

## Higher Ground: The Archaeology of North American Platform Mounds

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*Platform mounds, as forms of monumental architecture, have long been central to inquiries into Native American social complexity. The archaeological literature produced over the last 5 years that pertains to North American platform mounds in the Southeast and Southwest is reviewed. Chronologies, forms, and functions of platform mounds are summarized. There are similarities in the platform mound characteristics and construction sequences found in both regions. It is proposed that these characteristics reflect similar social processes of integration and differentiation.*

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**KEY WORDS:** platform mounds; Southeastern archaeology; Southwestern archaeology; Hohokam; Mississippian.

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### INTRODUCTION

Our knowledge of North American platform mounds is divided into what we know, what we think we know, and what we wished we knew (see Kintigh, 1990). We *know* that platform mounds are a distinctive type of nonresidential architecture but sometimes residences are found on top of them. We know that platform mounds represent ceremonial precincts within a community—places where specialized activities occurred and access was often restricted. We *think we know* that the people who lived on platform mounds were not ordinary. Whether we call them elites or leaders, those who resided on the mound precinct must have been distinguished community members. We *wish we knew* exactly why platform mounds were

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constructed. Answers to this question have been proposed but remain, for the most part, speculative.

Determining why platform mounds were built cuts to the core meaning of social complexity—how people interact and how groups are differentiated and integrated. In complex societies, differentiation is revealed in the restricted ownership of goods, land, rights, or knowledge (Redman, 1991). Often this sort of differentiation occurs in a context where surplus food or other goods accentuates the inequalities between those people associated with restricted ownership and everyone else. Differentiation creates an unbalanced situation that, in noncomplex societies, could not persist because inherent balanced reciprocity offsets and limits inequalities. But in complex societies, unbalanced conditions persist because people excluded from restricted ownership feel they are gaining something important from the situation. This inclusive feeling is generated through integration, a social process whereby legitimation is necessary to convince those without restricted ownership to perpetuate the unbalanced situation (Redman, 1991).

This article provides an overview of North American platform mounds by focusing on recent research conducted in the American Southeast and Southwest. Because of distinct regional variation in chronology and form, Southeastern and Southwestern platform mounds are first discussed separately and then compared. Although platform mound function is diverse, comparison of Southeastern and Southwestern platform mounds reveals recurrent shared characteristics. We review the evidence that connects these shared characteristics to similar social processes of integration and differentiation. The concluding discussion focuses on how aspects of integration and differentiation at North American platform mounds were developed and perpetuated.

### WHAT IS A PLATFORM MOUND?

All platform mounds are a form of monumental architecture, constructed eminences on which activities were conducted or buildings were placed. This simple definition identifies the essence of a platform mound as the creation of an elevated surface that was used in a variety of ways. Platform mounds usually were enlarged repeatedly in a series of construction episodes. Both in the American Southeast and Southwest, platform mounds were constructed primarily of soil and clay but also included rock or log mantles. The majority of platform mounds are quadrilateral in shape, although circular forms occur. Access to mound summits was accomplished by ramps, stairs, or ladders.

Like formal cemeteries and other monuments, platform mounds are evocative symbols created as a product of regional florescences in territori-

ality, sedentism, and corporate-group formation (Charles and Buikstra, 1983; Reidhead, 1992). We can only speculate about the motive for establishing a surface above the level where people normally interacted. It is evident, however, that a platform's bounded space creates a stage where observers can view a performance more separated and controlled than would be possible at ground level. If walls or buildings are built on a platform, control can be exercised in terms of when a performer can be observed by the audience. If mounds were places where one's perspective of the world differed, they may not have been freely accessible to everyone. Individuals who had regular access to platforms, resided on platforms, or directed the considerable labor necessary to build them may have had special social status. As powerful symbols within a community, platform mounds may represent a zone of contention between collective and individual interests. Control and boundedness made mounds places where social differentiation operated, but their monumental size required social integration.

## PLATFORM MOUNDS IN THE AMERICAN SOUTHEAST

In size and complexity, earthen platform mounds are the most impressive native monuments in the American Southeast. Southeastern platform mounds range in size from low-volume structures a meter or less in height to massive edifices. Monk's Mound at Cahokia, the largest North American platform mound, covers 6 ha at its base and rises 30.1 m in height (Collins and Chalfant, 1993, p. 319). Most Southeastern platform mounds are far smaller, however, and those over 15 m in height are exceptional within the settlement systems in which they appear. Conical earthen mounds, constructed as tombs or monuments of uncertain function, predate the appearance of platform mounds in the American Southeast by at least three millennia (Russo, 1994). Platform mounds typically differ from conical burial mounds in their periodic, multistage construction, and greater range of mound-related activities.

### Early and Late Platform Mounds and Their Geographical Distributions

In the eastern United States, platform mounds are distributed from the Atlantic and Gulf Coastal Plains, west to eastern Oklahoma, and north to the upper Midwest. The platform mound examples discussed below are drawn from the American Southeast, as commonly defined by researchers (Smith, 1986, p. 1). The examples were selected because they either represent the most detailed investigations within the 5-year period emphasized in this review or help illustrate the full range of platform mound forms

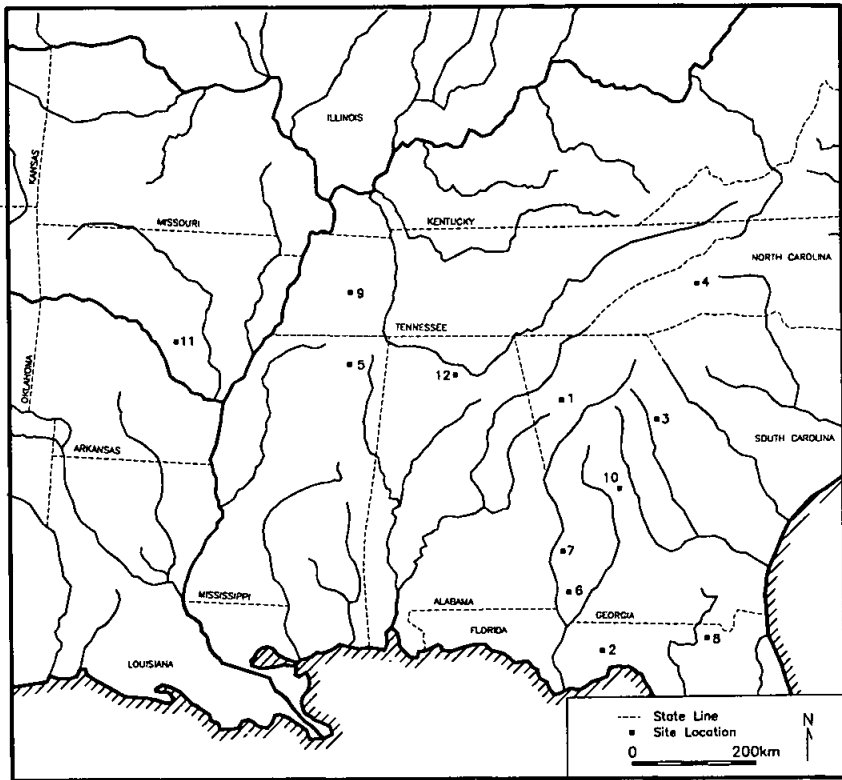


Fig. 1. Southeastern early platform mound sites mentioned in the text: (1) Annewakee Creek (Dickens, 1975); (2) Block-Sterns (Penton, 1994); (3) Cold Springs (Jefferies, 1994); (4) Garden Creek No. 2 (Keel, 1976); (5) Ingomar (Rafferty, 1990); (6) Kolomoki (Sears, 1956); (7) Mandeville (Kellar *et al.*, 1962); (8) McKeithen (Milanich *et al.*, 1984); (9) Pinson (Mainfort, 1986); (10) Swift Creek (Jefferies, 1994); (11) Toltec (Rolingson, 1990); (12) Walling (Knight, 1990).

and functions. Southeastern platform mounds may be divided into early (pre-A.D. 800) and late (post-A.D. 800) mounds based on differences in form and function. The oldest known platform mounds were erected around 100 B.C. (Knight, 1990, p. 168; Mainfort and Walling, 1989). However, this date may soon be pushed back substantially as more is learned about the function of Late Archaic period mounds in the Southeast (Gibson, 1994; Russo, 1994; Saunders *et al.*, 1994).

Over the last decade, researchers have documented the widespread use of platform mounds during the 100 B.C.-A.D. 800 interval (Brown, 1994; Dickens, 1975; Jefferies, 1994; Knight, 1990; Mainfort, 1986, 1988), far older than had been accepted in prior influential syntheses (i.e., Griffin, 1967; Willey, 1966). Early (pre-A.D. 800) platform mounds are widely dis-

tributed (Fig. 1). Although present at some Midwestern Hopewell sites (Greber, 1990; Mainfort, 1986, p. 86), recent investigations suggest early platform mounds are more prevalent in the Southeast. Knight (1990) synthesized information about 32 pre-A.D. 800 platform mounds and noted that they have a pan-Southeastern distribution unrestricted to a short temporal horizon. Despite variability in summit use, Knight (1990, pp. 166-172) identified characteristics that frequently occur together: overlapping, irregular scatters of post holes and features; lack of clear summit structure patterns; large, isolated post holes; burned summit surfaces and hearths; multicolored earthen fills or stages; concentrations of nonlocal raw materials; and special-purpose or nonlocal ceramics. Middens are often present on summit surfaces or as mound-side dumps. Comparatively little is known about the activities associated with early platform mounds. Although some early platform mounds served as foundations for charnel structures or contain human remains (Cold Springs Mound B, McKeithen Mounds A and C), many others appear to have served nonmortuary purposes (Annewakee Creek, Cold Springs Mound A, Ingomar Mound 14, Kolomoki Mound B, Mandeville Mound A, McKeithen Mound B, Pinson Mound 5, Swift Creek Mound A, Tolttec Mounds D and S, Walling Mound Ma50) (Jefferies, 1994, p. 82; Knight, 1990, p. 172).

Late platform mounds (post-A.D. 800) are more numerous and more widely distributed than early ones (Fig. 2). Features of late platform mounds include multicolored earthen fills or stages; well-defined, special-purpose structure remains on mound summits and premound surfaces; destruction of mound buildings by fire or razing; massive clay hearths that were frequently refurbished; partitions or fences enclosing mound summits or bases; mound summits kept free of debris; mound-side middens dumped from the summit; large, isolated post holes; and concentrations of rare or nonlocal raw materials or finished valuables. Some late platform mounds served as mortuaries. In terms of size, energy investment, and diversity, mound-top architecture differs from off-mound domestic dwellings. The substantial wattle-and-daub buildings take various shapes; rectilinear and circular structures are most common. Both residential (domestic) and non-residential buildings are found on mound summits. One structure type, earth-embanked buildings ("earth lodges"), is widespread in the lower Southeast (Larson, 1994; Rudolph, 1984). Other architectural features include ramadas, porticos, partitions, benches, steps, daises, and clay-plastered, painted surfaces. Specific mound construction techniques required considerable engineering skill (Collins and Chadfant, 1993; Krause, 1990). Standardized units of measurement and solar alignments have been proposed (Sherrod and Rolingson, 1987).

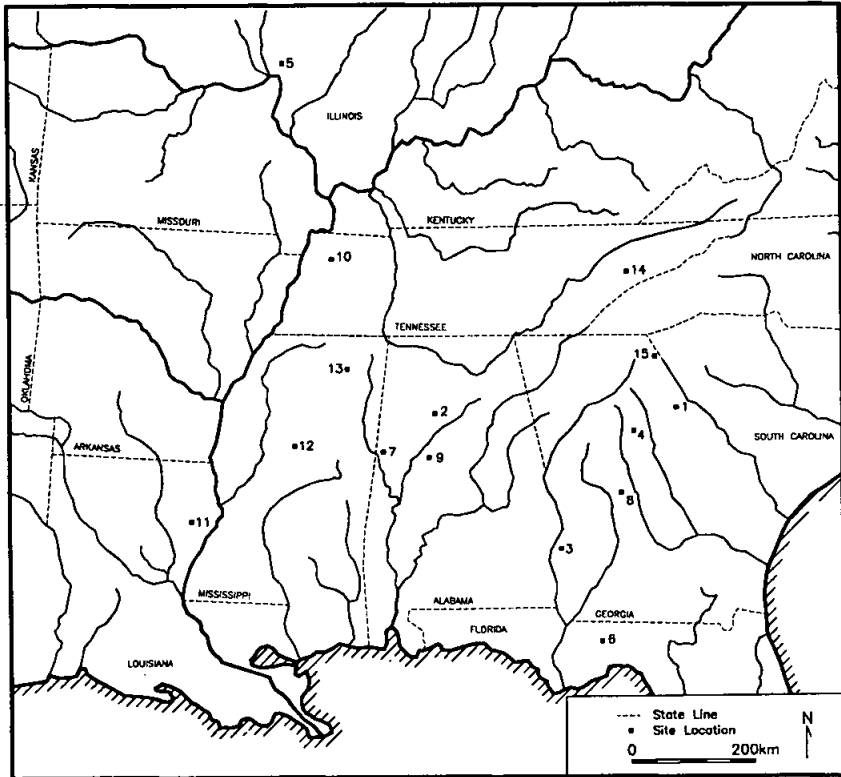


Fig. 2. Southeastern late platform mound sites mentioned in the text: (1) Beaverdam Creek (Rudolph and Hally, 1985); (2) Bessemer (Welch, 1994); (3) Cemochechobee (Schnell *et al.*, 1981); (4) Dyar (Smith, 1994); (5) Cahokia/Monk's Mound/Kunnemann (Pauketat, 1993); (6) Lake Jackson (Jones, 1982); (7) Lubbub Creek (Blitz, 1993a); (8) Macon Plateau (Hally, 1994); (9) Moundville/1TU50 (Steponaitis, 1983, 1992); (10) Obion (Garland, 1992); (11) Osceola (Kidder and Fritz, 1993); (12) Old Hoover (Lorenz, 1992); (13) Owl Creek (Rafferty, 1995); (14) Toqua (Polhemus, 1987); (15) Tugaloo (Anderson, 1994).

Comparison of the early and late platform mound features and associations listed above reveals similarities, but there are differences. Unlike most late platform mounds, new stages of early platform mounds often were added to the summit only. As a result, the mound height increased but the basal area remained the same as that established by the first stage of construction (Jefferies, 1994, p. 82). Also unlike late platform mounds, summit post holes on early platform mounds often do not form identifiable structure patterns (Brown, 1994, p. 54; Knight, 1990, p. 170), so perhaps buildings were ephemeral or absent. On other early platform mounds, however, structure remains are certainly present (Annewakee Creek, Block-

Sterns Mound A, Garden Creek No. 2, McKeithen Mound B, Swift Creek Mounds A and B). Both early and late platform mounds may appear as single-mound sites (early—Annewakee Creek; late—Beaverdam Creek, Dyar, Lubdub Creek, Old Hoover), or may occur with one or more separate burial mounds (early—Ingomar, Walling Mound Ma50; late—Bessemer, Toqua) or additional platform mounds (early—Kolomoki, Pinson, Toltec; late—Kunnemann, Lake Jackson, Macon Plateau, Moundville, Obion). Both early and late platform mounds may be associated with extensive habitation areas with high artifact and feature densities (early—Block-Sterns, McKeithen; late—Moundville, Toqua), or they may represent vacant ceremonial centers with little or no off-mound habitation debris. At latter places, middens are confined largely to platform mounds, implying that food consumption activities were restricted to platform summits (Ingomar, Pinson, Toltec). Late platform mounds are most often linked with permanent, year-round settlements, but Mississippi period vacant ceremonial centers (Owl Creek) also occur (Rafferty, 1995).

### The Function of Southeastern Platform Mounds

Direct historical analogy has been central to archaeological investigations into the form, function, and meaning of late platform mounds (I. Brown, 1993; J. Brown, 1985, 1990). Detailed syntheses of early historical descriptions of mound-top buildings, furnishings, and related activities are available (DePratter, 1991, pp. 89–119). Both historical sources and archaeological investigations identify four basic late platform mound functions: elite/chiefly residences (Cemochechobee structure 7 complex, Dyar NW structure, Kunnemann F72, Toqua Mound A structure 14); temple/mortuaries or ancestor shrines (Beaverdam Creek, Cemochechobee structure 2, Lake Jackson Mound 3, Toqua Mound A); platforms for large nonresidential buildings that served as group meeting places, council houses, or sweat houses (Cemochechobee structure 8, Kunnemann F74, Macon Plateau Mound D-1, Tugalo); and unroofed areas or courtyards that presumably functioned as ceremonial stages open to public view, often with a central post-hole feature that supported a large upright pole (Cemochechobee, Kunnemann).

Although one or more of these functions and features have been identified at the late platform mounds in Fig. 2, the full extent of mound-top activities is not always clear. At some multiple-mound sites, these features occur on separate mounds (Macon Plateau, Moundville, Toqua, Obion). In other cases, multiple contemporary structures representing combinations of the basic features coexist on the summit of a single platform mound (Cemo-

chechobee, Dyar, Kunnemann, Toqua Mound A). Furthermore, these combinations may vary with each new stage of construction. For example, a mortuary feature may be imposed on top of earlier structures that served as elite residences or meeting places for large groups (Toqua Mound A, Beaverdam Creek). It is this evolving rearrangement of a sacred precinct, punctuated by the repetitive addition of new stages, that is the common unifying theme of late platform mounds (Knight, 1981).

### PLATFORM MOUNDS IN THE AMERICAN SOUTHWEST

Southwestern platform mounds represent one type of public-ceremonial architecture that also includes ball courts and great kivas. Although impressive for their size and complexity, no Southwestern platform mound ever reached the massive scale of public monuments found to the south (in the Valley of Mexico or on the Yucatán peninsula) or in the American Southeast (at Cahokia or Moundville). The elevated surface on most mounds is between 2 and 3 m above ground level. Southwestern mound summits were reached by ladders rather than the stairways or ramps characteristic of Mesoamerican and Southeastern mounds.

A tally of 128 platform mounds at 98 Southwestern sites was recently made (Doelle, 1994, Table F.1). Sadly, at least half of these mounds have been destroyed by agricultural and urban development (Rice and Lindauer, 1990, pp. 1-15). Until about 10 years ago fewer than a dozen platform mounds had been excavated with any degree of thoroughness. More recently, extensive excavations have been conducted at seven mound sites, and archival data from earlier mound excavations have been reanalyzed. This new research has contributed to a greater understanding of platform mound chronology, architecture, and function. These data are now available for compiling and assessing measures of social integration and differentiation.

The first archaeologists in the Southwest (Bandelier, 1892; Cushing, 1892; Fewkes, 1912) reasoned that rectangular elevated features (platform mounds) were associated with individuals or families with important social roles. Cushing proposed (see Haury, 1945, p. 33) that the large and centrally positioned buildings on mound summits were abodes of priests and that commoners occupied the less conspicuous neighboring buildings. Most early researchers considered Southwestern platform mounds to be local copies of Mesoamerican prototypes. Ferdon (1955, pp. 14-15) identified six features of Arizona platform mounds that follow the traditional Mesoamerican methods of platform and pyramid building: (1) massive rectangular retaining walls of adobe, (2) retaining walls filled with rubble and



earth, (3) mound-top buildings, (4) platforms enlarged by covering over the original surface with a new facing, (5) mound-top buildings superimposed over older ones, and (6) walls enclosing the mound compound. Because not all platform mounds in Arizona share all six features defined by Ferdon, considerable local invention or interpretation of the platform mound concept is indicated. While the issue of Mesoamerican diffusion remains unresolved, an overemphasis on Ferdon's features to classify mounds may obscure local variability and limit our ability to understand the evolution of platform mounds.

With recent detailed excavations, several typologies of platform mounds have been developed (Doelle *et al.*, 1995; Lindauer, 1992). At least three general forms of Southwestern platform mounds have been identified: dance mounds, planned mounds, and organic mounds (Lindauer, 1992a). Low platforms erected without mound-top structures are known as dance mounds (Snaketown Mound 16, Galatin Mound). The second form, planned mounds, are composed of a cell-like structure of internal and external retaining walls. The walls are filled with rubble to create a rectangular platform with vertical sides (La Ciudad Mound A, Las Colinas Mound 8, Bass Point Mound, Medler Point Mound). A third form, organic mounds, makes use of preexisting, ground-level rooms. These rooms are filled with rubble to construct an elevated platform with vertical sides (Schoolhouse Point Mound). Through these methods, planned and organic mounds expanded vertically or horizontally. Unlike dance mounds, both planned and organic mounds supported mound-top buildings.

### Distribution, Chronology, and Function of Southwestern Platform Mounds

Most Southwestern platform mounds occur along the Gila and Salt Rivers in the Sonoran Desert of Arizona, where canal irrigation was practiced by the Hohokam and Salado (Fig. 3). Platform mound construction, like the development of elites, may correlate with water management projects (see Rice, 1990, p. 32). However, a recent summary of the spatial distribution of platform mounds (Doelle *et al.*, 1995) indicates that there are six spatial clusters that include areas away from river valleys, beyond the limits of river irrigation. To the south, a variety of mounds, some similar in size to the mounds in Arizona, has been identified in northern Mexico (Fig. 3) at the site of Casas Grandes (DiPeso *et al.*, 1974). Unusual architectural features that could be platform mounds have been recorded north and east of the Sonoran Desert (Fig. 3) in the Mesa Verde (Luebber *et al.*, 1960) and Chaco Canyon (Nials *et al.*, 1987; Stein and Lekson, 1992)

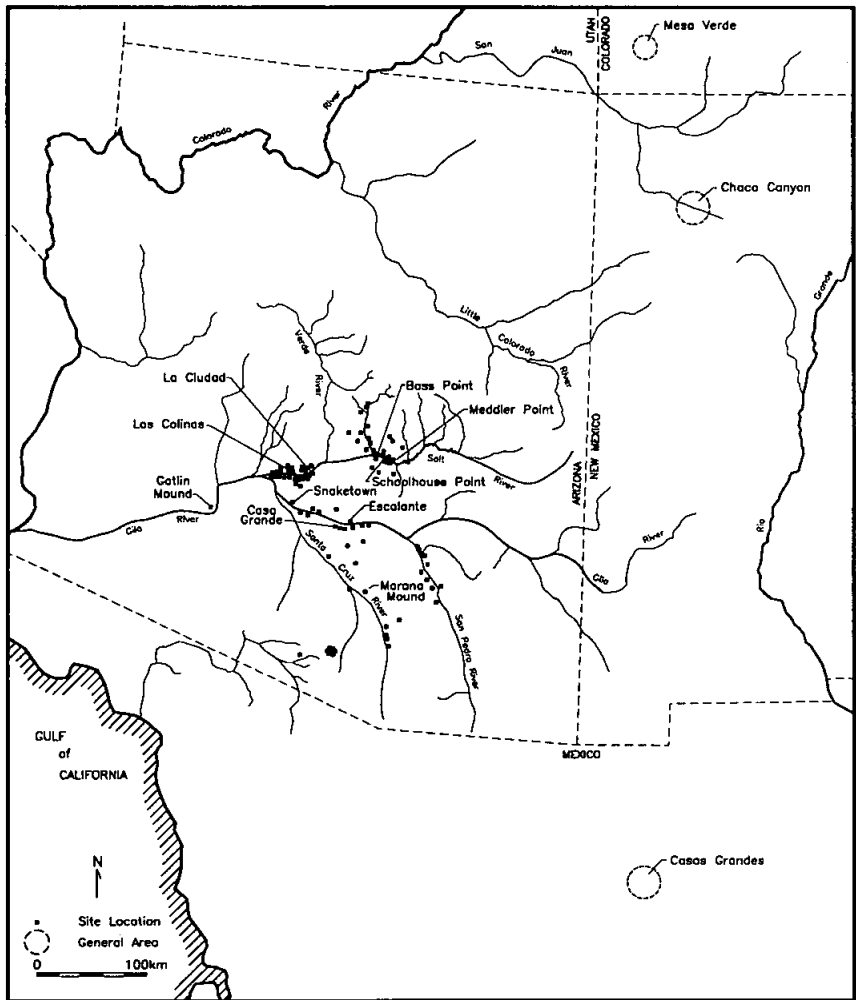


Fig. 3. Distribution of sites with platform mounds in the Southwest.

regions. These possible platform mounds are low architectural features that do not have evidence of buildings on their summits. There is little evidence of their use, and in the case of the Mesa Verde site, the platform may be a response to flooding conditions (Luebber *et al.*, 1960).

The oldest examples of platform mounds in the Southwest are plaster-capped "trash mounds" at the site of Snaketown in southern Arizona. These mounds probably date to the Pioneer period, sometime before A.D. 700 (Haury, 1976, p. 93). These features are small oval mounds of low

relief that provide the initial evidence for a long *in situ* developmental sequence of mound building (Doyel, 1975, p. 176). Little is known about what activities took place on these mounds, and similar mounds have not been recorded at other sites.

It is not until after A.D. 900 in the Sedentary period that low circular plaster-capped mounds are recorded at more than one site. Mound 16 at Snaketown (Haury, 1976, pp. 84–93), 1.5 m in height and 11 m in diameter, was built over a plastered surface that had witnessed some period of use prior to mound construction (Haury, 1976, p. 86). The mound has steeply sloping sides, and there is evidence of seven replasterings or refurbishings. An encircling row of post holes probably served as a palisade that was entered from the north (Gregory, 1988, p. 70). The Gatlin Mound in Gila Bend is another mound of similar size encircled by a possible palisade. The surfaces of these mounds lack post holes or other indications of structures and are thought to have been used as dance platforms or stages for ritual performances.

After A.D. 1100, during the late Sedentary period, platform mound form and function changed dramatically. Platform mounds no longer were dance platforms, but planned structures characterized by more vertical relief. They are rectangular in plan and are built with a cellular structure. Palisade walls were replaced by rectangular adobe walls, creating an enclosed compound. Exemplified by Mound 8 at Las Colinas, these planned mounds were repeatedly enlarged (Gregory, 1988). A pithouse may have been the first building on the Mound 8 summit; other features include extramural hearths and a possible ramada work area (Hammack and Hammack, 1981, p. 59). Gregory (1988) indicates that residential and nonresidential buildings such as large “community rooms” occur in the precinct surrounded by the compound, but the function of the initial mound-top structure is debated (see Howard, 1992).

Mounds built or remodelled after A.D. 1300 are rectangular in form and utilize massive retaining walls to supported several buildings and activity areas on their summits. Ground-level rooms were filled with rubble to initiate construction or enlarge a platform mound (Lindauer, 1992a). Doyel's (1975, p. 177) excavation of the Escalante Mound indicates that mounds dating to this phase support typical domestic structures and have features indicative of residential activities. Although he admits there was no indication that the mound served to house individuals or families of high status, he suggests that people living on the mound were special.

Doyel's (1975, p. 170) reflections on what made the Escalante mound special hold for other platform mounds: (1) the platforms represent a form of pan-village integration and cooperation; (2) a substantial amount of effort was necessary to construct a platform mound; (3) individuals in resi-

dence on a mound possessed the specialized information and ritual knowledge required to schedule important activities; and (4) individuals in residence on a mound could act to sanction or promote cooperation in labor projects. Because rank and distinctions in authority are often justified by ritual beliefs and practices, Southwestern mounds were probably the focus of sociopolitical activities in a ritual format. Ferdon (1955, pp. 18-19) considered the enclosures around Hohokam platform mounds to be comparable with the *coatipantli* or walled sacred enclosures of Mexico. Such a walled enclosure implies limited access to the mound.

### MEASURES OF SOCIAL DIFFERENTIATION

While the study of social differentiation at mounds in the Southeast and Southwest follow similar lines, differences exist. In the Southeast the tenor of research has been heavily directed by powerful direct historical analogies due to the existence of ethnographic or historical records of mound use. Yet the antiquity and diversity of Southeastern mounds imply limits to the extension of such analogies. In the Southwest, historical accounts of platform mound use are absent. The low levels of social differentiation often identified in Puebloan ethnographic records (Whittlesey and Ciolek-Torrello, 1992) are not easily reconciled with the degree of social hierarchy that may be associated with platform mounds. In both regions, the role of platform mounds in the process of social differentiation has been investigated by (1) determining whether the arrangement of buildings and walls on and around platform mounds created spaces with varying degrees of access, (2) identifying concentrations of valuables on mounds that served to accentuate inequalities between individuals, and (3) proposing processes of differentiation implied by ethnographic analogy—specifically, the appropriation of facilities associated with sacred authority by individuals who attempted to monopolize economic aspects of society.

### Architectural and Spatial Analysis of Platform Mounds

The degree to which activities on platform mounds were concealed from public view implies restrictions and controls over access. In the Southeast, the frequent lack of any evidence of substantial buildings on the summits of early platform mounds suggests that activities on these surfaces were open to communal view and, perhaps, functioned to emphasize social integration. In contrast, late Southeastern mounds exhibit a greater architectural complexity than earlier platform mounds; the remains of palisades

or partitions around mound bases or summits are common, as are summits with both open courtyard spaces and enclosed buildings.

The presence of mound-top residences marks a critical threshold of social differentiation. Steponaitis (1986, pp. 382, 386) noted that a common Middle Woodland mound form is a prepared surface or low platform used as a mortuary, then sealed with a dome-shaped earthen cap (e.g., Ford and Willey, 1940). He then proposed that the placement of residences on top of late platform mounds that were structurally similar to the earlier Woodland mortuary prototypes permitted elites to appropriate or coopt a sacred symbol to reinforce their authority. Residential and nonresidential buildings often were erected together on the summit of late Southeastern platform mounds. In such circumstances, elites in residence could monitor access to both shared and restricted zones within the mound precinct.

Two approaches to building location and wall placement on Southwestern platform mounds attempt to identify public and private space within mound precincts. Howard (1992) applied graph theory and alpha analysis to the architectural layouts of four platform mound complexes to evaluate the degree of segregation of activities and relative restriction of access to different locations within the mound precinct. Space in the mound precincts was divided among three zones: public plazas, ritual areas, and rooms linked by corridors to the plaza that could be ritual staging areas. Howard (1992, p. 70) discovered different levels of restricted access in the mound precincts. Plazas and rooms linked by corridors had the least restricted access. He identified those rooms in the most segregated and restricted spaces as ceremonial structures. These "special rooms" relate to the desire for secrecy associated with ritual and not to the presence of elite residences on platforms.

Jacobs (1992a) applied the ideas of differential access and ritual ideology in a comparison of architectural layout at three Salado platform mounds. Mound summits are interpreted as ritual stages and residential areas with very restricted access. He found that the placement of walls at each site channels visitors into a counterclockwise procession around a mound. Jacobs suggests that the circuit could reflect the Salado world view, since counterclockwise circuits are found among the oral traditions of possible descendant peoples such as the Hopi and Pima.

### Concentrations of Valuables at Platform Mounds

Differential distributions of platform mound features, artifacts, and ecofacts, when contrasted with domestic areas elsewhere, document platform mounds as specialized sacred precincts. In the Southeast, not only

does the mortuary use of platform mounds provide a link to the antecedent functions of burial mounds as territorial markers and corporate group symbols (Charles and Buikstra, 1983; Reidhead, 1992), but segregation of a subset of the community for special interment in platform mounds provides evidence of social ranking and differentiation (e.g., Peebles and Kus, 1977).

The fact that Southeastern mounds often contain rare or finely made artifacts has made them the object of antiquarian looting for many years. Historical accounts leave no doubt that mound-top buildings often were repositories for a wide array of status/wealth items (DePratter, 1991, pp. 96-105). Archaeological evidence for the production, accumulation, and consumption of valuables on platform mounds includes nonlocal or rare raw materials; stone, bone, and antler blanks, preforms, scrap, and other production debris; concentrations of stone chisels, drills, saws, abraders, and other craft-working tools; caches of finished goods; nonlocal or highly decorated pottery; mineral pigments; and copper, shell, stone, and wood personal adornments, symbol badges, ritual objects, and other status/wealth items deposited as mortuary offerings. Many of these prestige goods are rarely or never found outside of elite-sacred contexts, and then usually in burial associations. Presumably, the display and deposition of status/wealth items at mound-top funerals reinforced social differentiation. If, however, valuables are recovered in nonburial and nonresidential contexts, ceremonies associated with communal integration may be indicated.

Evidence for the production and accumulation of valuables is not always restricted to mounds, but comparison of on-mound/off-mound distributions may reveal significant concentrations in platform mound contexts. Kunnemann, a late platform mound, contained shell, bone, and antler ornaments, together with associated tool kits and production debris, in one of the densest concentrations of craft production materials excavated at Cahokia (Pauketat, 1993, pp. 138-140). At 1Tu50, a platform mound constructed early in Moundville's occupation, concentrated nonlocal raw stone suggested to Steponaitis (1992) that the rise of an elite at this center was connected to craft production and attempts to control prestige goods. Concentrations of nonlocal lithics and nonlocal pottery also occur on late platform mounds in small-scale polities (Old Hoover), as well as on many early platform mounds (Annewakee Creek, Block-Sterns A, Cold Springs B, Garden Creek No. 2, Ingomar Mound 14, Kolomoki D, Mandeville A, McKeithen A, Pinson Mounds 5 and 10, Walling Mound Ma50). Although the archaeological context of wealth/status items found on platform mounds ranges from mound-top production to funerary deposits of finished goods, these activities can be viewed as aspects of an evolving sociopolitical process linking prestige goods to the creation, validation, and negotiation of community social relations in a ritual format. When concentrated in contexts

with restricted access, intensive craft production implies efforts to expand social differentiation.

Southwestern mounds also are places where valuables were produced, stored, and consumed. Teague (1984, 1989) assessed the role of Hohokam mound sites in regional exchange systems through comparison of artifact assemblages from mound sites with assemblages from nonmound sites. By standardizing counts of shell artifacts by frequencies of recovered sherds, Teague (1984) showed that platform mound sites have much higher frequencies of whole shells and shell artifacts compared with nonmound villages. Wilcox (1987, p. 161) suggests that the presence of bead spindle whorls at Hohokam platform mound sites reflects the production of fancy cotton textiles and that the distribution of textiles between Sinagua and Salado communities on the Salt River and its tributaries may signal an elite marriage network. At the Marana Mound and surrounding residential communities, quantities of exotic items such as shell and obsidian, when compared between the mound precinct and other residential compounds, are statistically indistinguishable (Fish and Bayman, 1994). Discernible differences occur in terms of greater architectural investment (wall construction material and size) or implied ceremonial functions of the mound precinct.

### **Ethnographic Analogy and Sociopolitical Process**

Drawing on Southeastern ethnohistorical data, Knight (1981, 1986) interpreted Mississippian platform mounds as communal icons representing the earth. This earth/fertility theme built on the earlier work of Swanton (1928), Waring (1968), and Howard (1968), who considered Mississippian mound building to be antecedent to the annual Busk or green corn ceremonial. They postulate the same relationship for prehistoric mound-top architecture and the historic Southeastern square-ground. Thus the annual refurbishing of square-ground buildings in the historic period is a transformation of earlier prehistoric mound-building practices. The periodic addition of earthen stages is considered by Knight (1986, p. 678) to be conceptually independent of the various functions of mound-top buildings; the additions were part of a cycle of world renewal that served to cover older "polluted" surfaces in a "communal rite of intensification." This observation helps explain why the first mound construction stage is almost always superimposed over the remains of a premound building, and why the terminal construction stage of many platform mounds is often a thick clay cap that supported no buildings but instead served to seal the final activity surface.

Some mound remodelling activity, however, is clearly an expression of social ranking. From Southeastern ethnohistorical data first marshalled by Swanton (1911) and Waring (1968), to recent archaeological considerations offered by Anderson (1994, pp. 87, 127-129), Hally (1996, 1993), Krause (1988, pp. 100-102) and others, the periodic stages of mound reconstruction are associated with succession to chiefly office or some equivalent change in community or corporate group status. The death or replacement of a chief represents a transitional crisis in community continuity, a crisis that may demand that the mound monument or shrine be renewed. Viewed this way, mound-building episodes represent successive sociopolitical events (Hally, 1996).

If mound rebuilding marks succession to chiefly office, then the number of mound stages in mound construction divided by the length of time the mound was in use yields a measure for the duration of chiefly tenure (Anderson, 1994, p. 127; Hally, 1996, 1993). Consequently, cessation of mound building signals the termination of the chiefly institution at the site (Hally, 1996, 1993). Late platform mounds in Anderson's (1994, Table 2) sample from the southern Appalachian area have from 2 to 10 construction stages that mark possible successional events, with an average interval of 30 years between episodes. Based on the estimated total length of time a late platform mound was in use, Hally (1996, p. 34) concluded that "most Mississippian chiefdoms in northern Georgia lasted less than 100 years, and in only one instance, more than 200 years."

Krause (1988, pp. 100-102) argued that mounds as community or corporate-group icons and mounds as elite monuments identify dual aspects of Mississippian sacred precincts that play a critical role in the formation and replication of sociopolitical systems. Because both ethnohistorical and archaeological evidence indicates that ancestor worship was a fundamental source of sanctified authority, and given that sacred precincts at platform mounds often served as mortuary ancestor shrines for corporate descent groups, one way for status-striving individuals to validate contested genealogical claims to rank and authority was through control of the ideological resources concentrated at the mound (Krause, 1988, pp. 100-102). Again, the concentration and consumption of food surpluses and valuable resources at mound sacred precincts point to a process whereby sanctity was used to justify individual efforts to extend political and economic control.

Recently, Southwestern anthropologists have recognized that subtleties of status and rank have been glossed over in promoting an egalitarian model of Puebloan social organization (Brandt, 1994, pp. 10-12). Hierarchy regarding access to ritual knowledge is described for historic-era Puebloan groups (Brandt, 1980, 1994). The application of ethnographic records to explain social differentiation at Southwestern platform mounds has entailed



cross-cultural comparisons among widely separated cultural groups. From these resources, Wilcox (Wilcox and Shenk, 1977; Wilcox and Sternberg, 1981, p. 38) suggested that the manipulation of astronomical information used to schedule ceremonial events was part of elite activities at the Casa Grande platform mound. The sun, the moon, certain planets, stars, and constellations were thought to be supernatural powers that shamans, priests, or chiefs sought to control for human benefit. Such control was possible through the possession of esoteric knowledge manipulated and guarded by society's leaders. The combination of platform mound and astronomical observatory has been described for two other platform mound sites (Bostwick, 1992; Jacobs, 1992b).

### MEASURES OF SOCIAL INTEGRATION

The processes of integration and legitimation become intertwined in social contexts that give meaning and power to individual actions. As social complexity and inequality expand, differentiation needs to be legitimized to perpetuate unbalanced conditions. Integration is the social process that allows people excluded from restricted ownership to feel they are gaining something important. Integrative activities bring many people together to pool their efforts in productive actions that are perceived to or actually benefit all the participants. Integration entails more than interaction—the participants must have a relationship of interdependence. Communal construction of vital facilities such as fortifications or canals can establish and maintain interdependence. Construction of platform mounds themselves can be considered an integrative activity, because these facilities may represent communal meeting places where critical information (community decisions, conflict resolution, contact with the supernatural, calendrical scheduling) deemed necessary to community welfare is promulgated. Finally, feasting, possibly combined with the completion of construction projects or as periodic ritual where commodities are exchanged, is an activity that serves to cement social relationships and reinforce social roles.

The role of platform mounds in the process of social integration has been investigated by (1) gathering evidence for large-scale feasting and food storage, (2) assessing the labor costs of platform mound construction, and (3) analyzing settlement systems in an attempt to measure the degree of interdependence between platform mound communities and associated sites.

### Feasting and Food Storage

Many early and late Southeastern platform mounds served as central facilities for large-scale feasting and food storage. Direct and indirect evidence consists of concentrations of food remains quantitatively different from off-mound contexts, ceramic assemblages with size and function attributes quantitatively distinct from those of off-mound assemblages, concentrations of highly decorated (often nonlocal) serving wares suitable for ostentatious display, mound-top structure remains sufficiently spacious to accommodate large groups, and massive hearths. Additional evidence ties on-mound food consumption to ritual activities. For example, at the late platform mound site of Osceola, the remains of maize and tobacco seeds are confined to mound contexts, lending support to the hypothesis (Rose *et al.*, 1984) that "maize was adopted as an elite or ceremonial food in the Lower Mississippi Valley" (Fritz and Kidder, 1993, p. 9). *Ilex* pollen recovered from mound-top structures at Dyar presumably identifies black drink ceremonialism (Smith, 1994, p. 38).

Initial comparisons of Mississippi period on-mound/off-mound deer remains were interpreted as differential high-status access to "choice cuts" of venison by hereditary elites in mound-top residences (Belmont, 1983; Bogan, 1980; Cleland, 1965; Penman, 1983; Rudolph, 1984; Scott, 1983). However, recent research has revealed that a distinct social context of large-group food consumption was both an early and a late platform mound activity. Many of these sites lack clear evidence of strong vertical hierarchies, ranking, or hereditary elites (early—Toltec, Walling Mound Ma50; late—Old Hoover). Archaeologists thus face the difficult task of determining whether distinctive midden assemblages represent exclusive elite provisioning or more integrative communal feasting.

Because evidence of aboveground food storage facilities on Southeastern platform mounds is confined to ambiguous post mold patterns, functional analysis of ceramic vessel size, shape, and use-wear is more useful for identifying food storage, feasting, and other food-processing tasks (Hally, 1986; Shapiro, 1984; Steponaitis, 1983). At the Lubdub Creek site, the platform mound sample has a more restricted range of vessel sizes and disproportionately larger vessels than the off-mound sample, suggesting an emphasis on mound-top feasting and food storage (Blitz, 1993a, b). Initial work on vessel size distributions in small and large-scale Mississippian polities has begun to reveal intersite and intrasite vessel size distinctions in which the largest vessels are associated with mound centers and, in some cases, with mound-top activities (Blitz, 1993a, b; Holland, 1995; Lorenz, 1992; Pauketat and Emerson, 1991; Shapiro, 1984; Welch and Scarry, 1995).

While there is little doubt that food consumption accompanied the ceremonialism at Southwestern platform mounds (Gregory 1991, p. 167), insights into the specific social circumstances are limited. In Camron's (1992) comparative study of artiodactyl distribution among platform mound, residential compound, and residential room block sites in the Tonto Basin, faunal assemblages on platform mounds have the majority of the high-meat elements, whereas assemblages from other sites are dominated by metapodials and phalanges. Lindauer (1995) and Craig and Clark (1994) compared the demographic estimates (based on the quantity of sherds in middens) from site architecture at two Salado platform mounds, one residential and the other nonresidential (Bass Point and Meddler Point). They concluded that, at both platform mounds, the number of sherds in the middens is slightly greater than what was expected to be generated by the residents. These results suggest that only small amounts of food preparation, cooking, and serving were associated with feasting or elite provisioning at platform mounds.

Surplus storage facilities have recently been identified at several Southwestern platform mounds (Elson, 1994; Lindauer, 1992b, 1995; Wilcox, 1987). These discoveries have prompted some researchers to suggest that platform mounds served as centers for the communal processing and storage of foodstuffs (Gasser and Ciolek-Torrello, 1988). Wilcox (1987, p. 113) compared floor area with density of artifacts for rooms at Mound A, La Ciudad, to argue that long-narrow rooms may have been used for stored surplus. Lindauer (1992b, 1995) discovered beehive-shaped adobe granaries at two Salado platform mounds. He estimated their capacity to store corn and compared their food value to an estimated site population to conclude that the granaries stored surplus food. This contrasts with the lower capacity of adobe granaries found at residential compounds, where the amount of stored material corresponded to the estimated food needs of the residents. Because the granaries were not constructed as permanent features, the surplus at platform mounds was probably redistributed. The concealment of granaries within rooms next to residences or in plaza areas screened from view suggests that the magnitude of surplus was kept secret and closely monitored.

### **The Costs of Mound Building**

Construction and use of platform mounds literally set the stage upon which social distinctions among individuals were established and reinforced. If archaeologists can measure the labor requirements of mound building, then both the degree of control over social labor and the scale of social

integration can be assessed. In both the Southeast and the Southwest, platform mound construction is often assumed to have required a great number of laborers. Minnis (1989), however, has questioned this view and has suggested that labor requirements may not have been great because Southwestern mounds are smaller in comparison to mounds in other areas, such as the Southeast. He also observed that most Southwestern mounds were built in stages (as were Southeastern platform mounds), thereby distributing the labor requirements over time.

Estimates for labor required to construct the Casa Grande mound (Wilcox and Shenk, 1977, pp. 122-124) tend to support the claim by Minnis. Wilcox calculated the effort in collecting, mixing, and transporting adobe to build walls and concluded that the platform and Great House could have been built by 15 to 20 families (100 people) working full time over a 3-month period. Since the estimated population living within the walled compound enclosing the mound precinct was greater than this, neither an extremely large work force nor a highly ranked organization was necessary to build the Casa Grande mound.

Recent excavations of two Salado platform mounds in the Tonto Basin also indicate that only a moderate-sized work force was needed for construction. In their analysis, Craig and Clark (1994) identified eight tasks that were necessary to construct the Meddler Point Mound (including carrying water, and cutting and transporting logs) and estimated that 24 to 36 people, working about 45 days per year, labored for a period of 1.6 to 2.6 years. That group easily could have been drawn from the 12 compounds surrounding the mound. Lindauer's (1995) analysis of Bass Point Mound indicated that the labor effort doubled between the two construction episodes, in contrast to the nearly equal division of effort for the two construction episodes identified at Meddler Point Mound. The number of workers required to build the Bass Point Mound again was low, ranging between 36 and 50, working 3 months or less. This number was greater than the number living in the mound precinct, but easily could have been supplied from nearby compounds. As with the Meddler Point analysis, the scale of the population integrated with mound construction at Bass Point was modest, of the order of 100 people, assuming that the construction episode was one month or longer.

Neitzel's (1991) labor estimates imply that the largest of the Hohokam mounds prior to A.D. 1100 could have been built in less than a month by between 250 and 1000 workers. Much greater effort was needed to build the largest Hohokam mounds dating after A.D. 1100. For example, she estimates that the Pueblo Grande and Mesa Grande platform mounds were in the size range of 35,000 to 40,000 m<sup>3</sup> (the Meddler Point and Bass Point mounds were each about 1000 m<sup>3</sup>). If each mound was built over eight

construction episodes, each episode would require 700 workers to complete their task in a week or 200 laborers to work for a month [but see Craig and Clark (1994) for a lower estimate of labor].

Discussions of labor requirements for Southeastern mound building often evoke images of coercive control over large numbers of workers (Haas, 1982, pp. 214–216; Steponaitis, 1978). Detailed labor estimates, however, are rarely attempted. Muller (1986, pp. 200–204), following the Mexican field experiments of Erasmus (1965), suggests that labor costs for mound construction are often overestimated. He proposed that 1000 workers could have erected all the mounds at the Kincaid site (93,278 m<sup>3</sup>) in 130 to 228 years with an annual community labor of only 4 days per household of five people. Muller (1986, p. 204) concluded “that the scale of mound construction cannot be taken as evidence for huge Mississippian populations either in the Lower Ohio Valley or elsewhere.” If Anderson’s (1994, Table 2) estimated average of 30 years between construction episodes is representative of most late platform mounds in the Southeast, then mound building was not a significant demand on the time or energy of most individuals, except perhaps in the case of the very largest mounds.

Estimates of the amount of labor necessary to build platform mounds must be treated with caution. The calculation of construction effort is complicated by imprecise knowledge of the variety and quantity of necessary raw materials, the duration of the construction episode, and the size of the labor pool. Further refinements of method, however, are promising. New data on the degree of erosion present for individual building stages might distinguish short-term and long-term construction episodes (Collins and Chalfant, 1993; Craig and Clark, 1994). Current methods permit the use of a relative scale to compare labor effort between individual construction stages, between required labor inputs and estimated site populations, and between different mound centers.

### Platform Mound Settlement Systems

The location and spacing of platform mound villages relative to each other are another means for evaluating the scale and character of social integration. Not only does the spacing between villages suggest zones of influence, but also the possibility that mound villages and other settlements were linked expands the scale of social integration.

A particularly well-studied region of platform mound settlement systems is the Salt and Gila River area in the Southwest. In this region, several platform mound settlement systems, known as “irrigation communities” (Schroeder, 1966), existed by about A.D. 1250. Each irrigation community

had one to five platform mound villages and other smaller settlements that were associated with a single canal or canal system (Crown, 1987; Doyel, 1981; Gregory and Nials, 1985; Howard, 1987). Gregory (1991, pp. 170–171) suggests that these irrigation communities were sociopolitical units that achieved a formal degree of social integration above the level of individual settlements. These sociopolitical units or polities are characterized by a remarkably uniform spacing of 5 km between mound villages. This close spacing may reflect an interdependence based, in part, on the need for coordination and cooperation to maintain and repair a shared canal system (Crown, 1987; Gregory and Nials, 1985). The mound village in single-mound polities is also about 5 km downstream from the canal intake. The regular spacing might pertain to the length of a canal system that the population of a single site could maintain successfully, perhaps through an encompassing organization that coordinated tasks such as construction, defense, repair, and conflict resolution among mound villages (Crown, 1987, p. 158).

Linkage among Southwestern platform mound settlements need not be focused only on irrigation canals. Wilcox and Shenk (1977, p. 197), for instance, proposed that platform mounds functioned within a “big man” redistribution system that perhaps included wood for construction, cotton blankets, and a wide variety of food stuffs. In the upper Tucson Basin, the Hohokam Marana Mound polity incorporated multiple nonmound sites and environmental zones (Fish *et al.*, 1985, 1992). Fish (1989, pp. 42–43) observed that the high population in this desert area entailed coordination of production activities and movement of products across environmental zones and probably required an intervillage organization centered at the platform mound village. Apparently, Hohokam and Salado mound sites functioned as civic-ceremonial centers within a settlement system.

Many Southeastern platform mound settlement systems exhibit a greater degree of site hierarchy than those found in the Southwest. A basic Southeastern sociopolitical unit may be identified in the common two-tiered arrangement of households (either nucleated or dispersed) and other small sites associated with a central place of one or two mounds. Sometimes a larger, multiple-mound primary center appeared as a third tier, implying political dominance over the smaller secondary mound centers in the regional site hierarchy [see Anderson (1994), for various settlement typologies]. Currently, researchers disagree on the level of political integration and centralization manifest in the most complex late platform mound settlement systems, so that polities such as Cahokia are variously interpreted as politically integrated, statelike formations (O’Brien, 1989) or as loose alliances of semiautonomous mound centers (Milner, 1990). Regularities

in the linear distance between contemporary mound centers throughout northern Georgia led Hally (1993) to conclude that polity size, whether characterized by a single mound center or a hierarchy of centers, rarely exceeded 40 km in diameter.

## DISCUSSION

In conclusion, we return to the three forms of archaeological knowledge. The preceding review outlines *what we know* and *what we think we know* about North American platform mounds. Important differences between platform mounds in the Southeast and Southwest include the following: (1) Southeastern platform mound use has a greater temporal depth and geographical scale than Southwestern use; (2) the number and size of mounds

PLATFORM MOUND CHARACTERISTICS	INTEGRATION	DIFFERENTIATION
SEPARATE PLATFORMS INCORPORATED INTO A SINGLE PLATFORM (APPROPRIATION)		
WALLS / PARTITIONS (CONCEALED ACTIVITIES)		
BOTH NONRESIDENTIAL AND RESIDENTIAL BUILDINGS (PUBLIC / PRIVATE)		
INTENSIVE CRAFT PRODUCTION		
RAW / FINISHED VALUABLES	NONBURIAL / NONRESIDENTIAL CONTEXT	BURIAL / RESIDENTIAL CONTEXT
HUMAN BURIALS	MASS COMMUNAL	ELITE INDIVIDUALS
DISTINCTIVE MIDDEN ASSEMBLAGES	COMMUNAL FEASTS	ELITE PROVISIONING
LARGE-SCALE FOOD STORAGE		
NONRESIDENTIAL BUILDINGS ONLY (PUBLIC)		
NO BUILDINGS (ACTIVITIES OPEN TO PUBLIC VIEW)		

Fig. 4. Platform mound characteristics that are related to the social processes of integration and differentiation (indicated by shading).

at many Southeastern sites are on a greater scale of construction than those found in the Southwest; and (3) an antecedent tradition of burial mound construction is absent in the Southwest. However, we are more impressed by the similarities in platform mound characteristics and sequences of mound development in the two regions. We have already emphasized the social implications for specific platform mound characteristics in this review. Figure 4 summarizes those shared platform mound characteristics, arranged along an axis of increasing control over access to material or ideological resources, that we believe reflect similar processes of social integration and differentiation. The placement of some platform mound characteristics along this axis, such as distinctive middens or concentrations of raw/finished valuables, is context specific. The presence or absence of elite residences or burials is a critical measure of the control exerted over a mound and its associated resources. We consider the presence or absence of these platform mound characteristics to reflect variability in the forms of sociopolitical hierarchy and the degree of social inequality present in the prehistoric communities that constructed the mounds.

Moving to the more difficult issue of *what we wish we knew*—why platform mounds were constructed—we think the answer lies in determining how the processes of integration and differentiation at platform mounds developed and how these processes were perpetuated. In both the Southeast and the Southwest, it was common for mounds to be erected over the remains of pre-mound, ground-level ceremonial or residential buildings. The repetitive act of covering the symbolically charged older surface with a new episode of construction is the key social dynamic of platform mounds. Groups or individuals that controlled this cycle of construction gained an important strategy for perpetuating social differentiation.

In the Southeast and Southwest, there are similarities in the histories of platform mound development and use. First, a space (be it private residential or public ritual) is established that has a concentrated resource (feasting, storage, burial of ancestors, sacred rituals). Next, that space is expanded, controlled, and/or appropriated by covering or destroying it to construct an elevated precinct. Within that new precinct, additional resources may be added and concentrated, become sanctified, and deemed necessary for community survival. Finally, control of the resource is increased by restricting access. Thus, appropriation and control of the sacred space, especially if successful through multiple generations, become part of the device for perpetuating social rank/differentiation.

In both regions, the earliest platform mounds are integrative facilities with either nonresidential structures or no buildings on the summits. Other facilities such as meeting houses and communal structures often occur within the mound precinct. Later, many mound-top buildings are clearly



residential, implying restricted access, and an important sociopolitical transition. Even after this transition, however, the initial integrative elements such as open courtyards and nonresidential structures are often retained. In this manner, the sacred precinct becomes partitioned into public and private spheres. Appropriation and control are further revealed in the construction histories of individual mounds. For example, large late platform mounds in the Southeast may originate as small, separate platforms with specific functions that are later encapsulated by a single new construction stage. This act serves to consolidate multiple activities into a single elite-sacred precinct (e.g., Kunnemann, Obion Mound 6).

Rice (1990) recently proposed that Southwestern platform mounds developed in the context of two kinds of social hierarchy (Johnson, 1982). Initially, when mounds were nonresidential dance platforms, the hierarchy was sequential and leadership positions were achieved. Later, the occurrence of residences on platform mounds signals a shift to a simultaneous hierarchy with ascriptive leadership positions. At Snaketown, Gregory (1987, pp. 198–200) and Rice (1990, p. 35) suggest that the early dance platforms functioned in association with ball courts. Together they served complementary ceremonial purposes, possibly integrated people from different groups, and, in the case of ball courts, were possibly the focus of gambling and other economic activities.

Similarly, in the Southeast, the form and function distinctions between early and late platform mounds may correlate with the widespread transition from sequential to simultaneous social hierarchies. Replacement of ground-level buildings considered council houses with late platform mounds and associated residences, documented at several sites, may signal the transition from a consensus-based political institution to a decision-making process dominated by a hereditary elite (DePratter, 1991, pp. 163–165; Rudolph, 1984). Welch (1990, pp. 219–220) suggests that household compounds that evolved into mound precincts prior to evidence for ascriptive rank reflect economic and political roles that acquired religious sanctity (e.g., Lubbug Creek), while the presence of large public buildings prior to mound building and ascriptive rank implies the “promotion” of a sanctified role to political dominance (e.g., Bessemer) (see Drennan, 1976; Flannery, 1976).

It may be useful to view multiple-mound sites such as Snaketown and Moundville as composed of modular architectural units, each maintained by individual social segments of a total site population. For example, Waring (1968, p. 56) argued that dual residences on prehistoric mound summits indicate the presence of dual chieftainship, common in the 18th-century Southeast. Fewkes (1912) excavated a pair of Southwestern platform mounds enclosed by a single compound at Casa Grande, which

has led to speculation about the presence of dual organizations. Knight (1993) expanded the earlier observations of Peebles (1983) and considered the arrangement of mounds around Moundville's great plaza as possibly analogous to the symbolic positioning of clan structures in historic Southeastern square-grounds. If some platform mounds are corporate-group facilities, then the size of individual platform mounds at multiple-mound sites may reflect not only the duration of use (number of construction episodes) but also the relative size of the labor pool available to each social segment.

It should be emphasized that integrative nonresidential facilities on platform mounds often persist after the apparent transition to simultaneous hierarchy with ascriptive leadership positions. As mentioned above, nonresidential and residential buildings sometimes occur together on the same mound summit. At some Southeastern multiple-mound sites, integrative nonresidential facilities ("earth lodges" or "council houses"), restrictive elite residences, and mortuaries may occupy separate mounds (e.g., Macon Plateau). Also, at Southeastern multiple-mound sites, it is not uncommon for one or two platform mounds to be much larger than the other platform mounds. These largest mounds may have been constructed with labor provided by all social segments, either as integrative communal projects to counterbalance the differentiation inherent in competitive corporate groups or, alternatively, as a form of tribute that directly acknowledged a ranked social hierarchy.

The rebuilding and continuous use of sacred precincts over many generations, the hallmark of platform mounds, imply the institutionalization of associated activities and roles. Further, the political necessity of concentrating status-striving, ritual, and economic activities within a ceremonial precinct underscores the fact that the nascent social hierarchies in both regions were expressed primarily as sacred authority. In these societies, economic monopolies and other secular controls were underdeveloped. The risk and uncertainty associated with nascent elites resulted in a delicate balancing act. On the one hand, individual success demanded that mound building be presented to followers as a reaffirmation of community or corporate-group solidarity. On the other hand, personal aggrandizement and group goals could be made to appear one and the same, blurring or erasing distinctions between community/corporate symbol and personal monument. Considered as a political strategy, the ability to direct the rebuilding of the mound sacred precinct became, in effect, the ability to perpetuate or remake individual and group mythic history. In nonliterate traditions such as these, it was the enduring message of the monument—the physical mound itself—that objectified these principles.

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