests the ridges developed rapidly over a few generations. These data indicate Poverty Point witnessed significant population aggregations for brief periods of time and the duration of much of the construction probably was limited to a period of less than one hundred years.

While the ridges were likely surfaces on which people lived, the function of Mound A is unknown. Early work included testing on the summit of the cone and the platform but failed to identify signs of structures, features, or occupation surfaces. Examination of the mound slopes and adjacent fields indicates there is no occupation debris associated with mound-top activities (e.g., feasts, dances, domestic occupations), or if there were activities on the mound summit the inhabitants fastidiously cleaned up afterwards. In fact, if we take the evidence literally, the function of the mound was to bury a natural wetland.

Mound A has always been understood as a ritual feature. It was first seen as an effigy of a bird flying west, and later as a representation of “earth island”—the cosmological center of Poverty Point. Our work emphasizes this ritual aspect of the mound and situates it more clearly in the Native American mythological tradition. The structured and purposeful sequence of construction—the burial of the wet, dark pre-mound depression with light-colored sediments and the rapid construction of the main stage over this can be read as a recapitulation of historical myths of Emergence. An alternate interpretation might suggest it is a rendering of the Earth Diver myth, also present in parts of the historic Southeast. The temporal gap between historical myth and the construction of Mound A renders a specific interpretation disputable. We suggest the building of this earthwork repre-

sents an enactment of a ritualized drama where in a very brief period of time the builders covered the watery chaos of pre-creation and erected a monument symbolizing the triumph of creation over the forces of chaos. This symbolic act surely mirrored political processes and helped forge a social identity for the people living at and around Poverty Point. This story, however, is also written in the entire site plan. Mound A is situated astride an axis that links the Middle Archaic Lower Jackson site—erected fifteen hundred years before Poverty Point's mounds were started—to Mound B, the earliest monument at Poverty Point. In placing Mound A on this axis the builders were engaging an ancestral pattern and tapping into the tradition and power of an even earlier origin story (Clark 2004). Mound A was also erected when the ridges were being built, suggesting an episode when the entire site plan was symbolically and ritually reconfigured.

Theoretical approaches to hunters and gatherers have not given much consideration to the ways such people deployed symbolic and ritual systems to order their lives and to respond to nature and to social groups in the world around them. Poverty Point is a singular site because it represents something that never existed before and has apparently never existed since—a massive hunter-gatherer settlement ordered around a cosmological plan created by a large, sedentary population. The site is more than just spatially extensive or massive in its earthen architecture. Size and mass were only components of a greater significance we are only beginning to perceive. However we understand Poverty Point and its role and function, the emerging understanding of the site proves hunter-gatherers are unambiguously more complex and variable than we have ever imagined. Recently,

Ken Ames (2004) enjoined us to suppose hunter-gatherers were complex in ways not explicable by analogy to living or ethnographic exemplars. Indeed, exploding the stereotype of hunter-gatherer simplicity is one of archaeology's great anthropological contributions. Poverty Point represents variability in hunter-gatherer behavior that cannot be anticipated from the ethnographic record or from the needs of basic subsistence requirements. It is truly like nothing else and with new and ongoing research we are finally presented the opportunity to comprehend that the people who built this remarkable site must be understood by more than just what they ate.

References Cited

- Ames, Kenneth M.
2004 Supposing Hunter-Gatherer Variability. *American Antiquity* 69:364–374.
- Clark, John E.
2004 Surrounding the Sacred: Geometry and Design of Early Mound Groups as Meaning and Function. In *Signs of Power: The Rise of Complexity in the Southeast*, edited by J. L. Gibson and P. J. Carr, pp. 162–213. University of Alabama Press, Tuscaloosa, Alabama.
- Gibson, Jon L.
2000 *The Ancient Mounds of Poverty Point: Place of Rings*. University Press of Florida, Gainesville.
- 2006 Navel of the Earth: Sedentism at Poverty Point. *World Archaeology* 38:311–329.
- 2007 “Formed from the Earth of That Place”: The Material Side of Community at Poverty Point. *American Antiquity* 72:509–523.

SASSAMAN, from page 8

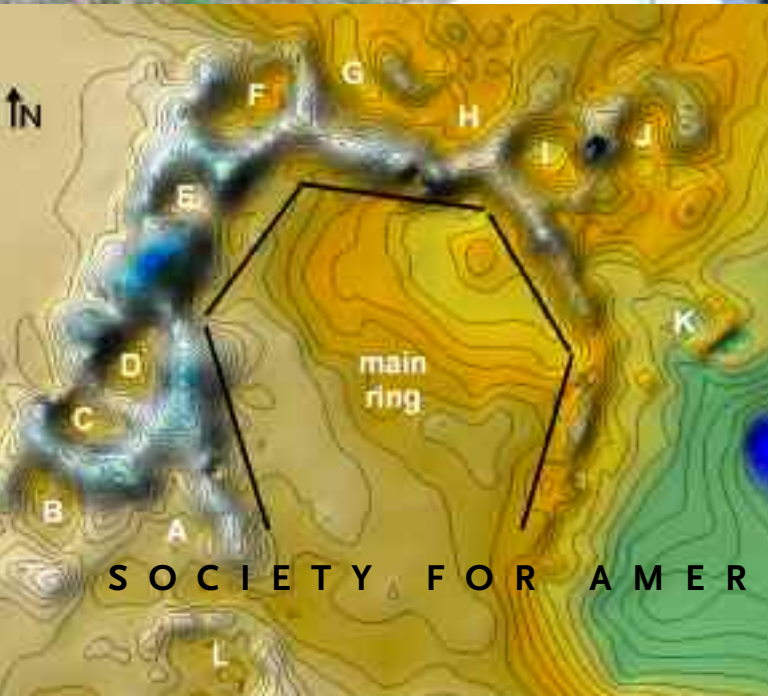
- Sassaman, Kenneth E., Meggan E. Blessing, and Asa R. Randall
2006 Stallings Island Revisited: New Evidence for Occupational History, Community Pattern, and Subsistence Technology. *American Antiquity* 71:539–566.
- Saunders, Rebecca
2004 Spatial Variation in Orange Culture Pottery: Interaction and Function. In *Early Pottery: Technology, Function, Style, and Interaction in the Lower Southeast*, edited by R. Saunders and C. T. Hays, pp. 40–62. University of Alabama Press, Tuscaloosa.
- Willey, Gordon R.
1966 *An Introduction to American Archaeology. Volume 1: North*

- and Middle America*. Prentice-Hall, Englewood Cliffs, New Jersey.
- Willey, Gordon R., and Philip Phillips
1958 *Method and Theory in American Archaeology*. University of Chicago Press, Chicago.

SPECIAL ISSUE: THE NEW ARCHAIC

the SAA Archaeological record

NOVEMBER 2008 • VOLUME 8 • NUMBER 5



SOCIETY FOR AMERICAN ARCHAEOLOGY

the SAA Archaeological record

The Magazine of the Society for American Archaeology

VOLUME 8, No. 5

NOVEMBER 2008

Editor's Corner	2	Andrew Duff
In Brief	3	Tobi Brimsek
Springtime in Atlanta	4	Terry Powis and Bobbi Hohmann
Exciting Archaeology in Atlanta	5	Michael E. Smith

SPECIAL ISSUE: THE NEW ARCHAIC

Edited by Kenneth E. Sassaman

The New Archaic, It Ain't What it Used to Be	6	Kenneth E. Sassaman
Poverty Point and the Archaeology of Singularity	9	Tristram R. Kidder, Anthony L. Ortmann, and Lee J. Arco
Archaic Shell Mounds of the St. Johns River, Florida	13	Asa R. Randall
Late Archaic Shell Rings and Society in the Southeast U.S.	18	Michael Russo
"Archaic Period" Traditions of New England and the Northeast	23	Brian S. Robinson
Hunter-Gatherer Archaeology and the Upper Great Lakes Archaic	27	William A. Lovis
Imagining the Archaic: A View from the Middle Fraser Canyon of British Columbia	31	Anna Marie Prentiss
What's So Archaic about the Late Archaic? Recent Discoveries in Southwestern North America	36	Jonathan B. Mabry
Money Matters	41	Paul Welch
Financial Statements	42	
POSITIONS OPEN	44	
NEWS AND NOTES	47	
CALENDAR	48	



On the Cover: Top: Excavation of the South Profile, Mound A at Poverty Point (16WC5), 2005, photo by Anthony L. Ortmann;

Bottom Left: Rollins shell ring complex, surface topography in 10 cm intervals, axes = meters; Bottom Right: Artist's reconstruction of the Bridge River village at peak size ca. 1100-1200 B.P. (drawing by Eric Carlson).



The SAA Archaeological Record (ISSN 1532-7299) is published five times a year and is edited by Andrew Duff.

Deadlines for submissions are: December 1 (January), February 1 (March), April 1 (May), August 1 (September), and October 1 (November); send to Andrew Duff, *The SAA Archaeological Record*, Andrew Duff, Department of Anthropology, Washington State University, Pullman, WA 99164-4910, (509) 335-7828, or email duff@wsu.edu. Manuscript submission via email or by disk is encouraged. Advertising and placement ads should be sent to SAA headquarters, 900 Second St., NE #12, Washington, DC 20002, (202) 789-8200.

Associate editors include:

Gabriela Uruñuela [Exchanges, Mexico & Central America]

email: gabriela@mail.udlap.mx

Jose Luis Lanata [Exchanges, Southern Cone]

email: jllanata@filo.uba.ar

Anne Vawser [Government]

email: Anne_Vawser@nps.gov

Susan Chandler [Insights]

email: susan_chandler@alpinearchaeology.com

Mark Aldenderfer [Interface]

email: aldenderfer@anth.ucsb.edu

John Hoopes [Networks]

email: hoopes@ku.edu

Teresa Pinter [Public Education]

email: tpinter@acstempe.com

Jamie Brandon [The Recent Past]

email: jbrando@uark.edu

Kurt Dongoske [Working Together]

email: kdongoske@cableone.net

Inquiries and submissions should be addressed directly to them. *The SAA Archaeological Record* is provided free to members and institutional subscribers to *American Antiquity* and *Latin American Antiquity* worldwide. *The SAA Archaeological Record* can be found on the Web in PDF format at

[www.saa.org/publications/
thesaaarchrec/index.html](http://www.saa.org/publications/thesaaarchrec/index.html).

Past issues of the *SAA Bulletin* can be found at

[www.saa.org/publications/
saabulletin/index.html](http://www.saa.org/publications/saabulletin/index.html).

Copyright © 2008 by the
Society for American Archaeology.
All Rights Reserved

Manager, Publications:

John Neikirk

Design: Victoria Russell

Papertiger Studio • Washington, DC

Production: Peter Lindeman

Oakland Street Publishing • Arlington, VA



EDITOR'S CORNER

Andrew Duff

Andrew Duff is an Associate Professor of anthropology at Washington State University.

This special issue on "The New Archaic" was organized and edited by Ken Sassaman. He invited the authors of these articles to summarize new research and ideas that challenge much of what we have come to think about the Archaic, and the individuals and groups that populated this increasingly antiquated spatiotemporal construct. Sassaman's introductory essay highlights the ways in which recent research undercuts, challenges, or upends traditional conceptions of hunter-gatherer societies and the Archaic. The group of papers assembled here showcases exciting and innovative research directions, findings and interpretations, and I hope you find them as stimulating as I did.

Though additional thematic or "special issues" of *The SAA Archaeological Record* are in the works, I always welcome articles, items for the "News & Notes" and "Calendar" sections, and photographs, especially high resolution vertically oriented photos that might be suitable for the cover (9 x 11 inches at 300 dpi resolution). I am happy to discuss ideas for articles, thematic issues, or other projects you would like to see appear in these pages.

I would like to again formally invite and would especially welcome articles by those based in Latin America. Submissions can cover any of a wide range of issues, periods, contexts, and topics. Please submit inquiries or materials to me (duff@wsu.edu) or the Associate Editors.