

*The Scioto Hopewell*  
*and Their Neighbors*

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D. Troy Case and Christopher Carr

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# *The Scioto Hopewell* *and Their Neighbors*

**Bioarchaeological Documentation and Cultural Understanding**

**D. TROY CASE**

*North Carolina State University,  
Raleigh, North Carolina*

**and**

**CHRISTOPHER CARR**

*Arizona State University,  
Tempe, AZ, USA*

with contributions by

Cheryl A. Johnston, Beau Goldstein, Rex Weeks, Mark Bahti,  
Rebekah A. Zinser, and Ashley E. Evans



**Springer**

D. Troy Case  
North Carolina State University  
Raleigh, North Carolina  
USA  
dtcase@chass.ncsu.edu

Christopher Carr  
Arizona State University  
Tempe, AZ  
USA  
christopher.carr@asu.edu

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*Cover Design Acknowledgment:* Digital painting, “On the Way”, by Christopher Carr, based on portraits of three ceremonial leaders rendered on three copper celts by anonymous Ohio Hopewell artists, compositions of processions of persons rendered on copper breastplates by anonymous Ohio Hopewell artists, and an early photograph of a virgin hardwood forest in the Allegheny Plateau province of Ohio. The three celts bearing the portraits of leaders, from left to right, are: Carr no. C023 Side A, from the Hopewell earthwork, possibly Mound 25, Skeletons 260–261, curated at the Ohio Historical Society, cat. no. 283/351B; Carr no. C301 Side A, from the Edwards Mound Group, 33HA7, curated at the Harvard Peabody Museum, cat. no. 84-6-10/32346; and Carr no. C011 Side A, from the Seip earthwork, curated at the Ohio Historical Society, cat. no. 957/-. Example depictions of processions of ceremonial leaders are found on breastplates Carr B061 Side B, from the Liberty earthwork, curated at the Ohio Historical Society, cat. nos. 7/1.007 and 13716; and Carr B025 Side A, from the Hopewell earthwork, Mound 25, Burial 6, curated at the Ohio Historical Society, cat. no. 283/83C. The portraits and processions were revealed by color and near-infrared digital photography, hybrid color-near-infrared image display, and image contrast enhancement. The full forest photograph is published by Gordon (1969:Frontispiece). Top and bottom border designs are, respectively, a snake-skin design incised on the top of a pottery vessel and a rocker-stamped bird feather design placed on the body of the same vessel, from the Hopewell earthwork, Mound 25, Altar 1 (Moorehead 1922:171, Figure 70). Cover layout by Christopher Carr and Deann Gates.

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*To Hopewell people of the Scioto*

*for your creative spirits and passions in living*

# Preface

Investing in the future of Hopewell archaeology is the spirit in which this book has been written and is its substance. Our passion to do so derives from our admiration of Hopewell peoples, themselves, and all they achieved. Hopewell peoples of the Scioto valley and their neighbors were remarkable by any measure. Their graceful and powerful artwork, monumental earthen architecture, and knowledge of geometry and astronomy; their social finesse in choreographing ritual performances with many hundreds of persons, local and foreign; the long-lasting intercommunity peace they achieved through the rich and cross-cutting social and ritual ties they wove; and their extraordinary sensitivity to and relations with the animal persons and spirit beings with whom they cohabited—each humble the Western mind. For us, it seems only right and worthwhile that an empirical and conceptual path be cleared whereby future archaeological work might help Hopewell peoples to speak better for themselves of their lives, accomplishments, concerns, and disappointments.

This book shares with you the empirical tools and a broad vision for exploring the ways of Scioto Hopewell and other Ohio Hopewell peoples. In these pages and the accompanying CD, we summarize what is known about Scioto Hopewell culture, life, and history as a beginning point, compile four massive data bases for further investigating the culture, lives, and histories of Scioto and other Hopewell peoples in Ohio, present preanalyses of the data to ready researchers for deeper studies, and offer

a detailed agenda of pressing empirical issues and intriguing interpretive questions that remain to be addressed in the attempt to understand Hopewell peoples.

The first half of the book provides a synthesis and expansion of current knowledge about the anthropology of Scioto Hopewell peoples: their natural and symbolically interpreted environments, subsistence, settlement and mobility patterns, community organization at several scales, social-political-ritual organization, and world view, and the history of changes of each of these over time. Coming to an understanding of how Scioto Hopewell social-ceremonial life abruptly began and abruptly ended, neither of which were triggered proximally by subsistence or demographic change, is one of the fruits born from attempting the broad synthesis. The ethnohistory presented here is made tangible with over 195 photographs of artistic renderings that Scioto Hopewell peoples made of themselves, of artifacts that marked their social roles and were used in their ceremonies, and of views of their sacred landscape.

The reconstruction of Scioto Hopewell life presented in this book is an integration, maturing, and substantial widening of the ideas developed in the individual, focal studies reported in its sister book, *Gathering Hopewell*, edited by us and published in 2005 by Springer. Here, we make a first attempt to write an integrated “thick prehistory” of Scioto Hopewell peoples. By this is meant a text that empirically and richly

describes the lives, lifeways, and motivations of individuals and social groups in their own local context, considering a full spectrum of social, cultural, natural environmental, and historical matters, and personalizing the past with people in active, created, on-the-ground sociocultural roles. In complement, *Gathering Hopewell* focuses on primarily social, political, and ceremonial organization, and spans and compares multiple Hopewell local groups across the northern Eastern Woodlands for this one subject. A number of the social and ceremonial analyses presented in *Gathering Hopewell* for Scioto and other Ohio Hopewell peoples have been reworked for this publication.

The second half of the book presents four massive computer data bases of primary archaeological and ethnographic data that made possible the integrated reconstruction of Scioto Hopewell life summarized here, and that open the way for future archaeological studies and insightful advances. Central is a bioarchaeological data base that documents the mortuary records of over 1000 Ohio Hopewell people and over 75 ceremonial deposits of artifacts buried in 113 mounds and cemetery areas within 52 ceremonial centers across the state—all reported, excavated and provenienced Ohio Hopewell individuals of whom we are aware. The ceremonial centers include well known ones, such as the Hopewell and Mound City sites, and ones that have long been forgotten in the archives of libraries and museum collections. The people are described in detail for their sex and age at death, tombs, body treatment, grave goods, and the spatial organization of their graves by over 500 variables, making fine-grained social and anthropological analysis possible. To support these studies, the bioarchaeological data base is supplemented with three others. One places the individuals and ceremonial deposits of artifacts in spatial context by assembling 84 maps of the layouts of the burials and deposits on mound floors and the spatial arrangement of mounds, embankments, and other earthen constructions within ceremonial centers. A second data base places the 52 ceremonial centers in a regional context.

It reproduces 53 detailed-scale Ohio county maps and one state-wide overview map of the locations of Adena and Hopewell mounds and earthen enclosures as recorded in W. C. Mills' (1914) comprehensive *Archaeological Atlas of Ohio*. The third data base collects and systematizes more than 1000 dispersed ethnohistoric accounts of the ceremonial functions, religious and symbolic meanings, and social role associations of 51 kinds of ceremonial paraphernalia and raw materials used by historic Woodland and Plains Native Americans and analogous to ones used by Ohio Hopewell peoples. The accounts are crucial to interpreting the mortuary records in the bioarchaeological data base in terms of the social roles and actions of once living Hopewell people. Together, these four data bases provide researchers with the information necessary to make extraordinarily detailed, personalized, ethnographic-like reconstructions of the social, political, and ceremonial lives and ways of each of several Ohio Hopewell peoples. At the same time, they permit broad-scale cultural comparisons among Ohio Hopewell peoples and contextualizing demographic and ecological inquiries.

The data bases compiled here make possible the study of Ohio Hopewell lifeways, with nearly instantaneous feedback between idea and testing of idea, great detail, and broad comparative coverage in a way that it simply was not previously. Lack of publication of much primary data, geographic dispersion of collections, documentation of individual sites and mounds in a multitude of partial sources by different archaeologists, and inconsistencies among records put stringent practical limits on the kinds of studies that could be made of Ohio Hopewell archaeological records. Assembling the bioarchaeological data base, alone, took 27 months of full-time archival research in seven institutions, and 8 years of continuous computer coding and verification by one to two persons working ten to twenty hours per week. The ethnographic data base took an additional person-year to assemble and tabularize, and the two spatial data bases a half-person year. These

overhead costs to fine-grained yet broad-scale investigations are largely eliminated with the publication of the data in this book. We gladly share them with you, with the hope that you and other researchers will use them to help further advance anthropological

understanding of Ohio Hopewell peoples and the extraordinary and thought-provoking lives they lived.

CHRISTOPHER CARR  
D. TROY CASE  
September 22, 2007



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The survey and compilation of ethno-historic literature on the ceremonial uses, social role associations, and social and spiritual meanings of artifacts analogous to those used by Ohio Hopewell peoples, as presented in the appendices to Chapter 11, could not have been accomplished without the tenacious efforts of Rex Weeks and Mark Bahti over a year and a half. Both added substantially to the design of the survey as it proceeded. We are grateful for their enormous, careful, and thoughtful efforts.

The challenge of writing an ethnographic-like and historical description of the lifeways of Scioto Hopewell peoples, as presented in Chapters 2 through 5 and augmented in Chapter 15, was made easier for Chris Carr

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# *Contributors*

**Mark Bahti, M.A., A.B.D.** Anthropology Program, School of Human Evolution and Social Change, Arizona State University, Tempe, Arizona 85287-2402.

**Christopher Carr, Professor.** Anthropology Program, School of Human Evolution and Social Change, Arizona State University, Tempe, Arizona 85287-2402.

**D. Troy Case, Assistant Professor.** Department of Sociology and Anthropology, North Carolina State University, Raleigh, North Carolina 27695-8107.

**Ashley E. Evans, M.A.** Anthropology Program, School of Human Evolution and Social Change, Arizona State University, Tempe, Arizona 85287-2402.

**Beau J. Goldstein, M.A., Senior Archaeologist.** Transcon Environmental, 3740 E. Southern Avenue, Suite 218, Mesa, Arizona 85206.

**Cheryl A. Johnston, Assistant Professor.** Department of Anthropology and Sociology, G15B McKee Building, Western Carolina University, Cullowhee, North Carolina 28723.

**Rex Weeks, M.A., A.B.D.** Anthropology Program, School of Human Evolution and Social Change, Arizona State University, Tempe, Arizona 85287-2402.

**Rebekah A. Zinser, M.A., Project Director, Human Osteologist, and Faunal Analyst.** Northland Research, 1865 E. 3rd St., Phoenix, Arizona.

## **Part I**

# **Rationale and Framework**

## Chapter 1

# *Documenting the Lives of Ohio Hopewell People: A Philosophical and Empirical Foundation*

CHRISTOPHER CARR AND D. TROY CASE

How does one come to know another? Ethnographers, social psychologists, historians, biographers, and economists and political scientists of micro decision-making each face this most fundamental issue in exploring and studying the social and individual lives of people. It is no less true of anthropological archaeologists who wish to come to know a past people. In actuality, all human beings share this concern, to the extent that they depend on others and must understand them and adapt to them at some level in the course of social relations.

Rapport with and understanding of another person comes in part from taking the time to experience life together with them, cultivating within oneself an awareness of their actions, responses, and sensitivities in varying contexts, and situating oneself, to the extent possible, in their social and personal worlds. Without taking enough time to experience in detail another and their ways of living life, one's constructed image of them becomes dominated by the contents of projections of one's own unconscious, personality, world view assumptions, and paradigms – an imprisonment in one's own existence and understanding of life without

substantial companionship and enrichment from others, and a condition of which psychologists and philosophers of science repeatedly warn. For an archaeologist, openly experiencing and understanding a past people – or a particular individual of the past (e.g., DeBoer 2004; Gillespie 2001; Hodder 2000; McGregor 1941; White et al. 2004) – necessarily implies reconstructing their lives, and the social, cultural, natural, and historical contexts in which they lived, in rich detail. Immersing oneself in such details constrains the range of reconstructions that can logically be made, and gives at least the hope that the material voices of a past people will speak louder than one's own presuppositions, and will help to jar one into awareness of them.<sup>1</sup>

Experiencing others of the past in their own terms entails the discipline that we previously have called *thick prehistory* (Carr and Case 2005a:19–21). By this we mean the detailed describing of individuals, social groups, events, actions, patterned behaviors and ideas, and their interrelationships within a local social, cultural, natural, and historical context. The thick prehistory approach has four key elements,



which are followed in this book. First is carefully exploring and keeping close to the data while *empirically and richly describing* people and their culture and lives. Second is *personalizing* the past with people in their active, created, on-the-ground, sociocultural roles. Archaeologically identifying and defining the roles of past people provide social substance and dynamism to their archaeological records, and discourage the projection of one's own self, culture, and implicit patterns of thought and behavior onto them. The rights, duties, functions, and latitude of a social role define the domains and forms of action of those people who take on the role, potentially lead to their action in a normative or negotiated manner, and point toward possible motivations.<sup>2</sup> Third, thick prehistory attempts to *contextualize* the ideas and practices of past people within their own *local* social, cultural, natural, and historical milieux. It is within the context of local conditions and demands, and individuals' needs that may be particular to a place and time, that insights are fostered into the motivations behind the specific actions, patterns of behavior, and selected ideas of the people there. Locally contextualizing the ideas and ways of a past people is an essential vehicle for experiencing and understanding them in a manner that is faithful to them rather than as largely an extension of oneself and one's own cultural, natural, and historical milieux. Finally, thick prehistory involves tracking the *local history* of people and contextualizing them within it. Detailed sequences of events and historical contingencies can give strong insights into the motivations of past peoples.

Finding the faces, actions, and motivations of past people, as individuals, as social persons within varying roles, and as larger social formations, and within their local social, cultural, natural, and historical milieux, is essential to a fully realized, anthropological archaeology. As an aspect of basic archaeological observation and identification, it is a precondition to faithfulness in sociocultural reconstruction – of coming to experience and know a people prior to trying to interpret or explain their ways with the additional vantages of high

theory or cross-society comparison in heavy application.<sup>3</sup> Thick description of past people in context is also necessary to the potent wedding of scientific, humanistic, and historical approaches of understanding – a union to which contemporary and earlier archaeologists have aspired (Carr and Neitzel 1995:10, 15; Flannery 1972:409; Hall 1977, 1997; Hawkes 1968:255, 260–262; Hodder 1987; Hogarth 1972:304; Wheeler 1950:128–129). Focusing on dynamic social roles in the context of local conditions, demands, and needs encourages the study of persons and their motivations, as do the humanities, but also opens exploration of the structural and processual regularities that those conditions, demands, and needs may produce, as studied in the social sciences by scientific method. Thick, contextualized descriptions of people, their motives, and their milieux over time also provide the foundations for developing understandings of the kinds that the discipline of history seeks: seeing how cultural and behavioral changes are generated by personal actions and motives that are constrained or encouraged by and interact with local, temporally contiguous events and factors. It is in the wholeness of humanistic, scientific, and historical points of view combined that an individual or a people can be made understandable and that this fundamental aim of anthropological archaeology can be achieved.<sup>4</sup>

This book has two aims. The first is to describe in rich, ethnographic-like detail and genre, to the extent possible, the culture, lifeways, environment, and history of a remarkable set of peoples: the Hopewell who lived in the Scioto valley and its tributaries in Ohio in the first centuries A.D. (Figure 1.1). These were the most socially complex and materially vocal of Native Americans who resided in Eastern North America at the time, and for centuries before and afterward. The Scioto Hopewell built monumental, 80 acre earthworks aligned precisely to events in the day and night skies, masterfully worked glistening metals and semiprecious stones into intricate and elegant symbolic designs, and honored their dead with these vocal artifacts in community burial houses two-thirds the size of a football



**Figure 1.1.** A Scioto Hopewell person costumed as a feline, with eared headdress and facial tattoos or scarification for whiskers. From the Mound City earthwork, Mound 8, altar. See credits.

field. The world view and rituals of the Scioto Hopewell inspired their artistic exploration of the principles of three-dimensional perspective a thousand years before Renaissance artists discovered them in the Old World and unlike the artistic norms of any other Native American people. The Scioto Hopewell's intricate social order of complementary and crosscutting groups and their religious-based concepts of alliance afforded them three centuries of peace among both individuals and communities, as revealed by the lack of evidence for interpersonal violence in their skeletal record and many other lines of evidence. All of these civilized qualities of Scioto Hopewell life perhaps seem out of place among a people who were hunter-gatherer-horticulturalists and lacked any centralized leaders, making Hopewell peoples and their accomplishments all the more curious, as well as challenging to anthropological theory.

The second goal of this book is to systematize and present for use by other researchers the massive, largely unpublished mortuary-archaeological and physical anthropological information and other supporting data that exist on the Scioto Hopewell and their Hopewellian neighbors across Ohio (Figure 1.2). These data

have made possible the fullness of the cultural reconstructions of Scioto Hopewell life that we present here, and of the lives of Scioto and other Ohio Hopewellian peoples that we and our colleagues have previously offered in the book, *Gathering Hopewell: Society Ritual, and Ritual Interaction* (Carr and Case 2005c). Through our presentation of this information, we remove the extraordinarily heavy burdens of data acquisition and organization that previously have constrained archaeologists from making in-depth, empirical inquiries into the social and political lives, rituals, and religious concepts of Ohio Hopewellian peoples generally. In so doing, we allow evaluation of our findings, and encourage further detailed studies and deeper, faithful understandings of these culturally rich peoples.

The title of our book expresses both of its aims: to develop an understanding of Scioto and other Ohio Hopewell peoples through thickly describing them, and to empirically document their bioarchaeological record. Yet, the title also bears a deeper meaning and goal of this book: to foster an attitude of respect for Ohio Hopewell peoples and to accept them for who they were – regardless of whether their evidenced ways fit neatly with general anthropological theoretical expectations, ethno-historical Woodland Native American analogs, or popular interpretations. By “Cultural Understanding” in the title we mean both “*an* understanding” of Ohio Hopewell peoples and to “*be* understanding of” Ohio Hopewell peoples – both noun and verb.

To develop an understanding of a past people that is faithful to them requires the researcher to be understanding – to respect their material voices and to leave behind his or her own Western and personal preconceptions, regardless of how comfortable those ideas feel. In turn, both forming an understanding and being understanding of a past people are encouraged by, and indeed cannot occur without, the researcher delving deeply into the details of their material remains and the details of the lives that those remains imply – that is, listening carefully and sincerely to others of the past – the discipline of thick prehistory.



Figure 1.2. Most excavations of Ohio Hopewell ceremonial sites occurred from the 1840s through the 1920s. Unsystematized and/or unpublished information on site layouts, features, artifacts, and skeletal series from these investigations and some later ones has discouraged the analysis and cultural interpretation of the material legacy of Ohio Hopewell peoples. Here, Warren King Moorehead (*front row, second from right, in suit*) and his field crew stand before a deposit of 69 copper and iron celts and 92+ copper and iron breastplates that covered Skeletons 260 and 261 in Cut 3 of Mound 25 at the Hopewell earthwork. See credits.

## REQUISITES FOR REVEALING THICK PREHISTORIES

Doing thick prehistory as a means for coming to know, understand, and respect a past people entails more than the attitude and strategies described above for approaching the archaeological record. It has very practical implications: the nature of the archaeological records to which it is amenable, the large amounts of data it requires, and the archaeologist's budget, tenacity, and talent for team research. Here we consider each of these three practical matters.

Revealing the social and cultural lives of a people in detail requires that their material record be socially and culturally

vocal, intentionally or not. When some certain aspect of a past people's lives is unexpressed materially, the researcher is left to surmising its nature from direct culture-historical analogies, crosscultural generalizations and correlations, and/or theoretical models that contextually seem appropriate. These strategies, of course, do not acknowledge the cultural inventiveness of individual peoples. They also open the way to laying interpretations upon a people that coincide with the researcher's own views on cultural life and that may not be true to the people.

Ohio Hopewell societies, fortunately, were very expressive materially about their social, political, and spiritual lifeways and beliefs.

Claws, talons, foot bones, teeth, and jaws of various animal species – their “power” parts – marked the clan affiliations and clan eponyms or totems of deceased persons in their graves. Quartz crystals and cones, sucking tubes, sets of awls, barracuda jaw scratchers and conch shells, and geometric symbols of copper and mica reveal the roles of shaman-like leaders respectively in divining, healing, processing corpses, leading public ceremonies, and integrating their people with the cosmos. Metallic earspools and breastplates, combined with demographic information on who they accompanied at burial and how commonly, indicate the developing presence of ceremonial sodalities in Scioto Hopewellian life, while changes in the relative frequencies of metallic headdresses of various forms seem to mark a shift in the nature of community-wide leadership from self-designed, shaman-like positions to more professionalized, priest-like ones. Spatial distributions of grave goods and persons of various age-sex classes among the rooms of charnel houses evidence multiple local communities that came together to bury their dead under one roof to solidify intercommunity alliances (Carr 2005a; Carr and Case 2005b; Thomas et al. 2005; Weets et al. 2005).

Socially and culturally expressive material records like these make it possible to begin to know and experience the lives of past people in their own social and cultural terms. This situation can be contrasted with, for example, Classic period Hohokam cemeteries, where deceased persons were seldom buried with indicators of their social roles and the most common grave goods were ceramic vessels that, for now, are largely silent about the social positions of individuals (Brunson 1995; Mitchell 2003:108–110, 115; Mitchell and Brunson 2001:53, 55). In general, societies in which “corporate” strategies of leadership and organization of social groups predominate are less socioculturally expressive materially than societies where “exclusive”, “network” strategies and organization are key (Blanton et al. 1996; Feinman 2000).

Second, doing thick prehistory practically also entails the building of very large

and systematized archaeological collections and computerized data sets, which encompass many sites over the expanse of a regional-scale landscape. Documentation at the scope of the region is necessary because this is the scale at which a society and its closely interacting neighbors operates, in the pre-state contexts that we consider here. Data from multiple sites, rather than some single “typical” or “representative” site within the area, are required because, in the course of the lives of a people, varying subgroups of them will carry out differing suites of social and cultural activities at different locations. The regional and multi-site requirements for doing thick prehistory follow from the “partitive” view of culture in distinction from the “normative” view (Binford 1964a; Gearing 1958): different individuals “participate in” different aspects of culture at different locations across a region through the varying roles they take on at those different locations, rather than each share all of culture and its norms and express all of them at all locations.

Although the partitive view of culture was first applied in archaeology to define regional, multi-site, settlement-subsistence systems (Struever 1968a; Winters 1969), it has been extended since then to consider regional, multi-site mortuary programs (Buikstra 1976; Carr 2005b), ritual landscapes (Buikstra and Charles 1999; Carr 2005a, b), and communities (Ruby et al. 2005; Charles 1995). These more recent concepts, like the settlement-subsistence systems viewpoint, make it clear why doing thick prehistory requires large, regional-scale data sets.

Specifically, a single society may produce multiple cemeteries of diverse kinds over a landscape for burying different subsets of its members who held different social roles, died by different means, were believed to be bound for different afterlives, or were distinguished in any of a variety of other social, philosophical-religious, circumstantial, or physical ways (Carr 1995). Similarly, one society may construct over its lands many and distinct kinds of ritual sites that vary in their function, the social segments that use them, and the roles enacted at them. Further, a community need not be a



compact group of people who live in a common place but, instead, multi-scalar in geographic extent and organization. Beyond nucleated or dispersed “residential communities” (Murdock 1949a:79–80), which are held together by common residence and perhaps kinship, race, dialect, and/or other cultural criteria, may exist geographically broader “sustainable communities” or networks. Within these networks, mates, labor, food, and other material resources are exchanged fairly regularly to offset and buffer against local variations in demography or in subsistence productivity (Mahoney 2000). Multiple residential communities, or segments of them or sustainable communities, can also seek out each other to form what have been termed “symbolic communities” (Charles 1995; Ruby et al. 2005) – self-identifying social units of negotiated affiliation and spatial and temporal fluidity that are created in order to meet mutual political, economic, and or religious goals, such as regulating irrigation or warfare (Abbott 2000; Rice 1998; Chagnon 1968) or maintaining the cosmos (Rappaport 1968, 1971). The regional and multi-site expanses of subsistence-settlement systems, some mortuary programs, ritual landscapes, and multi-scalar communities each require the collecting and analyzing of huge data sets to begin to unfold the thick prehistory of a past people and to experience the lives in their own terms rather than our own.

Finally, the large, systematic, regional-scale archaeological collections and computerized data sets that are necessary to do thick prehistory, as well as the multifaceted analyses of such data and their reporting that are involved, practically require an archaeologist to have tremendous focus over the long-term on a past people, a talent for team research and harnessing the imaginations and labors of fellow workers toward a unified research goal, and extensive, stable fiscal and infrastructural support, especially if field excavation is involved (Struever 1968b, 2000, 2004; see also Carr and Case 2005c:Dedication to Stuart Struever). Foundational to all of these is the archaeologist’s deep curiosity about a past people, and a passion to come to know and

experience their lives and motives in rich detail – the goal of doing thick prehistory.

## **THIS BOOK AND OHIO HOPEWELL PEOPLES**

It is within the understanding, above, of how one comes to know another, with all its archaeological entailments when concerned with people in the past, that this book emerges. Our aspirations here are to write, for the first time, a holistic description of Scioto Hopewell cultural life, and then to provide detailed, regional-scale, empirical documentation of the bioarchaeological record of the Scioto Hopewell and neighboring Hopewell peoples in Ohio. Our documentation, we hope, will allow other researchers to add to the thick prehistory of Scioto Hopewell life that we present here and to explore the similar yet differing lifeways and beliefs of other Ohio Hopewellian societies in their own individual terms. We hope that both our description of Scioto Hopewell cultural life and the rich data that we offer will create opportunities for archaeologists to situate themselves in the midst of the social and personal worlds of Hopewell peoples, to experience their lives in greater detail and depth than might otherwise be possible, and to become more sensitive to their actions, beliefs, and motivations in Hopewellian cultural terms.

In Ohio, Hopewellian peoples lived in a suite of communities in parts of primarily the Scioto, Paint Creek, Muskingum, Little Miami and Great Miami valleys in the southern half of the state (Figures 1.3, and 1.4). As hunter-gatherers and swidden agriculturalists (Wymer 1996, 1997), the households of a community were dispersed over the landscape rather than concentrated within villages (Figure 1.5).

In the Scioto valley, people of a community were held together and regulated socially, and multiple communities were sometimes integrated, through ties of kinship and marriage, membership in sodalities that crosscut kinship and residence, complementarity in leadership roles, gender role distinctions to a degree, and participation together in ceremonies of multiple

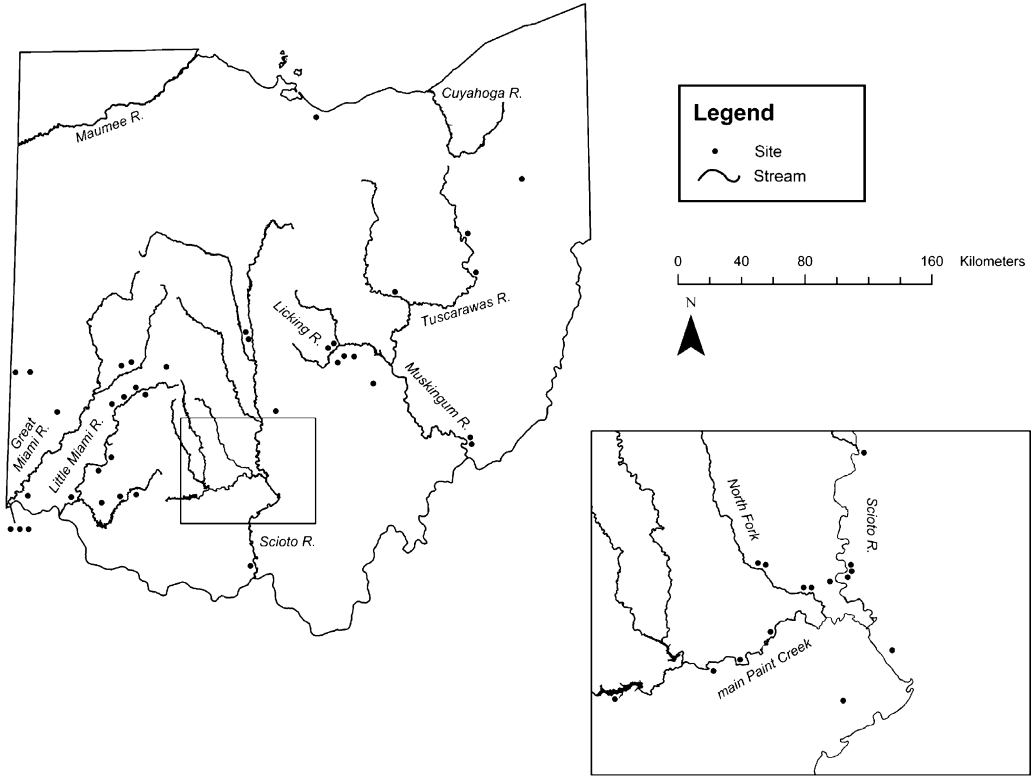


Figure 1.3. Ohio Hopewellian mound and earthen enclosure ceremonial centers that are reported in this book.

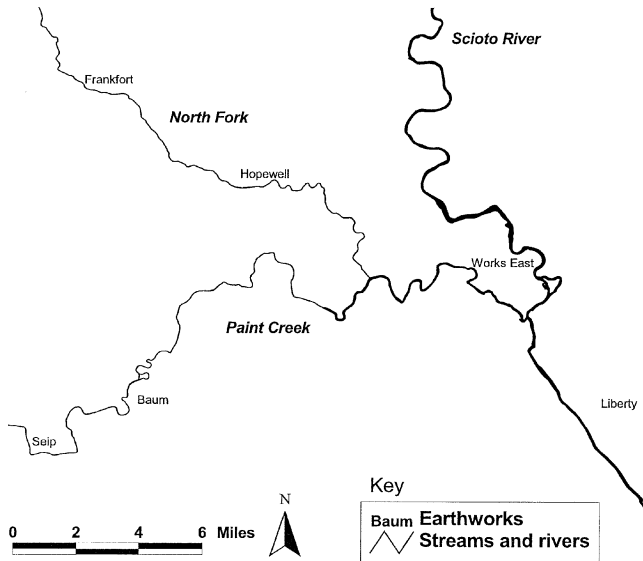
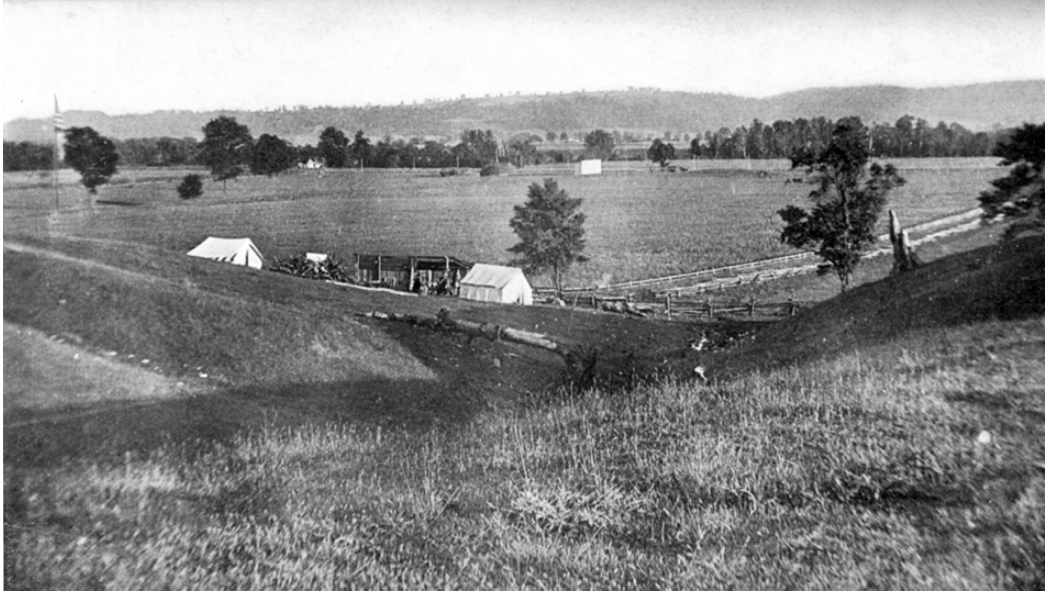


Figure 1.4. The Scioto-Paint Creek area with selected mound and earthen enclosure ceremonial centers.



**Figure 1.5.** The misty Scioto valley in 1891. View of the terrace upon which the Hopewell earthwork was built, with Warren King Moorehead's field camp in the foreground. See credits.

kinds held within ceremonial centers (Carr 2005a; Ruby et al. 2005). Some ceremonial centers were places of burial, where select persons from one or more communities were laid to rest within mortuary buildings under earthen mounds (Figures 1.6A–D; Prufer 1964a:74; Carr 2005a:278–280). Other centers lack cemeteries and were presumably the locations of gatherings for different purposes (Figure 1.7). Burial ceremonies and burial together of the deceased from one or more communities helped a spatially dispersed community or communities to cohere, to remain orderly, and to meet various social needs. The deceased were often laid to rest with markers of certain of their social roles. Frequently, these items were also very elaborate and refined artworks (Figure 1.8). Also buried within some earthen mounds were segregated deposits of ceremonial paraphernalia and role markers, sometimes in great quantities, that were purposefully broken, cremated, and/or placed intact as a part of the collective rituals of specialized ceremonial societies, ritual dramas, the periodic decommissioning of social and ceremonial items, and/or cemetery closing ceremonies (Figure 1.9). Many of the raw materials from which the ceremonial parapher-

nalía and role markers were made, such as copper, mica, silver, meteoric iron, obsidian, and hornstone, were obtained from sources that were many hundreds to several thousands of water and land miles away, round trip (Brose 1990; Carr and Sears 1985; Goad 1978, 1979; Hughes 2006; Spence and Fryer 2005; Vickery 1983; Walthall 1981; Walthall et al. 1979).

Although the elaborate archaeological record of Hopewell peoples who lived in the Scioto valley, specifically, has fascinated antiquarians, academic archaeologists, and the public for three centuries, a coherent synthesis of the whole of their life has yet to be written. The first half of this book attempts to fill this need. It describes:

- the natural environment, the opportunities it offered for material sustenance, and the conceptual models it provided Hopewell peoples for their social relationships;
- the natural environment as it would likely have been perceived and interpreted symbolically by Hopewellian peoples, given the many aspects of their world view that are known;

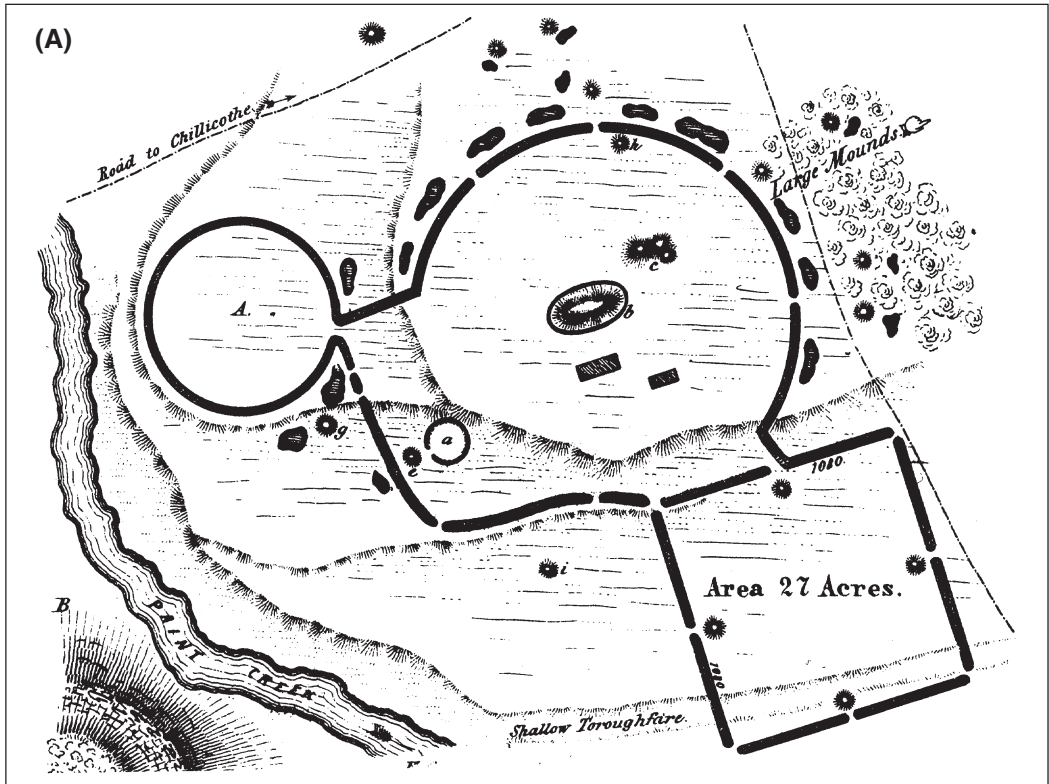


Figure 1.6. (A) The Scioto Hopewell ceremonial center, Seip, with geometrically shaped earthen embankments that enclosed burial mounds. (B) The Pricer mound under excavation at the Seip earthwork. (C) The charnel house enclosing tombs under the Pricer mound at Seip. (D) Model of a log tomb similar to those under the Seip-Pricer mound and some other Scioto Hopewell burial mounds. See credits.



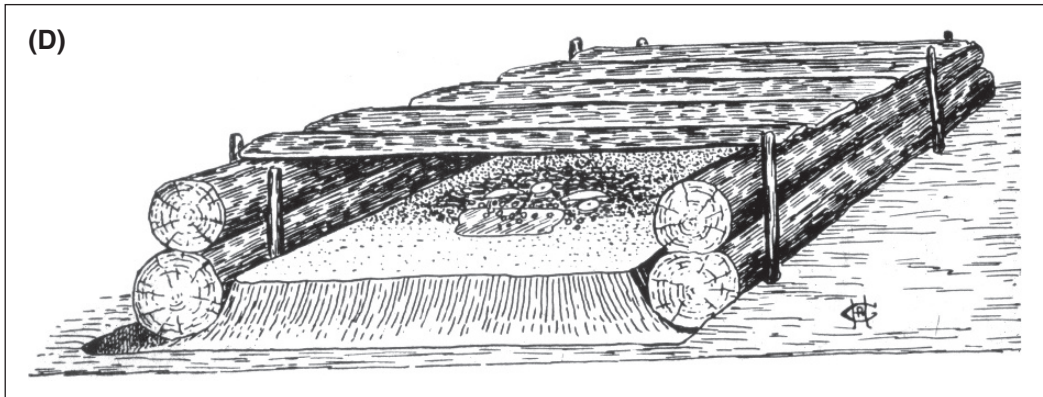
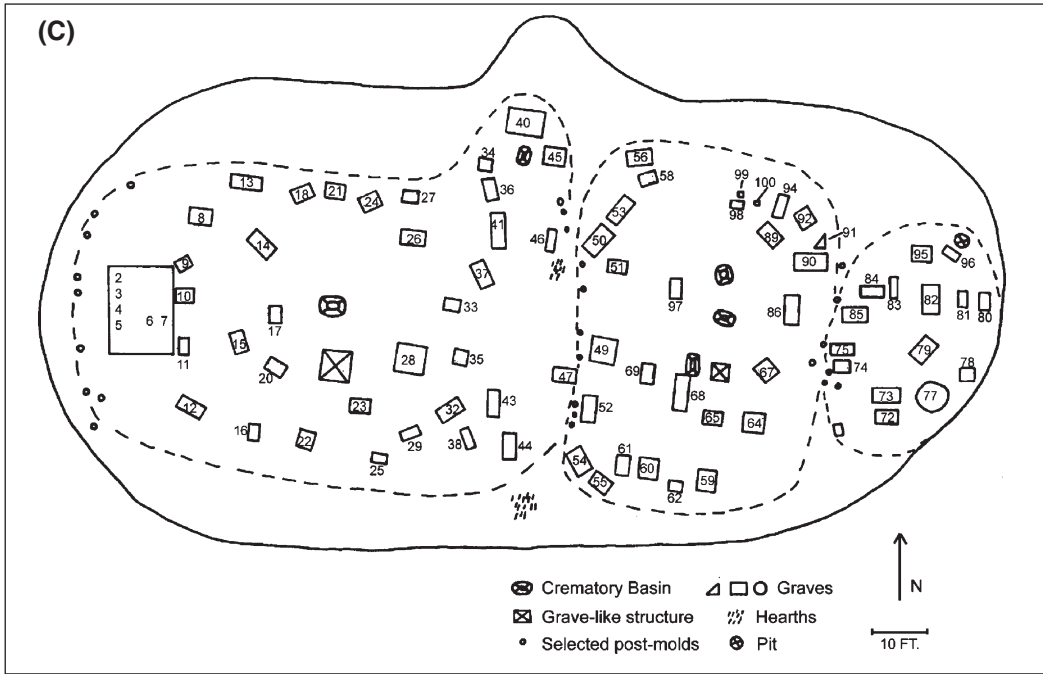


Figure 1.6. (continued)

- subsistence, settlement, and mobility patterns and decisions;
- community organization at several different spatial scales;
- many other aspects of social, political, and ritual organization such as clanship, leadership, and ceremonial societies;
- key elements of world view that were essential to the constitution, rise, and fall of Scioto Hopewellian society and life; and
- the history of changes in all of the above aspects of Scioto Hopewellian life.

For example, in the first half of this book, the reader is introduced to the various ceremonial societies of the Scioto Hopewell, their complementary ceremonial duties, whether their membership crosscut kinship and residence (sodalities) or not, the roots of some of these ceremonial societies in earlier Adena cultural organization, and the growth of ceremonial

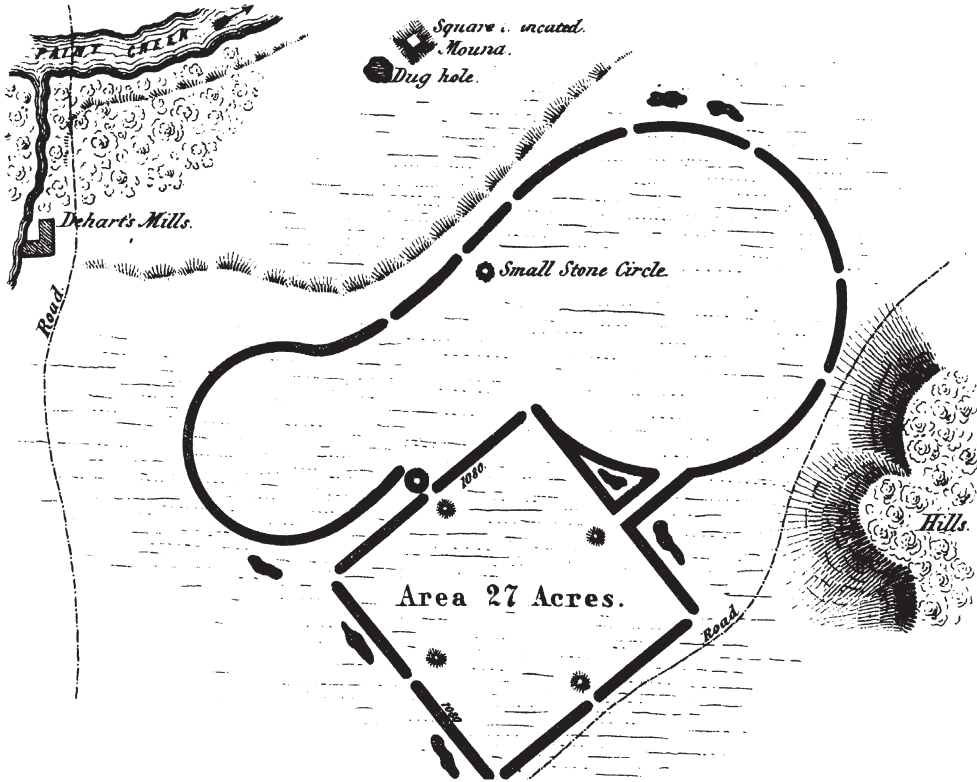


Figure 1.7. The Scioto Hopewell ceremonial center, Baum, is located 6.1 kilometers east of Seip within the same valley, is similar in layout to Seip, but lacks burial mounds. The two sites had complementary ritual functions and spiritual meanings. See credits.

societies over time in their kinds, sizes, and female memberships. The reader also learns how strategies for alliance among communities matured over time: from primarily economic and social exchange relations among individual commoners as dyads outside the context of ceremonial centers, to ritualized cooperative and/or competitive material displays focused on spiritual-social connections and orchestrated by leaders within ceremonial centers, to eventually the burial of members from multiple communities within the same charnel houses as an expression of the spiritual unification of the ancestors from those communities and their living descendants. An analysis of the faunal and paleoethnobotanical records of the Scioto Hopewell and their close neighbors, along with evidence from food processing equipment, storage facilities, art works, and gender roles, shows that Scioto Hopewell peoples were mixed forager-farmers, not agriculturalists.

They obtained the greater portion of their annual caloric intake from wild resources that had been staple to the diets of midwestern-riverine groups for millennia, and continued to be so for centuries after. More general, pan-Eastern Woodlands models of Hopewell subsistence, which are derived from other geographic areas and pose that Hopewell peoples were primarily farmers of native Woodland cultigens, do not fit the evidence from the upper Ohio valley.

Our textual descriptions of Scioto Hopewell culture and life are made tangible to the reader through 195 photographs and line drawings of the landscape and material creations of Scioto Hopewell peoples. Many of the images and what they show have never been published before, and give a fresh, vibrant, and broader look at the Scioto Hopewell world. The valley, mountain, and till plain landscapes where Scioto peoples lived and

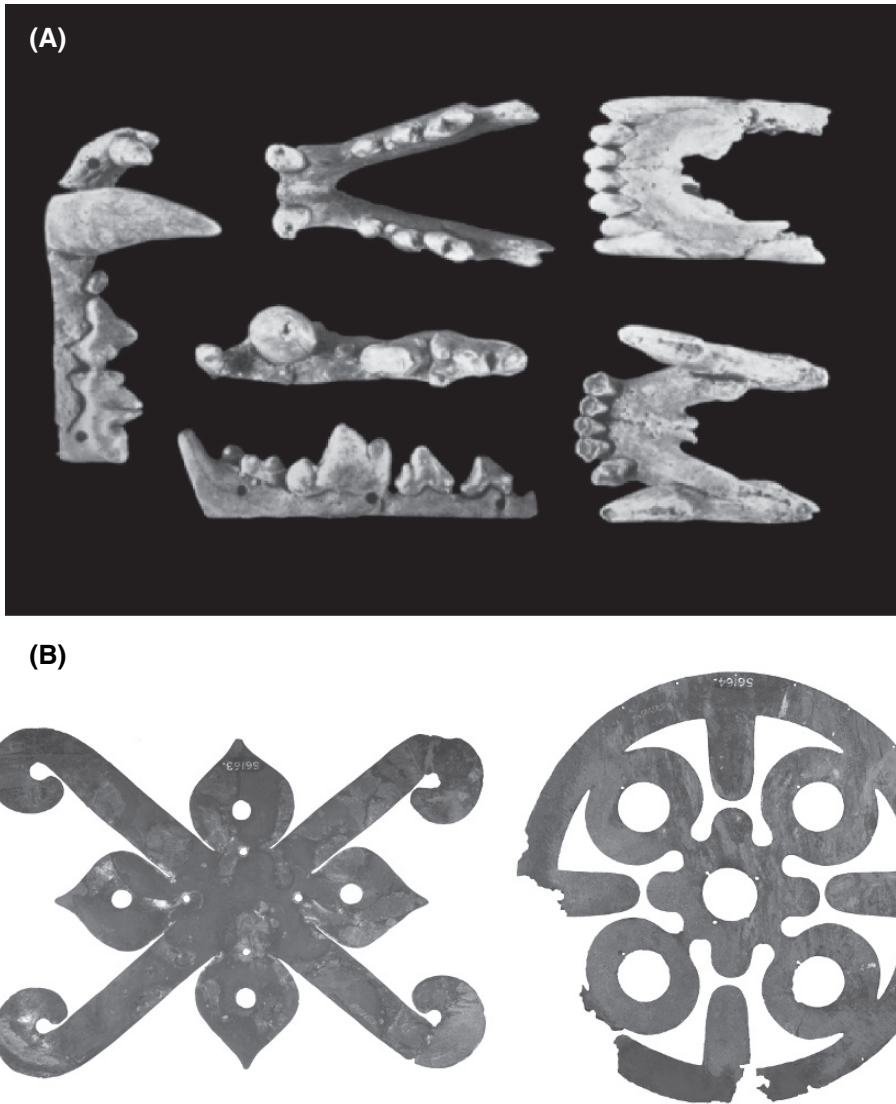
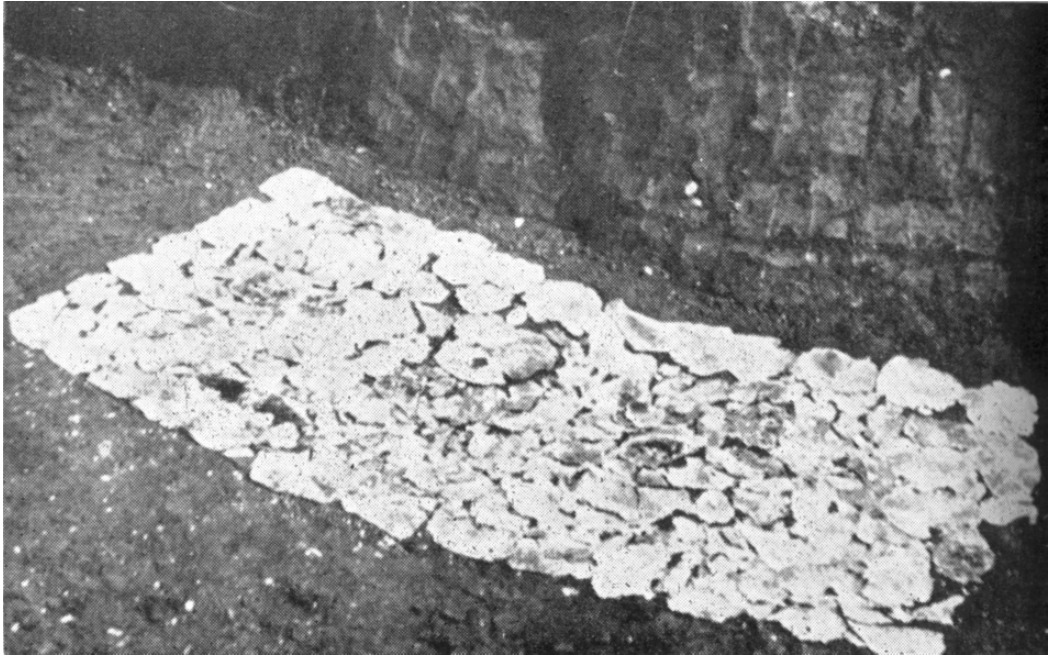


Figure 1.8. (A) Bodily parts of animals that displayed their power, such as their jaws, teeth, claws, and talons, were used to represent the totems of clans and to identify clan members and leaders. Pendants made of the jaws of wolf, wild cat (bobcat?), and mountain lion, from the Hopewell Site, Mound 25. (B) Copper geometrics depicting the directions of the cosmos were possibly part of the costumes worn by shaman-like public ceremonial leaders whose roles focused on philosophical and practical knowledge about the cosmos. (*Left*) The four cardinal directions and four moon maximum north and south rise and set points. (*Right*) The eight cardinal and semicardinal directions. See credits.



**Figure 1.9.** Deposit of 100+ mica mirrors, many similar in their round form and 10–12 inch diameter, placed systematically in a 4 foot by 8 foot pavement, overlapping one another like fish scales, in Mound 7, Mound City earthwork. The pavement possibly indicates a collective ritual of a ceremonial society concerned with divination using mica mirrors (Carr, Chapter 4, Sodalities and Ceremonial Societies). See credits.

foraged, the dense and dark virgin forests of the valley bottoms where they built their habitations and in which they carved spaces of light for their earthen ceremonial centers, and certain especially sacred geological formations in their landscape are each rendered in hard-copy photographs and on an accompanying CD. Ceremonial paraphernalia of many kinds are depicted, such as intricately carved wands used in small healing or magical rites, a sucking tube used in curing ceremonies, divination mirrors cut from mica in the forms of an eagle's head and a human-feline composite, and a whistle made of a human radius bone. Markers of social, political, and personal identities are also shown – for example, wolf and wild cat jaw pendants that distinguished certain clanspersons, the copper animal-effigy headgear of community leaders, and smoking pipes carved with the personal spirit-power animals of their owners. Hopewell earthworks, mounds, charnel houses, and artwork are well represented. All of these images are interpreted

in cultural terms, to guide the reader through Scioto Hopewell life.

In attempting to write an integrated, descriptive synthesis of Scioto Hopewell life, our literary style is necessarily different from a journal article or dissertation that focuses on argumentation and testing of propositions. Like an ethnography of a people, we present reconstructions of the various aspects of the lives of Scioto Hopewell peoples – their environment, communities, ceremonial life, etc. – in a straightforward, descriptive manner. Empirical support and archaeological argumentation for our descriptive statements are referenced to previous, detailed empirical analyses made in *Gathering Hopewell* (Carr and Case 2005c) and many other works, placed in endnotes, and/or presented in summaries following the descriptions. Although we present tabular data, maps, graphs and photographs, these are offered more commonly to fill out our descriptions than to prove or disprove a point. There is a difference between presenting a people and presenting



problems to be solved and analyses. This book does primarily the former; *Gathering Hopewell* and other works do mainly the latter, empirically supporting the integrative summaries that we make here.

The second half of this book presents and documents four massive data bases stored on the book's CD-ROM. These are the data that have allowed the unusually detailed reconstruction of Scioto Hopewell life that we give here. The data bases describe: (1) the tombs, grave goods, and human remains from all Ohio Hopewell cemeteries that have been excavated and reported – published and not – as far as we and other Ohio archaeologists know; (2) the intrasite layouts of most of those cemeteries and of the earthwork ceremonial centers that contain them; (3) the geographic locations of the excavated cemeteries and ceremonial centers, along with the locations of unexplored ones, on a suite of detailed-scale county maps; and (4) the ceremonial functions, symbolic meanings, and social role associations of a wide range of historic Woodland Native American ceremonial paraphernalia that are analogous to those used by the Ohio Hopewell and other prehistoric peoples across the Eastern US. These four data bases will give other researchers the opportunity to immerse themselves much more systematically, deeply, and interpretively in the remains of Ohio Hopewell lives than would otherwise be possible, and to gain for themselves an understanding of Hopewell peoples. In line with our hope that other researchers will use these data to extend our cultural studies of Ohio Hopewell peoples, we begin each chapter or suite of chapters devoted to a data base by describing its significance to anthropological reconstructions of Ohio Hopewell lifeways, thus guiding the researcher toward anthropologically relevant analyses.

### The Bioarchaeological Data Base

This data base inventories the material cultural and human skeletal remains excavated from many of the mortuary-ceremonial centers of Hopewell peoples in the Scioto and neighboring valleys in Ohio. The data base, called HOPEBIOARCH, includes information on:

- 1,052+ individuals buried in 126 earthen mounds and burial areas in 52 ceremonial centers across Ohio;
- the social, religious, and personal artifacts that accompanied them in their graves, encompassing 125 classes of items;
- the positions of the artifacts relative to the bodies in the graves;
- the architectural characteristics of the individuals' tombs;
- modern biological estimates of the ages and sexes of many of the individuals;
- the general spatial locations of the individuals relative to each other and mortuary features within the sites; and
- the approximately 15,000 ceremonial items that were decommissioned and buried in 77 special deposits at 19 of the sites, and that reveal the sizes, social compositions, and functional variation of ceremonial gatherings.

The artifacts include symbols that marked detailed social roles, such as shaman-like and nonshamanic community-wide leaders of several kinds, clan leaders and members, ceremonial societies (sodalities) of three to possibly five kinds, clan-based ceremonial society members, hunt diviners, healers, mortuary specialists, and cosmologists. Identification of these roles was accomplished through much ethnographic and archaeological-contextual research (see below).

The bioarchaeological data base encompasses all recorded Ohio Hopewell burials and ceremonial deposits in the published literature and in unpublished documents in museums and historical societies in Ohio and elsewhere, as far as we and other Ohio archaeologists know. It was assembled through 27 months of grant-funded archival research on documents, artifacts, and skeletons at the Peabody Museum of Archaeology and Ethnology at Harvard University, the Chicago Field Museum of Natural History, the Ohio Historical Society, and smaller public and private collections. The

archival work was followed by eight continuous years of computer coding and verification by the authors and by graduate students who worked half-time.

The data are presented in three forms on the book's CD-ROM. Individual pages, one per grave or ceremonial deposit, record all extant, assembled information on a grave or deposit as a Word text file in a standardized format. These descriptions are excellent for over-viewing a particular provenience. An EXCEL data base codes this information for each individual and deposit in a spreadsheet format that is more amenable to pattern searching. The EXCEL data base has also been exported into a tab-delineated format that allows its easy porting to various statistical packages.

Most of the chapters in the second half of the book document the bioarchaeological data base, assess the quality of its osteological and archaeological information, and report fundamental mortuary patterns within it. The later, pre-analyses prepare researchers for making more complex analyses of the kinds made today by anthropological archaeologists and bioarchaeologists when studying mortuary remains to infer social, political, ritual, and religious life. Documentary chapters are devoted to the organizational format of the bioarchaeological data base, descriptive overviews of each site within it in order to contextualize the data, and defining the mortuary variables and variables states in the data base. Chapters on osteology evaluate the accuracy of the ages and sexes assigned by previous researchers to human remains and tell how a best estimate was derived for each buried individual's sex and age at death. Also described are the complex statistical procedures used to estimate the ages and sexes of human remains from the Hopewell site. One chapter considers the reproducibility and accuracy of the archaeological and osteological information in the data base by comparing it to two smaller data bases previously constructed by other mortuary archaeologists. The chapters on preanalyses contextualize each mortuary variable (e.g., grave good class, tomb trait) by summarizing its global and site-specific distributions among individuals of different age and

sex categories, whether it tends to occur in burials or ceremonial deposits, and whether it tends to occur alone or in consistent numbers or in aggregates of varying sizes across burials. The chapters also contextualize select classes of ritual paraphernalia and artifactual symbols of social roles by summarizing their global and site-specific patterns of association and dissociation with one another. These patterns are useful for identifying and confirming the social and ritual functions of the artifact classes, and for defining basic social roles pertinent to the operations of Hopewellian communities.

### **The Data Base of Intrasite Layouts**

The second data base presented in this book includes 84 digitized maps of the spatial layouts of burials and ceremonial deposits of artifacts on the floors under 50 mounds, and the spatial organization of the mounds, embankments, and other constructions that comprise 10 earthen enclosure ceremonial centers. All of these Ohio Hopewell mounds and centers contained individuals and/or ceremonial deposits described in the bioarchaeological data base. The maps allow these burials and ceremonial deposits in the bioarchaeological data base, which is largely nonspatial, to be related to one another in space, providing essential sociological and historical information. Some of the maps have been published previously, some not. Alternative maps are provided for some published ones now known to be inaccurate. Original field maps have been cleaned up or redrawn to make them legible. Sources of publication or curation are given for all the maps.

### **The Regional Geographic Data Base**

A third data base plots the locations of 3,691 earthen-mound and earthen-enclosure ceremonial centers on 53 Ohio county maps of the Adena and Ohio Hopewell homelands. Earlier, Adena ceremonial centers can be distinguished to a fair degree from later Hopewell ones on the maps. The maps provide researchers with information necessary