Chapter 7

The Tripartite Ceremonial Alliance among Scioto Hopewellian Communities and the Question of Social Ranking

Christopher Carr

Within the Scioto and Paint Creek valleys around Chillicothe, Ohio, are five earthworks that form a fascinating pattern. The five are uniquely similar in shape, each having a large circle, a small circle, and a square. In addition, the earthworks and their corresponding parts are similar in size. In each case, the earthwork encloses about 31 hectares, with its large circle being about 16 hectares, its small circle about 4 hectares, and its square about 11 hectares (DeBoer 1997:232; Romain 2000:32–60). The five sites are Seip and Baum in the main Paint Creek valley, Frankfort or Old Town in the North Fork of Paint Creek, and Liberty and Works East in the adjacent main Scioto valley (Figures 7.1a–e and 7.2). Squire and Davis (1848:plates 20, 21) first pointed out this suite of sites over 150 years ago, and it has stimulated much interest and interpretation since then (e.g., Byers 1996; DeBoer 1997; Greber 1976, 1979a, 1979b:27, 1983:89, 1997:216–220). The five earthworks are distinguished from one-part, squarish or diamond-like-shaped enclosures such as Tremper and Mound City, which predate much of Seip and Liberty (Ruby et al., Chapter 4; Weets et al., Chapter 1 Greber 2003; Prufer 1961a:702–714; 1964a:44–52; Ruhl 1996, chap. 19; Ruhl and Seeman 1998); from the bipartite square-and-circle earthwork of Hopeton, which also predates much of Seip and Liberty (Ruby et al., Chapter 4); and from other one-part and two-part earthworks that are comprised of a square, a circle, both, or other shapes, and that are of unknown age.

Remarkably, the tripartite pattern witnessed in the layout of the five earthworks is paralleled by the tripartite division of charnel houses for processing and burying the dead at two of the earthworks: most obviously the charnel house under the Conjoined mound at Seip, but also apparently one under the Pricer mound at Seip and another below the Edwin Harness mound at Liberty (Figure 7.1g–i). The Conjoined and Pricer charnel houses, in turn, were both covered initially with three primary mounds, and the Harness charnel house may also have been (Greber 1979b). Within the Old Town Works, Porter Mound 38 and its two conjoining mounds resemble the tripartite Seip–Conjoined and Seip–Pricer

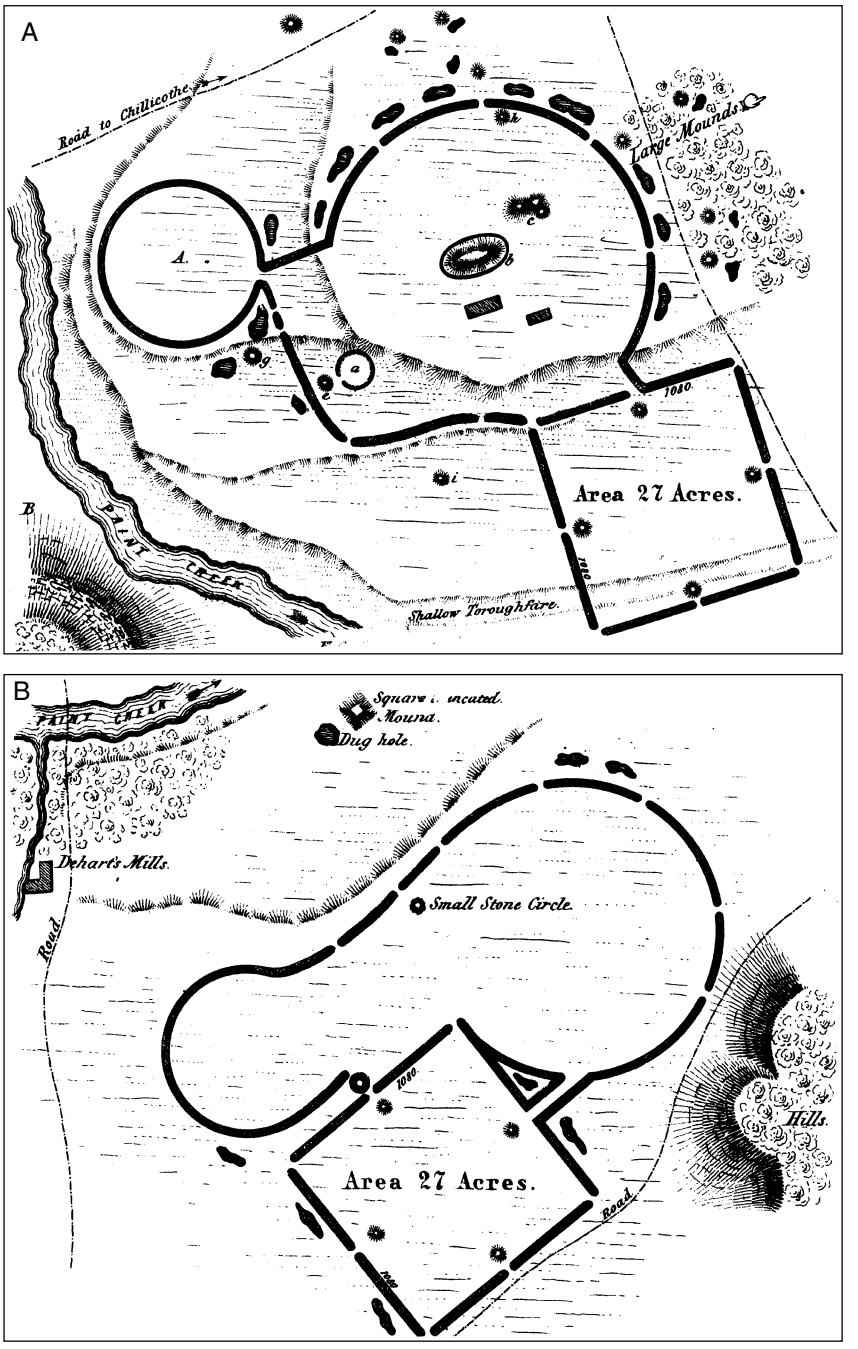
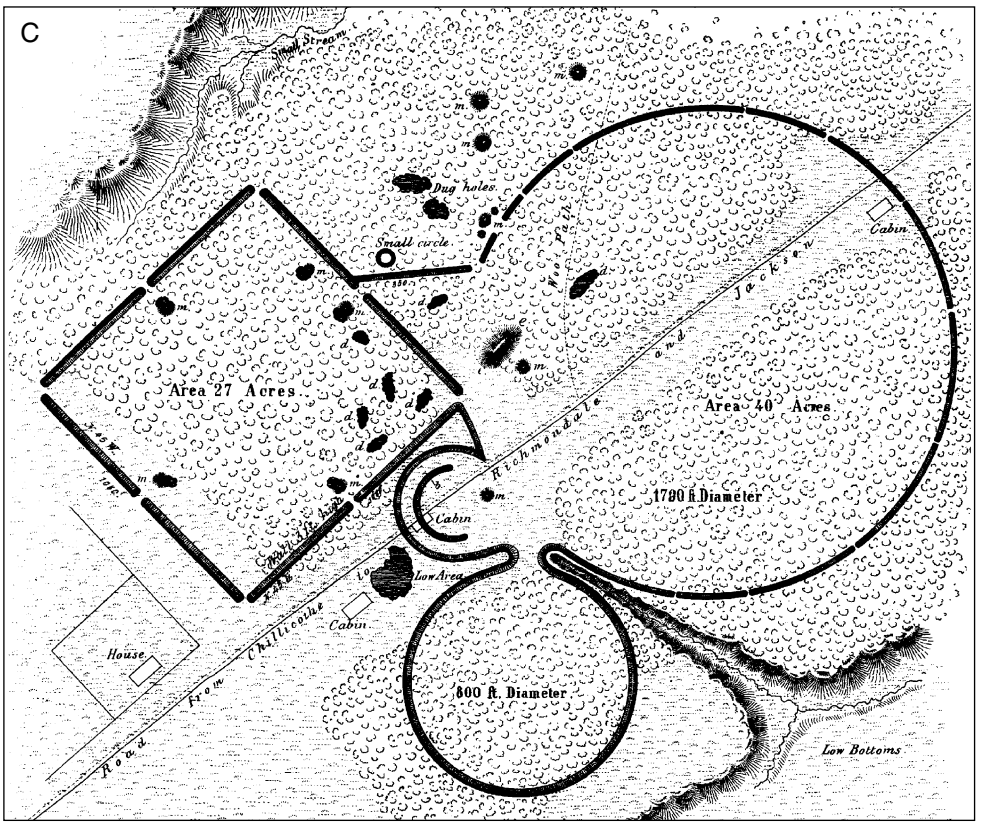
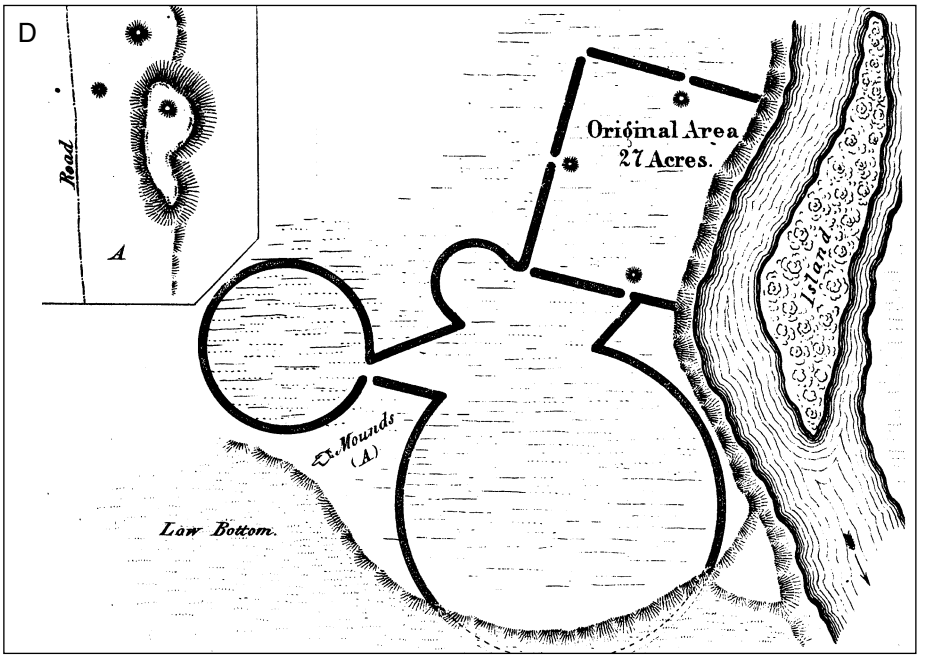


Figure 7.1. Earthwork layouts and floor plans of burial mounds discussed in this chapter. (A) Seip earthwork and (B) Baum earthwork in the main Paint Creek valley. (C) Liberty Earthwork and (D) Works East in adjacent portions of the Scioto valley. (E) Old Town Works at Frankfort and (F) Hopewell earthwork in the North Fork of Paint Creek valley. (G) Floor plan of the Seip–Pricer mound. (H) Floor plan of the Seip–Conjoined mound. (I) Charnel house under the Edwin Harness mound. (J) Floor plan of Hopewell Mound 25. (K) Floor plan of Raymond Ater mound. (A–F) From Squire and Davis (1848: Plates X, XX, XXI). (G, H) From Greber (1979: 58,66) by permission of AltaMira Press. (I) From Greber (1983:28) by permission of AltaMira Press. (J) From Greber and Ruhl (1989:50) by permission of N'omi Greber and Katharine Ruhl. (K) From Greber (1979:68) by permission of AltaMira Press.





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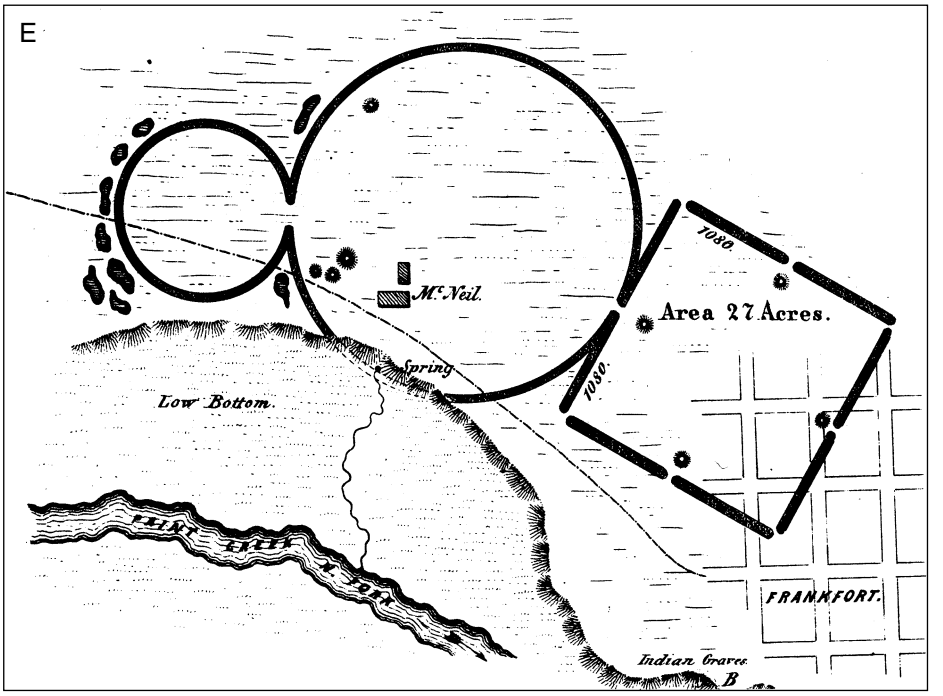

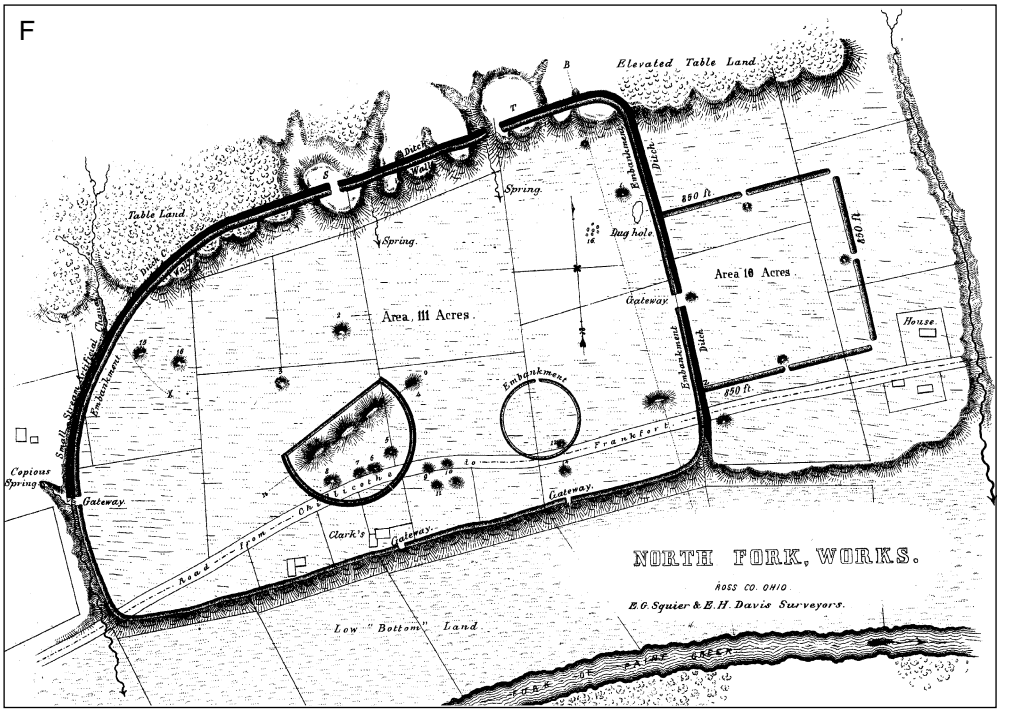

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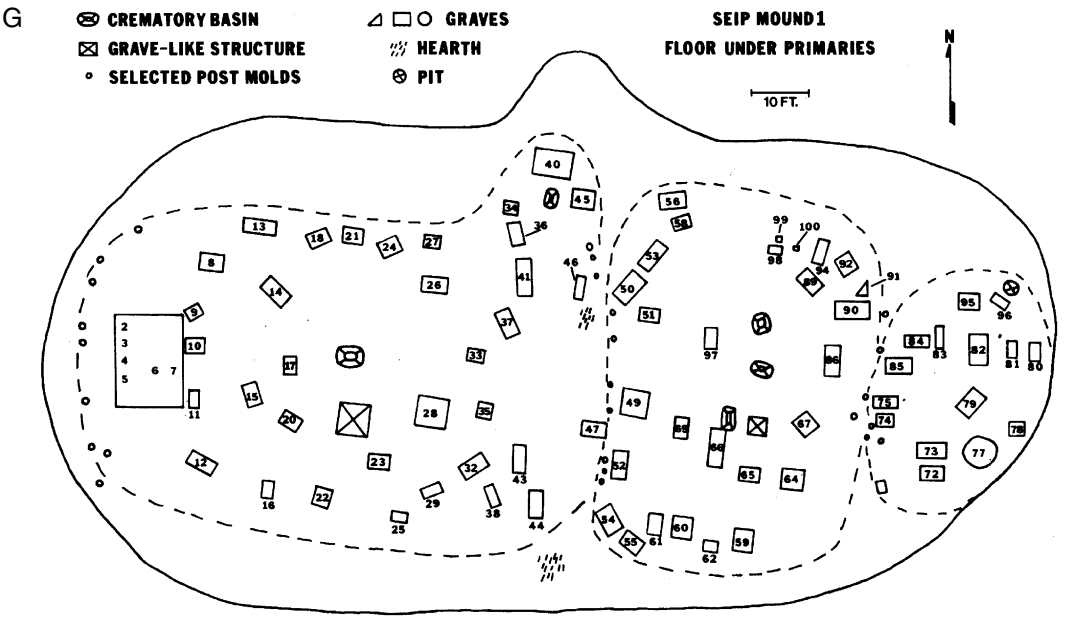

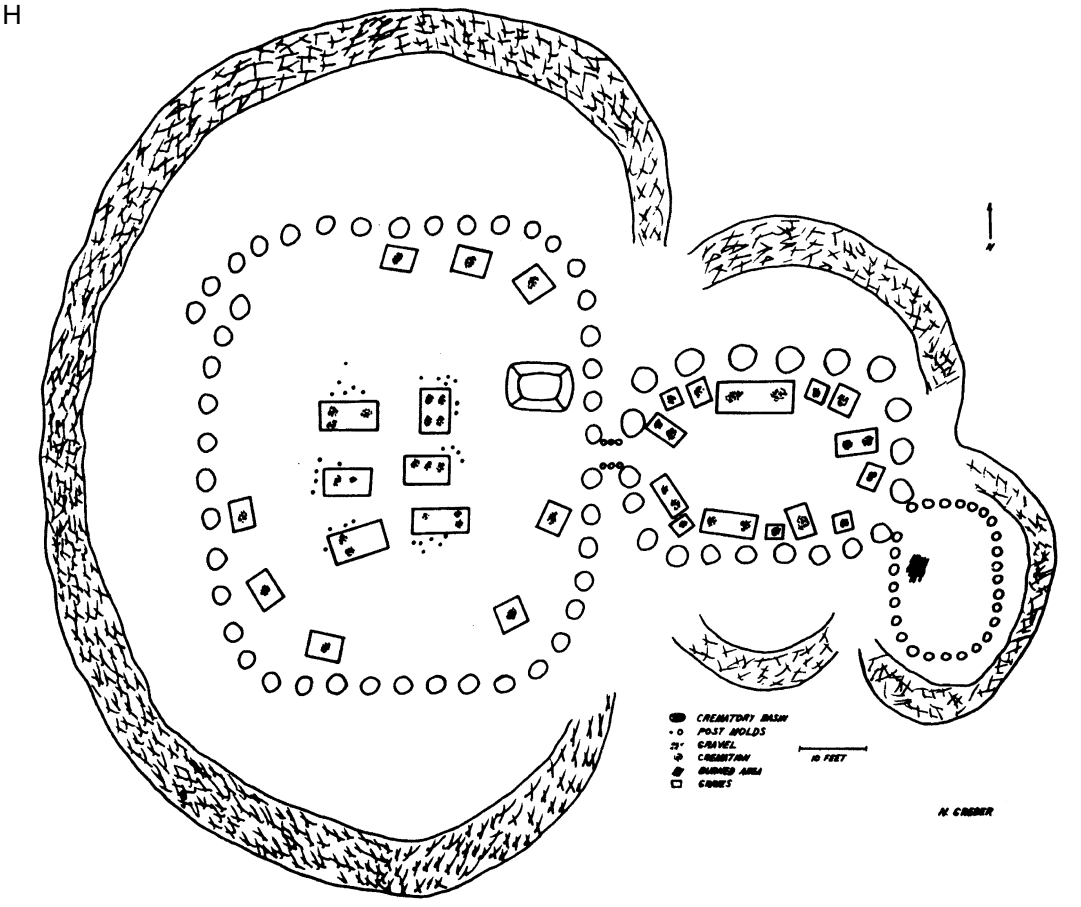

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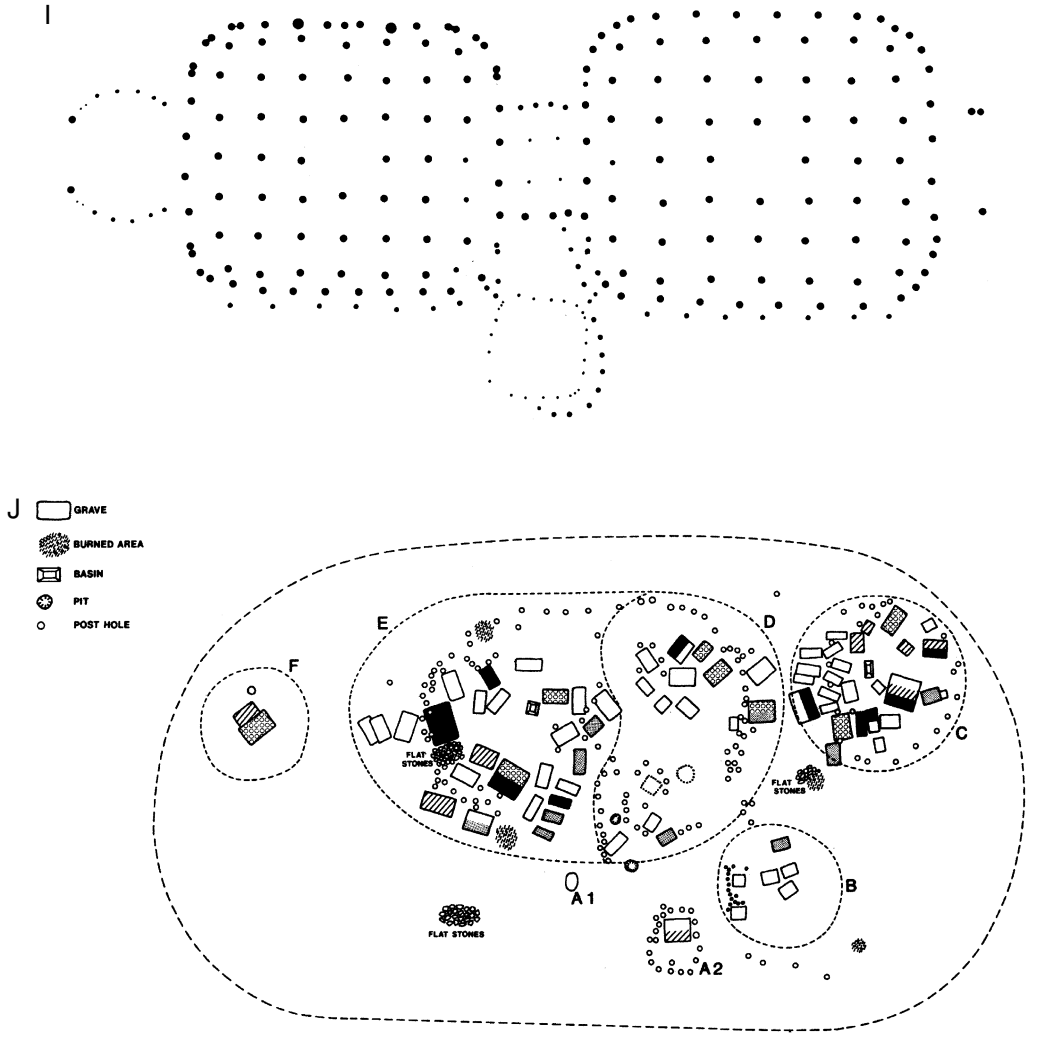

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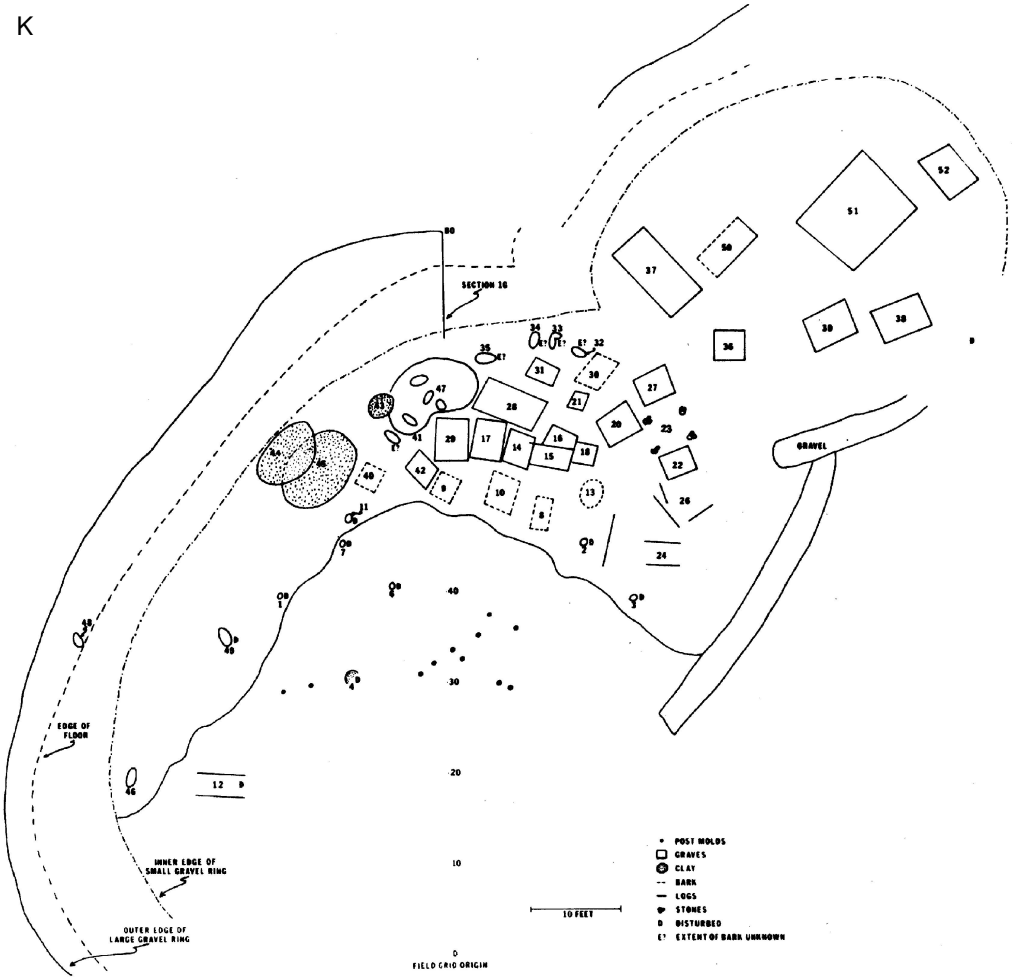
mounds (Greber 2003:91; Moorehead 1892:133; Squire and Davis 1848:plate 21.4). The large, tripartite charnel buildings at Seip and Liberty contrast with the small, one-room charnel buildings at Mound City, which preceded them, and the two-part charnel building at Ater, which postdates them (Prufer 1961a, 1964a).

The regular appearance of architectural units with three components at the scales of both the site and the building/mound begs for interpretation. What cultural meanings are to be attributed to them? Well-trained archaeologists would immediately consider explaining the regularity with at least three of the primary dimensions of causation evoked in archaeology: differences in the function of the three parts of the earthworks and charnel houses, differences in the social affiliation of those who built them, and history, in the sense of additions to the structures over time. Interpretations of each of these kinds have been posited. The square and circular elements of the earthworks have been conjectured to have functioned for residence versus gardening (Morgan 1965:232–244), to have symbolized different realms of the cosmos and functioned to hold different kinds of ceremonies



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(Romain 2000), and to have symbolized the senior and junior halves of a dual social organization as well as in-marrying foreigners (Byers 1996; DeBoer 1997). Different charnel house rooms have been interpreted as places where persons of different rank were buried (Greber 1976, 1979a) and places where members of different generations, and lay persons versus religious leaders, were buried (Byers 1996). Finally, earthworks have been seen as accretionary, with squares added to circles over time (Dancey 1996a:401–402).

These interpretations vary in the richness of their empirical foundations and in the logic of their bridges between data and interpretation. The most empirically detailed analyses of the sites and charnel houses are Greber's (1976, 1979a, 1979b; Greber and Ruhl 1989) studies of the mortuary remains from the Seip–Pricer, Seip–Conjoined, and Edwin Harness mounds, in comparison to one another and to the remains from the Ater mound and Hopewell Mound 25, in the general vicinity. Greber interpreted the three charnel house rooms and clusters of burials under both of the Seip–Pricer and Seip–Conjoined mounds to represent three ranks of persons within one society in the vicinity of Seip, and the three charnel house rooms and clusters of burials under Edwin Harness to represent three rank groups in a second society around Liberty. She concluded that the two room charnel house and two burial clusters under the Ater mound represented another society and the several burial clusters under Hopewell 25 yet another society, which were

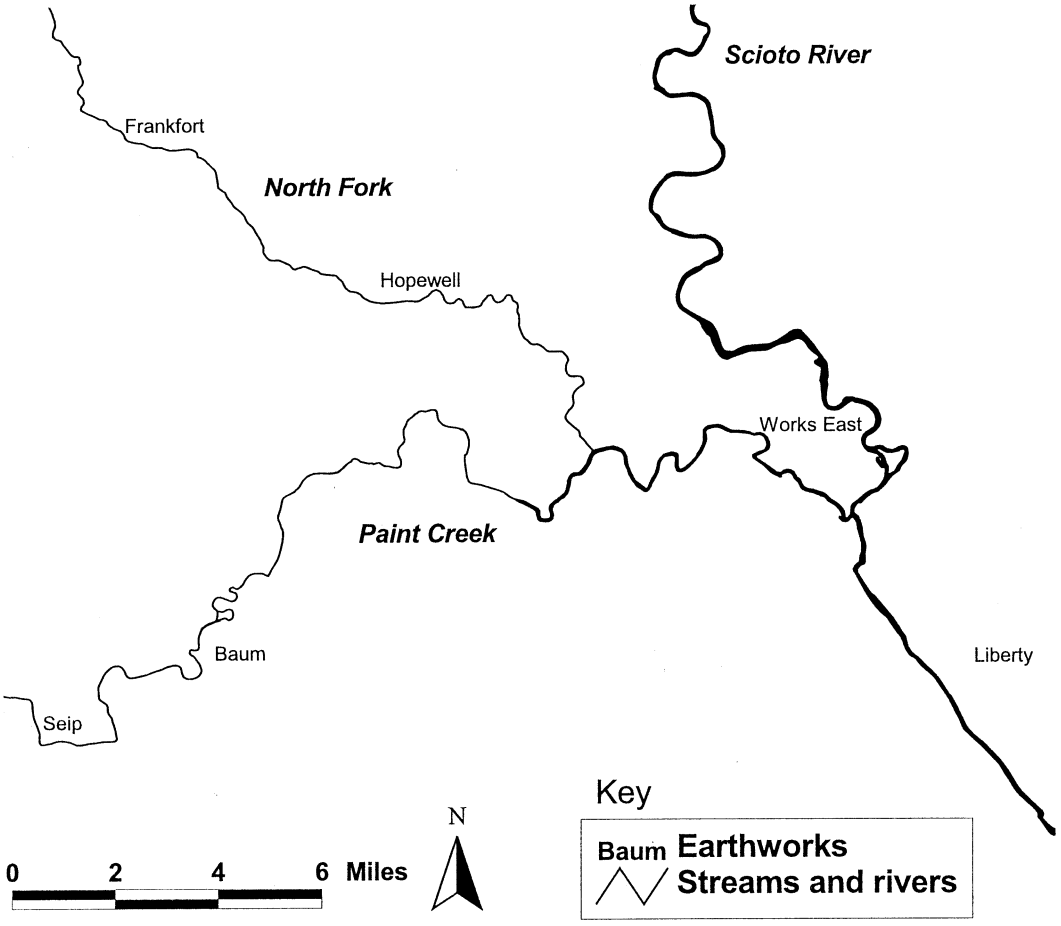

Figure 7.2. Locations of earthworks with tripartite symbolism in the Scioto valley–Paint Creek valley region.

organized differently than those around Seip and Liberty and differently from one another, although she did not offer any specific sociological reconstruction for the burial clusters at Ater and Hopewell 25. In all, the studies indicated to Greber (1979a) several societies that were strikingly diverse in their social organizations, despite their having lived in a very small area.

This chapter reviews Greber's (1976, 1979a, 1979b; Greber and Ruhl 1989) analyses of the mortuary remains under the Seip-Pricer, Seip-Conjoined, Edwin Harness, Hopewell 25, and Ater mounds, as well as the Burial Place within the Great Enclosure at Turner, and finds that her interpretations about social ranking and social organizational diversity in the Scioto-Paint Creek area are unlikely. Greber's studies are found to have fundamental conceptual, methodological, and empirical problems, relative to current understandings about social organization and its material, archaeological correlates, and relative to thought on these subjects at the time of her writing. Through a reevaluation of the mortuary data with contemporary anthropological and archaeological ideas and methods, it is concluded instead that the three distinct burial clusters within each of the charnel houses under Seip Pricer, Seip-Conjoined, and Edwin Harness, the three major burial clusters under Hopewell 25, and the two under Ater represent persons who were members of respectively three and two different allied communities in different, neighboring valleys in the Scioto-Paint Creek area and who were buried together in order to solidify an alliance among the communities. By burying their dead together, the communities

wedded their ancestors in an essentially permanent afterlife existence, thereby giving the living strong reasons for upholding the principles of alliance–a practice and ideology that has ethnohistoric analogs in the Eastern Woodlands, and deep prehistoric roots there. In the Scioto case, the allied communities also apparently planned together the architecture of their charnel houses, mounds, and earthworks, and possibly pooled labor to build them, evidenced by the close similarities across communities in the forms and sizes of these constructions. The alliance interpretation of tripartite mortuary patterning at the level of burials, charnel house, and mound in turn makes sense of the similar shapes and sizes of the tripartite earthworks of Seip, Baum, Frankfort, Liberty, and Works East to each other.

The mortuary and regional analysis made here, in conjunction with information from Chapters 5 and 13, also reveals several additional, essential features of Scioto Hopewellian community organization. Specifically, it is unlikely that the three allied communities thought of themselves as one integrated society, or were unified by one or a few strong, centralized leadership positions with power over all three communities. However, two kinds of supra-community leaders, who shared power with many other kinds of local community leaders in a decentralized arrangement, appear to have arisen as the alliance developed. These positions were marked by plain copper headplates and conch shell vessels with dippers. Also, at least two kinds of sodalities, indicated by copper breastplates, copper earspools, and perhaps other symbolic artifacts, arose with the alliance and integrated persons within single communities, and probably multiple communities. Finally, the three-community alliance represented materially by tripartite architecture is found to have broken down at the end of the Middle Woodland into a two-community alliance, represented by the two burial clusters and one empty charnel room under the Seip-Conjoined mound and the two burial clusters and lobes of the Ater mound. Significantly, earthwork building in the Scioto valley ceased about this time of alliance disintegration.

No final conclusion is reached here on whether Scioto Hopewellian societies were organized by principles of rank. However, some sociological reasons are given as to why ranking might not have been primary in importance for symboling with burials within charnel houses, if ranking did exist, and evidence is cited for how ranking very likely was displayed in several alternative manners.

Our journey to understanding the intriguing, tripartite symbolism of both earthworks and burials within charnel houses in the Scioto-Paint Creek area is long and somewhat indirect, but one meant to reach a conclusion built on a firm, logical, and empirical foundation. The chapter begins by examining Greber's interpretive goals and general analytical approach to studying the organization of past societies through mortuary remains. It goes on to describe the sample of burials and the mortuary traits that she selected to study and evaluates their relevance to social ranking and to her interpretation of the burial clusters as persons of differing rank. Finding essential difficulties with her general approach, data, and conclusions, the chapter proceeds to reanalyze and reinterpret the mortuary data from the Seip-Pricer, Seip-Conjoined, Edwin Harness, Hopewell 25, and Ater mounds in a more modern framework, which is presented in Chapter 6. As preliminaries to the reanalysis, mounds of differing function, where different social categories of persons from a community were segregated from each other for burial, are identified. The social roles marked by specific artifact classes, including copper headplates, celts, breastplates, and earspools, and the degree of social prestige marked by cremation and inhumation, are also defined. Next, eight possible, alternative interpretations of the organization of burials into clusters under each of the five mounds are scrutinized for their empirical credibility relative to current social anthropological and mortuary theory. The eight possibilities include clusters as: rank groups, leaders of different roles or leaders versus followers, age sets or gender sets, sodalities, clans or phratries, persons who differed in their circumstances of death and social classification at death; persons who were bound to different afterlives; and persons from different communities. Evaluations of these alternatives are made by considering the distribution among burial clusters of artifactual

markers of various leadership roles, sodalities, and animal totemic groups, of persons of various age and sex classes, of social prestige gauged by mortuary energy expenditure, and of the numbers of persons per burial cluster. These spatial patterns and some ethnohistorical analogs point to the identity of the individual burial clusters as representative members from different communities rather than other distinct social categories. Thus, the interpretation of a three-way intercommunity alliance and its partial break-up is richly supported empirically. This interpretation is then elaborated by placing it the context of general anthropological theory on alliance formation and the long-term, culture-historical development of alliance strategies in the greater Scioto area from the Late Archaic through the Early Late Woodland.

The chapter ends with a discussion of the many implications of the reconstructed alliance and its change over time for current thinking about Scioto Hopewell cultural practices and prehistory. One of the most important implications is the need for substantial revision in the vacant ceremonial center–dispersed hamlet model of Ohio Hopewell community organization offered by Prufer (1964a, 1964b) and reiterated by Dancey and Pacheco (1997). The analyses presented here indicate that the typical dispersed Scioto Hopewellian community was not focused on one earthwork of generalized function at the center of its territory in a "bull's-eye" fashion. Instead, members of a community commonly used multiple earthworks that had specialized functions and that were located both within and outside of their communal areas. Also, singular earthworks commonly were used, and perhaps built, by persons from multiple communities. These conclusions corroborate those reached by Carr (Chapter 3) and Ruby et al. (Chapter 4), who consider a much broader array of archaeological evidence. Other essential Hopewellian cultural practices and aspects of prehistory upon which the alliance interpretation bears include contrasting views of the Hopewell world as revolving around competitive displays (e.g., Brown 1981; Buikstra and Charles 1999) versus a Pax Hopewelliana (e.g., Hall 1977), Greber's (1979a) idea that closely neighboring Scioto Hopewellian communities differed greatly in their social organization, and Braun's (1977, 1986) thoughts on the role of development of pan-society sodalities in the decline of Hopewellian ceremonialism.

This chapter follows the theoretical and methodological framework established in its companion piece, Chapter 6, for assessing whether ranking existed in a prehistoric society and, in this way, continues the themes of this book. Specifically, refined archaeological correlates of social ranking are used and distinguished from some other forms of vertical social differentiation, including leadership, wealth, and achieved prestige. These fine-grained distinctions help to personalize Hopewellian archaeological records. In addition, the region rather than the individual cemetery is taken as the unit of study of burial programs. Allowance is made for the possibility that burial mounds and mound complexes were functionally differentiated, with different social categories of persons within a community having been buried in different mounds and/or mound complexes over a landscape. Also, consideration is given to the possibility that persons from multiple, closely cooperating communities might have been buried together within a single mound or mound complex. Exploring these possibilities helps to contextualize Hopewell locally.

This chapter goes further than Chapter 6 in personalizing mortuary records in that the specific social roles that used and were marked by certain artifact classes are identified: leadership roles indicated by headplates and celts, and membership or achievement in sodalities marked by breastplates and earspools. Defining the kinds of social actors who used these items, rather than lumping them under the general category of "status markers" (Binford 1962:219; Braun 1979:67; Brown 1981:29; Hohmann 2001; Loendorf 2001; Peebles and Kus 1977:431; Struever 1964:88; Struever and Houart 1972:49), is found helpful in discriminating between ranking and other forms of social differentiation archaeologically, which in turn is necessary to determining whether a society had social ranking. Sociologically contentless, structural descriptions of mortuary records at the intrasite scale, of the kind generally advocated by Binford (1971) and specifically used in Ohio by Greber (1976, 1979a, 1979b), are shown to be insuffi-

cient in the cultural information they embrace for sorting out the nature of Hopewellian societies.

The studies presented here are made possible not only by the refinements in ethnological and archaeological thinking about ranking presented in Chapter 6, but also by certain critical, empirical advances. These include recent systematization of the mortuary records of Ohio Hopewell peoples, including coverage from 32 cemeteries, greater detail on artifact classification, function, and provenience (Case and Carr n.d.), more modern skeletal studies (Johnston 2002; Konigsberg 1985), and evaluations of the reliability of earlier skeletal analyses (Case and Carr n.d.). Greber's (1976; Greber and Ruhl 1989) assembly of floor plans for the sites studied here have been seminal to integrating these several kinds of data. Better absolute chronological control has also been important (Greber 1983, 2000, 2003; Hatch et al. 1990).

Finally, it is important for the reader to know that the analytical results obtained here, and the interpretation of intercommunity alliances inferred, came as a complete surprise to me as I worked through the data. This study was begun simply as a search for evidence of whether Scioto Hopewell societies were organized by ranking. When data patterns found by Greber could not be explained in this manner, many alternative interpretations were weighed and additional archaeological evidence was consulted in an attempt to understand the patterns. The intercommunity alliance model developed here was the *last* interpretation that came to my mind, after other, more traditional possibilities failed empirically. However, the model quickly showed its power in making sense of multiple kinds of archaeological patterning within the five burial mounds and at the regional scale.

TERMINOLOGY: SOCIETY AND COMMUNITY

This chapter brings together several literatures of varying age that use different terms for roughly similar concepts. The terms are *society, dispersed community*, and *local symbolic community*. Greber (1976, 1979a) spoke of Hopewellian societies, a society being implied to be a group of people who lived in dispersed households and hamlets in the vicinity of a major earthwork or mound like Seip or Liberty or Ater and who built and used it. Dancey and Pacheco (1997) used the terms community and dispersed community to refer to this same concept. Societies and communities are seen by these authors as self-identifying, territorial, and largely self-sufficient (Dancey and Pacheco 1997:10). In contrast, Ruby et al. (Chapter 4) define the local symbolic community as a network of persons with a constructed sense of identity and common purpose who live in the vicinity of each other. However, a local symbolic community need not be firmly territorially bounded, united with the goal of owning, maintaining, or using a territory, nor is it necessarily stable over time. The local symbolic communities that Ruby et al. envision in the Scioto Hopewell case are somewhat fluid and dynamic in membership, in response to shifts in any of a variety of cultural needs or environmental conditions at the time. Significantly different from Greber's, Dancey's, and Pacheco's notions, in the model of Ruby and coworkers, a single local symbolic community might encompass multiple earthworks of varying ceremonial function, and multiple, neighboring local symbolic communities might build and use a single earthwork. In this view, the social and ceremonial landscape was more complex and interactive than Greber, Dancey, and Pacheco envisioned.

In this chapter, I use the term society when discussing Greber's work, in line with her terminology, conceptual framework, and interpretations. The term local symbolic community, or community for short, is transitioned into the text when presenting my own analysis. The term social organization is used generically to speak of social relations and actions in any of the above social units.

A PREVIOUS STUDY OF OHIO HOPEWELL SOCIAL ORGANIZATION BY GREBER

The topic of Scioto Hopewell social organization, as well as the more specific question of whether Scioto Hopewellian societies were organized by principles of ranking, has attracted surprisingly

little systematic analysis by archaeologists. Most of what is known on these subjects derives from studies of burial patterning made by N'omi Greber (1976, 1979a, 1979b) more than 20 years ago, and a much more focused but seminal study on charnel house usage by James Brown (1981).

In part, the little attention given to Scioto Hopewell social organization stems from the elaborateness and large scale of the Scioto Hopewellian archaeological record. Certainly, the presumption runs, Scioto Hopewellian societies must have been complex, with ranking and centralized leadership, to have organized and carried out with such exactitude and fineness their accomplishments in crafts and site architecture—an argument that Brown (1997a) has called the "awe effect." In part, the paucity of study of Scioto Hopewellian societies also relates to the unsystematic and only partial presentation of mortuary data in Ohio mound excavation reports of the early 1900s. Difficulties with artifact and burial proveniences within sites, as well as poor documentation of the age and sex of the deceased, have discouraged most from attempting mortuary studies of social organization that require these details.

Greber's Studies of Scioto Hopewell Social Organization and Her Approach

This section describes Greber's general goal in studying Ohio Hopewell social organization and the general approach and logic that she used. The section clarifies why her approach and logic were not, in retrospect, conducive to determining whether Ohio Hopewellian societies were organized along lines of ranking.

Greber documented and analyzed mortuary patterning in six Hopewell mounds within Ohio: the large Pricer mound (also called Mound 1) and the smaller Conjoined mound (also called Mound 2) within the Seip earthworks, the Edwin Harness mound within the Liberty earthworks, the Raymond Ater mound, Mound 25 within the Hopewell earthworks, and a low, oblong mound called the "Burial Place within the Great Enclosure" of the Turner earthworks (Figure 7.1). The first five mounds are found near the confluence of Paint Creek and the Scioto River, near Chillicothe, Ohio (Figure 7.2), while Turner is located in the Little Miami drainage. Two works by Greber (1976, 1979a) examine societal diversity across Ohio Hopewell through a comparison of the mounds at Seip, Ater, and Turner. One work of hers (Greber 1979b) focuses on the tripartite organization of the Seip–Pricer, Seip–Conjoined, and Edwin Harness mounds. Her last study (Greber and Ruhl 1989:46–64) is a largely descriptive report of patterning at Hopewell Mound 25.

Greber did not aim explicitly at determining whether Scioto and Miami Hopewell societies were organized by principles of ranking. Her stated goal was broader: to describe the structure and organization of Ohio Hopewellian societies, by which she meant identifying socially recognized groups of persons and their horizontal or vertical relationships to each other (Greber 1976:2, 5–7, 1979a:37, 1979b:36). She was also concerned with measuring and comparing the overall social complexity of individual Ohio Hopewellian societies (Greber 1976:7; 1979a:35).

Greber's approach to studying society was strongly influenced by her earlier graduate studies in mathematics. She was drawn in concept to abstract sociological measures of organizational complexity (Haray 1959, in Greber 1979a:38; see also Greber 1976:7–8) rather than anthropological studies of social structure and dynamics from a group perspective (e.g., Evans-Pritchard 1940; Murdock 1949a). She also did not embrace the potent anthropological frameworks for studying social organization that focus on individual social positions and roles (Firth 1951; Goodenough 1965; Nadel 1957; Parsons 1949) and that have served as a core for modern archaeological theory on mortuary remains (e.g., Binford 1971, Peebles 1974; Saxe 1970; Tainter 1975a) just predating her studies. Social studies focused on the individual had, for her, "the practicality of counting all the individual grains of sand on a beach after picking up each one" (Greber 1976:8). In emphasizing the search for social groups and the abstract measurement of social complexity, Greber (1976:7–8, 1979a:38) briefly envisioned how the overall hierarchical complexity of a society might be summarized by considering the number of vertically differentiated groups within it and the number of individuals within each group; she

also discussed finer calculations of the "ranks" of individuals, following the sociologist, Haray (1959). However, in her studies, she did not describe or use quantitative measures of complexity corresponding to these images of complexity, as had Tainter (1975a), though she cited his quantitative research (Greber 1976:24–25). Why she did not is unclear.

Greber did not align herself with the "search for rank" paradigm in mortuary archaeology of the time (e.g., J. A. Brown 1981; Buikstra 1976; Peebles 1974), nor did she concern herself with the archaeological exploration for other ethnographic-level details of society such as moieties and dual organization, the ascribed versus achieved recruitment of leaders, or distinctions in their authority and power (Greber 1979b:36). Her preference was to keep analysis and interpretation at an abstract level. This situation stemmed not only from her predisposition to the mathematical, but also from the limitations she saw in social typologies and the use of societal features to typologically characterize the nature of a particular society. She commented on the wide range of variability in social relationships that social typologies mask under a given type (Greber 1976:9–10, 1979a:38, 1979b:36). However, in rejecting social typology, she also unfortunately set aside the archaeological search for the specific societal features on which social types had been built (Greber 1979b:36), such as ranking. Finally, Greber's bypassing of the study of ethnographic-level details such as ranking, in favor of broader generalizations about structure, derived from her lack of confidence in the ability of archaeology to map such details with accuracy. "A more abstract descriptive scale may provide a less predetermined framework for considering social structures. Such an abstraction has a double necessity in dealing with prehistoric peoples known only through archaeological data" (Greber 1979b:36).

In departing from mainstream anthropology on social organization and archaeological interests in it, Greber also did not explicitly employ most of the middle-range theoretical principles that were being developed in archaeology at the time for identifying societal features with archaeological data. Her discussions of this body of theory were limited largely to the most general conclusions of Binford (1971) and Saxe (1970)—that the organization and complexity of a society structure its mortuary practices, which are in turn observable in patterned relationships in a burial population. She rewrote these general ideas in terms of identifying social groups archaeologically (Greber 1976:15–19). The one exception to Greber's not using detailed, middle-range, archaeological theory was her interest in Binford's (1971) finding of a correlation between burial location and social categories. Greber posed—though did not test ethnographically—an elaboration of this correlation: that "distinctions indicated by [the] use of space in [the] mortuary activities [of a society] are likely to coincide with the components which are basic to the social organization" (Greber 1976:17). However, we will see below that spatial clustering and separation of burials can represent a variety of other cultural matters. Finally, Greber did not explore the regional, multi-cemetery approach pioneered by Peebles (1971) for evaluating social ranking, or J. A. Brown's (1971) formal-analytic approach to defining rank levels.

These understandings of Greber's goals and approach in studying social organization draw into question the credibility of the statements she has made about social ranking in Ohio Hopewellian societies. Specifically, although she offered no anthropological definition of ranking, no models of the possible variant organizations of rank societies, and no formal expectations of their possible archaeological manifestations against which to interpret data, Greber nonetheless concluded (or assumed—it is unclear)[1] the rank nature of organization of most of the Ohio Hopewellian societies that she studied. She envisioned organization by "ranking" for those buried in Seip–Pricer (Greber 1979a:45), Ater (Greber, p. 51), and Turner (Greber, p. 54); "kin-related" "ascribed" membership in the three major social divisions represented by three clusters of burials at Seip–Pricer, Seip–Conjoined and Edwin Harness (Greber 1979b:38); and a lack of "ranking" of the three social divisions represented by the three major burial clusters at Hopewell Mound 25 (Greber and Ruhl 1989:57). These conclusions were not derived formally and explicitly through the relating of anthropological and archaeological theory about ranking to data.

It would be unwarranted to accept these conclusions today, uncritically, as known features of Ohio Hopewellian societies.

Selection of Burials That Are Representative of a Society

The ethnology of ranking and leadership, and contemporary middle-range theory on mortuary practices, as summarized in Chapter 6, imply that certain conclusions about Scioto Hopewell social organization can and cannot be drawn from Greber's analyses of mortuary data from the Pricer, Conjoined, Edwin Harness, Hopewell 25, and Ater mounds, and the Burial Place within the Great Enclosure at Turner. These qualifications are discussed in this section and the next by applying to Greber's study the first two methodological steps outlined in Chapter 6 for assessing whether a past society was organized by principles of rank. Here, the samples of burials that Greber selected for analysis are evaluated for their adequacy and relevance in determining whether ranking existed in Ohio Hopewellian societies, and in measuring their social complexity in general. In the next section, the descriptive mortuary variables that she selected are similarly evaluated.

The study of ranking with mortuary data requires, as a first step, the selection of a set of burials that constitutes the entirety of a society or a representative cross section of its social categories. Greber assumed in her studies that a single mound constituted a complete cemetery for a whole society, rather than some particular segment of it. This cannot be shown for any of the mounds that Greber analyzed and is one of the most fundamental problems with her studies. The problem has four aspects.

First is the strong possibility that the deceased from some single Ohio Hopewellian dispersed communities were buried not in one mound, but across multiple mounds within an earthwork or among multiple earthworks, with different kinds and ranges of categories of persons buried in different places, according to social or other principles. The burials within a single mound or a single earthwork might thus represent only a select and biased portion of a community. This appears to be the case for the Seip–Pricer mound and Hopewell Mound 25, and possibly for the Ater and Edwin Harness mounds. In Seip–Pricer and Hopewell Mound 25, the percentage of buried persons who were social elites is much greater than one would expect for a single farming community. Within these cemeteries, 29.8% and 22.5%, respectively, of those buried were placed with finely crafted, regionally infrequent, exotic copper headplates, celts, and/or breastplates, which probably marked community leadership, sodality leadership, or achievement of a prestigious level within a sodality, respectively (see analyses below). These high percentages of leaders and other elite suggest that burial within Seip–Pricer and Hopewell 25 was restricted to some degree to persons of importance and, perhaps, their close consanguines and/or affines. In turn, other segments of the community or communities from which these elite came would have been interred elsewhere. The same situation may hold in greater moderation for the Ater and Edwin Harness mounds. In these two mounds, the percentages of persons interred with headplates, breastplates, and/or celts are 15.0% and 13.2%, respectively. In addition, what is known about the age–sex composition of the burials in certain earthworks and mounds also hints at the disproportionate burial of persons of import at them (Appendix 7.1). Adult males appear to be overrepresented in Hopewell Mound 25, possibly Hopewell Mound 23, and probably the other smaller mounds at the Hopewell site as a group, as well as in the Burial Place within the Great Enclosure of Turner and in the other burial mounds at Turner. Carr (Chapter 3) and Ruby et al. (Chapter 4) summarize other evidence that Scioto Hopewellian mounds and earthworks were functionally specialized and that indicate a general cultural context in which one might expect the separation of persons of different social categories for burial in different mounds or earthworks at death.

The second cause for concern about the archaeological samples of burials that Greber used is the possibility that the corpses in some mounds with flamboyant ceremonialism, such as Hopewell 25, Seip–Pricer, and Edwin Harness, derived from multiple communities that gathered for rituals, feasting, gifting, and alliance, rather than one community. Carr and Maslowski (1995:339) reported some stylistic evidence that

hints that this was the case for these mounds. Buikstra and Charles (Ruby et al., Chapter 4; 1999:206–215; Charles and Buikstra 2002:12) concluded a similar situation for Illinois flood plain mound groups, based on the size and composition of the burial populations and artifact assemblages within them. The Illinois case cautions us to look for analogous burial programs in Ohio. In point of fact, the conclusion drawn below from a reassessment of the mortuary patterns within the Seip–Pricer, Seip–Conjoined, Edwin Harness, Hopewell 25, and Ater mounds is that multiple communities did bury their dead together in each of these cemeteries. Finally, Carr (Chapter 3) and Ruby et al. (Chapter 4) present a variety of lines of intrasite and regional archaeological evidence that suggest that multiple, dispersed communities built and used individual ceremonial centers in the Scioto–Paint Creek area, creating a general cultural context in which specifically the joint burial of persons from multiple communities in one cemetery might be anticipated.

The third aspect of the issue of societal representation in Greber's sample of burials pertains to the analytical universe: which excavated burial populations within an earthwork should have been analyzed together or separately to obtain a reasonable cross section of a community, if one could be had? Greber chose to analyze the burial populations from Seip–Pricer mound and Seip–Conjoined separately from each other, the burial population from Hopewell Mound 25 separately from the burials recorded at 17 other excavated mounds at the site, and the burials under the Edwin Harness mound separately from those within the Russell Brown mounds, all associated with the Liberty earthwork. Her decision to analyze Seip–Pricer and Seip–Conjoined separately is reasonable. Several kinds of data suggest that the use of the burial floor at Seip–Pricer mound preceded the use of the burial floor of Seip–Conjoined, rather than the contemporaneous use of both floors (Greber 1979b:37; see also 1997:215). However, at Hopewell, the two large burial populations in Mound 25 and Mound 23 have yet to be dated relative to each other. These are suspiciously complementary in their burial composition. The burials in Mound 25 are rich in grave offerings and/or tomb construction about a third of the time, and are disproportionately adult males, whereas those in Mound 23 are largely poorer in grave offerings and tomb construction, and are less clearly male dominated. The remaining small mounds at Hopewell vary in the richness of their burials and, taken together, have the most equitable proportion of adult males and females. These circumstances suggest that, if the Hopewell site was the remains of largely one society, an analysis of more than Mound 25 would be necessary to describe that society's structure and complexity—in contradiction to Greber's assumption that "the whole society [was] represented within the Central Mound" (i.e., the main section of Mound 25) (Greber and Ruhl 1989:56). It is interesting, in this light, that Greber did *not* find any evidence for vertical social differentiation of the three main clusters of burials under Mound 25 that she assessed quantitatively; such social differences appear to have been expressed between mounds. Finally, at Liberty, Greber analyzed the remains from only the Edwin Harness mound. However, one or more of the three, small Russell Brown mounds just outside of the earthwork walls appear to have been used for burial at the same time as the Harness charnel house (Seeman and Soday 1980:93), and probably should have been included in her burial sample. Their exclusion, given their undistinguished and small numbers of burials, would seemingly be more consequential to an assessment of the number of rank groups found at Liberty than to whether or not ranking existed there.

The fourth aspect of the problem of societal representation is cemetery excavation coverage. Only half of the Raymond Ater mound (all of one lobe and a third of the second) was excavated, the remainder having been bulldozed away. The number of burials and the amount of burial diversity lost through destruction are unknown. Significantly, the Ater mound was concluded by Greber to represent a simpler society with fewer group distinctions than the community that she thought was represented by the Seip–Pricer mound, which was almost completely excavated. This conclusion is premature, in light of the sampling issue at Ater. Cemetery repre-

sentation at Turner is poor. The burials selected by Greber for detailed study came from the small minority of an area under a low, oblong mound known as the Burial Place of the Great Enclosure. Information is missing from large expanses of area between the three excavation blocks dug by Willoughby, Putnam and Metz, and Saville. Within these blocks, not all burials were recovered and studied, due to poor preservation and past disturbances. Also not included and/or available for study by Greber were numerous other, fragmentary skeletons in two other groups within the Enclosure, burials from six mounds that contained skeletons and that were within and adjacent to the earthwork, and burials under the embankment of the Enclosure (Greber 1979a:52). Similar to the situation at Ater, it is significant that Greber did not find evidence of vertical social differentiation among the two major groups of burials that she defined there (by burial orientation) or between burials in separated excavation blocks. Vertical social distinctions might instead have been symbolized at Turner by burial in different mounds, as at the Hopewell site, but this possibility was not investigated by Greber. Excavation coverage at Seip earthwork is also problematic. The earthwork contained 18 mounds, both within and outside it. Only the two largest mounds (Seip–Pricer, Seip–Conjoined) and two smaller mounds (Mounds 3, a remnant of Mound 4) have been excavated, all within the earthwork. At Liberty earthwork, much like at Seip, the largest of the burial mounds and five smaller ones with burials were excavated, while six mounds were not investigated. Greber's samples of burials from Seip and Liberty included ones from only the large mounds there. The effects of partial site coverage on her social analyses for Seip and Liberty are unknown.

Implications for Interpretation

The samples of burials from each of the five sites analyzed by Greber were likely portions of dispersed communities, with unknown representation of various social categories, and with some sites and mounds probably having contained persons from several different communities. Each of the four sampling problems clarified above could cause social ranking to seem to have been present when it was not, or vice versa. Mounds in which leaders or other important persons were buried in disproportionately high percentages (e.g., Hopewell 25, Seip–Pricer, and Seip–Conjoined, perhaps Ater and Edwin Harness) are archaeological contexts in which normally rare symbols of leadership or sodality achievement might readily be confused for frequent symbols of rank, and ranking might erroneously be concluded. Alternatively, a mound devoted to burial of primarily leaders or persons of high rank or other importance (e.g., especially Hopewell 25) could appear more homogeneous in vertical social differentiation than would a cross section of a community, and ranking might be obscured or erroneously inferred to have been simple. Mounds in which persons from multiple communities were buried (e.g., Hopewell 25, Seip–Pricer, Seip–Conjoined, Edwin Harness, and Ater; see below) are archaeological contexts in which differences in community wealth might be confused for symbols of rank. Incomplete coverage of a community's burial population, attributable either to the selection of only one of several mounds for analysis or to only partial excavation (e.g., especially at Hopewell, Ater, and Turner), could hide or accentuate signatures of social ranking, depending on the particulars of the sample. At a more subtle level, any of the four sampling problems could distort the complexity of ranking observed, either upward or downward, if ranking existed. Thus, the conclusions reached by Greber about the overall complexity of social structure evidenced at each of the six cemeteries that she studied, the diversity in social structure that she observed among them, and her more specific conclusions about the presence or absence of ranking within the five communities that she examined, are of unclear credibility. These topics of inquiry need to be revisited, and are below.

Selection of Mortuary Traits That Indicate Rank

The second step required in the study of ranking with mortuary data is the selection of a set of mortuary traits that have good potential for having symbolized vertical differences

in social position, including achieved prestige, ranking, achieved leadership, leadership ascribed by rank, and family/lineage wealth. The third step is to narrow the set of mortuary traits further to those that likely symbolized ranking, specifically (Carr, Chapter 6). The purpose of these two steps, and their contrast to how Greber proceeded in her analyses, is best understood in light of the methods by which such variables are subsequently analyzed. Preferred methods are to use the variables thought likely to reflect ranking to cluster burials into sets that represent different rank levels (e.g., Tainter 1975a), to map those burial sets over space to indicate spatial clusters or spatially dispersed sets of burials that differ in rank, and/or to map the selected variables individually over space for similar purposes (e.g., implicitly done by Buikstra 1976). Through the selection of variables that are relevant particularly to social ranking, spatial clusters of burials that indicate ranking, if any are found, are derived directly from the data, themselves.

Greber used a different approach in studying the Ohio cemeteries she examined, excepting Turner, which makes her conclusions about ranking suspect. Specifically, Greber started with the *assumption* that different clusters of burials in a cemetery represented recognized social divisions within a society and then compared divisions for differences in mortuary treatment of *unknown* cultural meaning. This strategy has two difficulties, as just italicized, which cast doubt on her evaluation of whether Hopewellian societies were organized by principles of ranking. First, the burial clusters were assumed a priori to represent social structural segments within a society. Her assumption was based on a cross-cultural finding of Binford (1971:22), that burial location can indicate vertical social position or horizontal social affiliation (Greber 1976:17–18). This cross-cultural pattern is now known to be true only in part. A good number of philosophical–religious beliefs, as well as age, the timing of death, and circumstances of death, have since been found through more detailed cross-cultural survey to determine burial location within a cemetery, and yet a broader range of factors to determine burial location within a community (Carr 1995b:162–163, 181; variables 28 and 12/17). Moreover, of the social variables observed across cultures to determine within-cemetery grave location, membership in a horizontally differentiated social segment was noted twice as frequently as vertical social position or vertical group membership by both Binford's and Carr's surveys. Thus, it is unclear that the groups of burials used by Greber to find social distinctions were, in fact, determined by social–structural principles within a society; if they were, it is more likely a priori, considering cross-cultural patterning alone, that they reflected horizontal group distinctions than ranking.[2] In addition, Greber did not consider the possibility that each cluster of burials in a cemetery might represent persons from a different society that were buried together, as, for example, in the Huron and Algonkian Feasts of the Dead (Heidenreich 1978:374–375; Hickerson 1960; Trigger 1969:106–112), rather than members from within one society. A Feast of the Dead model of Hopewellian ceremonialism was an aspect of archaeological thinking at the time and in the circle of Greber's writing (Callender 1979:257). Thus, to establish the social–structural nature of the burial clusters, their pertinence to social segments from within one society and, more specifically, their significance to ranking would have required Greber to map the distribution of particular mortuary variables *known* by their nature, through contextual analysis, ethnographic analogy, or other means, to have likely indicated ranking and other specific forms of social differentiation. This was not done.

The second difficulty with Greber's approach is the lack of attention she gave to the cultural and sociological meanings of the mortuary traits (variables) that she analyzed, and the more general issue of variable selection. Relevant variables for searching for ranking in a mortuary data set are characterized, first, by traits that are nonutilitarian and that imply extraordinary energy investment or cultural value; and second, of these traits, those that involve qualitative distinctions in form or material rather than differences in quantity, and those that are found with persons of all ages beyond puberty, both sexes, and persons of all physical predispositions (e.g., height, robustness, deformities) to power or not (Carr, Chapter 6). The mortuary attributes that Greber used in her studies were not selected with regard to these criteria of relevance to ranking.

Of the 9 to 12 mortuary variables used for her analyses of Seip–Pricer, Raymond Ater, Turner, and Hopewell Mound 25, 3 or 4 (25%–36%) for each site were utilitiarian or personal items or functionally mixed categories: bone needles and awls, flint blades, beads, shell beads, stone objects, other flint objects, other shell objects, other objects made of locally available materials, bone and flint tools, and miscellaneous other (Greber 1979a:71; Greber and Ruhl 1989:53). In this set, the ordinary items would not be expected to be symbols of rank, and the mixed categories cannot be evaluated for their relevance to ranking. Other variables, like copper breastplates, celts, and earspools, marine shell containers, cut mica, perhaps large canines, grave area, and the elaborateness of grave construction, are on first sight more likely relevant to social ranking. These artifact classes are not utilitarian, represent energy investments in the distant sources of their raw materials, and are qualitative distinctions that could have symbolized a prestigious social position such as high rank. Two final variables, grave area and construction, measure energy expenditure, and the latter is, again, a qualitative distinction. However, none of these variables potentially relevant to ranking was screened, prior to spatial analysis, for whether it was independent of the age and sex of the deceased. Appendix 7.2 shows the most modern estimates of the age and sex distributions of the burials (Case and Carr n.d.) that included each of the fancy artifact classes used by Greber that might, by their nature, have indicated ranking. Information is tabulated for four of the sites that Greber studied that have this demographic data: Seip–Pricer, Hopewell, Ater, and Turner. None of these artifact classes is independent of age and sex for any of the sites. This is the case even when the most permissive division of persons by age is used—into simply subadults versus adults, which would favor the finding of rank symbols—and when the proportions of males, females, subadults, and adults having a given artifact class are assessed for significance relative to the proportions of these demographic categories at large in a site. The one possible exception is copper celts at Turner, which are equally distributed among subadults and adults, but for which the sex distribution is unknown. No assessments of the age–sex distributions of graves of different area or construction were made by Greber (1976:tables 14, 23) or are made here.

Because none of the artifact classes studied by Greber has both the qualities and the age–sex distribution expectable for a symbol of rank, the variation of these classes in frequency among spatial clusters of burials at each of Seip–Pricer, Hopewell, and Ater, or among sets of burials defined by orientation at Turner, cannot be interpreted as evidence of ranking. The spatial clusters or sets of burials, themselves, which Greber assumed a priori to represent social segments, cannot be concluded to be ranked social groups. Information on the age–sex distribution of grave construction attributes could alter this conclusion if they were found independent of age and sex.

One other troubling aspect of Greber's selection of variables is her rank-sum statistic for assessing differences in the grave goods found in different burial clusters at each of Seip–Pricer, Hopewell Mound 25, and Ater, and with other burial categories at Turner. The statistic was computed by ranking the counts of an artifact class from high to low (1 to n) for all individuals with which it was found, repeating this ranking procedure for each artifact class, and then, for each individual, summing the ranks of the artifact class counts for that person (Greber 1979a:39–40). The statistic allows individuals to be compared for the overall number of artifacts with which they were buried, while giving roughly similar weighting to high-count and low-count artifact classes.

Greber used the rank-sum statistic to compare the overall artifact quantity had by individuals in different spatial clusters of burials or burial sets. She found a statistically significant difference among the three burial clusters at Seip–Pricer in their rank-sums, no difference between the two burial clusters at Ater, no difference between the east–west- and the north–south-oriented burials at the Burial Place in Turner (Greber 1979a:42, 50, 53, respectively), and no difference among the three largest clusters of burials at Hopewell Mound 25 (Greber and Ruhl 1989:55). Edwin Harness mound could not be similarly tested, for lack of detailed information on most individual graves. The extent to which Greber used these results (or many other patterns that she reported) to infer ranking of the persons

buried in Seip–Pricer (Greber 1979a:45) is not clear. She did conclude that the similarly distributed rank-sum scores among the three large burial clusters in Hopewell Mound 25 could be interpreted as "nonranked social components" if they were contemporaneous (Greber and Ruhl 1989:57). Why she concluded that the persons buried in Ater and the Burial Place in Turner were ranked when the rank-sum statistic did not show differences among burial groups at these sites (Greber 1979a:51, 54) is unclear.

The spatial patterns or lack of patterns in rank-sum scores found by Greber at the four sites she studied probably cannot be taken as evidence or lack of evidence of social ranking. The scores are based on counts of artifacts found with individuals. Cross-cultural survey has shown that *quantities* of grave furniture rarely indicate the vertical social position of the deceased (Carr 1995b:178–180) and, specifically, the rank of the person (Tainter 1975a, 1978:12). Both of these surveys covered a large number of societies of diverse social complexity. In contrast, the *kinds* of grave furniture placed with individuals was found to frequently indicate vertical social position (Carr 1995b:180), in line with archaeological middle-range theory on ranking and symbols of rank (Braun 1979:67; Peebles 1974; Peebles and Kus 1977:431).[3] A second reason for not giving weight to Greber's rank-sum scores when evaluating whether ranking was a feature of Ohio Hopewellian societies is the fact that most of the tabulated artifact classes, themselves, cannot be shown to have been symbols of rank by their nature or age–sex distributions. Thus, the sum of their ranked counts is not relevant to the issue.[4]

Implications for Interpretation

Greber's a priori assumption that the clusters of burials under the several mounds that she studied had social significance, and that they pertained to divisions within a society rather than to different societies, was too narrow an interpretive framework for guiding the mortuary analyses of these mounds. It led her to envision the distribution of mortuary treatments among burial clusters in sociological and internal social terms, rather than to explore a wide diversity of other possible cultural meanings of the clusters. It also predisposed her to interpret differences and similarities among clusters in the artifact content, artifact richness, and tomb elaboration of their burials as indications of ranking or not, despite the fact that she did not attempt to learn the sociological meanings of the individual artifact classes and tomb traits that she analyzed. These interpretations, derived as much from her assumptions as empirical patterning, fall apart when it is seen that neither the mortuary traits that Greber selected for study nor the composite of them as a rank-sum statistic are relevant to the question of ranking—from the perspective of either middle-range archaeological theory on ranking that was developing at the time of Greber's work or theory that has solidified since then. Without this relevance to ranking, the distributions of the traits and the rank-sum statistic across burial clusters cannot be used to infer whether ranking was or was not an organizational aspect of the societies studied by Greber.

Summary of the Selection of Burials and Mortuary Traits

Greber's reconstruction of the floor plans of Seip–Pricer, Hopewell Mound 25, Ater, and Turner are invaluable contributions to Scioto Hopewell archaeology. However, her statements that the burial remains within Seip–Pricer mound, Ater mound, and the Burial Place within the Great Enclosure at Turner indicate social ranking are not credible because they do not follow logically from the nature of the burials selected for study, the mortuary traits chosen for analysis, and the rank-sum measure that was used. For the same reasons, social ranking cannot be inferred from the Edwin Harness mound and Hopewell Mound 25, although Greber did not conclude ranking for these mounds. In particular, Greber's studies have six fundamental difficulties, as follows. None of the burial samples analyzed probably represents a cross section of the social categories within a society, because (1) different social categories of persons were probably buried in different mounds or earthworks, (2) single mounds and earthworks probably contained persons from multiple communities, and (3) only portions of some mounds and only some mounds within an earthwork were analyzed or available for analysis. (4) Greber assumed rather than derived empirically

that the burial clusters under the mounds had internal, social–organizational significance rather than other social or cultural meanings. (5) None of the artifact classes chosen for analysis can be inferred to have been a symbol of rank, because they are utilitarian or personal in nature, are functionally mixed categories that cannot be evaluated, and/or do not meet even liberal standards for having been independent of the age and sex of the deceased. (6) The rank-sum statistic used by Greber probably did not measure the social rank of the person because it was based on some kinds of artifacts that were not symbols of rank, and because it tracks quantitative rather than qualitative differences in mortuary treatment. As a consequence of these difficulties in Greber's analyses, the question of whether Scioto Hopewell societies were organized by principles of rank remains formally unanswered today.

A REANALYSIS OF SCIOTO HOPEWELL MORTUARY PATTERNS FROM A REGIONAL MULTICOMMUNITY PERSPECTIVE

Although Greber's several mortuary analyses do not allow a formal conclusion on whether Hopewellian societies in Ohio were organized by principles of ranking, they do document a number of strong and intriguing intrasite mortuary patterns. The division of burials on the floors of mounds into spatial clusters, repetition and variation among mounds in the number of burial clusters, and differential distribution of some key artifact classes among burial clusters within a mound, were each documented. The pattern defined by the three clusters of burials under both of the Seip–Pricer and Edwin Harness mounds, the three primary burial clusters under Hopewell Mound 25, and the three-part charnel house under Seip–Conjoined was revealed and contrasted to the pattern of the two clusters of burials under Ater mound. In addition, Greber (1979a:47) called attention to the similarity of the tripartite spatial layouts of burials and/or charnel houses under Seip–Pricer, Seip–Conjoined, and Edwin Harness to the tripartite morphology of the Seip and Liberty earthworks in which they were built, and to that of some other earthworks, as discussed at the opening of this chapter.

The purpose of the second half of this chapter is to interpret these archaeological patterns with more formal argumentation and greater anthropological specificity and breadth than had Greber. What social, religious, death-circumstantial, physical, or other identities did the burials within each cluster share? To make these intrasite assessments, however, requires first the development of firm understandings of the sociological nature of the populations of burials being analyzed and the social roles that key artifact classes marked. Do the burials within a mound, or within the multiple mounds of an earthwork, represent an entire society or parts of one? Did mounds and/or earthworks vary functionally in the segments of a society that were buried at them? Can any artifact classes that marked leaders, rank groups, or other social roles be identified?

These preliminaries are accomplished here in part by taking the region rather than the individual cemetery as the unit of study of burial programs and mortuary variability. Only from a regional perspective can functional differences among mounds and among earthworks be seen and sorted out. In addition, a bootstrapping approach is used here, whereby very strong, regional similarities and contrasts of fairly clear meaning are used to help understand the nature of weaker patterns at the regional scale and patterns at the intrasite scale that would be ambiguous from a single-site, local perspective, alone. Finally, the conceptual and material distinctions drawn in Chapter 6 among several forms of vertical social differentiation, such as leadership versus ranking versus achieved prestige, are applied here.

The data used in the analyses presented below derive from a comprehensive computer database compiled by Case and Carr (n.d), unless otherwise specified. The database describes most excavated and recorded Middle Woodland burials in Ohio, from a total of 32 sites, as documented in publications, unpublished field notes, and museum catalogs, maps, and photographs. Of particular importance are modern assessments of the ages at death and biological sexes assigned to individuals by various researchers, and

conclusions as to which age and sex estimates are most reliable.

Regional Patterning

A clear benchmark for interpreting Scioto Hopewell mortuary variability is the Hopewell site and its contrast from nearby earthwork and mound sites. The Hopewell site is the only multimound earthwork site in the Scioto drainage where the majority of mounds have been excavated and a sense of the nature of the entire burial population can be had. It is also unique in some anthropologically telling ways.

Archaeologists have long agreed that the Hopewell site (especially Mound 25) stands out compared to all other Scioto Hopewell mortuary sites in the material richness of its record: total mound volume, total amounts and diversity of Hopewell Interaction Sphere finished artifacts and exotic raw materials (e.g., Seeman 1979a:392–393), the very large number and sizes of ceremonial caches of items, and the quality of crafting of certain artifact forms (e.g., obsidian bifaces, copper cutouts). Not so well known is the fact that the Hopewell site is also unique in the demographic distribution of its burial population. Subadults (less than 21 years old) are almost completely missing, and apparently males are more common than females. In Hopewell Mound 25, only 2.3% of the excavated individuals of known age were subadults (2 of 87 known, 13 unknown). In the next largest mound at the site, Mound 23, again, only 2.2% of the excavated individuals of known age were subadults (1 of 45 known, 3 unknown). Of the 15 other excavated mounds having burials, 11 lack subadults among their aged individuals (0 of 33 known, 9 unknown). Three other mounds have one subadult, and one has three subadults (6 of 15 known, 1 unknown). Identified males outnumber females 12:8 (20 known, 82 unknown) in Hopewell Mound 25, 6:4 (10 known, 38 unknown) in Mound 23, and 8:6 (14 known, 21 unknown) in the five other excavated mounds with burials and sex information on them (Case and Carr n.d.; see also C. A. Johnston 2002:109, appendix F)

In contrast to the Hopewell site are the less materially rich sites of Seip, Liberty, and Ater. What is known of the demographic profiles of Seip, Ater, and Liberty does not indicate a bias toward adults and males. At the fully excavated Seip–Pricer Mound, subadults constituted 28.7% of the aged individuals (25 of 87 known, 36 unknown) (Konigsberg 1985:140–141). Konigsberg found the age distribution of the sample to correspond to a model life table, with the exception of an underenumeration of infants zero to one year of age (Konigsberg, p. 129). The sex ratio was found not to differ significantly from equivalence of males and females (Konigsberg, p. 126).[5] At the partially excavated Ater Mound, 19.5% of the excavated individuals that could be aged were found to be subadults (8 of 41 known, 19 unknown). Too few skeletal remains have been reliably sexed by modern methods to estimate a sex ratio there. The fully excavated Edwin Harness mound appears to have contained a roughly comparable proportion of subadults, although data are poor. Of 53 individuals with known provenience out of the 178 excavated individuals, at least 7 are subadults (13.2% of 53; 41 unknown).

The distinction of Hopewell from Seip, Liberty, and Ater in its material richness, and apparently its almost completely adult burial population with a predisposition for males, suggests that it was a burial place for persons of import: those who had lived to be old enough to accumulate prestige or to demonstrate the prestige they might have inherited. In contrast, those buried under the Seip–Pricer mound, Edwin Harness mound, and Ater appear to represent a much broader spectrum of social actors in terms of age, balance of the sexes, and prestige. This is not to say, however, that those buried within Seip–Pricer, Harness, and Ater are representative cross sections of entire societies (contra Greber 1979a; Konigsberg 1985). In each of these sites, the percentage of persons buried with elite items is more than would be expected for a single farming community, implying that some persons of lesser prestige were buried elsewhere (see above; Selection of Burials That Are Representative of a Society).

The artifactual and mound-building evidence for the greater prestige of the individuals buried at Hopewell, in general, compared to those buried at Seip, Liberty, and Ater, seems

to be a genuine reflection of the situation. It is possible that the greater material richness of Hopewell compared to the other sites reflects a greater intensity of cooperative/competitive display and gifting to the deceased there, instead of the greater prestige of the deceased per se—particularly with regard to the greater number and richness of ceremonial caches at Hopewell (Carr et al., Chapter 13). The situation would be analogous to that apparently evidenced in the distinction between rich flood plain and less rich bluff-crest mound groups in the lower Illinois valley (Ruby et al., Chapter 4; Buikstra and Charles 1999). However, an examination of the artifact contents of burials from the four Ohio sites suggests that this was not the typical situation, and that the artifacts buried with adult deceased persons were more often their own. At each site, the modal number of artifacts of one kind found with burials is one, a functional pair, or some other functional unit: e.g., one copper celt, one copper breastplate, one copper headplate, two earspools, or four bear canines (Carr et al., Chapter 13; Bernardini and Carr, Chapter 17; also below). Thus, the actual social prestige of the deceased does seem to be generally higher at Hopewell than at the other three sites, in line with the demographic evidence; Hopewell does seem to have been a place for the burial of special persons, by and large.

Considering sampling, the functional contrast drawn here between Hopewell and Seip, Liberty, and Ater seems reliable enough, even though a good number of mounds at Seip and Liberty have not been excavated and part of Ater mound had been destroyed before its excavation. Three reasons can be cited. First, the percentages of the total burial populations of Seip and Liberty known through excavation are probably fairly large, because the excavated Seip–Pricer and Edwin Harness mounds were many times larger than any of the other mounds at Seip and Liberty, respectively. The small mounds that have been excavated at Seip and Liberty contained only one to a few individuals each, or no individuals or artifact caches at all. Second, because the inference being drawn here is very generalized—i.e., a distinction between a burial site for largely prestigious persons and burial sites for a broader social spectrum—incomplete recovery at these sites is much less of a problem than in the case of Greber's analysis and inferences, where specific, fine social subdivisions were sought and evaluated. Finally, the proposed functional contrast among the sites as wholes is probably sound because it holds well for mounds within them that are analogous: Hopewell Mounds 25 and 23, Seip–Pricer, and Edwin Harness are all by far the largest mounds at their respective sites.

Beyond material richness and demographics, there is a third distinction between Hopewell and the other three sites, which further helps to define the functional contrast between them. At Hopewell, the great majority of individuals were extended inhumations, while in the other sites, they were largely to almost all cremations. At Hopewell, 75.5% (77 of 102) of the individuals in Mound 25 were inhumed; 93.8% (45 of 48) of those buried in Mound 23 were inhumed; 7 of the 15 other excavated, smaller mounds had only inhumations, and an additional 5 had between 54.5% and 66.7% inhumations. The remaining 3 small mounds with 4 persons total had only cremations. In contrast, within Seip–Pricer, Seip–Conjoined, Edwin Harness, and Ater, the percentages of inhumations were only 8.9%, 10.4%, 6.2%, and 13.3%, respectively.

The strong contrast of Hopewell from Seip, Liberty, and Ater in the predominance of extended inhumations versus cremations within it again suggests the greater prestige of the individuals buried at Hopewell than the other sites, because body treatment appears to have reflected prestige in this region. The latter is shown by the association of certain regionally infrequent symbols of prestige more commonly with persons who were inhumed than those cremated. In Hopewell Mound 25, 40.3% of those inhumed (31 of 77) had a copper headplate, breastplate, celt, and/or earspools, while only 28% of those cremated (7 of 25) had one or more of these items. In the small mounds at Hopewell, 39.0% of those inhumed without charring (16 of 41) had one or more of the items, while only 25.0% of those cremated (4 of 16) had one or more of them. At Ater, the respective percentages of inhumations and cremations with one or more of the copper items were 50% (4 of 8) and 13.5% (7 of 52). In

addition, Greber (1979a:51) found the rank sum of the counts of 11 artifact classes to be significantly greater for the extended burials than the cremations in Ater mound, although some of these classes are comprised of simple utilitarian items. At Seip–Pricer, which has a richness in finished Hopewell Interaction Sphere goods and raw materials closest to that of Hopewell (Seeman 1979a:392, 393) of the other three sites, a mixed pattern (not unexpectedly) is found: similar percentages of inhumations and cremations had a headplate, breastplate, celt, and/or earspools: 36.3% (4 of 11) of the inhumations and 36.9% (34 of 92) of the cremations. Greber (1979a:44) did find, however, that the extended inhumations at Seip–Pricer had a signficantly higher rank sum of the counts of 11 artifacts plus grave area than did the remaining cremations. Again, some of these items were utilitarian. The single, clear exception to the pattern is Hopewell Mound 23, where one or more of the copper items are more frequently found with cremations: 66.6% (2 of 3) of the cremations in contrast to 15% (7 of 45) of the inhumations, partially charred inhumations, or possibly partially charred inhumations. This mound is odd, however, in having a very high percentage of inhumations that were also charred or probably charred (64.4%; 29 of 45)—a mixing of inhumation and cremation symbolism that is hard to decipher.[6] Not enough data are available from Edwin Harness to assess the relative artifactual richness of inhumations and cremations there. Finally, the idea that inhumed persons were more prestigious than cremated individuals in the region of study is in line with broader, cross-cultural survey information on the cultural meanings of mortuary practices. Body treatment has been found to reflect the vertical social position of the deceased more commonly than any other social dimensions, although several philosophical–religious factors were found to be yet more important (Carr 1995b:161; see also Tainter 1978:116–117).[7]

Summary

Diverse kinds of data support the interpretation that Hopewell was a burial place generally reserved for persons possessing a good deal of prestige, whereas Seip, Liberty, and Ater served to contain a broader but still incomplete spectrum of society. The data suggesting this inference include artifact quality and quantity, mound size, and body treatment information. The twin conclusions, that Hopewell was functionally differentiated from Seip, Liberty, and Ater, and that different segments of single Hopewellian societies were buried in different earthworks and/or mounds, will be found essential to interpreting the cultural meaning of the multiple clusters of burials under some of the mounds at these sites, including whether or not they represented rank social groups.

The Sociological Meaning of Copper Headplates, Celts, Breastplates, and Earspools

Preparations for interpreting the cultural nature of the burial clusters under the five Scioto Hopewell mounds of interest requires not only a firm understanding of the societal representativeness of their burial populations, but also an identification of the social roles that key artifact classes marked. The latter is necessary if the different or similar distributions of the artifact classes among the clusters are to be useful for interpreting the sociological and broader cultural nature of the clusters. Identifying the social roles marked by artifact classes is undertaken now for four key ones: copper headplates, breastplates, celts, and earspools. These artifact classes do not constitute the full repertoire one would want to identify in social terms and to examine for their spatial distributions for a complete study of social differentiation (horizontal and vertical) at the four sites. The classes are focused on here because all have very strong potential for having symbolized vertical social differentiation—our topic—and three (all but headplates) were studied by Greber in discussing ranking at the sites.

Headplates, breastplates, celts, and earspools each were clearly prestigious items in Scioto Hopewell society. The copper from which they were wrought was socially and economically expensive to obtain, having its source more than 600 miles away in the Upper Great Lakes.

Copper was among the most distant raw materials used by Scioto Hopewellian peoples (Seeman 1979a:401). All four artifact classes also represent large time and energy investments in the efforts required simply to create the copper sheets from which the forms were made. The sheets typically are many-layered composites of a thick sheet core and multiple thin foil coverings (personal observation). In addition, the earspools were technically complex forms to assemble (Greber and Ruhl 1989:127–149). Further, the symbolic loading of copper was probably intense. Historically in the Woodlands, copper had connotations of power, transformation, the Upper World, the Lower World, and powerful creatures of these worlds: the Horned Serpent, the Underwater Panther, snakes, bears, the fearsome copper-tailed bear, and the Thunderbirds (Turff and Carr, Chapter 18).

The prestigious nature of the four artifact classes is also suggested by their frequencies and distributions among the sites of Hopewell, Seip, Liberty, and Ater (Appendix 7.3). Overall, the classes are infrequent among Scioto Hopewell burials, ranging from less than 1% up to 23% of the burials in the mounds under study. Also, the artifact classes generally decrease in frequency as the overall material richness and size of the mounds declines. Hopewell Mound 25 and Seip–Pricer, being the richest and largest mounds in the set under study (Seeman 1979a:392–393), had the greatest percentages of burials with each one of the four artifact classes. Edwin Harness and Ater, being less rich and volumetrically smaller, had lower percentages of burials with each one of the four classes. Artifactually impoverished Hopewell Mound 23 had no headplates, celts, or earspools, and the second to least percentage of breastplates. Thus, the four artifact classes correlate well with the social dimension of prestige generally.

The prestige represented by headplates, breastplates, celts, and earspools relative to each other can be inferred from their frequencies and nature. Considering all of these items at Hopewell, Seip, Harness, and Ater together, one finds a graded sequence of the numbers of individuals buried with them, from least numerous headplates, through celts, then breastplates, and, finally, the numerous earspools (Appendix 7.3, totals). There is approximately a twofold increase in the number of individuals buried with each successive artifact class. On a frequency basis, one would infer that headplates were indicators of greatest prestige, celts and breastplates next, and earspools the least prestige, but still significant considering the great majority of individuals not buried with earspools. The frequency sequence is not attributable to the relative frequencies of burial mounds that differed in function and contained individuals of different social roles; the sequence holds well across each individual mound also (Appendix 7.3). Two exceptions are the unexpectedly large number of burials with headplates at Hopewell and the unexpectedly low number of burials with earspools at Seip. The former may reflect the specialized function of Hopewell as a preferred place of burial of prestigious persons.

Each of the four artifact classes appears to have been a badge that represented a social role, the badge having been owned individually. Most individuals buried with a given artifact class were buried with only one example of it or, in the case of earspools, one pair. When multiple artifacts of a kind were found in a grave, they were usually limited to two or a few. Instances of multiple artifacts of a kind may represent the gifting of that badge by one or more holders of the role to a deceased person who had had that role (Carr et al., Chapter 13). Two major exceptions to this pattern occur: the double Burial 260–261 in Hopewell Mound 25, which was accompanied with 92 breastplates and 63 celts, which had been arranged over the grave; and Burial 7 in the same mound, with 60 earspools. These cases possibly represent the symboling of socially cooperative and/or competitive gifting and display.

Headplates, celts, breastplates, and earspools, and the social roles indicated by them, were not interrelated in a hierarchical manner. That is, one did not have to have all the less prestigious, more frequent kinds of artifacts (e.g., earspools, breastplates) and the roles they indicated to have a more prestigious, infrequent kind of artifact (e.g., celts) and the role it indicated.[8] Instead, headplates, celts, breastplates, and earspools associate with each other fluidly in

combinations of moderate strength, save the strong dissociation of celts and headplates.[9] Presumably, the roles that these artifacts indicated also associated fluidly.

On Social Ranking

There is little indication that headplates, breastplates, celts, and earspools were symbols of social rank. First, demographically, none of the four artifact types crosscuts all age and sex categories of the deceased in expectable proportions at the Seip–Pricer mound, the Hopewell site, Ater mound, or the more removed Turner site, where demographic information is available (Appendix 7.2). The four artifact classes were not found with both sexes in similar proportions at most of these sites, excepting breastplates and earspools at Seip–Pricer (2 of 16 combinations of artifact classes and sites). However, there, breastplates and earspools were found much less often than expected with subadults compared to the subadult:adult ratio in the mound, and earspools were not found with subadults at all, decreasing the likelihood that at this site, breastplates and earspools were symbols of rank. In the other sites, breastplates, celts, or earspools were sometimes found with a few subadults as well as adults but, again, not at expectable proportions compared to the subadult:adult ratios at these sites.

A second indication that the four artifact types were not symbols of rank is possibly found in the lack of their mutually exclusive distribution among burials. In a rank society, a person falls in one rank group and should not bear the badges of other rank levels. However, one must be careful here, because gifting during mortuary ceremonies could account for the observed overlap of the four artifact types among burials.

Headplates and Celts

The formal nature and burial distribution of two of the artifact classes—headplates and celts—suggest something about the roles they indicate. Headplates take their place cross-culturally next to crowns, feathered headdresses, and other elaborate items worn on the head as potential natural symbols of leadership, i.e., heading a social unit. The rarity of these copper items in comparison to populations of burials at large would support this interpretation as well. Only 15 of the 575 burials excavated from the Seip–Pricer, Ater, and Edwin Harness mounds and the Hopewell site, or 2.6%, had the item; 2.6% is a reasonable percentage of leaders compared to a general populace within a society. This figure would also suggest that the social unit led by persons who wore headplates was effectively large: a whole dispersed hamlet community led directly by such individuals, or a key sodality that, in turn, played some important, community-wide, sociopolitical, or ceremonial role. The notion that headplates were symbols of leadership is also suggested by the disproportionate number of headplates at the Hopewell site and in Hopewell Mound 25, which seem to have been preferred places of burial for elite. In addition, headplates are exclusively associated with adult males at the Hopewell site, and where age is known with specificity, the males are old (the 36–49 and 50+ age classes). Celts, breastplates, and earspools, in contrast, each have some association with females and subadults at Hopewell and/or the other sites of interest (Appendix 7.2).

Some headplates had appendages or cutouts, or were cutouts, of the power parts of animals, or other animal referents, including deer antler stubs, a full rack of deer antlers, elk antlers, four claws of possibly a feline, ears or wings of a kind, a feather, and a bear-based or other composite creature,. Most of these features refer to power and suggest the association of these kinds of headplates with leadership, specifically with a shaman-like cast (Carr and Case, Chapter 5, Table 5.5; Carr et al., Chapter 13, Appendix 13.2).

The animal imagery of headplates could also refer to animal-totemic groups such as clans, phratries, or moieties; most of the animals just named were clan totems of social groups among the historic Woodland Native Americans (Thomas et al., Chapter 8; Trigger 1978). This association could be used to argue that leaders marked by headplates were clan heads, or at least were recruited from the clans that their headplates represented. However, within the Scioto valley and across Ohio, headplates are largely dissociated from animal power parts,[10] which can strongly be argued to have indicated clan affiliation (Thomas et al., Chapter 8).[11] Animal power parts are natural and effigy jaws, teeth, talons,

claws, and such that frequently were drilled with one or two holes to suspend them as pendants for display, and that come from species that correspond well to the animal totems of historic Native American clans.

It is likely that the leadership roles that copper headplates symbolized varied according to whether they stylistically referred to animals or were plain, and varied over time. Carr and Case (Chapter 5, Tables 5.5) document that, in the Scioto-Paint Creek area, headplates with animal symbolism associated in burials most closely with shamanic paraphernalia (copper cutouts with cosmos symbolism, other geometric copper cutouts, raw iron, silver, and copper), whereas plain headplates associated with some of these items but also others having secular connotations (some antler and bone batons, stone celts). Also, over time (Carr and Case, Chapter 5, Table 5.7), plain headplates became increasingly more segregated in burials from shaman-like paraphernalia, until at the end of the Middle Woodland period, in Ater Mound, headplates were buried fully apart from shaman-like items. This was not the case for headplates with animal symbolism. Finally, the leadership roles marked by plain headplates appear to have had domains of power beyond the local community level by at least the end of the Middle Woodland period, as determined by the spatial distributions of these items across the floors of certain burial mounds (Carr and Case, Chapter 5, Tables 5.6 and 5.7). In contrast, the domains of power of leadership roles indicated by headplates with animal symbolism appear to have resided in the local community, alone. The reader is referred to Chapter 5 for the analytical details supporting these inferences.

Copper celts, like headplates, are relatively rare, found in only 5.2% of the 575 burials excavated from the four sites. They, too, could mark some form of leadership of a whole, dispersed community, either directly or through a sodality key to a community at large. Bernardini and Carr (Chapter 17) raise the possibilities that celts were associated with a suite of intertwined meanings, including the building of dugout canoes and long-distance travel; the spirit canoes of shaman; and the construction of ceremonial centers through deforestation and the building of charnel houses, tombs, and other ritual structures. The association of celts with warfare in Mississippian iconography of the Southeastern Ceremonial Complex (Brown 1976:126; Phillips and Brown 1978:13, 18–19, 1984:plate 204; Waring and Holder 1945:10–11, 15) should also be mentioned. All of these proposed associations imply power, the acquisition of power, or its application in dangerous domains (mortuaries, warfare). These referents support the idea that celts were leadership symbols, power being a message one would expect to be communicated by a leadership symbol. Leadership in any of the several ceremonial or political arenas just mentioned could have been marked by celts, as it was in the Southeastern Ceremonial Complex (Brown 1976:126; Muller 1984:26).

As with headplates, celts are largely dissociated from natural and effigy teeth, talons, claws, and other animal power parts that probably indicate clan affiliation.[12] It is unlikely that recruitment to leadership roles indicated by celts was through totemic group lines.

The possibility that headplates and celts both represent leadership, of differing kinds, is indirectly supported in another way. Of the four copper artifact classes, including headplates, celts, breastplates, and earspools, only headplates and celts are rarely found together, and then only in one case.[13] All other combinations of these classes occur together in moderate frequencies at the four sites. In addition, the clans that regularly filled the two social roles marked by headplates and celts are mutually exclusive (Thomas et al., Chapter 8, Tables 8.12, 8.13). The strong dissociation of headplates and celts among graves and in the clans associated with them implies two social roles that were mutually exclusive in almost all instances. Two complementary leadership roles that shared responsibility over two fundamentally different domains—such as the red war chiefs and white peace chiefs of the historic Southeast (Lankford 1992)—is one inviting, possible interpretation (Thomas et al., Chapter 8.

Breastplates and Earspools

The social roles marked by breastplates and earspools can, like those of headplates and celts, be inferred from their frequency and contextual distributions. Breastplates and earspools are too

frequent within the Hopewell site at large, Hopewell Mounds 25 and 23, and Seip–Pricer, Harness, and Ater, to have represented society-wide leadership (Appendix 7.3). Their moderate frequencies would not discount them from representing rank levels within society, but their demographic distributions do (see above). Their restriction to only some persons within the mounds and, again, their biased age-sex distributions do not accord with their having symbolized dual social divisions. It is suggested, instead, that breastplates and earspools marked the members of two prestigious ceremonial societies or other sodalities. This interpretation would accommodate (1) the moderate frequencies of breastplates and earspools within mounds and/or sites, (2) their occurrence almost always with adults, (3) their occurrence with both males and females but more so males, (4) their joint occurrence with some individuals, (5) certain indications that breastplates indicated more prestige than did earspools, and (6) the increasing frequency of both kinds of items in materially richer mounds and/or sites.

That sodalities are indicated by the first five characteristics of breastplates and earspools can be illustrated by the sodalities of the Western and Eastern Puebloan societies of the American Southwest, where such groups are well documented, and supplemented with available information from the Great Lakes–Riverine tribes.[14] (1) In the Southwest, percentages of persons within a community that belong to a sodality can be low to high, depending on the pueblo, the ceremonial function of the sodality, and the community's demographic history. Sodalities that divide a pueblo into contrasting groups may number from 2 to 14, that is, with group sizes from about 7 to 50% of the adult (male and/or female) population. Wide diversity in the sizes of sodalities, from few to many persons of a tribe, characterizes the sacred "pack" organizations, Midewiwin society, dual divisions, and other societies of Northern and Central Algonkian tribes.[15] The 4% to 24% frequency of breastplates and earspools among persons within each of Hopewell Mounds 25 and 23, Seip–Pricer, Harness, and Ater (Appendix 7.3) fits comfortably with the Puebloan and Algonkian ethnohistoric record. (2) Among Puebloan peoples, membership in sodalities other than dual divisions is conferred primarily upon adults or youths being initiated into adulthood. Algonkian pack organizations for warfare, healing individuals, healing the whole tribe, sorcery, and shamanism, and the traditional shamanic Midewiwin society, naturally had only or primarily adult members, who could carry out the societies' tasks.[16] These age distributions echo the predominantly adult age association of Scioto Hopewell breastplates and earspools (Appendix 7.2). (3) With the exception of tribal-wide dual and multipartite social divisions, Puebloan sodality membership was most commonly restricted to males, males with the support of their wives, or males and females but with males holding positions of leadership or levels of achievement. Algonkian Midewiwin societies varied among tribes and over time as to whether only men or both men and some women were given membership.[17] These situations recall the bias for breastplates and earspools in Scioto Hopewell sites to have been associated with men (Appendix 7.2). (4) Among some Puebloan groups, a person can belong to up to several different ceremonial societies at once,[18] bringing to mind those Scioto Hopewell persons who were buried with both breastplates and earspools. (5) In some Puebloan tribes, ceremonial societies vary in prestige and power. The greater power and prestige of Mide shaman over other kinds of spiritual practitioners is analogous.[19] If breastplates and earspools marked sodalities in Scioto Hopewell societies, four pieces of evidence would imply that the sodality marked by breastplates was more prestigious than that marked by earspools. Breastplates are larger and more visible physically than earspools, suggesting their relative social presence. Also, most breastplates took much more copper to make than a pair of earspools. Further, breastplates are much less numerous in the Scioto Hopewell record at large (burials and caches) and, thus, more distinguished than earspools. Finally, the total numbers of individuals buried with breastplates at the four sites of interest is fewer than the number of individuals buried with earspools (Appendix 7.3). Arguments for an equality in the prestige marked by breastplates and earspools are not as strong.[20]

Sodalities documented in the Puebloan Southwest and elsewhere have other characteristics, for which evidence can also be sought in the Scioto Hopewell record. Most Puebloan ceremonial societies have memberships that crosscut clan affiliation, some societies have multiclan memberships controlled by one clan, and a few societies have members from only one clan.[21] Like the common Southwestern situation, membership in the possible Scioto Hopewell ceremonial society indicated by breastplates does not appear to have been restricted by animal-totemic group, such as clan, phratry, or moiety. Breastplates and natural and effigy animal power parts such as teeth, talons, and claws, which seem to indicate animal-totemic groups (Thomas et al., Chapter 8), strongly dissociate among Hopewell burials across Ohio (Case and Carr n.d.). In addition, in those sites where a few burials do have both breastplates and power parts, power parts of different species are found, suggesting that persons from multiple animal-totemic groups could have been members of the possible sodality indicated by breastplates (Thomas et al., Chapter 8; Case and Carr n.d.).[22] Finally, breastplates were frequently painted or patinated with images of animals that among historic Woodland Native Americans were common totems for clans. The range of animal species found on breastplates is wide within and among sites (Carr 2000c, 2000d).

Recruitment to the sodality thought to be represented by earspools likewise was not tied to animal-totemic group affiliation. Earspools and natural and effigy animal power parts strongly dissociate among Hopewell burials over Ohio. Where power parts occur with earspools, the parts represent diverse species of animals, suggesting that membership in the possible sodality marked by earspools included persons from a range of totemic groups (Thomas et al., Chapter 8; Case and Carr n.d.).[23]

Within a few ceremonial societies in the Puebloan Southwest, and within the Woodland Midewiwin society, different levels of prestige were open to members by achievement. To attain higher levels in the Mide required not just personal perseverance, but heavy financial and/or service obligations and psychological fortitude (Grimm 1983:133; Radin 1945:68).[24] In contrast, Scioto Hopewell breastplates and earspools do not seem to have been marks of two rungs on a ladder of achievement within a single sodality, with less frequent breastplates having symbolized greater achievement. At none of the sites studied here were breastplates and earspools distributed hierarchically among burials, with all persons having breastplates also having earspools, but not vice versa. Breastplates and earspools would seem to have indicated different sodalities. It is possible, however, that having a breastplate or earspool marked not simply membership in two sodalities, but attainment of a prestigious level within each of them. At the same time, breastplates and earspools did not indicate leadership within sodalities, because these items are too common within the mounds of interest.

It was suggested above that headplates and celts might have marked direct leadership over a whole, dispersed hamlet community, or indirect societal leadership through leadership in two key sodalities that carried out critical society-wide sociopolitical and/or ceremonial tasks. If the latter was the case, the two sodalities hypothesized to have been marked by headplates and celts would not have been the same sodalities as those whose members and/or achievers were symbolized by breastplates and earspools. A breastplate or earspools were found with only some (one-half to two-thirds) of the individuals buried with a headplate or celt (see Note 9).

Evidence for other potential sodalities in Scioto Hopewellian societies is presented in Chapter 8 (Note 21) by Thomas et al. and in Chapter 13 (The Issues of the Social Evolution of Magicoreligious Practioners) by Carr et al. However, these cases are not as well developed and convincing as those for breastplates and earspools. For additional, contextual evidence that earspools marked a corporate social group, see Ruhl (Chapter 19, Contextual Interpretation: The Social and Ritual Significance of Earspools).

Summary

A small range of possible sociological meanings can be attributed to headplates, celts, breastplates, and earspools, given their formal natures,

frequencies, and contextual distributions. All were items that marked a good amount of prestige, in a sequence from high to moderate prestige, from headplates to celts to breastplates to earspools. However, none of these artifact classes were symbols of rank, nor did they mark levels of achievement within a single sodality. It is most probable that headplates and celts symbolized leadership at the scale of the dispersed hamlet community, or multiple communities in the case of plain headplates late in the Middle Woodland Period. Headplates and celts also could have symbolized leadership within two sodalities that were essential to community-wide function. The two leadership roles indicated by headplates and celts were complementary and almost never combined in one person. Recruitment to these two social roles was not restricted by clan or other totemic animal group. Breastplates and earspools probably symbolized membership in two distinct sodalities or attainment of a particular level of achievement within them. Membership in neither of the sodalities was tied to clan or other animal-totemic group, and a person could be a member of both sodalities. Community leadership, marked by headplates or celts, was not contingent upon being a member of a sodality symbolized by breastplates or earspools; nor were persons with headplates or celts the leaders of sodalities symbolized by breastplates or earspools. It is possible that the sodality marked by breastplates was more prestigious than that marked by earspools. In all, the social roles indicated by headplates, celts, breastplates, and earspools were fluidly combined, save the largely mutually exclusive leadership roles indicated by headplates and celts.

The Sociological Meaning(s) of the Clusters of Burials under the Mounds

With an understanding of the different mortuary functions of the sites and mounds of interest, and the sociological meanings of some key artifact types buried with persons there, the groundwork has been laid for interpreting the possible sociological or other cultural meanings of the clusters of burials under those mounds. Greber thought that the major clusters of burials under Seip–Pricer, Seip–Conjoined, Edwin Harness, and Ater represented social segments that differed in "rank" or "prestige" (e.g., Greber 1979a:45, 1979b:37), and that those under Hopewell Mound 25 did not (Greber and Ruhl 1989:46–64). However, the logic and data with which these interpretations were made was found above to be suspect. The strategy of this section of the chapter is to document more fully, and with more sociologically relevant data, major archaeological patterning among the burial clusters under each of the five mounds, then to propose a priori a series of alternative, possible interpretations of the cultural meaning(s) of the burial clusters, and finally to evaluate each interpretation relative to the documented empirical patterns. The alternative interpretations to be weighed suggest that different burial clusters represent persons of different social rank, leaders in different social roles, leaders versus followers, age sets or gender groups, members of different ceremonial sodalities, persons of different clans or phratries, persons who died deaths that were classified differently, persons placed in different religious categories, and members of different dispersed hamlet communities who were buried together to solidify an alliance among the communities. The last interpretation is the only one found acceptable empirically. I begin with the three mounds of Seip–Pricer, Seip–Conjoined, and Edwin Harness, and then proceed to Hopewell Mound 25 and Ater.

Seip–Pricer, Seip–Conjoined, and Edwin Harness Mounds

Greber (1979b:32–36) summarized some remarkable structural similarities among the Seip–Pricer, Seip–Conjoined, and Edwin Harness mounds (Figures 1G, H, I). Seip–Pricer and Edwin Harness both had three clusters of burials on their floor.[25] Both Seip–Conjoined and Edwin Harness had a three-room charnel house on their floor. Each room at Harness contained a burial cluster, while at Seip–Conjoined, only two did; one room was left empty, but was structurally well defined and appears analogous to the other rooms at the two sites. (An explanation of why no burials exist in the third room is given below.) A tripartite building or screen probably existed under Seip–Pricer, but few postmolds are

known to confirm it. Both Seip–Pricer and Seip–Conjoined are oriented approximately east–west, while Harness is oriented approximtely north–south. Greber equated the three burial clusters of Seip–Pricer and the three charnel house rooms/burial clusters of Seip–Conjoined, from west to east, to each other and to the three burial clusters of Harness, from north to south. The western clusters of Seip–Pricer and Seip–Conjoined, and the northern cluster of Harness, were each found to be physically larger, to have more artifacts per person, and to have more copper breastplates than the other two clusters within these mounds. In addition, at both Seip–Pricer and Harness, their respective western and northern clusters each had more extended burials, a large, specialized artifact deposit, and a fabric canopy or apparent canopy over a grave, in contrast to the other clusters.

These insights of Greber's have been extended more fully in Table 7.1, adding comparisons among all clusters of a mound, and adding mortuary variables that are relevant to sorting out the cultural significance of the clusters. The general pattern that Greber found continues to hold. At Seip–Pricer, there is a systematic decline in a wide variety of mortuary traits from the western cluster, through the middle cluster, to the eastern cluster of burials: the number of persons per cluster; total floor area; spaciousness as measured by the floor area per grave; the number and percentage of extended inhumations, a treatment that was found above to indicate higher prestige; average artifact "quantity" as indicated by Greber's rank sum statistic; the number and percentage of individuals with headplates and celts, which may indicate society-wide or prestigious sodality leaders; and the number and percentage of persons with breastplates, which may indicate membership in a sodality or attainment of a particular level of importance within that sodality. The trend for earspools, which may similarly indicate sodality membership or achievement, comes close to following the general trend. At Seip–Conjoined and Edwin Harness, information is available on fewer mortuary traits but, respectively, the progressive west-to-east decline and progressive north-to-south decline hold.

A number of cultural interpretations of these patterns can be ruled out, drawing in part on what has been inferred above about site function and the sociological meaning of artifact classes. The idea that the three or two clusters of burials were different rank groups can be ruled out for several reasons, following contemporary definitions of ranking and principles of mortuary theory summarized in Chapter 6. First, at Seip–Pricer, where detailed demographic information is available, none of the clusters have persons of various age and sex categories in the proportions one would expect for a rank level of a society. This is true even when age groups are distinguished liberally, simply as adults versus subadults. Adults strongly predominate over subadults in the middle cluster, with a possible male bias. More normal age distributions are found in the eastern and western clusters, but females probably predominate at least in the eastern cluster. Second, no artifact class or other material trait that could have been a symbol of a rank level is evident for any of the three mounds. No class or trait simultaneously is common within a single cluster, distinguishes among clusters, represents a significant investment of energy, and occurs with multiple age groups and both sexes within a cluster (see Selection of Mortuary Traits That Indicate Rank, above, and Appendix 7.2). A third reason for discounting the idea that the clusters of burials represent rank groups is that none of the three mounds exhibit among their burial clusters a pyramidal distribution of persons of varying prestige, that is, where there are fewer persons of top rank and increasing numbers of persons of lower rank levels at the base of the pyramid. This is a pattern that occurs more or less in rank societies. Instead, in all three mounds, the reverse is true. Clusters of persons that apparently had more prestige, on the average, as measured by multiple indicators, also have more persons. For example, at Seip–Pricer, the cluster with the most persons is the western one, and it also has the greatest floor area per burial, the highest number and percentage of extended inhumations, and the greatest number of persons with items of prestige, including each of headplates, celts, breastplates, and earspools, as well as a large artifact deposit

Table 7.1. Characteristics of Spatial Clusters of Burials under Five Scioto Hopewell Mounds

Cluster characteristic	West cluster (W)	Middle cluster (M)	East cluster (E)	Summary of cluster relationships
		Seip–Pricer mound		
Group size (number of individuals)	47	37	18	W > M > E
Sex ratio (M:F)	2:4 M < F	5:2 M > F	1:5 M < F	Female–male–female
Subadult:adult ratio	5:16 S < A	1:19 S ≪ A	4:19 S < A	Normal–very adult–normal
Extended burials (number of individuals; % within cluster)	6 (12.8%)	2 (5.4%)	2 (11.1%)	W > M, E
Floor area (spaciousness)	Large	Medium	Small	W > M > E
Floor area/grave (spaciousness)	Large	Medium	Small	W > M > E
Grave form	Log tombs	Log tombs	Log tombs	W = M = E
Special canopy?	Yes	No	No	W > M, E
Special artifact deposits?	12 breastplates arranged over a 51 cm celt	No	No	W > M, E
Average rank-sum (Greber 1979a)	Highest-ranking burials on average	Intermediate-ranking burials on average	Lowest-ranking burials on average	W > M > E
Headplates (leaders) (number of individuals; % within cluster)	1 (2.1%)	0 (0%)	0 (0%)	W > M > E
Celts (leaders) (number of individuals; % within cluster)	8 (17.0%)	3 (8.1%)	0 (0%)	W > M > E
Breastplates (sodality member, achiever) (number of individuals; % within cluster)	18(38.3%)	5 (13.5%)	0 (0%)	W > M > E
Earspools (sodality member, achiever) (number of individuals; % within cluster)	7 (14.9%)	8 (21.6%)	0 (0%)	W ~ M > E

Seip–Conjoined mound

Cluster characteristic	West cluster (W)	Middle cluster (M)	East cluster (E)	Summary of cluster relationships
Group size (number of individuals)	24	19	0	W > M > E
Extended burials (number of individuals; % within cluster)	None	None	None	W = M = E
Floor area (spaciousness)	Large	Medium	Small	W >M >E
Floor area/grave (spaciousness)	Large	Smaller	No burials	W > M
Grave form	Log tombs	Log tombs	Log tombs	W = M
Special artifact deposits?	1 person has 38% of breastplates in mound	No	No	W > M, E

Edwin Harness mound

Cluster characteristic	North cluster (N)	Middle cluster (M)	South cluster (S)	Summary of cluster relationships
Group size (number of individuals)	68	48	22	N > M > S
Extended burials (number of individuals; % within cluster)	12 (17.6%)	3 (6.2%)	1 (4.5%)	N > M > S
Floor area (spaciousness)	Large	Large	Small	N = M >S
Grave form	Log tombs	Log tombs	Log tombs	N = M = S
Special canopy?	Possibly	No	No	N > M, S ?
Special artifact deposits?	Yes	No	No	N > M, E
Breastplates (sodality member, achiever) (number of individuals; % within cluster)	15 (22%)	3 (6.2%)	1 (4.5%)	N > M > S

(*continued*)

Table 7.1. (*continued*)

	East cluster (M)	(E)	Summary of cluster relationships	Hopewell Mound 25					
Cluster characteristic	**A1**	**A2**	**B**	**C**	**D1**	**D2**	**E**	**F**	**Summary of cluster relationship**
Group size (number of individuals)	1	2	5	35	13	3	30	4	C > E > D
Sex ratio (M:F)	n/a	1:0	0:1	4:2	3:1	0:1	1:2	2:1	too little data
Subadult:adult ratio	n/a	0:2	0:2	1:31	0:9	0:1	0:30	1:3	all adult dominant except F
Floor area (spaciousness)	Very small	Very small	Small	Medium	Small	Small	Large	Very small	E > C > D1, D2, B > others
Floor area/grave (spaciousness)	n/a	Medium	n/a	Small	Medium	Medium	Medium	n/a	E = D1 = D2 = A2 > C
Extended burials (number of individuals; % within cluster)	0 (0%)	2 (100%)	0 (0%)	26 (74%)	9 (69%)	1 (33%)	29 (97%)	2 (50%)	E, A2 > C, D1 > F, D2
Special artifact deposits?						Altar 2 riches	66 of 72 celts, 95 of 125 breastplates, and 16,000 pearl beads with B260–261; deposit of 109+ copper cutouts; Altar 1 riches	60 of 102 earspools and 5,000 pearl beads in B7	E > F > D > others
Average rank-sum (Greber 1979a)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar	C = D = E
Headplates (leaders) (number of individuals; % in cluster)	0 (0%)	0 (0%)	0 (0%)	2 (5.7%)	1 (7.7%)	0 (0%)	5 (17%)	1 (25%)	E > D1, C > others
Celts (leaders) (number of individuals; % in cluster)	0 (0%)	0 (0%)	0 (0%)	1 (2.8%)	1 (7.7%)	0 (0%)	3 (10%)	0 (0%)	E > D1 > C > others
Breastplates (sodality member, achiever) (number of individuals; % in cluster)	0 (0%)	0 (0%)	0 (0%)	5 (14%)	2 (15%)	0 (0%)	8 (27%)	2 (50%)	F > E > D1, C > others (% basis)
Earspools (sodality member, achiever) (number of individuals; % in cluster)	0 (0%)	1 (50%)	1 (20%)	8 (23%)	5 (38%)	0 (0%)	5 (17%)	3 (75%)	F, A2 > D1 > C > E > others (% basis)

Raymond Ater mound			
Cluster characteristic	**North cluster (N)**	**South cluster (S) (not completely excavated)**	**Summary of cluster relationships**
Group size (number of individuals)	48	11	N > S
Subadult:adult ratio	7:25 S<A	1:8 S ≪ A	Normal–adult
Extended burials (number of individuals; % within cluster)	None	None	N = S
Floor area (spaciousness)	Large	Small	N > S
Floor area/grave (spaciousness)	Small	Large	N < S
Grave size	Small	Large	N < S
Grave form	Mostly log tombs	Log tombs	N = S
Special artifact deposits?	No	1 person has 50% of breastplates and 33% of celts in mound	N < S
Average rank sum (Greber 1979a)	Similar to S	Similar to N	N = S
Headplates (leaders) (number of individuals; % within cluster)	2 (4.17%)	0 (0%)	N > S
Celts (leaders) (number of individuals; % within cluster)	2 (4.2%)	1 (9.1%)	N < S (%); N > S (#)
Breastplates (sodality member, achiever) (number of individuals; % within cluster)	1(2.1%)	4 (36.4%)	N < S
Earspools (sodality member, achiever) (number of individuals; % within cluster)	3 (6.2%)	3 (27.3%)	N < S (%); N = S (#)

and a fabric canopied tomb. The same inverse pyramidal structure holds for Seip–Conjoined and Edwin Harness. Thus, the three clusters of persons under each mound differ in their average prestige, and perhaps their average social "wealth," but not in social rank.

Some other possible sociological interpretations of the burial clusters under Seip–Pricer, Seip–Conjoined, and Edwin Harness also are not plausible. It is logical to ask whether the different clusters might have distinguished leaders of different roles from each other and from a portion of followers. This idea is compatible with indications that Seip–Pricer contained only a portion of a community, with emphasis on prestigious individuals (see Selection of Burials That Are Representative of a Society, above). The interpretation also is in accord with the overall material richness of Seip Pricer, which makes it analogous in certain ways to Hopewell Mound 25—a clear burial place for many elite (see Regional Patterning, above; Seeman 1979a:392–393). Evidence, however, does not bear out the idea. At Seip–Pricer, none of the artifact classes that conceivably might have been badges of leadership roles is found in only one cluster of burials and found with most burials in that cluster. This is the case for copper headplates, copper celts, marine shell, copper nostril inserts, copper crescents, obsidian bifaces, mica sheets, batons, and boatstones. These artifact classes occur with a few persons in a cluster and are scattered among all three clusters at Seip–Pricer.

A third possible sociological interpretation that does not fare well empirically is that different burial clusters represent age sets or gender groups. Persons differing by age or sex are not segregated among burial clusters at Seip–Pricer, where detailed demographic information is available (Table 7.1).

A fourth idea, that the different clusters represent different ceremonial societies or other sodalities thought to have been marked by breastplates and earspools (see The Sociological Meaning of Copper Headplates, Celts, Breastplates, and Earspools, above), can also be eliminated. Although these artifact classes are widely enough distributed among persons at Seip–Pricer and Edwin Harness to have symbolized sodalities, they are not segregated by cluster (Table 7.1). It is not known how these items were distributed at Seip–Conjoined.

It is possible that the spatial clustering of burials under the three mounds represented ceremonial or sodalities other than those marked by breastplates and earspools. If the persons buried within a cluster were members of one sodality, their additional membership in sodalities marked by breastplates and earspools poses no problem ethnologically. Cross-culturally, it is not uncommon for persons to be allowed to join multiple sodalities. Further, if the clusters of burials under a mound represented sodalities, the data would show that the sodalities differed in their prestige and/or wealth, based on the variation among clusters in the commonality of prestigious persons within them. Again, this poses no ethnological problem. However, other than spatial segregation, there is no material marking or badge of these posited sodalities to be found in the tomb forms or artifact classes associated with corpses in the three clusters. The interpretation remains possible, but is weak.

A fifth potential sociological interpretation of the burial clusters under each mound is that they represent different animal totemic groups, such as clans or phratries (sets of clans reciprocally obligated to each other). This idea can be evaluated with the distribution of species of animal power parts, which most likely represent clan membership or leadership (Thomas et al., Chapter 8), among burial clusters (Appendix 7.4). At Seip–Pricer, where information is available, species that would represent clans or sets of species that would represent phratries do not segregate by burial cluster. Instead, feline power parts occur in all three clusters. Moreover, there is not an equitable distribution of burials with potential clan markers among the three clusters, as one might expect if clusters represented clans of one or more kinds, nor is there a similar diversity of potential clan symbols among clusters, as might be expected if clusters represented phratries. The western cluster, which contains the greatest proportion of persons of high prestige, as indicated by multiple measures, has the greatest number and diversity of posited clan markers.[26]

It is important to consider factors other than sociological ones that might have determined burial within clusters under the three mounds. A sixth, cross-culturally common cause of intrasocietal mortuary variation that might explain the burial clusters is the circumstances of death of the deceased and their social classification (Binford 1971:22; Carr 1995b:153). This factor is hard to track without skeletal information on mode of death, but does not appear to have determined the cluster in which a person was buried. If one grants that circumstances of death are often linked to age, sex, and social role, then the occurrence of persons of a variety of ages, both sexes, and many social roles within single clusters of burials at Seip-Pricer (Table 7.1) gives little indication that persons who died different deaths were segregated at burial. Another argument against the idea that different circumstances of death led to segregation of burials into clusters is that it would require a strong correlation between mode of death and the several kinds of social role distinctions witnessed to vary regularly from western to eastern clusters and northern to southern clusters under the three mounds. Mode of death would have had to have correlated with whether or not a person was a community-wide leader indicated by headplates, a community-wide leader indicated by celts, a high achiever in a sodality possibly indicated by breastplates, a high achiever in a sodality possibly indicated by earspools, and possibly other prestigious social roles marked by other artifact classes not examined but encompassed in Greber's rank-sum statistic (e.g., conch shells, pearls). It is more likely that if mode of death had been tied strongly to social role, it would have been tied to only a few specific occupations rather than the broad spectrum of them just listed.

Philosophical–religious beliefs are strong determinants of mortuary practices—as common as sociological ones cross-culturally (Carr 1995b)—and must be weighed for whether they led to burial in clusters under the three mounds. One potential religious interpretation of the clusters is that they represent persons bound for different afterlives. Not uncommonly, cultural belief dictates that there are multiple afterlives and that these are in different locations. The Medieval Christian division of heaven and hell, upward and downward, and the Inuit division of the Land of the Day and Land Under the Sea, toward sunrise and the direction opposite sunrise (Ariès 1974; DeSpelder and Strickland 1999:52; Merbs 1989), are examples. A common correlate of the belief in multiple afterlives is the idea that the soul of the deceased can be guided to its socially appropriate afterlife by positioning the body and/or its grave toward that afterlife. The European Middle Ages practice of orienting the body toward Jerusalem or the Inuit way of orienting the body toward one of their two afterlives document this cultural logic. Perhaps the directionally oriented clusters of burials under Seip–Pricer, Seip–Conjoined, and Edwin Harness follow this cross-cultural pattern, with afterlives having been thought to be located in the two directions of the end clusters, and up or down for the middle clusters, or some such belief. This kind of interpretation cannot be corroborated empirically, however. At Seip–Pricer, for which a floor plan is available, the graves within each end cluster are not oriented in the direction of the cluster. In addition, for the interpretation to hold, it would be necessary to link beliefs about multiple afterlives and their directions to the sociological distinctions of the clusters in their general prestige and in the specific social roles more or less common in them. This argument seems overly complex. Alternatively, if the clusters represented sodalities that differed in prestige and in the afterlives to which their members went upon death, the archaeological distributions of various social roles among clusters might be more easily explained. However, no material marking or badge of these sodalities beyond cluster assignment is apparent in the tomb forms or artifact classes found in the three clusters. Finally, note that cross-culturally, burial location (e.g., in clusters) within a cemetery is determined by religious beliefs sometimes, but not predominantly (Carr 1995b:181).

The Burial Clusters as Communities. Setting aside the above, empirically falsified or at least unsupported interpretations, what is to be made of the spatial clusters of burials under Seip–Pricer, Seip–Conjoined, and Harness? A strong hint comes from two extensive cross-cultural

surveys of the determinants of mortuary practices made by Carr (1995b) and Binford (1971). Carr (1995b:163, 181) found that, of the many and diverse determinants of mortuary patterns examined, the horizontal social position of the deceased was the one factor most frequently associated with the location of the deceased's grave within a cemetery. Binford's (1971:22) survey revealed the same association, and with greater strength.

Within societies of middle-range complexity, such as those of the Scioto Hopewell, horizontal distinctions include primarily kinship group, residence, and sodalities, which by definition typically crosscut kinship and residence. In the cases of Seip–Pricer, Seip–Conjoined, and Edwin Harness, no support was found for the notion that the burial clusters were kinship groups (clans or phratries) or ceremonial or other sodalities. This leaves residence to be investigated. Could the burial clusters under each mound represent members of different dispersed communities, with three communities at Seip–Pricer, three at Edwin Harness, and two at Seip–Conjoined?

There are multiple reasons for believing this interpretation to be true. It brings order in explaining a variety of particular facets of the mortuary records of the three mounds, as presented above and in Table 7.1 and Appendix 7.4. The interpretation also complements existing understanding of the Scioto Hopewell mortuary realm in an ethnohistoric light. The first reason for accepting the interpretation is simply the patterning found cross-culturally in grave location as a strong material correlate of horizontal social distinctions, cited above, as applied to the three mounds.

Second, the social composition of each burial cluster under the three mounds, to the extent known, has the characteristics of a community. Each cluster has persons of a range of prestige, leadership roles, and sodalities. At Seip–Pricer, Seip–Conjoined, and Edwin Harness, each burial cluster includes some elite and also persons of lesser prestige. Extended burials, shown above in multiple ways to indicate high prestige, occurred in small numbers in all three sections of Seip–Pricer and Edwin Harness. Graves elaborated with log tombs housed most of the floor burials at Seip–Pricer and all of the floor burials at Seip–Conjoined, suggesting that those selected for burial from each posited community had at least a moderate amount of prestige.[27] Persons who had social roles of key responsibility of one kind or another, including possible society-wide leaders, sodality leaders, persons of high achievement within sodalities, and other ceremonial leaders of import, occurred in all three burial clusters at Seip–Pricer and all three at Edwin Harness, as one would expect of a sample of persons from a community. At Edwin Harness, persons interred with breastplates were found in all three burial clusters. At Seip–Pricer, copper headplates, celts, breastplates, and earspools occurred in only the two larger of the three clusters, but one to a few individuals with conch shells occurred in all clusters, and the smallest and largest burial clusters each had one person with a mica sheet mirror. Conch shells were closely associated with the use of the black drink in public ceremonies in the historic Southeast (Hudson 1976:229, 373, 398) and with top leadership roles in Mississippian society at Spiro (Phillips and Brown 1978, 1984). The distant sources of both conch shells and mica also suggest their association with prestigious social roles.

Third, the idea that the burial clusters under the three mounds represent communities helps to explain the distribution of apparent clan markers among the clusters at Seip–Pricer—the one mound for which data are available. At Seip–Pricer, feline power parts that probably indicate a feline clan occur in one or more burials in all three clusters. Bear canines and/or claws do as well, although their identification as clan markers is suspect (see Note 11). Other species of power parts that probably mark clans occur in only one or two burial clusters (Appendix 7.4). This patterning is in line with the idea that the burial clusters represent communities because, cross-culturally, a clan can be localized within one community, distributed among communities, or both. In addition, there is a wider diversity of animal species and possible clans represented by animal power parts in the western burial cluster, which is the largest. If burial cluster size is some reflection of community size, implying that the western cluster of burials came from the

largest community, then the broader range of apparent clans indicated for that large community is sociologically reasonable. Finally, only a small minority of individuals within Seip–Pricer are identified to possible clan by an animal power part. This may suggest that these artifacts represented some prestigious role within a clan. If so, the occasional occurrence of prestigious clanpersons in each cluster, with a good number of more common clanpersons, would reinforce the general pattern of their having been persons of a range of prestige in each social unit, as one would expect of a sample of persons from a community.

Fourth, the community interpretation of the burial clusters helps to explain their age–sex compositions at Seip–Pricer, where demographic information is available (Table 7.1). Two of the clusters there have normal age distributions and all three have adults, subadults, and both sexes, as communities should have. At the same time, the particular balances of adults to subadults and males to females probably vary significantly from cluster to cluster. This diversity is not what one would expect of different social segments, such as lineages or clans *within* a community. Within a small community, rules about who is to be buried where—within a communal charnel house or not—should be similar among closely interacting social groups. In contrast, different communities might vary significantly in their rules of burial, particularly in the case of a community burying some of its dead in a charnel house within a different community.

A fifth reason for interpreting the burial clusters under the three mounds as communities is that it makes sense of their inverse pyramidal distributions of prestige; that is, for each mound, clusters with more burials also had higher proportions of persons with prestigious goods. In real-life terms, larger communities were wealthier and had higher proportions of individuals with prestige. This situation is reasonable: larger communities would have had bigger labor pools for organizing public efforts and for acquiring material resources, as well as more potential mates, each resource of which would have augmented the development of prestige. In contrast, the observed, inverse pyramidal distributions of prestige are the opposite of what would be expected in a case of social ranking, where higher ranks usually have fewer persons (Carr, Chapter 6). None of the other interpretations offered above for the burial clusters explain the strong, pyramidal pattern of differential prestige among them, either.

The observed, inverse pyramid of prestige and its explanation as the result of community size fall in line with Chagnon's (1979) demographic theory of the creation of social prestige in middle-range societies. Chagnon posed that a Big Man becomes big not simply through his calculated generosity to kin and community persons, thereby obligating them and their labors to him (Sahlins 1972), but through his and his lineage's reproductive success. More people equate to more potentially harnessed labor and material resources. The multidimensionally greater prestige of the larger social units implied by the larger burial clusters under the three mounds of interest (Table 7.1) follows this expected pattern.

One particular manifestation of this demographically based phenomenon may be the greater diversity of leadership and other elite social roles represented in the larger burial clusters under Seip–Pricer and the greater proportion of persons in those roles. The record would suggest that the largest community at Seip–Pricer, indicated by the western burial cluster, had society-wide leaders or sodality leaders of primary and secondary prestige, marked by headplates and celts, respectively, as well as somewhat less prestigious persons of achievement within sodalities, symbolized by breastplates and earspools. In the smaller, middle burial cluster, persons of primary prestige with headplates are missing, and the other three social roles are represented, but at lower percentages than in the western cluster. In the smallest, eastern lobe, no individuals accompanied by these prestigious role markers were found, although persons with a conch shell or a mica sheet were present.

A sixth line of support for the interpretation of the burial clusters as communities comes from its good fit with a widespread metaphor in the historic Eastern Woodlands. Across the East, equations were drawn between domestic dwellings, on the one hand, and villages, tribal segments, ceremonial buildings, and/or mounds, on the other. These equivalencies were used to

foster the family-like ties and cooperation one would find in a household at a broader social scale. In the Scioto Hopewell case, the burial of dead from different communities together in a charnel house and under a single mound would have symbolized an intercommunity alliance.

More specifically, a now well-known and convincing ethnographic analog for the large charnel houses under Scioto Hopewell mounds is the concept of the "Big House"—domestic dwelling writ large (Greber 1979b:28, 1983:26–27). The correspondence between an individual dwelling and a large ceremonial house is found in the Shawnee language (Greber 1979:28, 1983:27) and a similar correspondence between domestic dwellings and mounds was found in the 18th Century Muskogee language of the Creek of Alabama and Georgia (Knight 1989:280). At a broader scale is a correspondence among the individual dwelling, the ceremonial dance ground (Greber 1979b:28; Swanton 1931:10–11, in DeBoer 1997:228), and the ceremonial center at large (DeBoer 1997:230–232). These particularistic equations are aspects of a much more fundamental, worldwide, and shamanic-rooted equation of the domestic dwelling, the ceremonial ground or structure, and the ceremonial site with the cosmos, and an equation of their center, center post, or smoke hole with the vertical World Axis that joins the levels of the cosmos (Eliade 1964:262, 264–265; see also Pearson and Richards 1994:12; Siegel 1996:317). In a somewhat different line of thought, the domestic dwelling has also been likened to more inclusive social units, such as the entire village or a congregation of bands or tribal segments. This logic occurred, throughout the Eastern Woodlands, among Muskogee, Yuchi, Iroquoisan, Siouan, Caddoan, and Algonquian speakers (DeBoer 1997:229). Thus, the house was used as a metaphor for a wide range of units of varying scale—from the family to community to multicommunity cooperative unit to cosmos, which in turn were symbolized physically by a house, a large ceremonial building, a ceremonial dance ground, or a ceremonial center—depending on the social context. The symbolism emphasized the family-like ties and cooperation within the unit thought of as a house.

If the charnel houses or structures under Seip–Pricer, Seip–Conjoined, and Edwin Harness were similarly equated by Scioto Hopewellian peoples to dwellings, with the potential for referencing any of a wide spectrum of social units, then the burial of members of multiple dispersed communities within each charnel house would fit well with the Eastern Woodlands cultural logic. In this case, the dispersed communities buried within a charnel house would have symbolized their cooperation and their identity as a cooperating social unit. Moreover, the use of segregated spatial clusters of graves to symbolize the different communities would be natural. Spatial locus, itself, would have been a sufficient and most visible material means for symbolizing community identity.

The conclusion reached, then, is that the three clusters of burials and/or the three charnel house rooms under the Seip–Pricer, Seip–Conjoined, and Edwin Harness mounds represent three dispersed hamlet communities that buried some of their dead together. The purpose of this joint burying of the dead was to express cooperation among the three communities and to solidify a three-way ritual alliance among them. This act, by its mortuary and spiritual nature, would have been a very substantial, structurally and ideologically potent, and long-lasting means of fostering cooperation. In particular, burial of the bodies of the dead from multiple communities together within one charnel house could have symbolized the eternal cooperation of the ancestors from those communities with each other—a sacred contract. In turn, this cooperation at the spiritual level would have served as a model for behavior among the living, with attendant consequences from the ancestors for those living descendants who violated the contract. This was the cultural logic of the historic Woodland and Algonkian Feasts of the Dead (Heidenreich 1978:374–375; Hickerson 1960; Trigger 1969;106–112), which involved the burying together of the dead from multiple communities and/or tribes, and which would be reasonable analogs for the ideology and rough strategy of alliance-making found among the Scioto Hopewell. (See Carr, Chapter 12, Feast of the Dead, and below, Contextual Support for

the Historical Reconstruction, for details on this analogy.)

A Regional Interpretation of the Seip–Pricer, Seip–Conjoined, and Edwin Harness Mounds. The interpretation of the three burial clusters and/or charnel house rooms under each of the three mounds as a symbol of a three-community ritual alliance has been based thus far on information at only the intrasite scale. Recall from the opening of this chapter that the Seip and Liberty earthworks are only two of five in the Scioto–Paint Creek area that have similar tripartite designs involving a square, a large circle, and a small circle and that share certain metrics (Figures 7.1a–e). Significantly, the five earthworks are dispersed among three different and major river valleys in the region: Seip and Baum in main Paint Creek, the Old Town works at Frankfort in the North Fork of Paint Creek, and Works East and Liberty in the Scioto valley near the confluence of Paint Creek (Figure 7.2). Also significant, in each of the three valleys, only one of the tripartite earthworks contains burial mounds: Seip, Old Town, and Liberty. Baum and East do not.

It is proposed here that both the three clusters of burials known from under the mounds at Seip and Liberty, the analogous three conjoined mounds within the Old Town Works, and the tripartite forms of the earthworks in the main Paint Creek, the North Fork, and the Scioto valleys, symbolized a formal, ritual alliance among three dispersed hamlet communities in the three valleys (Figure 7.3). The alliance was maintained by the communities burying their dead together at Seip, Old Town, and Liberty, probably by other jointly attended ceremonies within these earthworks, and perhaps by the communities pooling labor (Carr, Chapter 3; Ruby et al., Chapter 4; Bernardini 1999) to build the earthworks, their charnel houses, and/or their mounds. It is also proposed that the Baum earthworks, which neighbors Seip in main Paint Creek valley and lacks mounds inside it, was a part of the ceremonial landscape of the community in that valley, but had different ceremonial functions than Seip, which does have burial mounds. Likewise, Works East in the Scioto valley, which lacks mounds inside it, could have complemented the Liberty earthworks downstream as a part of the ceremonial landscape of the community in that valley (Figure 7.3). The different celestial or other alignments of Baum from Seip, and of Works East from Liberty, also suggest their complementary functions (Carr, Chapter 3: Earthwork Orientation). Thus, a community might have had multiple, functionally diverse, ceremonial centers within it.

The idea that Seip and Baum were contemporaneous, functionally differentiated earthworks within a single community, and likewise Liberty and Works East, is strongly supported and finds precedence in the earlier pair of sites of Mound City and Hopeton. These are adjacent to each other, functionally distinct in being filled with or largely empty of mounds, and are now known to have been contemporaneous, suggesting their use by one community (Ruby et al., Chapter 4).[28] Other lines of evidence for the functional complementarity of earthworks within a community are presented in Chapters 3 and 4.

In the community organization terms defined by Ruby et al. (Chapter 4) and reviewed at the beginning of this chapter, the three communities in the three river valleys would each have been a local symbolic community. Each would have been comprised of a network of persons who shared a constructed sense of identity and common purposes, and who lived in the vicinity of each other. Because each community was distant from the others and segregated in its own river valley, one of its purposes would have included using and maintaining the lands around it, if not owning them (i.e., territoriality). Another purpose would have been enacting various ceremonies together within the one or more earthworks within the community's lands. The degree of fluidity of each community in its membership is unknown.

There are multiple lines of evidence at a regional scale that support the reconstruction of the tripartite alliance, beyond the many kinds of intrasite data already presented. First, the likelihood that three local symbolic communities comprised the main of persons living in the two branches of Paint Creek and adjacent portions of the Scioto around the tripartite earthworks in those valleys is reasonable in light of

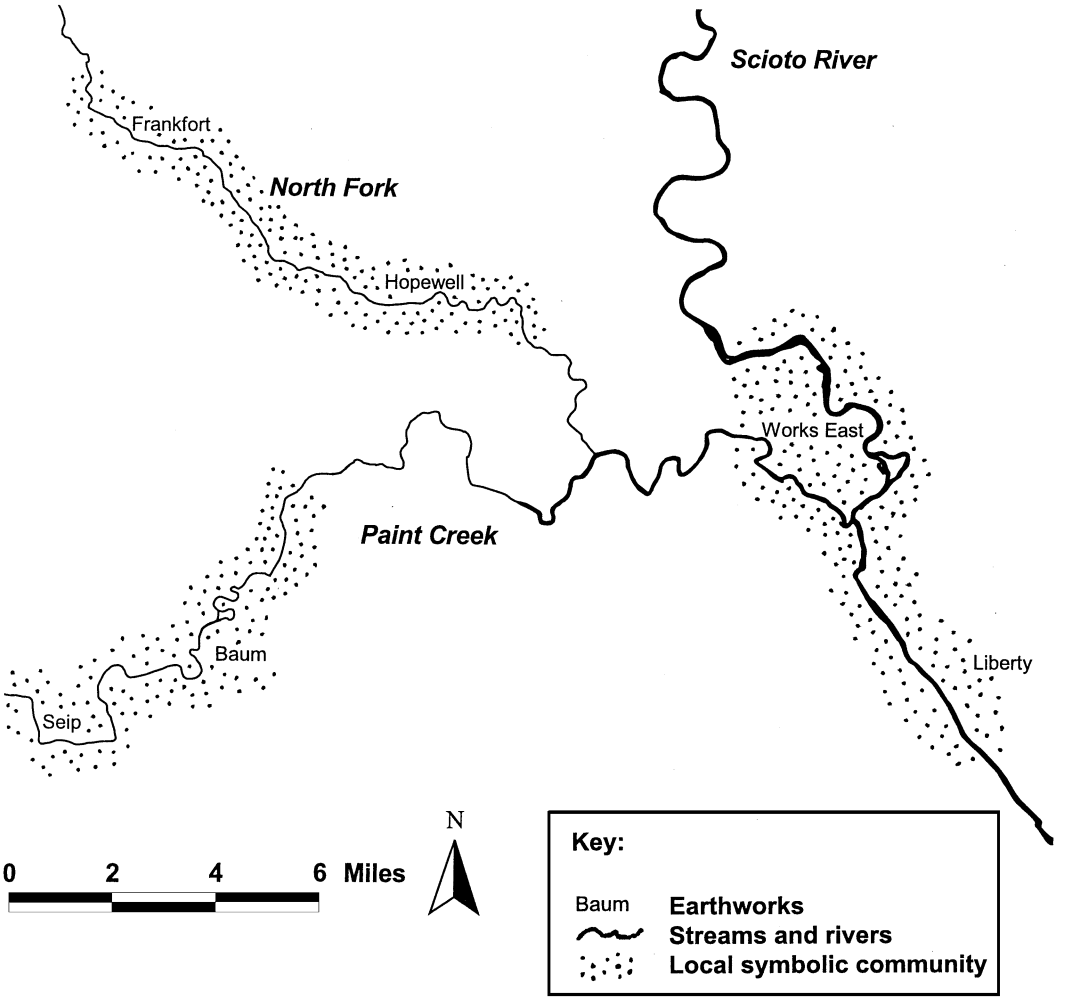

Figure 7.3. Three proposed local symbolic communities of dispersed households in the Scioto valley–Paint Creek valley region. The expanses of the communities beyond the two earthworks that each encompasses are unknown.

archaeological evidence for the scale of Scioto Hopewellian local symbolic communities, as estimated by Ruby et al. (Chapter 4). They used cross-cultural data on the interaction catchments of swidden farmer communities, regional survey information on Middle Woodland habitation site and mound group spacings in the neighboring Licking–Muskingum drainage, and patterning in a histogram of the overland distances between major earthworks in the Scioto–Paint Creek region to estimate the catchment sizes of local symbolic communities and sustainable communities in the Scioto–Paint Creek area. Local symbolic communities had catchment diameters of 5 to 13 kilometers and sustainable communities had catchment diameters of 13 to 25+ kilometers. A local symbolic community 5 to 13 kilometers in diameter would have fit comfortably in each of the three valleys, with a good amount of buffer between them (Figure 7.3). In main Paint Creek, the Baum earthwork, which is closer than Seip to the main Paint Creek–North Fork confluence, is 17 kilometers away from this junction. This distance is greater than either the radius or the diameter of a local symbolic community, and would have provided a local symbolic community that included Seip and Baum quite a bit of buffer from a neighboring local symbolic community in the

North Fork. Likewise, the Old Town Works in the North Fork is about 23 river kilometers from this confluence, providing yet more buffer for a local symbolic community that might have included Old Town from one in main Paint Creek valley. Finally, from the confluence of main Paint Creek and the North Fork to the Scioto valley is another 11 river kilometers, and from there to Works East an additional 4 kilometers, totaling 15 kilometers. Communities in main Paint Creek and the North Fork would have been well buffered from a community in the Scioto valley that focused on Works East and Liberty.

A second piece of evidence that supports the notion of a tripartite alliance is the 13 to 25+ kilometer catchment diameter sizes calculated by Ruby et al. (Chapter 4) for sustainable communities in the Scioto–Paint Creek area. Sustainable communities are regional-scale social networks within which mates, labor, food, and other material resources are regularly exchanged, offsetting local demographic and subsistence variations. Sustainable communities can correspond to a local symbolic community or integrate multiple, local symbolic communities. The close alliance proposed here among three local symbolic communities would suggest that the three together, rather than each one separately, constituted a sustainable community. This identification of the three as a sustainable community and, by extension, the reconstruction of the tripartite alliance upon which the identification is made, are borne out through a comparison to the data of Ruby et al. The land distances from the midpoint between Seip and Baum to the midpoint between Works East and Liberty to the midpoint between Old Town and Hopewell,[29] which are proposed here to be within one sustainable community, are 24, 22, and 16 kilometers, respectively. These distances fall neatly within the range of the catchment sizes of single sustainable communities in the broader Scioto–Paint Creek area, as calculated by Ruby et al.

Third, the idea that three Hopewellian communities in the main Paint Creek, the North Fork, and the Scioto valleys were allied with each other through mortuary ceremonies is supported by a stylistic analysis of fabrics from the mortuaries at Seip, Liberty, and other sites in the three valleys (Carr and Maslowski 1995:328–339). Certain distinctive stylistic traits were found to characterize fabrics manufactured in each of the three valleys, where cloths with those traits were concentrated. However, cloths with traits distinctive of one valley were also found occasionally at sites in the other two valleys. All three valleys were in this way interlinked stylistically.[30] This sharing of fabric styles among sites in different valleys can be explained in several ways: as the exchange of fabrics among the three valley communities, who then made the materials into burial clothing, shrouds, and tomb canopies for use in their own earthworks; as the intermarrying, among the three communities, of persons who made the fabrics; and/or as the burial of clothed or shrouded persons from the three communities in each others' earthworks. Each of these interpretations implies that the three communities in the three valleys were tied together, either formally as through alliance or informally through negotiated, individual, or lineage-arranged material exchanges and/or marriage agreements. The explanation that fabric styles became shared through intercommunity burial equates to the interpretation, here, of the burial clusters under Seip–Pricer, Seip–Conjoined, and Edwin Harness having been the dead from separate but allied communities.

A fourth and especially convincing piece of stylistic information that supports the interpretation of three communities allied through mortuary rites and other means is the extraordinary similarity between the charnel house under the Edwin Harness mound and the apparent charnel house under the Seip–Pricer mound, as revealed by the distribution of its graves (Greber 1983:87–88). The two buildings would have been the same length and width and almost fully the same shape. This strong architectural equivalence implies a very close connection between the builders of the two charnel houses—closer than that suggested by the similar designs of the Seip and Liberty earthworks at large. The equivalence of the charnel houses suggests at least the sharing of design details among community leaders who planned the structures, and may point to the pooling of planning efforts and labor among the two communities to build the

two ceremonial houses. Both interpretations, being concerned with mortuary buildings, coordinate with the notion of allied communities that buried their dead together and shared in other mortuary activities.

A last kind of stylistic information suggesting that the three communities were allied closely through mortuary rites is the shared metrics of the Seip, Baum, Old Town, East, and Liberty Works. All five earthworks in the three valleys are comprised of a large circle of about the same area (16 hectares), a small circle of about the same area (4 hectares), and a square of about the same area (11 hectares) (DeBoer 1997:232–232). Detailed land surveying and aerial photographic work (Romain 2000:58, 59) has shown that the absolute dimensions of some of the earthworks are very close: The small circles at Seip, Baum, Old Town, and East have diameters within 40 feet of each other (5.6% error), and the squares at Old Town and East have sides within 20 feet of each other (1.9% error). In addition, the dimensional similarities of the earthworks in turn allow the sharing among them of intriguing and detailed geometric relationships. For all five earthworks, their small circles have a diameter approximately equal to the side of a square nested in their large square (i.e., *ad quadratum* geometry). For all but Baum, their squares fit very closely within their large circles (i.e, the diagonals of their squares are close to the diameters of their large circles). For all but Baum, the diagonals of their squares are approximately equal to one-third the circumference of their large circles (i.e., equal to the side of an equilateral triangle inscribed within their large circles), while at Baum, a side of its square is close to one-third the circumference of its large circle (Romain 2000:43–54). All of these close similarities in areas, sizes, and proportional relationships, like the very close metrics of the charnel house under Edwin Harness and the apparent charnel house under Seip–Pricer, indicate the sharing of architectural details among the community leaders who planned and organized the building of the earthworks, perhaps the sharing of construction efforts among the communities, and close alliance relationships among them.

In conclusion, multiple lines of evidence at both the intrasite and the regional scales suggest that three local symbolic communities, in main Paint Creek valley, the North Fork of Paint Creek valley, and an adjacent section of the Scioto valley, were closely allied and formed a sustainable community. The three communities repeatedly buried their dead together within earthworks in each other's lands, and may have shared in the planning and building of their earthworks.

The interpretation of the burial clusters and charnel house chambers under each of Seip–Pricer, Seip–Conjoined, and Edwin Harness as representing three communities begs the question of which riverine communities were represented by which burial clusters. Also curious is the fact that the charnel house under the Seip–Conjoined mound, while having three chambers, had burials in only two of them. Why? These questions can be answered with good probability, and are in the summary section below. However, to lay out the logic of these answers requires first an exploration of burial patterning under Hopewell Mound 25 and the Raymond Ater mound. In addition, these sites provide an important diachronic view of the development and decline of the tripartite alliance. To these sites we now turn.

Hopewell Mound 25

The Hopewell site lies in the North Fork of Paint Creek, south of the Old Town works at Frankfort (Figure 7.2). Its enclosing walls do not have a tripartite structure as do those of Seip and Liberty. Its largest mound, number 25, has a floor plan that, on first appearance, looks distinct from those of Seip–Pricer, Seip–Conjoined, and Edwin Harness (Figure 7.1J). Seven spatial clusters of burials under Mound 25 were defined by Greber (Greber and Ruhl 1989:50), and eight by Case and Carr (n.d.), in contrast to the three clusters under Seip–Pricer, Seip–Conjoined, and Harness. Does the Hopewell site have a place sociologically within the regional patterning of the five tripartite earthworks described above? And what do the clusters of burials under Hopewell Mound 25 represent culturally? This section documents a number of strong structural similarities between Hopewell Mound 25 and Seip–Pricer, Seip–Conjoined, and Edwin Harness, and interprets their regional relationships to each other.

Table 7.1 lists the physical characteristics of the eight clusters of burials defined by Case and Carr (n.d). Of the eight clusters, significantly three (C, D1, E) stand out in their size, indicators of prestige of the deceased, and central location. One cluster (F) is small but symbolically rich and four others (A1, A2, B, D2) are less impressive in both size and indicators of prestige. Each of the central burial clusters, C, D1, and E, has a larger number of persons (13–35). Each has individuals accompanied by headplates and celts, which probably were symbols of society-wide leadership or sodality leadership, and by breastplates and earspools, which likely were symbols of membership or achievement within two different sodalities. In addition, C, D1, and E each have a high percentage (69%–97%) of persons who were inhumed rather than cremated—a likely prestigious burial treatment (see Regional Patterning, above)—and a more spacious floor area than those other clusters that are bounded. Cluster F has many fewer individuals but contains burials with a headplate; breastplates; earspools, totaling 60 in one case; a conch shell that may indicate ceremonial leadership (see Seip–Pricer, Seip–Conjoined, and Edwin Harness Mounds, above); copper and mica cutouts; unique copper nose inserts that may have had a shamanic reference to breath and spirit; bone skewers that may have been used in anchoring temporary fabrics over tombs (Brown 1979:217; Greber 1979b:35; Hall 1979:260) and that may indicate a shamanic role in burial preparation and/or body processing; and/or a protective, pearl-symbolized water barrier. Only half of the burials in cluster F are extended, however. In contrast to the burials in these four clusters are those in clusters A1, A2, B, and D2. All of these clusters have only one to five persons and lack individuals with copper headplates, celts, and breastplates. Two of the clusters also lack persons with earpools. Neither of the two clusters, A2 and D2, which are spatially bounded, occupies much floor area.

The small number of persons contained in clusters A1, A2, B, D2, and F and their spatially removed locations from the central clusters of burials C, D1, and E suggest the distinct nature of the former clusters from the latter, central ones. The almost complete lack of material indicators of prestige for the burials in clusters A1, A2, B, and D2 further suggests their socially peripheral nature. They may have been accompaniments of a kind (e.g., spouses, relatives), denied access to more central burial, perhaps not unlike the individuals in Hopewell Mound 23 (see Regional Pattterning, above, and Note 6). The persons in cluster F also appear symbolically to have been socially marginal, but in a different manner. They may have been too potent with power, especially spiritual power, for burial with the central clusters of persons. The pearl water barriers that surround Burials 6 and 7 of cluster F, the very rare copper nose inserts found with them, and their bone skewers possibly used in processing bodies, with all its implications for working with the souls of the deceased (Huntington and Metcalf 1979:61–87), imply this interpretation. Significantly, the only other Scioto Hopewell example of a person buried with copper nose inserts—Burial 2 under Seip–Pricer—also was accompanied by bone skewers, was surrounded by a pearl water barrier, and was placed with others at the edge of the burial clusters there. It is not uncommon, cross-culturally, for persons with extraordinary spiritual power to be buried marginally or bounded from the rest of society (e.g., Merbs 1989; Middleton 1982).

Taking the five burial clusters A1, A2, B, D2, and F to have been individuals who were socially peripheral or anomalous leaves the three central clusters of prestigious individuals. These clusters, being three, falling in a line, and in their association with headplates, celts, breastplates, and earspools, suspiciously recall the three clusters of burials and/or charnel house rooms under Seip–Pricer, Seip–Conjoined, and Edwin Harness. Did the three clusters under Hopewell Mound 25 and those under these other sites have the same sociological meaning?

Greber (Greber and Ruhl 1989:55–56) found no significant difference among these clusters in the rank sum of counts of certain artifact classes, and concluded that the persons in the clusters did not differ in "rank." However, the list of artifact classes that she used was not tailored for discriminating differences in prestige or ranking (see Selection of Mortuary Traits That Indicate Rank, above). Table 7.1 shows that mortuary

traits relevant to vertical social distinctions do reveal systematic differences among clusters C, D1, and E. Cluster E, on the southwest end of the line of three, has the highest number and percentage of individuals with headplates, celts, and breastplates, and persons that were inhumed rather than cremated. It also has the largest total floor area and is among a few clusters with larger amounts of floor area per grave. Cluster D1, in the middle between C and E, is the second most impressive in its percentage of headplates, celts, and breastplates and has the highest percentage of persons with earspools. It also has the second-largest floor area per grave and a similar percentage of persons inhumed to that in cluster C. The least impressive cluster in most of these several ways is cluster C. Again, this directional patterning of vertical social differentiation among persons buried in the three clusters recalls the directional patterning under Seip–Pricer, Seip–Conjoined, and Edwin Harness.

Most of the eight possible interpretations evaluated above for the burial clusters under Seip–Pricer, Seip–Conjoined, and Edwin Harness can be assessed for the clusters under Hopewell 25. There is no evidence that the material differences among burial clusters C, D1, and E symbolized rank distinctions within a society (Table 7.1). None of the clusters have persons of a wide range of age categories in the proportions expectable for a rank level of a society. In fact, there is only 1 known subadult among the 70 persons identified to age class in the three clusters. Further, the clusters of burials are not distinguished by any mortuary traits having the characteristics of symbols of rank, i.e., traits that are common within a cluster of burials, distinguish among clusters, differ among each other in the energy investments they involved, and are found with most or all persons in a cluster, including a wide range of age categories and both sexes. All three clusters share in all the fancy artifact classes that are common enough to have possibly represented symbols of rank. Finally, the clusters do not form a pyramidal structure, whereby group size decreases with group prestige. Instead, the nearly largest group, E, has the greatest proportion of burials with indicators of prestige, for several different indicators.

The ideas that clusters C, D1, and E represent leaders of different kinds, leaders versus followers, different sodalities, or different clans or phratries also do not conform with the data (Table 7.1, Appendix 7.4). Probable symbols of leadership (headplates, celts), sodalities (breastplates, earspools), and clans or phratries (animal power parts) do not distinguish the clusters. Badges or material markings of religious sodalities other than those marked by breastplates and earspools are not evident. Broad age sets that might have distinguished adults from subadults were not represented by the burial clusters because nearly all the deceased were adults. There are not the demographic data available to evaluate whether finer age grades of adults, or gender groups, were segregated among the burial clusters. The religious interpretation of the burial clusters as persons destined to different afterlives in different directions is not supported. The northeast, middle, and southwest directions of clusters C, D1, and E, respectively, are not mimicked by a systematic orientation of the graves within each cluster. It does not seem possible to either rule out or support the interpretation that the three clusters signify different circumstances and social categories of death. However, the sociological differences between the burials in the three central clusters as a whole and those in the five peripheral ones suggest that at least this spatial division of individuals was not linked to circumstances of death. If the division had been, it would imply an unlikely correlation between mode of death and the several social roles found in the central burial clusters but not in the peripheral ones.

The most parsimonious explanation of the three burial clusters is that they represent, as at Seip–Pricer, Seip–Conjoined, and Edwin Harness, members of three different dispersed hamlet communities, but with the additional restriction that the selected persons were primarily highly prestigious ones. The extraordinarily prestigious nature of the persons buried under Mound 25 compared to those buried under Seip–Pricer, Seip–Conjoined, Edwin Harness, and other Scioto Hopewell mounds has been inferred above (see Regional Patterning, above) from a broad suite of evidence: the total mound volume of Mound 25, the total amounts and diversity

of Hopewell Interaction Sphere finished artifacts and exotic raw materials within it, the very large number and sizes of ceremonial caches of items, the extrafine quality of crafting of some artifact classes, the almost-complete lack of subadults who would not have had time to achieve much prestige or to realize that inheritance, the greater proportion of males compared to females as best as can be estimated, and the very high percentage of apparently prestigious inhumations versus apparently less prestigious cremations.

The identification of burial clusters C, D1, and E as members of different communities is supported, as at Seip–Pricer, Seip–Conjoined, and Edwin Harness, by several kinds of evidence. These include: spatial segregation within a cemetery as a cross-culturally common form of symbolizing horizontal social position; the occurrence of prestigious individuals with key, artifact-symbolized social roles, including leaders and sodality members marked by headplates, celts, breastplates, and easpools, in each of the burial clusters, as one would find in different communities; the presence of the same clans (feline, wolf) rather than different clans in at least two of the three clusters, as one would find when single clans are distributed among communities rather than localized; the apparent occurrence of the greatest number of clans in the largest cluster (C), which might indicate the largest community with the greatest potential for clan diversity; and the spatial segregation of the burial clusters as a natural symbol of communities separated in space but within the circle of a cooperative social unit, represented by the mound.[31] Burial clusters C, D1, and E do not demonstrate, unlike at Seip–Pricer, Seip–Conjoined, and Harness, an "inverse pyramid" structure, whereby prestigious persons are found increasingly more commonly in clusters of greater size that may represent larger communities with more labor potential. However, this pattern is not to be expected necessarily if each community selected primarily important persons for burial within Mound 25, which is in line with the mound's elaborate character. Not enough information on the age and sex distributions of the burials in the three clusters is available to assess whether the distributions approximate what would be expected from a community.

Hopewell Mound 25 in Regional Perspective. A reasonable sociological position for the Hopewell site within the Scioto–Paint Creek area can be defined from the understanding that the three large burial clusters under Hopewell Mound 25, like those under the Pricer, Conjoined, and Harness mounds, were members of three different communities, but persons of primarily high prestige. The scenario is as follows. Within the main Paint Creek valley, the North Fork of Paint Creek valley, and the adjacent portions of the Scioto valley resided three dispersed hamlet communities, one in each valley. Each of the three communities had within its lands an earthwork that was used to bury some of its members and some of the members of the two other communities with which it was closely allied. These earthworks were, respectively, Seip, the Old Town Works, and Liberty. Persons of a broad spectrum of prestige were buried in the mounds at these three sites. Also within the lands of each community was a second earthwork used for different purposes. These earthworks were, respectively, Baum, Hopewell, and East. Baum and East appear to not have been used much or at all for burying the dead, because they lack burial mounds. Little of their functions beyond this is known. Hopewell served a function alternative to Old Town, as Baum did relative to Seip, and East did relative to Liberty, but this function was also distinct from that of Baum and East. Specifically, Hopewell was the burial place of largely a select group of important persons who filled social roles of key responsibility in each of the three communities, in contrast to the somewhat broader populations buried at Seip, Liberty, and Old Town. In addition, Hopewell was aligned celestially in a direction different from Old Town, suggesting the complementary ceremonial functions of these two earthworks in the North Fork of Paint Creek valley, analogous to the complementary celestial orientations and functions of Seip and Baum in main Paint Creek valley, and of Liberty and Works East in the Scioto valley.

The idea that the three central clusters of burials under Mound 25 represent persons from three communities situated in the three different river valleys is supported with regional-scale

data by the above-described stylistic analysis of fabrics from Seip, Liberty, Hopewell, and other sites (Carr and Maslowski 1995). Fabric attributes that were found to be distinctive of Seip and main Paint Creek valley, where cloths with those attributes were concentrated, were also noted in occasional cloths at Hopewell. Likewise, fabric attributes that were distinctive of Hopewell and the North Fork of Paint Creek, where cloths with those attributes were concentrated, were also shared in occasional cloths at Seip.[32] As discussed in greater detail above, the shared fabric styles could indicate the exchange of fabric between communities in the two valleys, intermarriage among them, and/or the burial of clothed/shrouded persons from the two communities within each other's earthworks. All of these possibilities suggest ties of alliance among the two communities.

The interpretation that the three communities were in close social relationship with one another is also supported with regional-scale data by stylistic similarities in the architecture of Hopewell Mound 25 to that of Seip–Pricer mound, Seip–Conjoined, and Edwin Harness (Greber and Ruhl 1989:62–63). Mound 25's final form was a conjoining of three mounds, analogous to the three conjoined submounds within Seip–Pricer, to the final form of Seip–Conjoined, and to one or more analogous construction features of Edwin Harness.[33]

Beyond the basic reconstruction of the burial of prestigious persons from three communities at Hopewell Mound 25, there are three additional, essential interpretations that can be inferred from intrasite and regional data. First, it is possible that Hopewell, Seip, and Liberty served as burial grounds for small numbers of certain special individuals or representatives from communities beyond the three allied ones discussed thus far. Each of these sites had some to many smaller mounds that sometimes held one to a few individuals, who may have been members of communities additional to the primary three. At Hopewell, there were at least 36 small mounds beyond the large Mounds 25 and 23; at Seip, there were 16 not counting Seip–Pricer and Seip–Conjoined; and at Liberty, there were 13 beyond the Edwin Harness mound. Further, the burials under Mound 25 in the peripheral, small clusters A1, A2, B, and D2 might also fit within this interpretation. The Old Town earthwork apparently had many mounds within and around it (Moorehead 1892:115) beyond its three conjoined mounds (Moorehead 1892:133; Squire and Davis 1848:plate XXI, 60–61). One of these (no. 17; Moorehead 1892:131) has been excavated, and it contained only six skeletons.

Second, it is unlikely that the three communities in main Paint Creek valley, the North Fork valley, and the adjacent Scioto valley conceived of themselves as one integrated society with a sense of identity and a symbolic center separate from the constituent communities. This is suggested by the regional positioning of the Hopewell earthwork. Although Hopewell was a special burial ground for important persons from all three proposed communities, it was not located centrally among them. It could have been located so, east of the confluence of the North Fork with main Paint Creek and west of the confluence of Paint Creek with the Scioto. Instead, it was built within the lands of one of the three apparent valley communities—that in the North Fork.

Third, it is unlikely that the three communities were integrated through one or a few strong, centralized leadership positions with supracommunity domains of power—political, religious, and/or symbolic of the unity and well-being of the communities at large (e.g., Earle 1997: Frazer 1935, vol. 4; Huntington and Matecalf 1979:123–124, 153–183; Peebles and Kus 1977; and Winkelman 1992:69–75). These positions might have been symbolized by elite residence and/or burial in a central location, as is so common among chiefdoms and kingdoms (e.g., Huntington and Metcalf 1979:123), but this was not the case in the Scioto–Paint Creek area. On the contrary, the inequitable location of the Hopewell site, in conjunction with the shared cemeteries within the lands of each of the three communities, suggest the more or less equal but separate social character of the three communities, with the one community that was focused on

Hopewell and Old Town in the North Fork having had some historical, demographic, material, or other advantage over the other two communities. This regional picture accords well with the intrasite archaeological records of Seip–Pricer, Seip–Conjoined, and Edwin Harness, which also point to three communities of variable stature and wealth (see below).

The lack of regional-scale evidence for strong, centralized supralocal leadership is also in line with a more direct study of Scioto Hopewellian leadership made by Carr and Case (Chapter 5) with mortuary data. There, leadership is found to have been characterized by many decentralized, complementary roles distributed among multiple persons rather than by centralized authority in one position. The power of most of the leadership roles appears to have been based within the local community, but two roles may have had broader domains of power across the three communities in main Paint Creek, the North Fork valley, and the adjacent Scioto valley. The two roles, which were marked by plain copper headplates and conch shells with dippers for serving drink, were both public ceremonial leaders that lacked shamanic trappings. The role marked by copper headplates might best be described as an incipient priest or a priest-chief, who had yet to dominate the supralocal political landscape, which was shared by many kinds of local community leaders. The nature of the role marked by conch shells and dippers is unclear.

Chronology

The regional structure of three allied communities, each with two earthworks, as just presented, is a static view that conceivably might constitute the culmination of historical developments in the area or be a somewhat misleading compression of historically related but not synchronous activities. Did the large, submound mortuary structures at Seip, Liberty, Old Town, and Hopewell operate over the same time span? Were there shifts over time in the community or communities that hosted multicommunity burial ceremonies, as power relations among communities changed? A detailed picture of cultural behavior on the ground requires better chronological control over the archaeological record than available, but some parts of the picture are known.

Prufer (1961a:702–714, 1964a:44–52) concluded that the Hopewell site, Seip, and Liberty all had operated during a "Middle Hopewell" period, distinct from the use of earlier Mound City and Tremper, and later Ater and Turner, among other sites. His chronology was based on the relative degree of resemblance of these Hopewell mortuary sites to generally earlier, Adena ones, considering a wide range of artifact types and mortuary architecture and practices. DeBoer's (1997) seriation of most earthworks in the Chillicothe area, based on several covarying aspects of their morphology, places Baum, Seip, Works East, and Liberty on the same time plane, preceded by Old Town, the square of Hopewell, and the subrectangle of Hopewell, in that reverse order.

Prufer's and DeBoer's approaches to chronology are too coarse, not having taken into consideration the now-known long duration over which the multiple mounds and embankment sections within at least some single earthworks were built (Greber 1983:92, 1997:221). Ruhl's (1996; Ruhl and Seeman 1998) seriation of Ohio Hopewell earspools by their morphology illustrates well the problem with taking a sitewide seriation approach. The seriation shows that the items from each of Hopewell, Seip, and Liberty have a very wide and nearly equal range of forms, suggesting the long and similar periods of use of all three sites. The range encompasses that expressed by earspool forms from Ater and Turner, which first appear in the seriation somewhat later than Hopewell, Seip, and Liberty. Thus, for an archaeological chronology for the Chillicothe area to be accurate and satisfying requires it to focus on the ordering of specific, individual features within sites, such as charnel house floors, mound building, and embankment building, rather than sites as wholes.

Becoming more specific, both the charnel house under Edwin Harness and that presumed to have occurred under Seip–Pricer can be closely estimated to have been used in the same or very close decades. Twelve calibrated beta-count radiocarbon dates from the charnel house under

Edwin Harness (Greber 2003:108) and three from the charnel house under Seip–Pricer (Greber 1983:92; 2003:103) range in their means from the late A.D. 200s to the early A.D. 400s, and do not show a statistically significant difference between the two structures, although the dates from Edwin Harness are generally somewhat earlier than those from Seip–Pricer. The likelihood of overlap in the times of use of the two mortuary areas is increased if one further considers the extended periods over which the mortuary areas would have been used. Greber (1997:215), taking a broad view of the Seip–Pricer mound within the context of the Seip site at large, believed that the charnel house under it was probably used about three generations.[34] Finally, Ruhl's (1996; Ruhl and Seeman 1998) seriation of earspools from Seip–Pricer and Seip–Conjoined largely mixed into one sample and from Edwin Harness, as reanalyzed by Greber (2003:96), shows no indication that the burial floors of Edwin Harness and those under Seip–Pricer/Seip–Conjoined differ significantly in age.

The dating of the floor of Hopewell Mound 25 is problematic. Two early-run, wood and bark radiocarbon dates with high variances (Prufer 1964a:45) and one recent, more precise wood date from Burial 260/261 (Greber 2003:102–103) calibrate to the 40 B.C.-to-A.D. 70 range. One other recently run wood date from Burial 260/261 and three from Altar 1 (Greber 2003:102–103) have calibrated averages between A.D. 245 and A.D. 398. Six obsidian hydration dates, which provide maximum estimates of age and are relevant to uncertain proveniences within the mound (Hatch et al. 1990), have means that spread uniformly between 78 B.C. and A.D. 106. These contrast with two obsidian hydration dates from Seip, with means of A.D. 256 and 347. It is possible that the old wood problem and curation of obsidian account for the set of early dates from Mound 25, but the number of these early dates says that these factors should not be used lightly to reject the dates. It is also unclear why obsidian curation would have occurred at Hopewell more than at Seip under this supposition. The overall thrust of the dates from Hopewell Mound 25 suggests that the mortuary area under the mound was at most contemporaneous with those under Seip–Pricer and Edwin Harness, and probably was begun earlier—either slightly or substantially—with an unknown length of use.

Information on mound and earthwork construction at Hopewell and Seip hints at the building of Hopewell Mound 25 earlier than the Seip–Pricer, Seip–Conjoined, and Edwin Harness mounds, sometime prior to the solidification of the three-valley alliance, its ideology and symbolism, as well as the close contemporaneity of the latter three mounds. Hopewell Mound 25 initially was built as one mound over the several clusters of burials on its floor. Later, two smaller mounds were appended to it, giving it a trilobate form similar to the initial form of Seip–Pricer, the initial and final form of Seip–Conjoined, and possibly the initial form of Edwin Harness (see Note 33). If the building of the central mound of Hopewell 25 preceded that of Seip–Pricer, Seip–Conjoined, and Edwin Harness, it is possible that the idea of trilobate mound construction in the area developed after the central portion of Mound 25 had been built and that its end mounds were appended later, when this idea was carried out at Seip–Pricer and Edwin Harness and/or Seip–Conjoined. This would have kept mortuary symbolism in the three communities analogous. The tripartite theme may have reached its final elaboration in the building of the tripartite earthworks around Seip–Pricer and Seip–Conjoined, as well as Edwin Harness and the mounds at Old Town, long after the simpler, subrectangular formed embankment and its appended square at Hopewell had been set in place. Greber (1997:215) concluded that the circular embankment around Seip–Pricer and Seip–Conjoined, and the square of the Seip site, were constructed after these mounds, relatively late in the Middle Woodland Period. This sequence would explain the difference in shape of the earthwork at Hopewell from the tripartite forms of Seip, Baum, Old Town, Liberty, and Works East.

This diachronic interpretation, and the asymmetry of the Hopewell site's architecture compared to that of the tripartite earthworks, hangs together well internally and is not unexpectable from the perspective of how regional

social–material landscapes build up over time. It is unusual to find perfect symmetry in the material expressions of a cultural system at the landscape scale. Social–material landscapes develop over generations—in this case over several or more generations (Greber 1997:210–211, 214–215)—during the course of which personnel are born and die, and social and ideological change can occur. At the same time, it is good to remain open to an alternative and/or complementary interpretation. The distinct shape of the Hopewell earthwork might indicate the choice of its builders to symbolize, in some way, the leadership and prestige dimensions of those buried there over the symbolizing of intercommunity alliance.[35]

There is one key piece of evidence that speaks to the possibility that the durations of use of the floors under Hopewell Mound 25 and Seip–Pricer were long enough to have overlapped in time. For the Ohio Hopewell world, where about 1,000 burials have been excavated and over 850 have been reported with their grave contents (Case and Carr n.d.), only 3 are known to have had copper nose inserts. These are Burials 6 and 7 under Hopewell Mound 25 and Burial 2 under Seip–Pricer. Each of these persons was an adult 20–45 years age, was buried at the margin of their mound floor, had two bone awls, one to three breastplates, and metallic buttons, and lacked almost all forms of shamanic equipment. Burial 7 at Hopewell and Burial 2 at Seip–Pricer both were surrounded by very rare water barriers formed with hundreds of pearls. The three burials have little that is not in common. All of these shared mortuary features suggest some form of well-defined social role that was very limited in its time–space distribution. The implication is that the burial of these individuals on the floors of Hopewell 25 and Seip–Pricer probably occurred within a generation of each other, at most, and that the floor of Hopewell Mound 25 was probably used over an extended period of time, almost or barely overlapping with the floor of Seip–Pricer.

This conclusion is reinforced by the burial on the floors of these two mounds of two extraordinarily large copper celts, which are unique in the Hopewell world and are within only 2 cm. in length of each other (58 cm., 60 cm.). One celt was found in an artifact deposit that covered skeletons 260 and 261 in Mound 25; the other in an artifact deposit on a clay platform in Seip-Pricer. This evidence of contemporaneity must be qualified with the possible differential curation and final burial of the two celts.

The above chronological information, in consort with the previous mortuary and artifact style analyses, suggests that the joint burial of persons from three different communities situated in main Paint Creek, the North Fork, and neighboring parts of the Scioto probably occurred contemporaneously at the Seip–Pricer mound in main Paint Creek and the Edwin Harness mound in the Scioto. It is possible that the joint burial of prestigious persons from the three communities at Hopewell Mound 25 also occurred at this time, but an earlier period of joint burial for most persons is more likely. If earlier, it may have been that mortuary-based alliance activities among the three communities began with the burial of their elite together (at Hopewell) and, with time and solidification, broadened to a wider spectrum of members of each community (at Seip and Liberty). There is no evidence one way or the other for changing power relations among the communities over time.

Raymond Ater Mound

The Ater mound is located in the North Fork of Paint Creek valley, just over a half-mile southeast of the Old Town Works and three and a half miles northwest of the Hopewell site. It is distinct from the Seip–Pricer, Seip–Conjoined, Edwin Harness, and Hopewell 25 mounds in several ways. First, it is not encompassed by an earthwork or just outside of one.[36] Second, the mound has two lobes instead of three and, probably, two burial clusters instead of three on its floor. The number of burial clusters found under the mound is not known for certain. Two clusters were documented, but two-thirds of the north lobe was destroyed before excavation commenced and could have covered one or more additional clusters. The most probable number of burial clusters, however, is two, equivalent to the number of

mound lobes. At Seip–Pricer, Seip–Conjoined, and Edwin Harness mounds, the number of burial clusters equates to the number of mound lobes or other mound architectural distinctions (see Note 33). Third, few postmolds are known from Ater, and these do not indicate a charnel house or other enclosure. Fourth, from Ruhl's (1996; Ruhl and Seeman 1998) seriation of Ohio Hopewell earspools, it appears that use of the Ater mortuary floor began significantly later than the first known burial activity at Hopewell and later than burial activity at the Seip–Pricer and Edwin Harness mounds, in line with Prufer's (1961a, 1964a) coarser placement of Ater "later" than Hopewell, Seip, and Liberty. There are no radiocarbon dates from Ater.

Greber (1979a:51) concluded from her study of the burials at Ater that, as a whole, they represented a rank society. However, the criteria and data patterns that she employed to come to this conclusion were not stated. She did not think that the burials in the two clusters were distinguished by rank because the rank sums of counts of the artifact classes she studied did not differ significantly between the clusters. Instead, Greber said that the persons were segregated into two clusters by their connections, or lack thereof, to a "leader" in one or both of the clusters.

Table 7.1 shows that, contrary to Greber's reading of the data, there are strong patterns that differentiate the two extant clusters of burials at Ater. Burials in the south cluster are, on the whole, more prestigious than those in the north cluster for several mortuary traits. The south cluster has a greater number and percentage of extended burials, more floor area per grave, larger graves on the average, a greater number and percentage of individuals with breastplates, a greater percentage of persons with celts, a greater percentage of persons with earspools, and a single individual (Burial 51A) with half of the breastplates and a third of the celts recovered from the mound. Paralleling these indicators of prestige, the adult-to-subadult ratio is much higher in the south cluster. These multiple, correlated differences between the two clusters recall the same reinforcing set of indicators of prestige that distinguish the three clusters of burials under the Seip–Pricer, Seip–Conjoined, Edwin Harness, and/or Hopewell 25 mounds. The one exception to the pattern is headplates; they were missing from the south cluster yet two were found in the north cluster.

It is harder to interpret the cultural meaning of the clusters under Ater than the previous mounds analyzed, because a significant proportion of the mound floor is unknown, and it was less rich in sociologically diagnostic artifacts than were the floors of the other major mounds examined here. It seems safe to conclude that the two clusters do not represent rank groups. The subadult-to-adult ratio in the south cluster, which was fully excavated, is not what one would expect of a rank level of a society. Also, none of the prestigious artifact classes that evidence significant energy investment is common enough in either of the clusters to represent a symbol of rank, is found in one cluster and not the other, and is found with all age groups and both sexes (Appendix 7.2). Further, a pyramidal distribution of prestige is lacking: although the smaller, southern cluster is materially richer on the average, there is as much variation in burial treatment among individuals within the cluster for each mortuary characteristic.

There is no indication that the clusters represent leaders of different kinds, leaders versus followers, or different sodalities. The two known clusters are not distinguished qualitatively by probable symbols of leadership (headplates, celts) or sodality membership or achievement (breastplates, earspools) (Table 7.1). No material symbols of other kinds of sodalities are apparent. Broad age sets that might have distinguished adults from subadults are not evidenced because both clusters of burials include persons of both age categories. Whether the two clusters varied in the finer age categories and sexes present in them cannot be evaluated for lack of data. The religious interpretation, that persons in different burial clusters were bound to different afterlives in different directions, is not corroborated by the orientations of graves within a cluster. These vary widely. Different circumstances and social categories of death seem unlikely to have led to the deceased having been buried in the two clusters, because this would imply a correlation between mode of death and the several social

roles that distinguish the south and north cluster in their commonality or presence–absence. Clan or phratry affiliation could explain the sorting of persons into two clusters, though data are much too sparse to assess (Appendix 7.4).[37]

The idea that the two known burial clusters represent members of two different communities is supported by many of the diverse lines of evidence found at Seip–Pricer, Seip–Conjoined, Harness, and Hopewell 25. These are: spatial segregation within a cemetery as a cross-culturally common form of symbolizing horizontal social position; the occurrence of prestigious individuals with key, artifact-symbolized social roles in each of the burial clusters, as one would find in different communities; and spatial segregation of the burial clusters as a natural symbol of communities separated in space but within the circle of a cooperative social unit, represented by the mound and its circumscribing gravel rings. At the same time, the two clusters under Ater lack an "inverse pyramid" distribution whereby important persons would be found most commonly in the larger of the two clusters that might represent a larger community with more labor potential. Also, there is a smaller diversity of animal species and possible clans represented by animal power parts in the larger, northern cluster than the smaller southern cluster. If burial cluster size reflects community size, however, one would expect the larger community and cluster to have the greater potential for clan diversity and a greater number of clans. Thus, the interpretation that the burial clusters at Ater represent different communities is reasonable, but not as clearly supported as in the case of the other four mounds analyzed above.

Ater Mound in Regional Perspective. The Ater mound is one of a large number of Middle Woodland and apparent Middle Woodland mounds in the Chillicothe area (e.g., Bourneville, McKenzie, Rockhold, West, Westenhaver) and elsewhere in Ohio (e.g., Hazlett, Clyde Jones, Kohl, Martin, Melvin Phillips, Rutledge, Stone, Wright–Holder, Yant) that were not located within or just outside an earthwork. The mounds are isolated or occur in clusters of two or three. Of these mounds and mound clusters, all that have been excavated excepting Ater had few persons, generally 1 to 4, and occasionally as many as 10 to 15 (Carr Chapter 13; Case and Carr n.d.). They included ordinary to more prestigious persons who were clearly only a part of a small social group, which would equate to a "residential community," or several interrelated residential communities in the terms of Ruby et al. (Chapter 4). In some cases, these social groups were probably similar to the small Adena social units that earlier gathered to bury some or all of their dead in typically small mounds and mound groups over the region (Clay 1987, 1991).

In contrast, the Ater mound included 59 excavated person, with approximately 40% of the mound not recovered. Thus, the number of persons probably buried on the floor of Ater was larger than that buried on the floor of Seip–Conjoined ($n = 43$) and Hopewell Mound 23 ($n = 48$), and could have approached the numbers buried on the floors of Seip–Pricer ($n = 102$) and Hopewell Mound 25 ($n = 95$). It is reasonable, then, to interpret Ater within the context of the regional spatial–ceremonial organization indicated by these larger mounds, the earthworks of Seip and Hopewell that encompass them, and the related, tripartite, mound-bearing earthworks of Old Town and Liberty.

If Ater mound was similar in some fashion to Seip–Pricer, Seip–Conjoined, Hopewell 25, and other large mounds within earthworks with tripartite symbolism, two questions immediately arise: Why was Ater mound not accompanied by an earthwork? And why did Ater mound have only two clusters of burials on its floor instead of three? In the regional interpretation to follow, it will be assumed that the number of burial clusters under Ater was actually two, paralleling the number of lobes of the mound like the architecture of other sites (see Note 33).

Geographically, Ater was built in the North Fork of Paint Creek valley, between the Old Town Works and the Hopewell site. From the above reconstruction of the three allied communities within the greater Chillicothe area, Ater would have fallen within the lands of the dispersed hamlet community in the North Fork that focused on Old Town and Hopewell, not considering the dimension of time.[38] The one preserved piece

of fabric from Ater links it stylistically to the Hopewell site (Carr and Maslowski 1995:331) within this community, rather than to others.[39]

Temporally, the burial floor of Ater mound probably dates to a time when the charnel house under Seip–Conjoined was used, or not much later. The logic for this is as follows. The charnel house under Seip–Conjoined has been estimated by Greber (1979b:37; 1997:215) to have been used after the charnel house that presumably existed under Seip–Pricer, and during a time when Seip–Pricer was heightened with more soil and gravel.[40] From the radiocarbon record at Seip (Greber 1983:89–92; 2000; see above), this would have been sometime relatively late in the Middle Woodland sequence, when Ater is estimated by traditional typology to have been used (Prufer 1961a, 1964a). The placement of the use of Ater's burial floor specifically after Seip Pricer's had been mounded and during or shortly after the use of Seip–Conjoined's burial floor is suggested by Ruhl's (1996; Ruhl and Seeman 1998) earspool seriation. In the seriation, earspools from Ater are interdispersed among those in a mixed sample from Seip–Pricer and Seip–Conjoined, not over the entire seriation sequence for Seip, but only over the last of it (Ruhl 1996, Appendix B), which probably pertain more to Seip–Conjoined (see Greber 2003:96).

The lateness of Ater and its two-part rather than three-part organization together suggest the possibility that Ater represents a two-community remnant of the three-community alliance, which had begun to collapse. This inference is strongly corroborated by the layouts of the burial floors under Seip–Conjoined in relation to the layouts of the floors under Seip–Pricer and Ater. The charnel house under Seip–Conjoined is like the reconstructed Seip–Pricer building in having had three rooms. However, burials were placed in only two of the rooms of the Seip–Conjoined charnel house (Figure 7.1h, Table 7.1), while all three rooms at Seip–Pricer were used for burial. In this regard, Seip–Conjoined is transitional between the three-section charnel house under Seip–Pricer and the two-cluster floor under Ater. This seriation of mound floor forms and the dates of use of the mound floors bring up the possibility that the Seip–Conjoined charnel house was built by three allied communities with the intention that all three would bury some of their dead within its three chambers, as at Seip–Pricer, but that this event was not realized. Specifically, one of the three communities may have broken off their part of the alliance and not buried their dead in the Seip–Conjoined charnel house. The other two communities did, and continued their part of the alliance. This two-community alliance then seems to have carried forward for a while, and was materialized again in the two lobed, probably two-burial cluster cemetery of Ater.

Also supporting this reconstructed history of alliances is the fact that the three primary mounds over the three sections of the Seip–Conjoined charnel house were never joined together by a single earthen mantel, as the three primary mounds over the three burial clusters at Seip–Pricer had been. Thus, Seip–Conjoined was not completed in two ways: by joint burial and by uniting the burial clusters under one mantel. Significantly, both of these actions had previously been metaphors for intercommunity cooperation.

Following the logic of the historical reconstruction one step further suggests which of the three allied communities parted ways: the one situated in the main Scioto valley and focused on Liberty and Works East. Three pieces of evidence support this conclusion. First, the two mounds that have charnel houses with only two burial clusters–Seip Conjoined and Ater–are located in the main Paint Creek valley and the North Fork of Paint Creek, respectively, implying the continuation of the mortuary alliance by the communities in these two valleys. Second, the two communities that are hypothesized to have retained their alliance are, sensibly, the ones that are closest geographically to each other: in main Paint Creek and the North Fork. The more distant community in the Scioto valley is the one hypothesized to have broken away. Third, the section of the charnel house at Seip–Conjoined that was empty of burials is the smallest one. By extrapolation from the trend of decreasing material richness of the burial clusters from the large to the medium-sized, used sections of the charnel house under Seip–Conjoined, the smallest, empty chamber within the charnel house would

have represented the materially least rich community in that mound. This conclusion is also inferable from the trend in decreased richness from the large to the medium-sized to the small burial clusters under each of Seip–Pricer and Edwin Harness. Significantly, of the three communities once within the tripartite alliance, the one that appears to have been least wealthy is the community in the Scioto valley. The Edwin Harness mound in the Scioto valley is noticeably poorer in its numbers, diversity, and qualities of fancy artifact classes than Seip–Pricer and Seip–Conjoined in main Paint Creek valley and Hopewell Mound 25 in the North Fork (Greber 1979b:33, 37). In sum, the valleys in which two-cluster burial floors occur, geographic distances among the three communities, and consideration of community wealth all converge on the conclusion that it was the community in the Scioto valley that left or was removed from the tripartite alliance.

Finally, the reconstructed history of alliances offered here suggests an answer to the question of why the burial mound of Ater, with a burial population size in the range of that of the Seip–Pricer, Seip–Conjoined, Edwin Harness, and Hopewell 25 and 23 mounds, was anomalously not accompanied by an earthwork Throughout this chapter, the case is made that charnel house construction, mound building, and earthwork building were each fundamental aspects of intercommunity alliance formation and symbolization. The tripartite form of charnel houses, mound architecture, and earthworks described here is thought to have symbolized these intercommunity relations and to evidence of them. In addition, the possibility that allied communities in the three valleys pooled their planning efforts and labor to build each others' ceremonial centers is a reasonable inference in light of the very close similarities in the sizes and shapes of the tripartite earthworks and charnel houses in the three valleys (see A Regional Interpretation of the Seip–Pricer, Seip–Conjoined, and Edwin Harness Mounds, above) and the overlap among valleys in the reconstructed catchments of their labor pools (Carr, Chapter 3; Ruby et al., Chapter 4; Bernardini 1999). In this context, the absence of an earthwork around the Ater mound can be explained by the waning of efforts at alliance creation and the contraction of labor pools when the floor of Ater mound was used and thereafter. We know that geometric earthwork–burial mound complexes ceased to be built in the Scioto–Paint Creek area near the end of the Middle Woodland Period. One logical possibility would be sometime after the mounding of Seip–Conjoined's burial floor and during the use of the Ater cemetery.

Summary of the Historical Reconstruction of the Tripartite Alliance and Its Fall

Multiple, reinforcing archaeological patterns at the intrasite and regional scales suggest that three dispersed hamlet communities, situated in the main Paint Creek valley, the North Fork of Paint Creek valley, and an adjacent section of the Scioto valley, buried some of their dead together under several mounds in each others' lands. These mounds minimally include Seip–Pricer, Seip–Conjoined, Edwin Harness, and Hopewell Mound 25 and could also include the three conjoined mounds within the Old Town Works. Through burying some of their dead together, the communities would have symbolized and sanctified a formal alliance among themselves, wedding together their ancestors in an essentially permanent afterlife existence and, by extension, giving strong reason for the living to uphold the principles of alliance. Alliance-creating activities may also have involved the three communities participating together in other ceremonies, planning together the architecture of their earthworks, mounds, and charnel houses, and pooling their labor to build these meeting places. The repeated, tripartite form and very similar sizes of Seip and Baum in main Paint Creek valley, Old Town in the North Fork of Paint Creek valley, and Liberty and Works East in the adjacent Scioto valley, as well as the nearly identical form and size of the charnel houses under the Edwin Harness and Pricer mounds at Liberty and Seip, strongly suggest common architectural planning at the least.

The identity of the three burial clusters under each of Seip–Pricer, Seip–Conjoined, Edwin Harness, and Hopewell 25 as portions of

dispersed communities was determined by both a process of elimination and reinforcing positive lines of evidence. Reasons why the burial clusters could not have been rank groups include their wrong age–sex distributions, and the lack of symbols of rank, which would have been identifiable from the goodly amount of energy invested in them, their age-sex distributions, and their segregation among burial clusters. The burial clusters could not have distinguished leaders of different kinds, leaders versus followers, sodalities of different kinds, or clans because apparent symbolic markers of these roles and social groups crosscut the clusters at each mound, where data on them are available. Age sets and genders were not segregated among clusters, given the demographic profiles of the clusters. The deceased's circumstances of death and consequent social categorization, as well as the afterlife to which the deceased was bound, also could be eliminated as the causes of the burial clusters. Many positive lines of support were found for the idea that the clusters represented communities. These include, for most or all of these sites examined, the following: spatial segregation within a cemetery as a cross-culturally common means for symbolizing horizontal social distinctions; the occurrence of persons of a range of leadership roles, sodalities, clans, and prestige within each cluster, as would occur in a community; the expected occurrence of the largest number of persons of key social roles and the greatest diversity of clans in the largest burial clusters, which may represent demographically larger communities; the age–sex distributions of the clusters, where known; the inverse-pyramidal distribution of indicators of prestige, such that larger burial clusters had persons of higher prestige and greater proportions of them; and the circumscription of some tripartite burial clusters within a charnel house, which in the historic Eastern Woodlands was likened to a domicile, which in turn represented the family-like ties and cooperation within a family, a community, multiple communities, or the cosmos. The sharing among Seip, Liberty, and Hopewell of certain fabric stylistic traits that originated in different valleys also aligns with the interpretation that the three communities buried some their dead together at these sites, although alternative interpretations such as fabric exchange and intermarriage among communities are also possible.

The three communities in Paint Creek valley, the North Fork, and an adjacent section of the Scioto valley may have differed in population size, and thus their potential for organized labor, acquiring resources, and developing prestige, in accord with Chagnon's (1979) demographic theory of the foundations of prestige differentials in middle-range societies. This situation is indicated by the different sizes of the major burial clusters under each of Seip–Pricer, Seip–Conjoined, Edwin Harness, and Hopewell 25, and the positive correlation between the size and the material richness of the clusters under the first three of these mounds.

The particular communities represented by each of the three major burial clusters under each of the four mounds is hinted at by the relative material richness of the burials in each cluster compared to the overall richness of burial mounds in the different river valleys. The richest and largest of burial clusters possibly contained the dead from a community in the North Fork of Paint Creek valley, focused on the Old Town Works and the extraordinarily endowed Hopewell site. The burial clusters of middling material richness and size possibly contained the deceased from a community in the main Paint Creek valley, centered in part on Seip, with its Pricer and Conjoined mounds of secondary richness. The poorest and smallest burial clusters may have held the dead from a community in the Scioto valley focused on Liberty and Works East. The Edwin Harness mound at Liberty was significantly poorer in the amount and quality of the fancy artifact classes it contained relative to Seip–Pricer, Seip–Conjoined, and Hopewell 25. This mapping of valley communities onto burial clusters is corroborated by the particulars of the history of changes to burial floor layouts in the Scioto–Paint Creek area.

Each of the three communities appears to have had multiple, functionally differentiated earthwork ceremonial centers within them. An earthwork with burial mounds for persons of a broad but not full spectrum of prestige distinctions and an earthwork apparently without burial

mounds respectively characterize Seip and Baum in the main Paint Creek valley, as well as Liberty and Works East in the Scioto valley. An earthwork with burial mounds presumably for persons of a wide but not complete range of prestige distinctions and an earthwork with burial mounds for largely prestigious adults respectively characterize the Old Town Works and the Hopewell site in the North Fork of Paint Creek valley. In each valley, the two earthworks also differed in their celestial or other alignments, indicating their complementary ceremonial functions. The pattern of multiple, functionally differentiated ceremonial centers within a single community appears to have had its roots in the Scioto-Paint Creek area as far back as the early Middle Woodland, as expressed by the pair of sites, Mound City and Hopeton.

The asymmetrical location of the specialized and prestigious Hopewell site in one of the valleys, rather than its placement central to all three, suggests that the three communities probably did not think of themselves as one integrated society with a symbolic center. Nor is it likely that the three communities were integrated through one or a few strong, centralized leadership positions with power over multiple communities. Instead, the communities were joined by alliance with their orchestration apparently facilitated in part by two kinds of incipient, supralocal leadership roles, marked by copper headplates and conch shells with spoon dippers. Differences among the communities in material wealth and social prestige account for the particular community and valley within which the Hopewell site was built.

Toward the end of the Middle Woodland Period, mortuary data suggest that alliance efforts wavered and that one community—probably that in the Scioto valley focused on Liberty and Works East—subdued, broke off, or was removed from its relationships with the other two. Evidence includes: a transition from mounds with three major burial clusters and lobes (Seip–Pricer, Harness, Hopewell) to mounds with two burial clusters and/or lobes (Seip–Conjoined, Ater), a charnel house (Seip-Conjoined) that apparently was planned and built for use by three communities but was actually used by only two, and the building of a large mound (Ater) equivalent in size to Seip–Pricer, Seip–Conjoined, and Hopewell 25 but without an accompanying tripartite earthwork.

EASTERN WOODLANDS CONTEXTUAL SUPPORT FOR THE HISTORICAL RECONSTRUCTION

The reconstruction that three river valley communities buried their dead together within shared cemeteries, and by so doing established a permanent alliance among their ancestors in an afterlife and a template of proper action for the living, is not surprising and gains support in the broader milieu of mortuary-related alliance practices in the Eastern Woodlands over time. Common burial was used to unify otherwise discrete local bands, villages, tribal segments, and tribes at multiple times and places in the Woodlands (Carr, Chapter 12, Feast of the Dead). Closest to hand, at the earlier Hopewellian Tremper mound in the southern Scioto valley, the cremated remains of ca. 375 individuals were comingled in four depositories within a single charnel house, which was then covered with a single mound (Mills 1922). Weets et al. (Chapter 14) suggest with multiple lines of evidence that the cremations represent persons of four clans, most likely from multiple Hopewellian communities in the general area. Elsewhere in the Woodlands, at the Hopewellian mound sites of Pinson, Tennessee and Helena Crossing, Arkansas, deposits of co-mingled cremated persons and broken pots from local and distant places have been interpreted as the remains of mortuary ceremonies aimed at cementing relations among local and foreign social groups (Mainfort 1986:31, 35, 46; 1988:167–168). Earlier in time, during the Late Archaic through the Early Woodland, at the Williams–Sidecut mortuary complex in the Lake Erie basin of northern Ohio, the cremations and bundles of between 656 and about 1000 individuals were intermingled in 20 mass burial pits, with one to 100 individuals per pit (Stothers and Abel 1993:68). The remains appear to several archaeologists (references in Stothers and Abel 1993:73) to indicate an interaction center, where local bands that were normally dispersed

across the basin gathered on occasion to form one or more regional bands, bury their dead, exchange gifts, trade, feast, and reaffirm their social ties. Smaller, similar Archaic–Early Woodland cemeteries are documented at the Hickory Island No. 2 and Marblehead sites in the basin (Stothers and Abel, pp. 73, 75). All of these instances recall the mechanism and logic of alliance-building used by protohistoric and historic Huron and Algonkian peoples in their Feasts of the Dead (Heidenreich 1978:374–375; Hickerson 1960; Trigger 1969:106–112; Carr, Chapter 12). The Feasts drew people from neighboring villages and tribes—and in the Algonkian case sometimes from distances of several hundred miles—to bury their recent dead together in single ossuaries, feast, dance, sing, display their warrior prowess, give gifts, court, and arrange marriages. The numbers of corpses, attendees, and given gifts each totaled above 1000 in the largest Feasts. In the Huron case, most of those buried together in an ossuary came from villages within the tribe, which was spread over a territory about the size of Ross Country, Ohio. The bones of all of the deceased, which were believed to retain their "body souls", were stirred together on burial, intermingling the body souls of the ancestors and forming a sacred alliance among the ancestors and, by implication, among the living. (For further details see Carr, Chapter 12). The tripartite charnel house cemeteries blanketed by a single mound at each of Seip, Liberty, and Hopewell fit easily within the above-mentioned modes of burial and logic of alliance formation found sporadically across the Eastern Woodlands over the millennia, and support the reconstruction here of the tripartite alliance.

The potency of this contextual support for the reconstruction of the tripartite alliance lies not only in the analogous forms of burial and their correlation with alliance-building, but also in a more basic, underlying logic or metaphor that all of the cases above, as well as the Scioto Hopewellian instances, seem to express materially. Each case appears to exemplify a fundamental equation between the fate of the body and the fate of the soul, with the implication that souls of the deceased can be manipulated by manipulating the body. In the Huron and Algonkian Feasts of the Dead, this logic is explicitly documented ethnohistorically: cremated remains were stirred together in ossuaries in order to associate the body souls of the deceased closely with each other. In the other cases, the logic is inferable from the co-mingled or otherwise associated bodily remains. The metaphor equating the fate of the body with the fate of the soul has a world-wide distribution (Hertz 1907, 1960a) and a "natural" symbolic quality (Douglas 1970), making its appearance in the Woodlands in these several cases expectable. This basic logic appears to underwrite the correlation between joint forms of burial and alliance-building in all of the above instances and makes for a strong contextual argument that, in the Hopewell case, three river valley communities buried their dead together within shared cemeteries in order to create a permanent alliance among themselves.

In the Seip, Liberty, Hopewell, and Tremper cases, a second metaphor provides additional contextual support for the reconstruction of the tripartite alliance. This metaphor is the common Woodland equation of the individual dwelling, and the family-like ties and cooperation it represents, with the ceremonial house of the larger community—here the Hopewellian charnel house in which the deceased from multiple communities were buried together (see above, The Burial Clusters as Communities).

THE TRIPARTITE ALLIANCE IN THE PERSPECTIVES OF ANTHROPOLOGICAL THEORY AND BROADER, SOUTHERN OHIO CULTURAL HISTORY

The archaeological reconstruction made here, of three valley communities that were allied intimately through burying their dead together, can be enriched considerably by placing it in a comparative sociological, ecological–evolutionary context. In particular, the tripartite alliance in the Scioto–Paint Creek area can be characterized as a comparatively advanced form of regional alliance—one of the kinds that may immediately precede the formal development of tribal sociopolitical units with pan-community

sodalities and a sense of identity. This rendering follows from an ecological–evolutionary theoretic framework on the development of alliances and tribes (Carr 1992a; see also Braun 1977; Braun and Plog 1982; Ford 1974; Voss 1980). In addition, the tripartite alliance can be placed in the context of the long-term culture–historical development of alliance strategies in the Scioto region and neighboring areas, which accords with the theory. Contextualizing the tripartite alliances both theoretically and historically in turn shows the reconstruction to be reasonable and expectable.

Cross-culturally, regional alliance networks among communities within social landscapes of middle-range complexity usually widen and intensify during periods of increasing subsistence, social, demographic, or natural environmental risks at the local level (Braun and Plog 1982; Voss 1980). Alliances between local groups widen because they can serve directly or indirectly as channels by which local subsistence inequities are leveled (Piddocke 1965; Suttles 1960; Vayda 1968), population is redistributed (Rappaport 1968, 1971), and/or political safety is secured (Chagnon 1983). It can be argued theoretically and demonstrated ethnographically that as risk increases in social landscapes of middle-range complexity, alliances among communities develop in a regular way that is typical of human, adaptive decision making. Adaptive strategies are created and chosen in an "ordered sequence" (Figure 7.4) (Slobodkin and Rappaport 1974). Initial responses are behavioral and costly in activity and energy but, being structurally noncommittal, are reversible and allow the person or social group to easily enact other responses later and thus to retain long-term flexibility. As perturbations become more intense, continuous, and predictable, adaptation is accomplished through structural changes. These release the person or social group from costly, continuous, behavioral responses but commit him/her or them to a narrower range of future adaptive options. Similarly, alliances are initiated with reversible economic transactions and political mechanisms such as the exchange of easily replaced utilitarian goods, the exchange of socially unrestricted valuables, networks of cooperation organized around Big Men, and the exchange of elite-restricted goods (Bohannan 1955; Chagnon 1983; Dalton 1977; Flannery 1967; Malinowski 1922; Mauss 1925; Wiessner and Tumu 1999). Alliances are escalated to longer-term, less reversible, social structural, political, and economic commitments through intermarriage, and may be culminated with binding sacred agreements, such as the burial of the dead (and their souls) from different communities in a common cemetery (Eggan 1964; Levi-Strauss 1969a; Rosman and Rubel 1971; Trigger 1969). During the latter alliance developments, a regional tribe may formally crystallize as a stable, bounded group with the establishment of pan-community sodalities (essentially permanent social structures) and a shared sense of pan-community identity, i.e., ethnicity. Centralization of leadership roles in the hands of one or a few political positions having power or authority across the tribe is not essential for the process of alliance and tribal development, although it may be involved in or follow such development.

The pattern of shift to more structural and committal forms of alliance strategies laid out here is most easily bridged to ecological–evolutionary literature (see above) on social networks that cites local subsistence, demographic, or natural environmental factors as the causes of escalation. However, I would emphasize that an equally valid factor is socially generated cycles of competition and cooperation internal to and among local groups (e.g., Bender 1978, 1985; see also Cannon 1989; Spielmann 2002). This image seems to accord especially well with the large ceremonial deposits that characterize mounds in the Scioto–Paint Creek area (Carr et al., Chapter 13). In addition, the cause of the actual sequencing from behavioral, structurally noncommittal, and reversible alliance strategies to more structural and committal ones is not simply a direct function of increasing risk of a kind, but also related to the intervening social–psychological factor of levels of trust, which require time and familiarity to develop. To be blunt, one does not initiate alliances with others by burying one's loved ones together with theirs.

In this theoretical light, then, the alliance among three Scioto Hopewellian communities

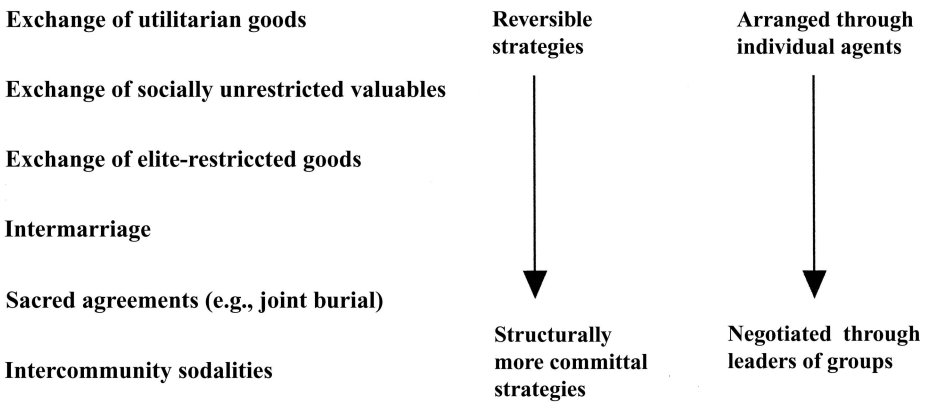

Figure 7.4. Progressive strategies for building alliances among communities within social landscapes of middle-range complexity (Carr 1992a).

who buried some of their dead together can be inferred to have been a comparatively advanced form of alliance—on the edge of tribal development and in line with the rise of sodalities, which are argued here to have existed and to have been marked by breastplates and earspools (see The Sociological Meaning of Copper Headplates, Celts, Breastplates, and Earspools, above).

This same conclusion is reached when the tripartite alliance is seen culture-historically as an outgrowth of earlier alliance strategies in the Scioto region and immediately neighboring areas, which follow a developmental sequence in line with the theory. The thrust of archaeological evidence from the greater southern Ohio area, along with the reconstruction of the tripartite alliance, suggest that many of the above-listed adaptive strategies for creating alliances were chosen, and in roughly their predicted order, in response to documented long-term increases in sedentism, population densities, and concomitant subsistence and political risks (Fischer 1974:55; Perzigian et al. 1984; Prufer 1967; Scuilli et al. 1982; Seeman 1986:576; Seeman and Branch n.d.; Tatarek and Scuilli 2000). In the Late Archaic, alliances were initiated and maintained with the exchange of utilitarian lithic resources and exotic marine shell, copper, and lithic valuables through apparently individually established trade partnerships (e.g., Cook 1976:65, 97; Ford 1974:394–398; Goad 1978:89–106; Griffin 1978:231; Smith 1986:30–32, 41; Walthall 1981:5–15, 37; Winters 1968). These were high-energy yet flexible endeavors. In the Early Woodland, alliances were further developed economically and politically through the formation of leader-centralized networks within and among Adena local kin groups. Such leaders are evident in the fancy grave goods within some tombs, their central location on the mound floor, and sometimes the focal spatial layouts of other graves around them (Aument 1990; Clay 1991; Dragoo 1963:19; Webb and Snow 1974:72).[41] These networks of leader-centralized negotiation among communities would have been more efficient than *ad hoc*, multiperson interaction among communities, but also evidenced the first sign of longer-term, structural commitment. From the Early Woodland through the Middle Woodland in southern Ohio, mortuary rituals certainly became more highly structured, showed greater long-term commitment to cooperative efforts, and involved a broader set of social units. Adena mortuary rituals focused on generally small mounds and mound clusters that probably tied together only closely related localized kin groups (Clay 1987, 1991), whereas Hopewellian ceremonies involved the building and use of big charnel houses, other substantial wooden architecture, and large-scale mounds and earthworks that must have involved a wider range of persons with deeper commitments to projects of long duration (cf. Greber 1997). The analyses made here of the clusters of burials under Seip–Pricer, Seip–Conjoined, Edwin Harness, and Hopewell

Mound 25, and the analysis made by Weets et al. (Chapter 14) of the Hopewellian Tremper mound in the Scioto valley, firmly suggest that the persons involved in mortuary rituals at the earthworks of Seip, Liberty, Hopewell, and Tremper came from multiple communities, and that these persons buried their dead together within the same mounds—an ultimate, sacred, and essentially irreversible act of alliance. Sodalities, which are thought to be evidenced by the breastplate and earpool symbols of membership or achievement of their members, also appear to have developed by this time. It is unclear, however, whether the members of these sodalities were drawn from multiple localized kin groups within single communities or from multiple communities that constituted a formal tribe (Service 1962); breastplates and earpools from different valley communities have not been studied stylistically to extract this information. Whatever the case, it is logical that sodality organizations such as these laid the social foundations necessary for the eventual nucleation of Scioto peoples into large villages during the Early Late Woodland (e.g., Dancey 1988, 1992; Seeman and Dancey 2000) and the formation of tribes at some unclear point in time prior to the Historic period. Finally, the process of alliance development in the Scioto drainage, late in the Middle Woodland, was apparently accompanied by the formation of two kinds of supra-community leadership roles, marked by plain copper headplates and conch shells with shell spoons. These leaders shared power with many other kinds of local community leaders in a decentralized arrangement (Carr and Case, Chapter 5; Thomas et al., Chapter 8).

In sum, the archaeological reconstruction of three Scioto Hopewell communities that buried some of their dead together can be characterized as a comparatively advanced form of regional alliance. The perspectives of both ecological–evolutionary theory about regional alliance development and long-term, archaeologically documented trends in the development of alliance networks in the Scioto area, which follow the theory, allow this conclusion. Thus, both theoretically and empirically, the reconstruction of the tripartite alliance is a reasonable one.

REVISITING THE QUESTION OF SOCIAL RANKING IN LIGHT OF ALLIANCE SYMBOLISM

The mortuary practices that were materialized at Seip, Liberty, Hopewell, and Ater and that are investigated here and were explored by Greber (1976, 1979a, 1979b; Greber and Ruhl 1989) do not evidence social ranking. Within the mounds of Seip–Pricer, Edwin Harness, Hopewell 25, and Ater, none of the artifact classes that represent an unusual energy investment and that were common enough to have been symbols of rank was found with adults, subadults, males, and females in the proportions one would expect in a rank level of a society. Nor were individual artifact classes of these kinds concentrated in single burial clusters as one would expect if the different clusters represented different social ranks. Additionally, none of the burial clusters was comprised of adults, subadults, males, and females in the proportions one would find in a rank level. It is true that the burial clusters within each of the four mounds varied in the prestige of the persons and/or the commonality of prestigious persons that they contained. However, prestige was not distributed pyramidally, whereby group size decreases as group prestige increases, as one would expect among rank levels of a society. Nor, alternatively, was prestige distributed equitably, whereby groups of different prestige were of approximately similar size. Instead, the materially richest clusters of burials had the most individuals.

These results may, to some readers, seem surprising, given that the Scioto Hopewell mortuary record in Ohio is much richer than the Havana mortuary record in the lower Illinois valley by any account (e.g., Seeman 1979b:392–393; Struever 1965), yet the Havana record does indicate social ranking through several kinds of mortuary patterning (Carr, Chapter 6). It is possible that ranking in Scioto Hopewell societies was expressed in mortuary traits other than those selected by Greber (1976, 1979a, 1979b; Greber and Ruhl 1989) and/or me for study. Although the theoretically and empirically obvious traits within single mounds have been explored here, intermound distinctions within single earthwork

complexes remain to be evaluated; so, too, do the interlocal distinctions between mounds within earthwork centers and the small mounds in one- to three-mound clusters without embankments, which dot the Scioto and Paint Creek valleys. The mound in which a person was buried could have served as a very substantial symbol of the person's rank and would fit the cross-cultural patterns whereby within-cemetery burial location is sometimes determined by the vertical position of the deceased, although less strongly than by horizontal social position (Binford 1971:22; Carr 1995b:181), and whereby differences in cemetery locations are determined foremost by vertical social position (Carr 1995b:162). The possibilities in these regards for the Ohio record are quite numerous.[42] A few are explored in Note 43, with strong implications but no definitive results, due to data gaps.[43]

Despite these qualifications, it may still be unsettling for some archaeologists that no evidence for ranking was found within mounds like Seip–Pricer that had large numbers of persons. I propose that a broad anthropological view of the nature of mortuary practices brings sense to these results by shifting our sociological expectations of them. Specifically, mortuary practices are symbolic behaviors that have potential for communicating, reinforcing, or challenging a diversity of social, philosophical–religious, or other cultural concerns (Binford 1971; Cannon 1989; Carr 1995b). As in any domain of symbolic behavior, the particular concerns that are communicated and the relative emphases with which they are communicated depend on cultural and personal values at that time and place and in that social context; in other words, cultural and personal messages are prioritized for their behavioral and material expression (Carr 1995a). In this light, Scioto Hopewell societies may very well have been organized by principles of rank, but ranking may have been thought by them to be less critical for expression in the extremely charged and powerful mortuary social domain of a single charnel house or mound than other dimensions of social differentiation.

Two such key dimensions that appear to have been given a central place by Scioto Hopewellian peoples in their mortuary symbolism are community affiliation and relationships of alliance among communities. These seem to have structured the basic tripartite layout of four known cemetery floors in the Chillicothe area, the structure of their covering mounds, and, in two instances, the form of their encompassing earthworks. Secondary value was given within charnel houses to other social dimensions of differentiation, including society-wide leadership (headplates, celts), membership or achievement within a sodality (breastplates, earspools), achieved prestige generally (extended burial), and other social roles not reported here. These were marked materially, but in much less impressive ways. Social ranking—if it existed—may also have been valued and expressed secondarily within charnel houses and, perhaps, within the entire mortuary realm. For instance, ranking might have been expressed in ephemeral, nonmaterial media not recorded archaeologically, such as funeral procession or seating order or funeral oratory, song, dance, or grieving displays. Cross-cultural survey has shown that the vertical social position of the deceased is commonly expressed in some of these nonmaterial media (Carr 1995b:163–164). These transient forms of symbolic expression, in contrast to the permanent symbolizing of community affiliation and alliances by cemetery layout and mound and earthwork architecture, would imply a secondary valuation of the expression of social ranking in the mortuary social contexts of a single charnel structure and a single ceremonial center. Also, ranking may have been symbolized at a geographic scale beyond the intimacy and practical visibility of a charnel house. As suggested above and in Note 43, persons of different rank may have been buried in different mounds within a mound group or earthwork center, or among different mound groups or earthworks. These possible symbols of differential ranking, though substantial materially, would not have been so easily perceived at one moment in time by one sweep of a person's eye, making them less "visible" practically than the very apparent internal organization of a charnel house and, presumably, the ceremonies within it (see Carr 1995a:185–187, 192–196 for a discussion of contextual versus physical visibility). This situation again would suggest the

placing of a secondary value on rank organization compared to the more immediate concerns of community affiliation and alliance relationships, which were expressed in charnel house layout. Finally, ranking might have been given expression primarily in cultural domains other than the mortuary realm, and in media more relevant to the living and their social interaction, such as fabrics for clothing (Carr and Maslowski 1995:337), costumery (Keller and Carr, Chapter 11; Carr 2000c), tattooing, or other methods of body marking (Greber 1983:33; Moorehead 1922:169; Shetrone 1926:214).

The conclusion that social ranking—if it existed–was given secondary symbolic expression relative to community affiliation and alliance in the mortuary realm is supported by the historical roots of Scioto Hopewellian mortuary practices. The earliest Scioto Hopewell charnel house, under the Tremper mound, and the ceremonies that were carried out in it, strongly emphasized alliance relationships and showed little or no clear expression of rank differences among persons or sets of persons. There, the cremations of some 280 individuals were mixed together, obscuring their identity, and laid to rest in a single depository, emphasizing the collective. Another 95 cremations were likewise intermixed and placed in three other depositories. Also, all of the ritual paraphernalia used for the cremation and other ceremonies within the charnel house, totaling approximately 500 items, were deposited together in a single large deposit, obscuring individual and group ownership and marking a cooperative social unit. The only possible hint of differences in prestige (perhaps rank) in the charnel house is the placement of the deposit of ceremonial artifacts near the large deposit of cremations and farther from the three other, smaller deposits of cremations.

Finally, the inference that social ranking was given secondary valuation in the large Hopewell charnel houses of the Scioto valley also concurs with the surprising visibility of clan symbolism there (Thomas et al., Chapter 8). Clan membership is like community affiliation and intercommunity alliance in being a kind of horizontal social identity. The symbolic marking of all of these horizontal social forms implies a strong emphasis in Scioto Hopewell societies on horizontal social ties and divisions and, reciprocally, less emphasis on vertical distinctions, such as ranking.

Social Complexity in the Scioto and Havana Regions Compared

A perennial issue in Hopewell archaeology has been the difference in complexity of Scioto and Havana Hopewellian societies, and the relationship of this social difference to differences in natural environment and human demography. The greater overall richness and scale of Scioto Hopewellian remains has led to the widely shared conclusion that Scioto Hopewellian societies were more "complex" than Havana ones. Struever (1965:212–213) systematized this view, pointing to the larger numbers of persons given preferential burial treatment, the greater differentials in burial elaboration, the larger burial populations, the greater numbers and forms of status-indicating artifacts, the superior workmanship of such objects, and the more extensive communal earthwork projects found in the Scioto area than in the Illinois valley. Struever concluded that Scioto Hopewellian societies were organized as chiefdoms, whereas Illinois valley Hopewellian societies were tribal. Greber (1979a) and Braun (1979) reinforced this position with their mortuary analyses, in which they respectively saw evidence for social ranking in Ohio Hopewellian burial populations and a lack of social ranking in an Illinois Hopewellian burial population. Seeman (1979b:406–407) attributed the greater complexity of Scioto Hopewellian societies to what he thought was the greater circumscription of food productive lands in the Scioto drainage than in the Illinois drainage—a situation that would have fostered increases in population densities and social complexity more so in the Scioto area than in Illinois (see also Hall 1973).

Without a firm understanding of social ranking in Scioto Hopewellian societies, and without an adequate study of the nature of leadership in Havana Hopewellian societies analogous to that made by Carr and Case (Chapter 5) for Scioto Hopewellian peoples, it is not yet possible to specify precisely and fully how societies

in the two regions differed in complexity. What can be said now is that the behavioral and material emphases placed on *alliance building* by Scioto Hopewellian peoples, as documented here and in Chapters 13 and 14, appear to have been much greater than in the Illinois case (Buikstra and Charles 1999; Buikstra et al. 1998), and that sustaining populations and communities in the Scioto area were larger in size than those in Illinois (see also J.A. Brown 1979:219; Struever 1965:213). In turn, the larger numbers of people integrated in the Scioto area probably required greater social complexity in various ways–horizontally and vertically–and certainly involved larger and more elaborate cooperative and/or competitive material displays among local groups within sustaining populations there (Carr et al., Chapter 13; Weets et al., Chapter 14). Both greater social complexity and grander cooperative/competitive material displays can be seen as responsible for the grander scale and greater richness of the Scioto Hopewellian material record than the Havana Hopewellian one. Finally, the broader communities and community integration in the Scioto valley can be understood as a counterbalance to the sparser food resources, the fewer alternative, highly productive food resources, and the greater potential for subsistence risks there than in the Illinois valley, as well as the geographically more widely distributed food resources within and beyond the Scioto valley than those circumscribed within the Illinois (Ruby et al., Chapter 4, Table 3).

In sum, the greater flamboyance of Scioto than Havana Hopewellian material remains may relate more to differences in the sizes of integrated, sustainable populations, and to differences in social complexity as a function of that factor, than to differences in local population aggregation and density, which actually appear somewhat greater in the Havana case (Ruby et al., Chapter 4, Comparisons: Similarity and Difference). When characterizing social complexity generally, and the social complexity of Scioto and Havana Hopewellian peoples specifically, it is necessary to consider not only vertical aspects of complexity, such as ranking and leadership, but also horizontal ones, such as sodality and alliance organization.

DISCUSSION OF BROADER IMPLICATIONS

The spatial–ceremonial organization of Hopewellian communities revealed here by intrasite and regional mortuary patterning bears on a number of current interpretations of Ohio Hopewell, and Hopewell more broadly, that have been put forward in the literature. These include the vacant ceremonial center–dispersed hamlet model (Dancey and Pacheco 1997; Prufer 1964a, 1964b; Prufer et al. 1965; B. D. Smith 1992), a view of social organizational diversity within Ohio (Greber 1979a), posited intraregional variation in the social meaning of certain ceremonial artifact types (Greber 1979a), the idea of ceremonial organization focussed on competitive displays (J. A. Brown 1981; Buikstra and Charles 1999), and the role of development of pan-society sodalities in the decline of Hopewell (Braun 1977; 1986).

The Vacant Ceremonial Center–Dispersed Hamlet Model

Prufer (1964a:71, 1964b; Prufer et al. 1965:137), B. Smith (1992), and Dancey and Pacheco (1997) have each offered similar models of the sociopolitical organization of Ohio Hopewell peoples into settlements, or "hamlets", of one to a few households scattered around a single earthwork ceremonial center. The multiple dispersed hamlets around a center were thought to have been integrated into a coherent community through their joint participation in mortuary and other ceremonies within the center, and through their pooling of labor to build the center's earthen and wooden architectural forms (Pacheco 1997). This model was based largely on the regional survey for and excavation of domestic sites (e.g., Dancey 1991; Prufer 1967; Prufer et al. 1965), without detailed study of the social components evidenced in the mortuary records of the centers.

Expanding the view of community organization to include mortuary patterning, as has been done here, brings three fundamental qualifications to the model.

(1) At least some communities built and used more than one earthwork or mound center

at a time within their lands. The different earthworks or mound centers had different ceremonial functions.

(2) Single earthworks and mound centers within the lands of one community were sometimes used, and perhaps constructed, by multiple communities to bury their dead and for other kinds of ceremonies.

(3) At least some communities buried their dead in multiple earthworks—outside of their own lands, in addition to within them.

Firm evidence of the first qualification is found in the age–sex distribution of persons buried in Hopewell Mound 25 and the mounds within the Hopewell site generally, which almost completely lack subadults and appear to have a higher than expected proportion of males. This age–sex distribution, along with the unusual material richness of the site, the high percentage of burials with markers of leadership of various kinds, and the high proportion of inhumations at the site, suggests its specialized use for burying predominantly persons of high prestige. By implication, other persons from the community or communities that used the Hopewell site were buried elsewhere, at other earthworks, mound complexes without embankments, and/or isolated mounds. Another form of evidence presented in this chapter, that some communities built and used more than one earthwork at a time within their lands, is the pairing of a tripartite earthwork with burial mounds and another earthwork of a different function in each of three different dispersed hamlet communities in three different valleys. The earthwork pairs are Seip and Baum in the main Paint Creek valley, the Old Town Works and Hopewell in the North Fork of Paint Creek valley, and Liberty and Works East in the Scioto. The two earthworks of each pair also were oriented celestially or otherwise in different directions, indicating their complementary ceremonial functions. Extant chronological data do not allow the contemporaneity of earthworks of different functions within the same valley to be evaluated, but do indicate the contemporaneity of earthworks of different functions in different valleys (Hopewell with Seip and Liberty). Other lines of evidence that point to multiple, functionally differentiated earthworks or mound centers having been used by single communities in southern Ohio are detailed by Carr (Chapter 3) and Ruby and Charles (Chapter 4).

Strong evidence for the second and third qualifications, that some earthworks were built and used by multiple communities, and that some communities buried their dead in earthworks both within and outside of their lands, is found in the three main clusters of burials that recur under each of the four mounds of Seip–Pricer, Seip–Conjoined, Edwin Harness, and Hopewell. Multiple reinforcing lines of evidence presented above point to the identification of these clusters as distinct communities rather than other kinds of social units. Even the particular communities represented by each cluster—foreign and local—under each of the four mounds could be deduced from three independent kinds of evidence. The planning, if not the construction, of single earthworks and charnel houses by multiple communities is strongly suggested by the close sizes, shapes, and/or complex geometries of these structures.

Social Organizational Diversity

Greber (1979a) concluded from her mortuary analyses of the Seip–Pricer, Seip–Conjoined, and Raymond Ater mounds and the Burial Place at Turner, and from her overview of Hopewell Mound 25, that "Hopewell peoples of southern Ohio lived in societies with different structure and organization" (Greber, p. 57). She specifically saw the society supposedly represented by the Raymond Ater mound to be internally less complex than that supposedly represented by the Seip-Pricer mound and Seip–Conjoined (Greber, p. 51). Whereas Seip society was thought by Greber to have been structured strongly into three rank groups, evidenced by redundant material indicators (Greber 1979a:41–45; 1979b:37), Ater society was thought to have been divided into two groups of roughly equal rank, which were focused around leaders and/or their kin (Greber 1979a:51). The Burial Place at Turner earthwork was thought to indicate little vertical differentiation but a variety of kinds of crosscutting horizontal distinctions (Greber, p. 54). In a later

analysis, Greber (Greber and Ruhl 1983:55–58) found no rank differences among three major segments of the society supposedly represented under Hopewell Mound 25. She concluded this despite the greater material wealth and powerful symbolism with which individuals in this mound were laden compared to persons in Seip–Pricer and Seip–Conjoined, where she did see ranking.

Greber's conclusion that social structural diversity in the Chillicothe area ranged from weakly ranked to strongly ranked societies, and from societies with two rank groups to societies with three, is ethnologically improbable. The sites of Ater, Seip, and Hopewell are within only 20 overland kilometers or a short canoe trip of each other, are situated in very similar environments, and are not separated by any topographic barriers. Hopewellian communities in the vicinity of these sites would have been subjected to similar levels and kinds of demographic and environmental stresses, rather than diverse conditions that would have fostered the significant differences in social complexity posed by Greber. The social structural differences reconstructed by Greber for this small area are of a scale that distinguish middle-range societies in distinct ecological settings at greater distances (e.g., Flannery 1967; Wiessner and Tumu 1999) and approach the distinctions between Contact-period Native American societies of the northeastern and southeastern Woodlands areas.

The unlikely social landscape drawn by Greber probably derives in part from three methodological problems in her studies, as described previously. First are the sampling inequities among the mounds examined. For example, Ater mound and the mounded Burial Place at Turner, which were thought to indicate simpler social structures, were excavated only in part, while Seip–Pricer and Seip–Conjoined, which were thought to indicate more complex social structures, were excavated completely. Incomplete excavation at Ater and the Great Burial Place could have resulted in undocumented social roles and categories there. The second methodological problem pertains to the broader scale of the earthwork. Greber made the "normative" assumption (Carr, Chapter 3) that a single mound constituted a complete cemetery for a society, rather than possibly some particular segment of a society, the whole of which was buried in the many mounds of an earthwork at large and elsewhere. She did not envision that the mounds she analyzed for different earthwork societies might have represented different kinds of social segments that are not comparable and that do not give insight into differences in total social structure among earthwork societies. Thus, Hopewell Mound 25 was found by Greber to express less vertical social differentiation than Seip–Pricer, I would conclude, not because the society that used Mound 25 was simpler than the society that used Seip–Pricer, but because Mound 25 was apparently the burial place for primarily key social figures of a restricted (high) range of social importance, whereas Seip–Pricer seems to have been a burial place for a broader spectrum of society. The final methodological problem that may have led in part to Greber's unlikely regional social reconstruction is the lack of close relevance of the mortuary variables that she selected to the issue of vertical social differentiation and ranking.

Greber's improbable conclusion about social organizational diversity also stems from a more fundamental, normative assumption of hers that was popular in mortuary archaeological circles at the time of her writing: that the structure of mortuary remains reflects the structure of the society that produced them (e.g., Binford 1964b, 1971; Braun 1979; J. A. Brown 1971; Goldstein 1981; Saxe 1970; Tainter 1975a). In contrast, the analysis presented here aligns with more recent understandings of mortuary behavior, which admit a much broader spectrum of causes of patterning in mortuary remains. Relevant here are the key insights that many factors other than the internal social structure of a society can be primary determinants of the structure of a cemetery, and that multiple societies may choose to bury their dead together in a single cemetery.

This more modern and complex view of the mortuary records opens the possibility that, in the case of Scioto Hopewell mortuary remains, *the foundation determinant of their content and organization was intercommunity alliance organization and its associated ideology*, not internal

social organization. This foundation determinant is concluded here to have been responsible for the triads of burial clusters and/or charnel house chambers under each of Seip–Pricer, Seip–Conjoined, Edwin Harness, and Hopewell Mound 25, and their distinction from the pair of burial clusters under Ater mound. Thus, Ater mound did not represent a simpler society than Seip–Pricer, but a simpler alliance organization among communities later in time. Upon this basic mortuary theme of alliance, the effects of other determinants of mortuary practices and mortuary remains, such as the marking of leaders, sodalities, and clans, were then overlaid at the large mounds studied here.

Significantly, the alliance view of the Scioto Hopewell mortuary record offered here explains archaeological anomalies that the internal social organization view does not. Among these anomalies are: the one empty chamber of the tripartite charnel house under Seip–Conjoined, the lack of an earthen mantel unifying the three lobes of Seip–Conjoined into one mound, the addition of lateral mounds without underlying burials to the central mound of Hopewell 25 in order to create a three-lobed appearance, and the lack of an earthwork around the large Ater mound. Finally, the alliance interpretation is harmonious with known Historic-period sociopolitical and mortuary practices of Native Americans of the northern Woodlands (Heidenreich 1978; Hickerson 1960; Trigger 1969), whereas the wide yet localized social organizational diversity hypothesized by Greber (1979a) does not have ethnographic analogs in this culture area.

In sum, from the modern viewpoint taken here, Hopewell mortuary patterning within the Scioto drainage seems homogeneous in cause. Greber's interpretation of societies with diverse social structures in a small area appears to be an artifact most fundamentally of a normative assumption that single cemeteries equate to single societies, a normative assumption that mortuary variability is caused primarily by intrasocietal structure, and incomplete representation of societies who buried their dead over a broad landscape. Additional problems were created by the use of mortuary variables that lacked close relevance to the topic of vertical social differentiation and ranking and, perhaps, intramound sampling.

Regional Uniformity in the Social-Symbolic Meaning of Headplates, Celts, Breastplates, and Earspools

Greber (1979a:56–57) concluded that symbolic artifact classes such as breastplates may have had different social meanings at Seip, Liberty, Hopewell, and Ater. She drew this inference from her interpretations that each of the earthworks represented a single community and that these communities differed in their social structure—the context in which breastplates and other artifact classes were employed. In support of her conclusion, Greber pointed to the different percentages of the burials at these sites that had breastplates, the different ranges of prestige of persons who had breastplates within and among sites, and the unique case of Burials 258 and 259 in Hopewell Mound 25, which had a very large number of breastplates.

All of these varying features of the Scioto Hopewellian archaeological record are easily explained within the reconstruction of the spatial–ceremonial organization of communities presented here, without calling upon differences in the meaning of elite artifact classes across locales. Variation among sites in the percentages of burials that had breastplates can be related to the different proportions of burials within the sites that derived from different communities of apparently differing size, material wealth, and prestige. Intersite differences can also be attributed to the functional specialization of Hopewell as a place for burial of primarily prestigious persons compared to the other sites. Variation in the prestige of persons buried with breastplates within and among sites, as indicated by other artifact classes placed with the deceased, is expectable if all breastplates were symbols of sodality membership or a level of achievement within a sodality. Sodality membership and achievement would have been simply one social persona of an individual buried with breastplates, with other dimensions of possible achieved or ascribed prestige having been free to vary. The unusually large number of breastplates buried with Burials 258

and 259 in Hopewell Mound 25 is one example of several similarly large deposits of prestigious items or materials—earspools, mica mirrors, or galena—that were placed with one or two burials at this earthwork and others (Carr et al., Chapter 13, Table 13.2). These large deposits of items with an individual, like the large ceremonial caches that occurred in mounds independent of burials, are most easily understood as the product of cooperative displays, competitive gifting, and/or ritualized material destruction in the course of alliance maintenance, rather than ownership of the items by an individual and his or her social position (Carr et al., Chapter 13; see also Buikstra and Charles [1999] for a Havana Hopewell analog).

The idea that breastplates, and other markers of social roles like headplates, celts, and earspools, had different social meanings in different earthworks makes little sense given the geographic and social closeness of the dispersed hamlet communities that included Seip, Liberty, Hopewell, and Ater. These sites are a maximum of 30 overland kilometers and 38 river kilometers from each other. The communities focused on these sites probably had small enough populations to have required intermarriage among them (Ruby et al., Chapter; 4 Konigsberg 1985:131). In addition, the communities cooperated very closely with each other through the burying of some of their dead together in each other's earthworks. Such multicommunity ceremonies, to have cohered and been effective for such a potent and potentially dangerous activity as processing the dead, would have had to have involved material symbols with regionally shared, important social and religious distinctions and meanings, as well as to have been based in religious conceptual systems that were very similar among communities.

Competition and Cooperation

In the interpretive literature on Ohio and Illinois Hopewell, a tension exists between two points of view: (1) intercommunity social relations were heavily competitive, and (2) intercommunity relations were unusually peaceful, termed a *Pax Hopewelliana*. The first view is based on the material flamboyance of mortuary records, including finely crafted, ceremonial costumery and equipment made of expensive-to-obtain exotic goods, large caches where these items were ceremonially destroyed and deposited on mortuary floors and within mounds, and some burials that were accompanied by large numbers of redundant, gifted items, such as copper celts, breastplates, or earspools. These qualities of the mortuary record are said to evidence "ostentatious, competitive displays" of social wealth and power among local groups "vying with each other for highest prestige" (e.g. J. A. Brown 1981:36; Buikstra and Charles 1999:205, 215), in line with Marxist influenced views of social relations (J. A. Brown 1981:36, citing Friedman and Rowlands 1978; see also Bender 1978, 1985; Friedman 1975; Miller and Tilley 1984). Root sociopolitical causes of such displays of prestige have been thought to be the need to recruit persons through marriage or other means of social affiliation for community vitality and labor, and the show of popularity for aspiring leaders (J. A. Brown 1997b:242–243; 1981:36; see also Bender 1978:217; 1985).

The second view, of peaceful relations, is founded in the pervasive material evidence for long-distance acquisition and/or exchange of raw materials over the midcontinent by Hopewellian peoples, previously held perceptions (now largely disconfirmed) of the long distance exchange of finished goods and/or long-distance intermarriage, and the wide spreading of religious ideas, icons, and artistic styles. These things have evoked the picture of strong mechanisms of peaceful interaction and cooperation among neighboring and distant Hopewellian societies. Hall captured the view when he proposed that the Hopewellian platform pipe had some of the same functions as the historic calumet pipe, which "absolutely ruled out violence" in its presence and enabled a person to walk safely among enemies in the "hottest" of fights and, thus, was an effective mechanism for material exchange among groups (Hall 1977:504–505, also citing Marquette 1966:131, 133).

Further supporting the view of peaceful cooperation are various mortuary data. Excavated skeletons from Illinois and Ohio Hopewellian

sites almost completely lack embedded projectile points or their markings, parry fractures, or bashed in skulls, in contrast to later Late Woodland and Mississippian skeletons and earlier Late Archaic ones (Buikstra 1977:80; C. A. Johnston 2002:112; Mensforth 2001; Milner 1995:232, 234–235; 1999:120–122).[44] Culturally modified human skulls and mandibles, once concluded to represent primarily trophy skulls of young recruits for warfare (Seeman 1988), have been shown through more thorough osteological study (Johnston 2002) to indicate the revering of ancestors and probably a variety of other cultural practices but seldom, if ever, trophy taking. At the Hopewell site, all extant examples of culturally modified human remains are adults (>15 years) and include both sexes rather than males (warriors), alone. In addition, those buried with culturally modified human skulls and mandibles include an equal number of males and females, rather than predominantly males (warriors) (Johnston, pp. 105–114). Significantly, this near absence of skeletal indications of warfare is coupled with a paucity of elite artifacts symbolizing the taking of war captives and trophy parts, and even these few cannot be securely identified as such (Table 7.2). Elite artifacts made of fancy raw materials and representing implements used to inflict wounds are common, but whether they functioned in war divination, hunt divination, or the sending or pulling out of spiritual power intrusions by shamanic practitioners is unclear (Table 7.2). Moreover, these fancy implements that might have been used in war do not associate in burials or ceremonial deposits with the takings of war—the supposed trophy jaws and skulls mentioned above and effigy human parts (Chapter 5, Table 5.5). It is possible, however, that the implements were used in spiritual-level fighting and the sending of power intrusions among individual, shaman-like practitioners of a certain kind, rather than as ritual paraphernalia in actual physical warfare among communities at large.

The image of peaceful cooperation has also been encouraged by anthropological theoretical perspectives during the 1960s through 1980s. The harmony-and-equilibrium orientation of the systems and ecological viewpoints of the Hopewellian world (e.g., Braun 1986:121; Braun and Plog 1982; Ford 1974) popularized the notion of cooperative intercommunity alliances to offset rising local subsistence risks. More recently, Milner (1995) attributed the apparent Middle Woodland peace over the Eastern Woodlands to an increased reliance on seed-producing native plants, which were more plentiful than the shellfish shoals and agricultural lands that focused populations and competition in the Late Archaic and Late Woodland– Mississippian periods, respectively. He also posited that new forms of social organization and intersocietal relations during the Middle Woodland could have dampened tensions and cycles of revenge killings among groups.

Between the competition and the cooperation viewpoints is a middle road, which sees these two as going hand-in-hand in much of social interaction. This view is strongly supported by ethnographic observation and ethnological theory (e.g., Chagnon 1983; Rosman and Rubel 1971:3; Service 1962; Trigger 1969). Seeman proposed such a view for interpreting the Ohio Hopewell mortuary record specifically, despite his more one-sided finding that human "trophy skull" artifacts were largely heads taken in warfare rather than the curated skulls of revered ancestors: "High levels of Hopewell cooperation imply at least some competition for resources and social position . . . and certain themes in Hopewell iconography, the elaborate patterns of Hopewell personal decoration and hairstyling, the conspicuous consumption of exotic artifacts in public ceremonies, and 'monumental' earthwork construction must be seen as relating directly to both processes. . ." (i.e., cooperation and competition) (Seeman 1988:573). Buikstra and Charles (1999:204–205) have called attention to the roles of both cooperation and competition in Havana Hopewell mortuary ceremonialism. They cited a distinction of Morris's (1991) between "ancestor cults", which emphasize lineage unity and the transmission of common property, and "mortuary rituals", which are the social arenas for interpersonal and intergroup competition and for disputing and reworking current status arrangements. Buikstra and Charles (1999:212–214) held that a long mortuary tradition in the lower Illinois valley, going back to

Table 7.2. Possible Indications of Interpersonal Violence in Ohio Hopewelllian Societies, and Alternative Interpretations

Artifact	Site, mound, and burial	Reference	Possible interpretations
Human body referents			
Effigy finger, cannel coal	Hopewell, Md 25, Sk 278[a]	Moorehead (1922:111, 142, fig. 38)	War trophy, disfigure and dishonor the antisocial (Bird 1971:101; Burkett 1997:274; Vizenor 1981:80), ceremonial
Human digit with two perforations and a skull	Hopewell, Md 25, cache	Shetrone (field notes, July 16)	War trophy, disfigure and dishonor the antisocial, ceremonial
Effigy hands of children, pair, copper	Mound City, Md 13, B 4	Mills (1922:452, 552–553, fig. 77)	War trophies, disfigure and dishonor the antisocial, ceremonial
Effigy hand, gracile, mica	Hopewell, Md 25, B 47, Sk 2	Shetrone (1926:95–97, fig. 35)	War trophy, disfigure and dishonor the antisocial, healing hand of a healer
Effigy ear, copper	Hopewell, Md 25, Altar 1	Moorehead (1922:113, 142–143, fig. 39), Greber and Ruhl (1989:123–124, fig 4.45)	War trophy, disfigure and dishonor the antisocial, prestige (Burkett 1997:274)[b]
Effigy human torso, headless, legless, hands (tied?) behind back, copper	Mound City, Md 13, B 11	Mills (1922:455, 552, fig 76)	War captive, executed; ceremonial sacrificial victim
Effigy human body, headless, as a headplate, copper	Mound City, Md 7, B 12	Mills (1922:494–496, 542, fig. 67)	War captive, executed; ceremonial sacrificial victim
Effigy human body, headless, missing lower legs and hands, mica, smaller of two	Hopewell, Md 25, B 34	Shetrone (1926:87–89, 209, fig. 146)	War captive, executed; ceremonial sacrificial victim
Effigy human body, headless, missing lower arms, mica, larger of two	Hopewell, Md 25, B 34	Shetrone (1926:87–89, 209, fig. 146)	War captive, executed; ceremonial sacrificial victim
"Trophy" skulls and jaws	53+	C. A. Johnston (2002) and Seeman (1988:570–571) inventory them	Ancestor worship; few if any were war trophies (Johnston 2002)
Artifacts for inflicting wounds			
Mace, stone	Hopewell site	Ohio Historical Society 283/—	Weapon
Effigy atlatl, mica	Hopewell, Md 25, Altar 1	Moorehead (1922:113, 142–143, fig. 39), Hall (1977:503, fig. 1c)	War or hunt divination
Effigy atlatl, mica	Hopewell, Md 25, Altar 1	Moorehead (1922:113, 142–143, fig. 39), Hall (1977:503, fig. 1d)	War or hunt divination
Effigy atlatl, copper, three	Hopewell, Md 25, deposit of copper designs	Moorehead (1922:plate 124), Hall (1977:503:fig. 1b)	War or hunt divination
Projectile points, quartz and translucent	Many hundreds	Case and Carr (n.d.) inventory them; Carr et al., Chap. 13, Table 13.2	War or hunt divination, sending or pulling out power intrusions
Projectile points, obsidian	Many hundreds	Case and Carr (n.d.) inventory them; Carr et al., Chap. 13, Table 13.2	War or hunt divination, sending or pulling out power instrusions
Effigy projectile points, copper, mica	8+ at Hopewell, Liberty, Ater, Turner sites	Case and Carr (n.d.) inventory them	War or hunt divination, sending or pulling out power intrusions

[a] Md, mound; SK, skull; B, burial.
[b] See also the analogous leather effigy ear from the Mt. Vernon site, Indiana (Burkett 1997).

the Middle Archaic and culminating in the Middle Woodland, involved both of these elements—ancestor cults of individual local groups having been carried out in bluff-crest cemeteries while competitive displays attended by multiple groups were staged in flood plain cemeteries (see also Bullington 1988:238, 240).

The mortuary analyses presented here accord with the intermediate view of Ohio Hopewellian intercommunity social relations as having involved both cooperation and competition, but lean somewhat more toward the cooperation end of the spectrum. The analyses conclude that three communities in neighboring valleys buried some of their dead together repeatedly in buildings that were formally analogous to the "Big Houses" of some Historic-period Woodland Native American tribes. The fact that Historic-period Big Houses connoted the family-like ties and cooperation among those included within them (see references above) suggests the possibility that Ohio Hopewellian mortuary buildings did as well, and that communities may have employed this strong metaphor to symbolize intercommunity cooperative relations. This metaphor would have been especially potent when key individuals of a community who might have served well to represent it in its entirety were buried with key individuals of other communities, as is strongly suggested by the mortuary record of Hopewell Mound 25. Intercommunity cooperation of depth is also evidenced in the probable joint planning and building of the charnel house(s)/burial layouts under the Seip–Pricer mound and the Edwin Harness mound, which were located in different valley communities. These situations of very close cooperation stand apart from the model of Hopewellian communities as peer polities (Dancey and Pacheco 1997:9–10; Pacheco and Dancey n.d.) that might have alternately sponsored multicommunity ceremonies focused on escalating competitive displays (Renfrew 1986). Finally, the very close cooperation among the three communities is indicated by the mortuary nature, itself, of the reconstructed alliance among them, compared to other possible mechanisms of alliance. As discussed previously, alliance mechanisms vary in the degree of trust among parties that they imply, ranging from silent trade and utilitarian exchange to valuables exchange and intermarriage, which are increasingly less reversible and place more at stake. Burial of one's deceased ancestors with those of another group tops out this sequence by implying the eternal cooperation of one's ancestors in the afterlife, and requiring analogous behavior on the part of the living (see The Tripartite Alliance in the Perspectives of Anthropological Theory and Broader Cultural History, above).

At the same time, the mortuary analyses presented here also point to intercommunity social boundaries and competition that were not, ultimately, overcome through joint burial of the dead. Persons from a community appear to have been buried with their own, in a cluster distinct from the burial clusters of other communities, rather than intermingled spatially. Additionally, evidence suggests that sometime toward the end of the Middle Woodland period, the alliance of the three communities in main Paint Creek valley, the North Fork, and the Scioto valley broke apart, leaving only two of the communities allied and continuing their cooperative mortuary tradition. Considering what was at stake socially and spiritually, such a break must have occurred in a context of significant intercommunity tension. Thus, intercommunity cooperation and competition appear to have gone hand in hand, and to have varied in their balance over time, among at least the three Hopewellian communities studied here.

The Decline of Hopewell

Braun (1977, 1986:123–125) has argued that the decline of Hopewellian material flamboyance over the Eastern Woodlands can be traced not to a disruption of any kind, but to the successful, continued development of formal ties of obligation among communities. Specifically, supralocal alliances that depended on the unpredictable negotiations among leaders of communities, and that were reinforced through material shows of prestige and power, became superfluous as formal, multicommunity sodality organizations arose. These organizations would have provided supralocal social channels for leveling out subsistence and other risks, and would have done so more effectively than Hopewellian ritual ties

that had been developed earlier to meet these challenges.

Qualified support for Braun's position can be found in the contextual analysis of breastplates and earspools made here (see The Sociological Meanings of Copper Headplates, Celts, Breastplates, and Earspools, above). These items were identified, from diverse evidence, to have been symbols of membership or achieved prestige within sodalities of two different kinds. It is not known whether the members of each of these sodalities came from within single dispersed communities or spanned multiple communities. Breastplates and earspools were found in the three main clusters of burials under Hopewell Mound 25, in two of the three main burial clusters under the Seip–Pricer mound, and in the two known burial clusters under the Ater mound, all clusters of which were interpreted as portions of communities. Breastplates occurred in all three burial clusters under Harness mound; no information on the distribution of earspools is available for this mound. These distributions could indicate two *specific* sodality organizations, marked by breastplates and earspools, that drew members regionally from two or three communities. The distributions could also indicate, instead, two *kinds* of sodality organizations, specific instances of which were found in each of two or three communities in the region, without formal, multicommunity connections.

In either case, it appears that some Hopewellian peoples in the Scioto region were networked together by sodalities, which would have provided personal channels for the flow of subsistence and other goods across localized kinship and localized residence units. Significantly, breastplates and earspools were much less frequent in early Scioto Hopewell mounds, such as Tremper and those comprising Mound City, than in the later mounds of Seip–Pricer, Harness, and Ater. This may suggest an increase over the Middle Woodland period in the popularity of the sodalities marked by breastplates and earspools, in line with the cultural developments Braun proposed, but pushed back somewhat earlier in time.[45]

The issue of the decline of flamboyant Hopewellian ceremonialism through the development of supralocal sodalities is broached again in Chapter 13, by Carr et al. There, empirical evidence shows that persons who were marked socially by breastplates or earspools gathered for ceremonies in large numbers—so large that the persons must have derived from multiple communities. The data suggest the existence of two specific sodality organizations that bridged multiple communities. The possible existence of a variety of other kinds of multicommunity sodalities (e.g., specialized forms of shamanic practitioners, roles marked by reel-shaped gorgets, panpipes, smoking pipes, bear canines, and elk teeth is also inferred from data on social gatherings in Chapter 13. The multiplicity of sodality organizations hinted at in Chapter13 for core times of Hopewellian expression in Ohio does not support Braun's thesis. However, these social reconstructions require further corroboration before they can be used to evaluate Braun's idea.

CONCLUSION AND FUTURE DIRECTIONS

This chapter, like the previous one on ranking in Havana societies, demonstrates the necessity of taking a personalized and contextualized approach to studying Hopewellian archaeological records—"thick description" of local society, culture, and prehistory—if an accurate anthropological understanding of the nature of Hopewell is to be obtained. The sociologically contentless structural descriptions of Scioto Hopewell mortuary records that Greber (1979a) employed, following the lead of Binford (1971) and in the vein of others two to three decades ago, led to sociological conclusions that do not bear up under the weight of contexutalized, personalized data and that, in certain ways, are ethnologically improbable. Most significantly, the analysis presented here shows that the fundamental cultural determinants of cemetery layout and material variation over space, for each of five key Scioto Hopewell burial mounds, were not social ranking and leadership, as Greber had concluded, but community affiliation and intercommunity alliance structure. In addition, organizational differences among the five mounds were found to have derived not from differences in the internal complexity of

different societies in the region, but from differences in mound and earthwork function and from a change in alliance organization over time.

The centrality of a personalized and contextualized methodology to gaining these insights is shown in a number of specific chains of logic. It was only by linking social roles and actors to material categories such as headplates, celts, breastplates, and earspools—i.e., personalizing the archaeological record—that enough of an understanding of the social composition of the burial clusters under each mound was developed to sort out their identity as portions of distinct, allied communities rather than rank groups. It was only by taking the region rather than the site as the unit of mortuary analysis, and by placing site-specific mortuary patterns in the context of their repetition regionally, that the community alliance interpretation was corroborated by independent regional evidence, that the three valley locations of those communities became evident, and that a change in alliance organization through time was revealed. Taking a regional, contextual perspective was also essential to opening the interpretive possibility that a single community might have buried its dead in multiple, functionally differentiated earthworks and mounds—a site for the burial of primarily prestigious persons who filled key social roles (the Hopewell site) and other sites for the burial of a broader spectrum of social personae (Seip, Liberty). Thus, personalizing and regionally contextualizing the Scioto Hopewellian archaeological record brought clarity to its analysis and anthropological interpretation when a structural and normative one-site-equals-one-society approach, more limited in information, could not.

Left open by this chapter for future research on Scioto Hopewellian communities are the topics of whether they were organized by principles of rank and their overall internal social complexity. Certain dimensions of Scioto Hopewell social organization have been revealed here that will be useful starting points in these endeavors: two leadership roles, marked by headplates and celts; two sodalities or kinds of sodalities, marked by breastplates and earspools; a fundamental division between prestigious persons (and certain kin?) who were inhumed and others of a broader range of prestige who were cremated; and community affiliation marked by burial cluster in the mounds studied. The leadership roles and totemic-animal groups identified in other chapters (Carr and Case, Chapter 5; Thomas et al., Chapter 8) will also be essential to investigating Scioto Hopewell ranking and social complexity.

Also left for future study is the long-standing question of whether Scioto Hopewell societies were more internally complex than Havana and other Hopewellian societies across the Eastern Woodlands, and if so, precisely how (e.g., Beck 1990; J. A. Brown 1981:213, 219; Seeman 1979a:399–400; Struever 1965). The thorniest aspect to this issue will be untangling the contributions of two distinct cultural dimensions to the magnitude and complexity of Hopewell mortuary records: internal social complexity and intergroup cooperative/competitive display in the course of alliance building (Ruby et al., Chapter 4; Buikstra and Charles 1999; Charles 1995). It is now apparent that both factors significantly affected archaeological records in Illinois and Ohio, and that alliance building efforts were probably much greater in scale in Ohio than in Illinois. Thus, the issue of comparative social complexity is tractable only through using a multisite, regional approach to mortuary studies and taking a detailed, role-oriented, personal and contextual approach in both geographic areas. As the material signatures of the two determinants of archaeological richness are more easily separated, the weight of the "awe effect" (J. A. Brown 1997a) in our assessments of social complexity for these two traditions will accordingly diminish.

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NOTES

1. It is unclear to me in reading Greber's (1976, 1979a) central studies whether she assumed *a priori* that Ohio Hopewell societies were rank in Fried's sense, then went on to look at the specifics and complexity of ranking and other aspects of social structure from there, or whether she was attempting to demonstrate ranking methodologically and empirically. Her article that summarizes her dissertation, on Hopewell societal expressions at Seip, Ater, and Turner, gives the impression that she was assuming ranking. The article begins with anthropological assumptions that do not include a discrimination of "egalitarian" social structure from social ranking. Instead, she focused directly on rank societies, stating, "Within the class of rank societies (Fried 1967: p. 109), which probably includes the majority of human societies, there is a wide range of possible complexity. Comparisons of patterns of ranking provide one means of making finer distinctions both within and among such societies" (Greber 1979a:37–38). She then went on to discuss a sociological method for measuring the complexity of ranking in a society, defined a specific quantitative procedure for doing so, and applied it to Hopewell data.

   A complicating matter in reading Greber's (1976, 1979a) works, however, is that she vacillated in whether she followed Fried's (1960, 1967) notions of ranking, and it is sometimes unclear what she meant by the terms rank and ranking. Her dissertation begins with an acceptance of Fried's distinctions: "The fine exposition of Morton Fried (1967) has made it easy to use his definitions, which divide the continuum of social complexity into three parts: egalitarian, ranked, and stratified societies" (Greber 1976:8). A page later, Greber (1976:9) rejected Fried's (1967) distinction between egalitarian and rank societies, seeing that inequalities exist in all societies. She also implicitly rejected his definition of ranking by creating her own definition of it: "In the discussions which follow, relationships between any two social components (which may be single individuals) will be called symmetric if the components are differentiated and of equal rank and asymmetric if they are of unequal rank in the behavior which identifies the relationships between the components" (Greber, p. 9). Here, she used the term ranking as equivalent to some unstated quality such as importance or prestige or power, without qualifying whether that quality is obtained by achievement or inheritance, or whether the number of rank positions in a society is less than the number of members of society—key criteria in Fried's (1960:464–466, 1967) definition of ranking. In some places in Greber's analytical studies and interpretations, her use of the terms "rank" and "ranking" appears to denote only the social importance or prestige or power that she assumed to exist in all societies; in other places, Fried's notion of ranking seems to have been meant; and in other places, it is unclear. For example, her interpretation of the Seip–Pricer mound, "The social structure included 3 main ranked societal divisions."(Greber 1979a:45), could be read in either way. A subsequent statement, "Membership within a given division was *most likely* ascribed (Greber, 1979a:45; emphasis added), suggests that she did not mean Fried's definition of ranking, which requires the ascription of prestige. In contrast, her closing interpretive statements on the Ater and Turner sites use Fried's terminology: "This set of characteristics places this society [Ater] toward the less complex end of the possible range of rank societies" (Greber, p. 51) and "The total impression is one of crosscutting differentiations rather than one of strong hierarchies, bringing a relative amount of complexity within this ranked society" (Gerber p. 55).
2. It is possible to conjecture, for example, that the three clusters of burials within the charnel houses under Edwin Harness and Seip–Conjoined, and the possible charnel house under Seip–Pricer, represented the Upper, Middle, and Lower Worlds of the Hopewellian cosmos (Carr 2000a; Penney 1985), or social divisions tied to them. This interpretation would be in line with the Sky and Earth/Lower World concepts argued by Romain (2000:167) to have been symbolized respectively by the square and circular elements of tripartite earthworks such as Seip and Liberty. DeBoer (1997) has provided other possible social interpretations.
3. It should be noted that the only cross-cultural survey of mortuary practices completed and published at the time of Greber's writing was Binford's (1971) much smaller one. Binford (1971:22–23, Table 1) had found that vertical social position is marked by both the kinds and the amounts of items buried with the deceased, although

Greber did not cite this result to back up her use of the rank-sum method. Greber did, however, cite in her bibliography Tainter's (1975a) dissertation, which contained Binford's cross-cultural survey, but did not use it to evaluate the relevance of her rank-sum statistic. Tainter had found that the vertical social position of the deceased is rarely marked by the quantity of grave furniture—a finding that counters the relevance of Greber's rank-sum statistic.

4. Another aspect of Greber's selection of variables that requires comment is her selection of only those artifact classes that occurred in at least 5%–10% of the excavated burials of a site (Greber 1976:49, 102, 121). She did this in order to minimize idiosyncratic artifact associations and the overweighting of rare objects, but did not consider the sociological effect of this choice. By removing rare artifact classes from study, Greber shifted analytic attention away from potential symbols of leadership and vertical distinctions pertinent to leadership—there being few leaders per capita in a society—and toward broader vertical social distinctions like prestigious sodalities with membership by achievement, rank groups, or conceptual classes. For example, three individuals at Seip–Pricer and Hopewell Mound 25 with copper funnel nose inserts were bypassed from consideration. This strategy turned out to be a good choice for investigating social ranking, but compromised her studies of individually important persons and their distributions among burial clusters (e.g., Greber 1979a:43, 49, 53, 54; Greber and Ruhl 1989:58), upon which she based some of her social interpretations.
5. This result differs from that reported by Greber (1979a:45), who used the identifications of Raymond Baby, which were made with older, male-biased sexing techniques.
6. One possible interpretation of this situation is that those buried in Mound 23 were close consanguines or affines of prestigious persons buried in Mound 25, but were not permitted by cultural rules to be buried in Mound 25, which was restricted to persons of high prestige or certain important social roles. These consanguines or affines may have been inhumed with partial charring as a symbol of their mixed social position, associated with highly prestigious individuals but not highly prestigious in and of themselves.
7. It may be significant that Webb and Snow (1974:169–173) concluded inhumation to be a more prestigious form of body treatment than cremation among Adena peoples of the greater Ohio area. The authors cited multiple lines of evidence, some still relevant today. It may also be relevant that the prestigious burials in the central tombs of some Havana Hopewell mounds (e.g., those at Klunk–Gibson) were uniformly extended inhumations or bundles made of formerly extended inhumations, while less prestigious, peripherally located burials were a mixture of flexed and extended inhumations.
8. For example, at the Hopewell site, if a person was buried with a headplate, he or she had only a 67% (8/12) chance, of also having a breastplate, instead of a 100% chance, in the hierarchical situation where all persons with a headplate would have a breastplate. Morever, the person with a headplate would also have the same 67% (8/12) chance of having a pair or more of earspools, instead of a 100% chance, in the hierarchical situation where all persons with a headplate would also have earspools (Case and Carr n.d.).
9. At the Hopewell site, 12 persons had headplates, 11 had celts, 29 had breastplates, and 48 had earspools. One person had a headplate and a celt, 8 persons had a headplate and a breastplate, 8 persons had a headplate and earspools, 5 persons had a celt and a breastplate, 6 persons had a celt and earspools, and 16 persons had a breastplate and earspools (Case and Carr n.d.).
10. Of 854 Hopewellian burials in 35 sites across Ohio, 79 have animal power parts (e.g., jaws, teeth, talons, claws), 23 have headplates, and only 6 have both animal power parts and headplates. Of the 35 sites, 11 have burials with animal power parts, 7 have burials with headplates, and only 3 have burials where headplates and animal power parts co-occur (Hopewell, Mound City, Seip) (Case and Carr nd.). Thus, the two kinds of artifacts are strongly dissociated.
11. A possible exception to this interpretation may be bear canines, which are well out of proportion in their representation at Seip–Pricer and at most Scioto Hopewell mortuaries compared to the power parts of other species. It is possible that bear canines marked membership or achievement within a ceremonial society or other sodality, rather than clan affiliation (Thomas et al., Chapter 8). Bear medicine societies were and are common among Algonquian, Iroquoian, and Siouan peoples (Abler and Tooker 1978:515; Dewdney 1975:116–121; Gill 1992:23–25; Tooker 1978:460; Weaver 1978:534). Among the Ojibwa, the bear was a key power for practitioners of the fourth level of the Grand Medicine Society, or Midewiwin (Dewdney 1975:109, 111, 115, 138, 147, 149–150). Thus, one possible bear effigy headplate from Burial 3 under Mound 13 at the Mound City cemetery (Mills 1922:451–452) might indicate a leader of a bear sodality, perhaps dedicated to medicinal practices.

    At the same time, Hopewellian bear canines and artifact symbolism might have indicated bear clan membership or leadership because, historically among the Fox, necklaces of bear canines did mark bear clan leadership (Callender 1978b:641 see also Carr and Case, Chapter 1, Figure 1.4 f). Thus, the headplate from Mound City might have indicated leadership in a bear clan, though it was not associated with bear canines.
12. Of 854 Hopewellian burials in 35 sites across Ohio, 79 have animal power parts (e.g., jaws, teeth, talons, claws), 43 have celts, and only 9 have both animal power parts and celts. Of the 35 sites, 11 have burials with animal power parts, 10 have burials with celts, and only 6 have burials where headplates and animal power parts co-occur (Ater, Hopewell, Mound City, Rockhold, Seip,

Turner) (Case and Carr n.d.). Thus, the two kinds of artifacts are strongly dissociated.

13. The only exception where a headplate and a celt were found together in a burial at the four sites considered here is the double Burial 260–261 in Hopewell Mound 25. This burial had 63 celts and 92 breastplates. The burial included an antler-stub headplate of extraordinary mass (thickness, width, and weight) and a unique meteoric iron headplate. It is possible that the association of celts and headplates in this burial resulted from the gifting of the celts rather than the combining of the social roles indicated by headplates and celts in one or both persons. It is also unclear which of the two individuals was associated with which of the artifacts in this double burial, causing further ambiguity in the associations of the social roles marked by headplates and cells.
14. Ethnohistoric information on sodalities in the Great Lakes–Riverine region of the Eastern United States is limited and does not provide a clear foundation for modeling the five characteristics of sodalities examined here and their variation. In addition, among the Central Algonkians of this region, tribal-wide integration and organization appears to have been achieved primarily through clans and phratries based on patrilineal descent, and sometimes through moieties, and only secondarily through special societies that crosscut kinship and residence. Spiritual and ritual matters focused around visions and sacred packs, which were most commonly made and owned by the individual and inherited within his lineage (Callender 1962:26, 31, 65, 77), as well as around the eponymous relationship, the totemic relationship, and naming, which were associated with the lineage or clan (Callender, pp. 29–31; see also Radin [1945:68] for the Siouan Winnebego).

    The best-known societies are the Medicine Lodge or Midewiwin (Hoffman 1888, 1891; Radin 1945) and the more recent Dream Drum or Dream Dance cult and Peyote cult (Gill 1982:167–171; Ritzenthaler 1978:755–756; Skinner 1915, 1920; Spindler 1978:716; Venum 1982). Members in these societies typically could come from any sector of a tribe, although Midewiwin membership was traditionally heavily screened and, for the Winnebago, was divided among five ceremonial bands that were responsible for different parts of rituals (Quimby 1960:142). In addition, the Central Algonkian Fox, Sauk, Kickapoo, and Prairie Potawatomi had "sacred pack" organizations that were formed for healing of individuals, healing of the whole community, sorcery, warfare, hunting (especially buffalo), or those blessed by the same spirit. Membership in these organizations was voluntary, nonhereditary, and crosscut clans and lineages (Callender 1962:31; Tax 1937:267). The Menominee similarly had a sorcery organization and emerging Thunder and Buffalo dance cult groups of persons blessed by the same spirit (Callender 1962: 35; Skinner 1915). The Shawnee had a Man-Eating society and probably associations of shaman (Callender 1962:41). Dual divisions that were not based on lineage or clan were found among the Fox, Sauk, Kickapoo, Potawatomi, and possibly the Shawnee, whereas the Miami, the Menominee, and probably the Illini had true moieties based on clan affiliation (Callender 1978a:615–616, 1994; Tax 1937:268). Dual divisions divided a tribe into groups who competed in games, especially lacrosse, and for war honors and organized dances and rituals (Callender 1962:32, 1978a:616). The Siouan Winnebego had a variety of ritual societies, each open to persons who shared in some common supernatural experience, the most sacred of which was the Night-spirit society (Radin 1945:68–69).
15. For example, the Zuni have 6 kiva groups and 6 divisions of the Kachina cult, and 12 medicine societies, all of which crosscut clans (Eggan 1950:205, 208). The Hopi have a total of 10 men's kiva societies that crosscut clans but are controlled by one clan, with 6 to 8 kiva societies per village (Connolly 1979:548; Eggan 1950:90, 103–104; Titiev 1944:103). Tribal Initiation rites for men divide them into four societies that crosscut clans (Eggan 1950:93-97; Frigout 1979:573). The 14 major ceremonies of the Hopi are controlled by varying clans that head a kiva society (Eggan 1950:103; Titiev 1944:90–92). Beyond the Kachina and kiva societies of the Hopi are their rain, war, curing, and clowning societies, as well as two Flute societies, which each have a more limited membership, but one open to all clans (Eggan, 1950:98–99). The Snake and Antelope societies tend to be more single-clan dominated in membership (Eggan, p. 99–100). Taos and Acoma Pueblos have six and seven kiva groups, respectively (Eggan 1950:243; 1983:728). Membership in these crosscut clans, save the head kiva used by the Antelope clan. Laguna Pueblo has three Kachina dance organizations and seven medicine societies, as well as war, hunt, and clown associations, all of which crosscut clans (Eggan 1950:279, 280–283). Hopi–Tewa have a dual division into Winter and Summer People, and Sandia Pueblo has a dual division into Turquoise and Pumpkin People, all of which crosscut clans (Brandt 1979:731; Eggan 1983:728; Stanslawski 1979:597). Picuris Pueblo is divided into Spring, Summer, Fall, and Winter People ceremonial societies, which crosscut clans (Eggan, p. 728). Tiwa Pueblo has five Corn groups that crosscut clans and a dual division into Winter and Summer People that crosscuts lineages. These various social divisions constitute from 7% to 50% of the adult population of a single pueblo or pueblo-village society, assuming the equitable distribution of persons among divisions of a kind.

    In the Great Lakes–Riverine region, dual divisions not based on clan affiliation were found among each of the Fox, Sauk, Kickapoo, Potawatomi, and, possibly, Shawnee (see Note 14) constituting social divisions of roughly 50% of the tribal population. The Siouan Winnebego Medicine Rite, approaching modern times, drew members from a "large" percentage of the tribe (Radin 1945:70). In contrast, memberships in the sacred pack organizations, societies of those who had a similar spiritual experience, and other cult groups of the Central

Algonkians (see Note 14) constituted much smaller percentages of a tribe.

16. The most common means by which a person gains membership in a Puebloan sodality are initiation at the transition to adulthood, selection of a sodality for a child by a biological parent, following the ceremonial path of one's biological father, selection of a "ceremonial father" within a sodality by a youth or adult, trespassing onto a secret ceremony or being subjected to it, being cured by a medicine society, and taking a scalp in the case of war societies. For example, among the Hopi, youths undergo the Tribal Initiation rite into the Kachina society at age 10. Thereafter, boys begin frequenting the kivas of their fathers, typically, but may change kiva affiliation later in life (Titiev 1944:104). The Zuni male is initiated into the kiva organization of his father's or mother's choice at age 8 to 12 years, and may change kiva affiliation thereafter (Ladd 1979:484–485). Admission into the Bow Society requires a man to have taken a scalp and, thus, to be an adult (Ladd, p. 485). Membership in one of the six Kachina cult divisions is through selection by a "ceremonial father" at birth (Eggan 1950:205), but initiation is delayed until adulthood. It occurs in two stages, one at 5 to 9 years of age and the second at 10 to 14 (Tedlock 1979:502). Men and women may be "given" to a medicine society upon being cured, and must become a member for the cure to remain permanent (Eggan 1950:208). Likewise, adults who trespass or are subjected to a curing ceremony must become members (Eggan, p. 208). At Hopi–Tewa Pueblo, young men are initiated into the two kiva groups at between 14 and 18 years of age (Stanslawski 1979:597).

    In contrast to the adult society memberships just mentioned are dual and other tribal divisions of the Puebloans. Typically, a person became a member of these at birth or as a child, sometimes later confirmed by initiation. At Sandia Pueblo, a person was assigned membership into either the Turquoise or the Pumpkin People at birth, in an alternating fashion down a line of siblings (Brandt 1979:731). Summer and Winter People affiliations of the Isleta Tiwa were given to children, likewise in an alternating-sibling manner (Eggan 1983:731). Among the Hopi–Tewa, Summer and Winter People assignments were given to children and confirmed by initiation at adulthood (Eggan 1983:728). Isleta Tiwa parents give their children to one of the five Corn groups (Eggan 1983:731).

    Central Algonkian sodalities for healing, sorcery, shamanism, warfare, hunting, and devotion to a blessing spirit had voluntary memberships (Callender 1962:31), which naturally were primarily or fully adult, being determined by the nature of the activities involved. Membership in the Winnebego Medicine Rite was traditionally comprised of middle-aged or older persons, because there were a set number of positions, which could be filled only upon the death of a member, and because entrance requirements were expensive and psychologically difficult. However, in more modern times, with fewer interested persons, the age of initiates has dropped (Radin 1945:68; see also Grim 1983:116, 132, 133). At the turn of the century among the Ojibwa, a sick child could be initiated into the Midewiwin to cure his or her illness (Grim 1983:68, 116). The Chippewa sometimes admitted children to the Midewiwin through dedication at birth (Quimby 1960:126). In contrast to these primarily adult sodalities, membership in Central Algonkian dual divisions included children through adults in their natural demographic proportions. The Fox, Prairie Potawatomi, and Sauk assigned children to opposite divisions by birth order, in an alternating fashion (Callender 1978a:616, 1994:118).

17. Membership in kiva societies was restricted to men among the Hopi, Zuni, Hopi–Tewa, Hano, and Taos (Eggan 1950:96, 162, 1983:728; Ladd 1979:484–485; Stanislawski 1979:597; Titiev 1944:104). Membership in medicine societies beyond kiva groups was limited to men among the Hopi (Eggan 1950:98). The Kachina cult is restricted to men almost completely among the Zuni (Eggan 1950:205), but not so among the Hopi (Titiev 1944:109) and other Pueblos. However, only men participate in masked Kachina dances throughout the Pueblo region, save among the Santa Ana (Eggan 1983:727). At Acoma Pueblo, both young men and women are recruited into the Kachina society, but only men play an important role (Eggan 1950:243). Similarly, the Zuni medicine societies contain both men and women, but only men hold offices in the societies and perform curing rites (Egan 1950:208).

    In some instances, both men and women are recruited into sodalities. At Laguna and Acoma Pueblos, both young men and women join the kiva organization of the father, and at Laguna, women join the kiva of their husband at marriage (Egan 1950:244, 279, 1983:725). At Laguna, both men and women join the medicine societies. Kachina medicine societies at Santa Ana Pueblo include men and women (Eggan 1983:727). Women's societies, which may have an occasional man, are found among the Hopi, and these parallel the men's groups (Eggan 1950:100).

    The Medicine Rite society of the Winnebago and the Midewiwin of the Ojibwa included both men and women (Hoffman 1888:213; Radin 1945:70). However, among the Ojibwa, shaman members were apparently restricted to males (they were called "old man," indicating their connection with manitou), and were distinct in their degree of knowledge and spiritual capabilities from members who were initiated to cure an illness (Grimm 1983:116) and who apparently could be of either sex. The Fox Sing-Around society, which worked to help the whole tribe during an epidemic or drought, included nearly equal numbers of men and women (Tax 1937:267).

18. Many Pueblos have a Kachina society, as well as kiva or medicine societies. All men and/or women are initiated into the Kachina society, and may join a kiva or medicine society in addition. This is the case for the Hopi, Zuni,

Acoma, and Laguna Pueblos (Eggan 1950; Titiev 1944), for example. At Hopi, a man can belong to several kinds of societies, including a Tribal Initiation society, a Winter Solstice society, and rain, war, clowning, and curing societies (Eggan 1950:89, 90). Analogous society diversity and multi-society membership is found among the Acoma (Eggan, pp. 243–245), Laguna (Eggan, pp. 278–282), Hopi–Tewa (Eggan 1983:729), and Sandia (Eggan, p. 731; Brandt 1979:347), and other communities.

Among most Puebloan groups, a person was a member of only one kiva group or medicine society at a time (e.g., Eggan 1950:244, 279, 280, 485; Titiev 1944:104). Hopi men can belong to multiple kiva organizations but have their most basic affiliation with the kiva society in which they were initiated at the Tribal Initiation rite (Eggan 1950:96).

19. Most commonly in the Puebloan world, any differences in the prestige of sodalities within a tribe are muted. In part, this subtlety arises because the societies complement each other in ceremonial and other social responsibilities. Also, when membership crosscuts clan affiliation and kinship, which is common, it is difficult for one society to concentrate power (Connelly 1979:548). However, there are clear exceptions.

    Among the Hopi–Tewa, the Central Plaza kiva society has clear power and leadership in the community, above that of the Outer kiva society (Stanislawski 1979:597). At Laguna Pueblo, there are seven medicine societies under the leadership of one (the Shikane) (Eggan 1950:280). There are also three Kachina dance societies, one of which has priority over the other two in that a member of the most prestigious group can dance in the dances of the other two, but not vice versa (Eggan, p. 279). At Acoma, there are seven kiva societies, one of which is designated "head" in that it is used by the village cacique and the Antelope clan, which is dominant in the community. The other kiva societies, in contrast, have members from multiple clans (Eggan, pp. 243–244). Among the Hopi, the four Tribal Initiation societies, which functioned in the Kachina cycle, were primary. A man could participate in multiple ceremonies in multiple kivas, but his basic affiliation was considered the kiva into which he was initiated at Tribal Initiation. Moreover, initiation into one of the Tribal Initiation kivas was necessary if a man was to participate in the Winter Solstice ceremony (Eggan, pp. 96–97, 105).

    Among the Ojibwa, shamanic practitioners of the Midewiwin society appear to have been considered more powerful than the Jossakeed—a class of magicians and jugglers. However, the Jossakeed were not an organized society, and anyone who was successful at performing magic and jugglery could call himself one (Hoffman 1888:222–223).

20. The fact that earspools were technically complex artifacts (Greber and Ruhl 1989:140–149), and might have taken more time to manufacture than breastplates, may cast some uncertainty on the conclusion that a sodality indicated by breastplates was more prestigious than a sodality marked by earspools. Further, breastplates are not accentuated in their counts relative to earspools, or in the number of persons buried with them compared to those buried with earspools, at the Hopewell site at large or in Mound 25. These were burial places for the prestigious, and one might therefore expect breastplates and those who owned them to have been highlighted there relative to earspools and earspool owners, if a sodality associated with breastplates was, indeed, more prestigious.
21. Note 14 lists Puebloan ceremonial societies with memberships that range from clan-crosscutting, to multiclan but single-clan controlled, to single clan.
22. Of 854 Hopewellian burials in 35 sites across Ohio, 79 have animal power parts (e.g., teeth, talons, claws), 84 have breastplates, and only 28 have both animal power parts and breastplates. Of the 35 sites, 11 have burials with animal power parts, 11 have burials with breastplates, and only 8 have burials where breastplates and animal power parts co-occur (Ater, Bourneville, Hopewell, Liberty, Mound City, Rockhold, Seip, Turner) (Case and Carr n.d.). Thus, the two kinds of artifacts are strongly dissociated. The diversity of animal power parts with which breastplates occur are as follows: Ater–raptor, wolf/dog, bear, and beaver; Hopewell–feline, wolf/dog, bear, and beaver; Mound City–wolf/dog, bear, and raccoon; Seip–feline and bear; and Bourneville, Liberty, Rockhold, and Turner–bear. Thus, where breastplates associate with animal power parts, the animal species are diverse.
23. Of 854 Hopewellian burials in 35 sites across Ohio, 79 have animal power parts (e.g., teeth, talons, claws), 115 have earspools, and only 30 have both animal power parts and earspools. Of the 35 sites, 11 have burials with animal power parts, 14 have burials with earspools, and only 9 have burials where earspools and animal power parts co-occur (Ater, Bourneville, Hazlett, Hopewell, Liberty, Mound City, Rockhold, Seip, Turner) (Case and Carr n.d.). Thus, the two kinds of artifacts are strongly dissociated. The range of animal power parts found with earspools is wide: Ater–raptor, wolf/dog, bear, and beaver; Hazlett–wolf/dog; Hopewell–raptor, feline, wolf/dog, fox, bear, and beaver; Liberty–feline and bear; Seip–feline and bear; and Bourneville, Mound City, Rockhold, and Turner–bear.
24. In the Puebloan Southwest, ceremonial societies are generally not characterized by ladders of achievement (e.g., Titiev 1944:107). Exceptions are the six kiva groups of Taos Pueblo. There, boys go through the first rites of initiation into a kiva of their parent's selection, but few go through the addition rites of initiation. Those who do not cannot partake in esoteric rituals or hold key leadership positions in Taos government (Eggan 1983: 730).

    The Midewiwin societies of the northern and central Algonkian tribes and the Siouan Winnebago usually had four and sometimes eight "degrees", which varied in their knowledge, powers, and prestige (Grim 1983:133; Hoffman 1888:219–220; Ritzenthaler 1978:754). Ojibwa fourth-degree shaman were expected to be able to foresee

events, divine for game, make rain, cure diseases, prolong life, make fetishes, and help others gain their desires. Members who had achieved only one or two degrees usually practiced only a specialty, e.g., making rain, divining for game, or making fetishes (Hoffman 1888:220). The Ojibwa Midewiwin tradition associated the four degrees with the Four Directions and their Four Wind Gods (Hoffman 1888:220). In the Winnebago Medicine Rite, members arranged themselves around the medicine lodge in four directions, which varied in importance (Radin 1945).

25. The group of 13 burials placed above the first gravel layer that covered the primary mounds over the three groups of burials on the floor of Seip–Pricer (Greber 1979a:41, 1979b:34) are not considered here. They clearly were buried after the three groups of floor burials, and may have been functionally distinct, perhaps dedicatory. The five persons buried above the floor at Seip–Conjoined and the two burials above the floor of Edwin Harness (Greber 1979a:46, 1979b:34, 35) are not included for the same reasons.
26. This spatial pattern of animal power parts mimics that of headplates, celts, breastplates, and earspools. If the latter, copper artifacts indicate society-wide leadership or achievement within a sodality, as discussed above (see The Sociological Meaning of Copper Headplates, Breastplates, Celts, and Earspools), then perhaps the animal power parts indicate clan leadership or level of prestige within a clan.
27. Tomb forms are not reported adequately enough at Edwin Harness to assess the frequency and spatial distribution of this mortuary trait there.
28. In contrast to this scenario is Greber's (1997:216–217) proposal that Baum was built by the same community that had built Seip, but later in time, with a "concurrent shift in corporate activities to constructing large enclosures rather than large mounds (Greber, p. 217). Greber's suggestion is without physical evidence of a temporal separation of Seip and Baum (Greber, p. 219). It also runs counter to the continuity of mound building that characterized cultures of the Eastern Woodlands from the Early Woodland Period to the Historic and the post-A.D. 600 calibrated dates from the Russell Brown 3 Mound at Liberty (Seeman and Soday 1980:93, 97).
29. The reason the Hopewell earthwork is included in this study becomes apparent below.
30. Carr and Maslowski's (1995) style analysis identified particular sets of fabric attributes that seem to distinguish social units of varying size and nature within the Scioto–Paint Creek area, as are often found in stylistic studies (Carr 1995a). Of relevance are a regional distinction in stylistic traits between Paint Creek valley as a whole and the Scioto valley, and more local distinctions in stylistic traits among main Paint Creek valley, the North Fork, and the Scioto valley, which would correspond to the three local symbolic communities proposed here. For both of two stylistic attributes relevant to regional and more local distinctions, the range of attribute values for fabrics from the Seip–Pricer mound in main Paint Creek valley was large and encompassed tighter clusters of the attributes' values at the Edwin Harness mound in the Scioto valley. For both of two other regionally and locally significant attributes, the range of attribute values for the fabrics at Edwin Harness in the Scioto valley was large and encompassed tighter clusters of the attributes' values at Seip in main Paint Creek valley. In similar ways, fabrics from the Hopewell site in the North Fork valley—the valley of the Old Town Works—and those from Seip in main Paint Creek valley overlapped in style. In all of these patterns, the sites with tight clusters of attribute values are interpreted to represent the locations of manufacture of the fabrics in the cases of fabric exchange or joint burial of the clothed or shrouded dead, or the locations of origin of the style in the case of intermarriage. The sites with broader ranges of attribute values are thought to have been the recipients of the fabrics or style through intercommunity exchange, joint burial of clothed or shrouded deceased persons, or intermarriage.
31. The burial clusters under Mound 25 were not contained within a single charnel house, as were those at Edwin Harness and probably at Seip–Pricer. The floor of Mound 25 had several post screens or buildings, one around cluster C, one to three around clusters D1, D2, and E, one around cluster A2, and an at least a partial screen near cluster B (Greber and Ruhl 1989:50). However, all the clusters of burials were eventually capped under a single mound, to each end of which two earthen lobes were added.
32. Carr and Maslowski (1995) found four stylistic attributes that distinguished fabrics at sites within Paint Creek as a whole from fabrics at sites within the Scioto valley. They also found attributes that distinguished fabrics at sites in main Paint Creek from fabrics at sites in the North Fork. Two attributes had wide-ranging values at Seip that encompassed tighter clusters of values at Hopewell. Two other attributes had wide-ranging values at Hopewell that included tighter clusters of values at Seip. As discussed in Note 30, the sites with tight clusters of values are interpreted to have been the locations of manufacture of the fabrics or the locations of origin of their style, whereas the sites with wider ranges of attribute values are thought to have been recipients of the fabrics or style.
33. At Hopewell 25, the central mound that covered burial clusters A through F was extended by the later addition of two smaller mounds on its northeast and southwest sides (Greber and Ruhl 1989:42). At Seip–Pricer, the three clusters of burials were each covered by their own mound before being capped with a joining gravel layer and subsequent layers into one mound (Greber 1979a:41). At Seip–Conjoined, the three sections of the charnel house were each covered with a mound, and the mounds overlapped, forming one trilobate mound that was never capped. At Edwin Harness, a submound was built over the middle cluster of burials, but it is not known

whether two other submounds over the remaining two clusters were also built (Greber 1979b:28). However, three stone circles were constructed at a higher level of the mound, apparently over the three burial clusters.

34. Six beta-count radiocarbon assays from the northern section of the charnel house under Edwin Harness have a calibrated weighted average date of A.D. 340/370, while six other assays from the middle section have a calibrated average weighted date of A.D. 260/289/324 (Greber 2003:108). Three assays from the Seip–Pricer charnel house (Greber 1983:89–92, 2003:107) have a calibrated weighted average date of A.D. 421. The three average dates from Edwin Harness and Seip–Pricer are not statistically different from each other by a T′ statistic (5.43) calculated with Stuiver and Reimer's (1993) CALIB program.

    Konigsberg (1985:131) estimated demographically that the mortuary floor under the Seip–Pricer mound was used for one to, at most, three generations. However, he assumed in making this estimate that those buried under Seip–Pricer represented almost the entirety of one local community, which does not appear to have been the case.

35. My suggestion is that the form of the Hopewell earthwork represents the headdress of a leader, on the basis of comparison to masked and hooded human representations in Hopewell art. This idea will have to be elaborated elsewhere.
36. In the area of Chillicothe, Ohio, the half mile distance of Raymond Ater from the Old Town Works is a significant cultural separation. Five earthworks around Chillicothe have nearest neighbors of 2.5 kilometers or less (Mound City–Shriver, Mound City–Hopeton, Hopewell–Anderson) and two have nearest neighbors of approximately 1 kilometer (Mound City–Shriver). Greber (2003:92) also agrees that Ater mound was not associated with an enclosure.
37. The south cluster includes a person buried with the power parts of raptor, wolf, and beaver, whereas the north cluster includes a burial with the power part of an elk. The multiple clan symbols present in the first burial would likely represent the person's own clan and gifts from members of other clans (see Carr et al., Chapter 13). The lack of a clan symbol with each person in a cluster could, in this clan-based interpretation, suggest that a power part symbolized achievement or leadership within a clan, rather than simply clan membership. The occurrence of bear power parts in burials in both clusters would negate the idea that the clusters reflect clan affiliation, if bear power parts indicated a bear clan rather than some ceremonial sodality (see Note 11). This remains unknown.
38. How Ater related within its own dispersed community to the Hopewell site and the Old Town Works is unknown. The three conjoined mounds and other mounds at Old Town have not been dated. The calibrated radiocarbon and/or obsidian hydration dates from floor contexts in Hopewell Mounds 25 and 11 (Greber 2000; Hatch et al. 1990; Prufer 1961a, 1964a), which have means ranging from 78 B.C. to A.D. 398, suggest the uses of those floors earlier than Ater's, if Ater's was used, as reasoned in the text below, somewhat later than the floor of Seip–Conjoined and later yet than the floor of Seip–Pricer, with a calibrated date of about A.D. 421 (see Note 34). However, a late, mean, calibrated date of A.D. 460 from Hopewell Mound 17 (Greber 2003:103), and the stylistic interdispersion of the earspools from Hopewell over the entirety of and beyond the seriated range of Ater's earspools within Ruhl's (1996: Appendix B; Ruhl and Seeman 1998) earspool seriation, would suggest that the Hopewell site probably had continued to be used through the period when the mortuary floor at Ater was used and afterward.
39. No fabric stylistic data bear on the relationship of Ater to sites outside of the community that was focused on the Old Town Works and Hopewell and that encompassed Ater.
40. Greber's estimation of the younger age of the charnel house under Seip–Conjoined than that thought to exist under Seip–Pricer is based in part on the occurrence of two additions of soil and gravel to Seip–Pricer and only one to Seip–Conjoined, leaving it "unfinished" (Greber 1979b:37). Whereas the three submounds over the three clusters at Seip–Pricer were hidden by a final capping of soil and gravel, the three submounds at Seip–Conjoined were not. It is also possible that the depositing of the large quantities of mica in the final capping of Seip–Pricer while it was being ceremonially finished and the depositing of much mica on the floor of Seip–Conjoined while it was still in use link the cap and floor to the same time (Greber, p. 37), but this cannot be substantiated. Finally, Ruhl's (1996; Ruhl and Seeman 1998) seriation of earspools from Scioto Hopewellian earthworks, as analyzed by Greber (2003:96), hints that the floor of Seip–Conjoined was used after the floor of Seip–Pricer.
41. The leaders who coordinated alliances among Adena local groups have sometimes been called Big Men (Custer 1987; Fitting and Brose 1970:47–48). However, Clay (1992:79–80) convincingly warned that they probably did not have certain qualities of the classic Melanesian Big Man (Sahlins 1963)—specifically, power built on the ability to amass and distribute large quantities of food, and power displayed through mortuary and other ritual at the domestic level. Evidence for large surpluses in Adena archaeological records is lacking, and there is a clear spatial separation of Adena mortuary sites from domestic sites. It is more likely that Adena leaders who coordinated alliances among local groups were those important in arranging intergroup marriages and in facilitating supernatural affairs (Friedman and Rowlands 1978:206–207; Netting 1972).
42. Examples of intermound comparisons yet to be studied within single cemeteries include burial distinctions between the 16 small mounds at Seip (2 excavated) and the 2 larger mounds of Seip–Pricer and Seip–Conjoined; between 17 small mounds at Liberty (5 excavated) and the large Edwin Harness mound; between the large Mounds 25 and 23 and the 36 smaller mounds (17 excavated) at

the Hopewell earthwork; between the mounded Burial Place of the Great Enclosure at Turner, two other locations of burials within the Enclosure, and 6 other mounds having burials; and between the 24 mounds within the enclosure at Mound City. As for intersite comparisons in the Chillicothe area, burial forms in the large and small mounds within the Hopewell, Seip, and Liberty earthworks can be contrasted with those in nearby small mound groups without embankments, such as Bourneville, Rockhold, and West in main Paint Creek valley, and McKenzie, Circleville, and Westenhaver in the Scioto valley.

Certain variables not explored by Greber or me also stand out as potential indicators of ranking. These include artifact morphological types that differ in their materials of construction, and thus the costs of materials acquisition and production, and that also are common enough to have been symbols of rank rather than leadership. Examples include earspools (ceramic, stone, copper, copper with silver overlay, and copper with iron overlay), bear canines (real and plain, real with pearl inset, effigy of bone, effigy of copper or mica), and, possibly, bear power parts generally (claws, canines, jaws).

43. Strong burial distinctions among some mounds within single earthworks, and among mounds in different ceremonial centers, suggest the possibility that Scioto Hopewellian societies were organized by principles of rank. However, the paucity of age and sex information on the skeletal series from these mounds, as well as the uncertainty of their contemporaneity and the known functional distinctions among some of them, prevent the drawing of firm conclusions.

Within the Hopewell site, Mounds 25 and 23 stand as a naturally contrasting set, being the two largest mounds by volume and population at the site and being of similar oblong shape. The burials in Mound 25 as a population are extremely modally distinct from those in Mound 23. The burials in Mound 25 generally have much more elaborate tombs in each of several ways: platforms, walls, floor preparations, and coverings. Elaborations along these four dimensions are 10 to 40 times more common in Mound 25 than in Mound 23. In addition, the number of leaders (nonshamanic and shamanic) and persons of high prestige (e.g., those with earspools, breastplates, crescents, and reel-shaped gorgets) who offered gifts to the deceased, per deceased person, is 24 to 30 times greater for the Mound 25 population than the Mound 23 population (see also Carr et al., Chapter 13, Tables 13.7, 13.8). Mound 25 also is distinguished by five large ceremonial deposits of fancy artifacts, whereas Mound 23 has none.

Some small mound groups that lack embankments, that occur in the general vicinity of Hopewell and Seip, and that may be contrasted with the mounds at Hopewell and Seip include Bourneville, Rockhold, West, McKenzie, Circleville, and Westenhaver. Like Mound 23, all of these small mounds pale in their frequency of tomb elaborations through platforms and wall preparations, and in the number of leaders and prestigious persons who offered gifts to the deceased at them, compared to these characteristics at Hopewell Mound 25 and Seip–Pricer, on a per-deceased basis. Mound 25 has 23 times the frequency of tomb platforms and 5.7 times the frequency of wall preparations found in the pooled small sites, on a per-deceased basis. Seip–Pricer has 30 times and 5.5 times the frequency of tomb platforms and wall preparations, respectively, compared to the pooled small sites on a per-deceased basis. The numbers of leaders and prestigious persons who offered gifts to the deceased at Hopewell Mound 25 and at Seip–Pricer are 13.5 to 17 times greater and 5.4 to 5.5 times greater, respectively, than the pooled number for the small sites, on a per-deceased basis (see also Carr et al., Chapter 13, Tables 13.7, 13.8, 13.12). Only two of the six small mounds have a ceremonial cache, one each, compared to the five found in Hopewell Mound 25 and the four in Seip–Pricer.

In all, these qualitative contrasts suggest the possibility of two or three rank groups: (a) those buried within earthworks in mounds with high-cost facilities and spectacular offerings (e.g., Hopewell Mound 25, Seip–Pricer), (b) those buried within earthworks in mounds without these special traits (e.g., Hopewell Mound 23), and (c) those buried in small mounds that lack special traits and that are not enclosed by earthworks. The earthwork–nonearthwork distinction between the second and the third sets of burials may or may not be significant with regard to ranking, given their overall similarity in having little tomb elaboration, few or no offerings by leaders, and few or no ceremonial caches.

There are numerous burials in Hopewell Mound 25 and Seip–Pricer that do not have elaborate tombs and lack gifts from leaders. In the interpretation offered here, these would represent persons of rank who had access to burial in these two mounds, but who did not achieve or inherit positions of leadership or other prestigious roles. In contrast, those deceased persons with elaborate and gift-laden tombs would have been persons of rank who did achieve or inherit leadership or other important positions. All of the deceased within Mound 25 or Seip–Pricer would have been persons of the same rank group, probably having been given in joint the same elaborate ceremonies, indicated by their burial within the same charnel house and the specialized ceremonial deposits therein.

I do not currently see the greater frequency of offerings given by leaders and prestigious persons to the deceased in Mound 25 than in Seip–Pricer (2.5 or 3 times greater) as an indication of differences in rank among the deceased in these two mounds. The different frequency of offerings is not paralleled by significant differences in tomb elaboration or the number of ceremonial deposits in the two mounds (1.18 times more instances of platforms or elaborate wall, floor, or cover preparations in Mound 25 than Seip–Pricer on a per-deceased basis; 5 deposits in Mound 25 versus 4 in Seip–Pricer). Instead, the varying frequency of elaborate offerings may

reflect only a functional difference between these two mounds: Mound 25 as a burial place for persons of rank that achieved or inherited leadership or other prestigious roles, and their close relatives of rank, versus Seip–Pricer as a burial place for persons of rank with a wider spectrum of roles, achieved or inherited, prestigious and less prestigious (see Regional Patterning, in text). The differences in age–sex composition of Mound 25 and Seip–Pricer (Appendix 7.1) would bear out this interpretation. It is important not to confound the material mortuary correlates of leadership with those of ranking, as discussed in by Carr Chapter 6.

44. The possibility that Scioto Hopewellian mortuary records do not reflect Hopewellian social relations reasonably accurately because killed warriors and war captives were generally tabooed from burial with other community members in mounds, or were cremated rather than inhumed and thus remain unidentified, should also be entertained. Traditional societies often separate the places or forms of burial of those who have died "bad deaths" from those who have died "good" ones (Carr 1995b).
45. It is not problematic for Braun's interpretation that sodalities seem to have originated within the period of Hopewellian ritual florescence in the Scioto drainage and gained popularity during this florescence. Braun's argument only states that there came a time when multicommunity sodality organization became a more effective and economical means for leveling subsistence and other local risks than materially and energetically expensive Hopewellian ritual in the hands of community leaders, bringing the decline of such ritual. Braun's interpretation does run into problems, however, if it can be shown that a rich diversity of sodalities existed during the heart of the Middle Woodland period—a proposition supported to a degree in Chapter 13 by Carr et al.

Gathering Hopewell

Society, Ritual, and Ritual Interaction

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