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Early Regional Centers: Evolution and Organization

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Introduction

The shift from autonomous, egalitarian societies to complex societies with significant social inequalities is a historical phenomenon that occurred across the globe. To understand in part how this occurred, archaeologists have focused on the evolution and organization of early regional centers (Fig. 1). Much has been learned about the development of these ancient settlements, and recent studies utilizing more detailed data are providing rich understandings of the role of early regional centers in human history.

Regional centers are both physical entities and hubs for social interaction. Early regional centers were the loci of new configurations of social processes, human choices, and relationships. Three analytical problems have emerged from the comparative study of these types of sites. These are:

1. The institutionalization of asymmetrical social relationships between people and between communities
2. The emergence of new forms of social integration and frameworks of organization
3. The evolution of these along different historical trajectories dependent on geographic, temporal, and historical context

Definition

Early regional centers were human settlements with a permanent and sedentary residential population. But they were more than just a permanent spot on the map; they were involved with ushering in new kinds of regional relationships. Regional centers are set apart from a network of villages through the daily operation of an asymmetrical regional social network, with the central settlement being most prominent. While interactions between villages within any region could take place on relatively equal grounds, regional centers created imbalanced relationships among communities. The regional asymmetry, however, was not just demographic in nature. It was often operationalized across one or more key dimensions, including (1) economy, (2) politics, or (3) ideology. As such, early regional centers could assume regional prominence when social groups living there utilized their standing as key economic, political, or ideological players to organize other regional populations.

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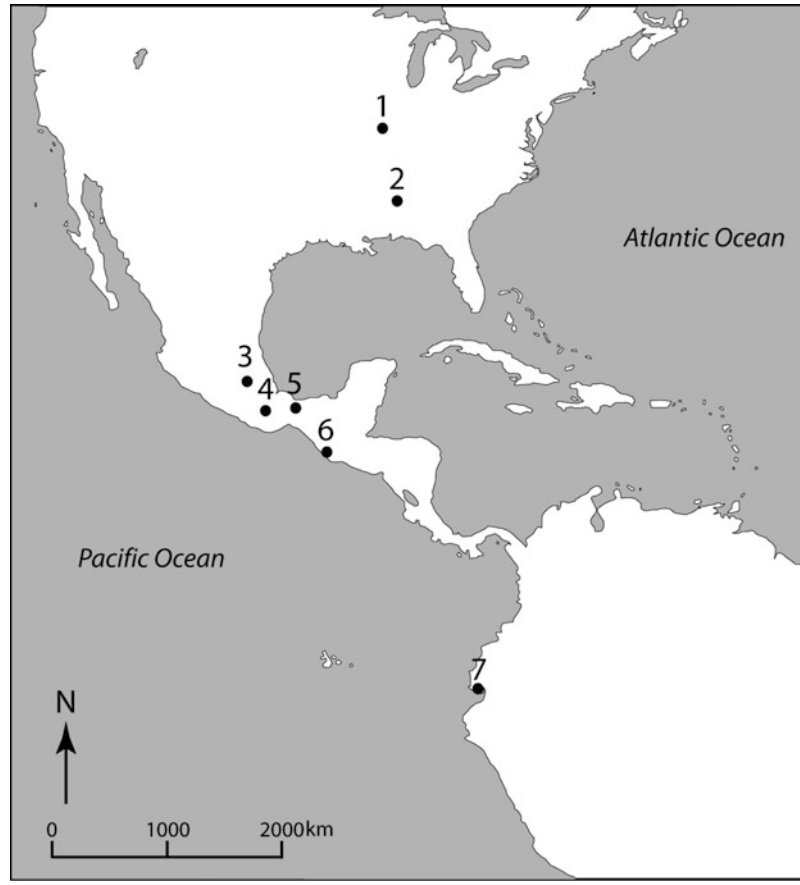

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Fig. 1 Map of several sites in the Americas mentioned in the text, including (1) Cahokia, (2) Moundville, (3) Tlapacoya, (4) San José Mogote, (5) San Lorenzo, (6) Paso de la Amada, and (7) Real Alto

Historical Background

Large-scale regional surveys in the early- to mid-twentieth century established a series of traits that served as criteria for the typological classification of known archaeological sites. Regional centers were identified when evidence recovered from a site matched a series of expected features, including certain presumed population and settlement sizes, the presence of central and public spaces, the occurrence of specialized buildings, recognition that the settlement served as a nexus for regional trade, or indications that a segment of individuals living there were specialists who made unique and important craft goods. These traits allowed archaeologists to quickly distinguish probable regional centers from smaller-scale villages, larger urban centers, or other settlement types.

The development of processual archaeology in the 1960s and 1970s saw a shift in focus toward understanding the organization and operation of human social systems, with the objective to develop and assess models to describe the evolution of those systems. Regional centers were often defined as the central settlement of a regional polity, consisting of a group of villages that found themselves under the authority of a more dominant settlement. This kind of network, resulting from the loss of village autonomy to a politically dominant group, is commonly referred to as a chiefdom. Whereas chiefly rulers who lived at regional centers were sometimes assumed to direct the organization of not only politics but also economic and ritual-ideological life, already by the early 1970s, many archaeologists were aware that smaller human settlements often contained facilities for local ritual affairs (cf. Flannery 1976).

More recently, archaeologists have begun to decouple the study of settlements and their constitutive social practices from the study of sociopolitical evolution (Yoffee et al. 1999). The analytical focus is increasingly directed toward understanding the dynamic social processes occurring within early regional centers and between people residing in centers and those residing in smaller villages, hamlets, or with people engaging a mobile lifestyle.

New approaches recognize that greater diversity exists in the ways humans organize and that an analytical focus upon any number of historical trajectories can provide important information about social change through time (Birch 2013; Chesson and Goodale 2014). Thus, a focus on the development of regional centers and the kinds of activities that they embodied is a significant research objective in its own right. Importantly, this allows archaeologists to better understand the conditions under which regional centers and social complexity emerged, and it also positions researchers to ask questions about why many of these settlements suffered drop-offs in regional prominence or were abandoned outright.

Key Issues

Archaeologists studying early regional centers have identified several key issues involved with their emergence and organization. Four primary issues considered here are:

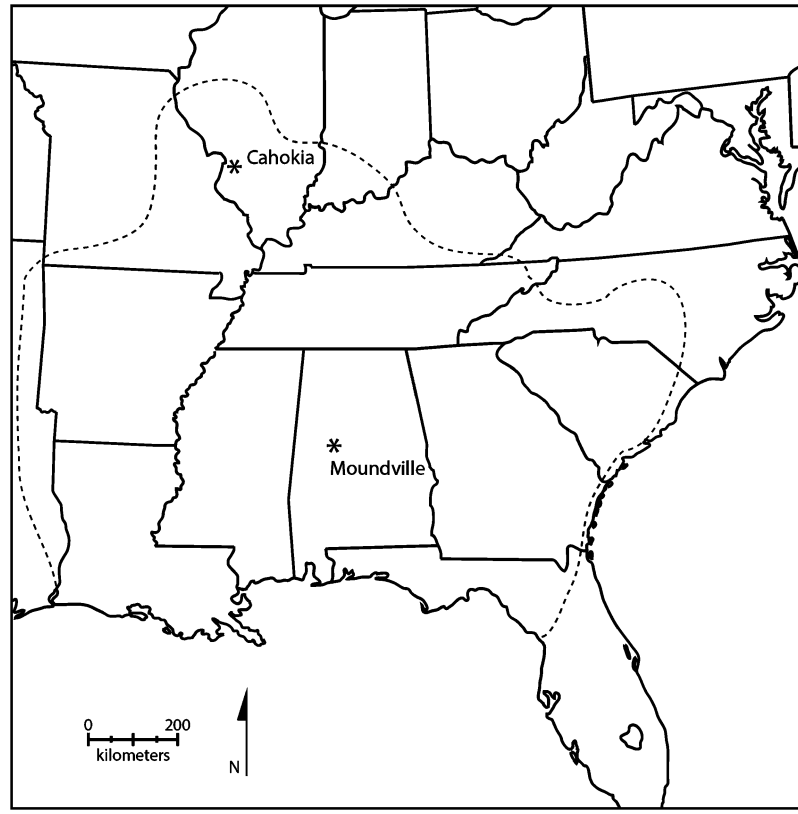
1. The human institutions that developed to take advantage of the new opportunities and the challenges of living in regional centers
2. The structural organization of early regional centers that resulted from the intersection of these institutions and how regional groups were centralized (i.e., through economic, political, or ideological dimensions)
3. The dynamics of local and regional institutions and the trajectories of their emergence, persistence, growth, and collapse
4. The tempos of variable trajectories

These issues are predicated on the ability of archaeologists to demonstrate, rather than assume, the presence of regional centers that are qualitatively different than other sites in the landscape. There are many social and taphonomic processes that can produce site-size hierarchies, and only some are the material remains of regional centers (Duffy 2015). Researchers have developed analytical tools to more accurately characterize variation in settlement patterns and demonstrate the presence of regional asymmetries (e.g., Peterson and Drennan 2005). Fine-grained chronologies are also critical for demonstrating that large and small settlements were contemporaneously occupied and potentially interacting (Bailey 2007; Barrier 2017). Once the presence of large settlements is demonstrated, additional analyses are necessary to characterize the social, economic, political, and ideological underpinnings of early regional centers (e.g., Brughmans 2013; Knappett 2013; Quinn and Ciugudean 2018).

Local and Regional Institutions

Early regional centers presented new opportunities and challenges for the people living in and around them. In response to these novel conditions, new institutions – the socially mediated and communally accepted sets of rules for interaction and conduct – developed as means to organize economic, political, or ideological aspects of life. Archaeologists have focused on those institutions that structured the flows of people, resources, and ideas within a region. These include chiefly political offices, religious beliefs and practices, and institutions involved with kinship or identity. Within a chiefdom, for example, the institution of a regional chiefly political office is one way that decisions affecting people throughout a region are carried out. While chiefdoms are normally thought of as hierarchically structured political polities, the decisions of chiefly persona often deal with regional economic matters as well as major aspects of ideology.

Early regional centers did not always support hierarchical institutions but did minimally place important decision-making responsibilities into the hands of certain groups. For instance, sodalities, which are organizations whose members



Early Regional Centers: Evolution and Organization, Fig. 2 Map showing geographic extent of the Mississippian world, with Moundville and Cahokia highlighted

come from several kinship groups, can perform or organize important tasks associated with ritual, key portions of the economy, or political matters. In the Southeastern United States (Fig. 2), for example, the Mississippian settlement of Moundville was constructed around a very large plaza, ringed by several monumental earthen mounds, the summits of which were spaces where elite sodalities or representatives from distinct kin groups carried out tasks that ranged from the crafting of ritual items to processing of human remains (Blitz 2008; Knight 2010). Assuming important ceremonial roles, these groups fueled religious and productive cycles that demanded access to surplus foods, labor for building monuments and ceremonial architecture, and acquisition of the prized materials that specialists crafted into ritually charged items. The most successful may have also taken on roles overseeing important ceremonies associated with death and the afterlife and attendant mortuary practices. Kinship and sodality institutions operating within Moundville's larger regional society were one way that a more politically focused and hierarchical chiefly institution was organized.

Ritual practice and ideologies helped people overcome the new problems associated with living in close quarters (Bandy 2004). In many developed regional centers, archaeologists have recovered evidence for social institutions that operated to maintain a sense of commonality among the various groups that resided at the site. Ideology was important at the Terminal Formative settlement of Tetimpa in Central Mexico (Plunket and Uruñuela 2002). Early on in its history, families would mark their distinctive household compounds with burials to venerate their ancestors. During subsequent phases of growth, more recently arrived families constructed their domestic compounds following the standardized architectural pattern of several domestic rooms around a central courtyard space. Because these new arrivals did not have founding leaders to commemorate, these groups marked their central

courtyards with shrines that displayed serpent and feline imagery associated with more widespread and commonly recognized worldviews.

Security and defense were important factors in the development of some regional centers. A village in a defensible location or protected by a strong leader may attract new residents, especially in situations where competition over resources was increasing between multiple villages, or when sedentary groups were seeking protection from ethnically distinct neighbors or in frontier situations. Political leadership may develop when an individual or group can effectively mitigate the negative effects of increasing warfare either through overseeing a larger group of warriors or through managing the construction and maintenance of defensive structures like palisades or other fortifications (Earle 1997). Globally, it has been recognized that warfare intensified alongside the demographic, economic, and institutional changes associated with increased sedentism and the adoption of agriculture (Haas 2001). The ability of leaders or institutions to funnel surpluses into channels for protection, but also to plan and carry out their own raids and acquisitions of new lands, would attract scattered groups from across a region to these new centers. Strength in numbers, defensive structures, and public symbols of success in battle or social violence can also lend a source of ideological power to the groups most associated with success (Earle 1997).

Institutional arrangements in early regional centers were diverse and varied depending on the histories of specific regions. In some cases, new institutions represented novel solutions to extant social problems. In other cases, however, they may have failed to resolve new problems associated with these changing social conditions. The dynamics of early regional centers are thus influenced by broader institutional configurations as well as historically specific events and processes. When archaeologists track the emergence of regional centers over the long term, they are better equipped to understand the trajectories of local and regional histories.

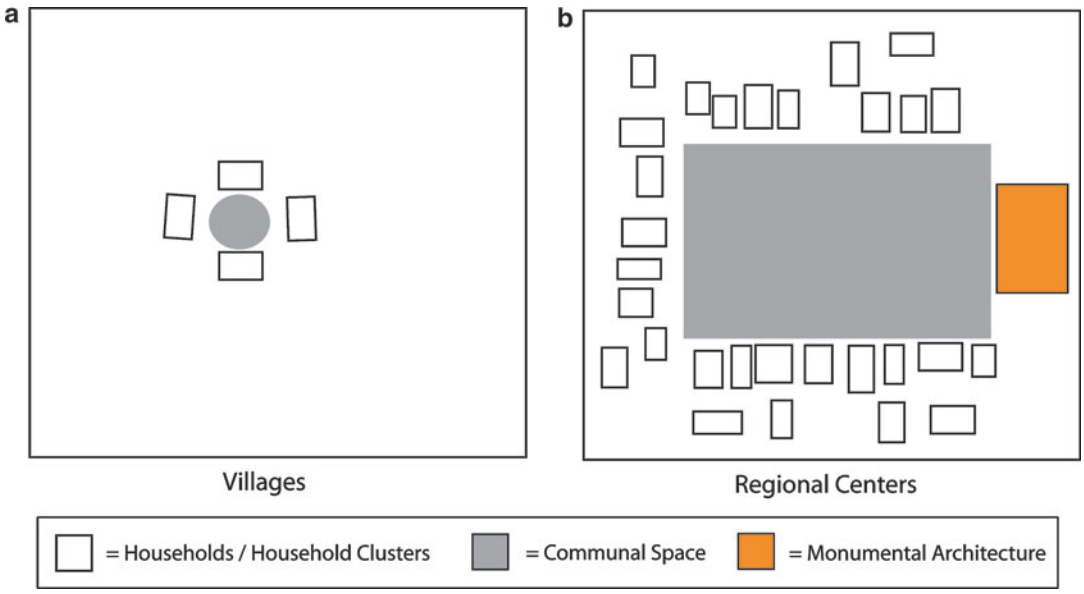
Structure and Organization of Early Regional Centers

Regional centers are part of multiscalar social systems. In fact, the development of regional centers is necessarily linked to the emergence of new scales of human organization. Consequently, understanding the structure and makeup of these settlements – from households to the sites themselves and to their regional settings – requires investigations at multiple analytical scales. Researchers have been quick to note that studying the emergence of regional centers requires an evaluation of the scale at which different organizing processes occur and how organizations at one level do or do not alter organization at other levels (Arnold 1996). Two spatial scales, the site and regional levels, are discussed here.

Intra-Site Scale

Regional centers contain some of the earliest forms of public meeting spaces and monumental constructions within permanent settlements (Fig. 3). Since people no longer lived solely among their relatives, large plazas, temples, earthen mounds, and pyramids, to mention a few examples, provided spaces for ceremonies, performances, and economic transactions to occur. New forms of architecture, like buildings that served specialized ritual or political functions, are evidence that the institutions necessary for community and regional integration existed. Likewise, the amount of work required to construct large monuments and clear spaces for public plazas demonstrates that several families or regional populations provided labor at a central site.

Regional centers will often have distinct residential sectors made up of multiple families who may have relocated from different settlements across the region through a process of aggregation and coalescence (Kowalewski 2013). Differences between these neighborhoods are sometimes recognizable through material remains, such as variation in house sizes and layouts or the uneven distribution of special foods, exotic goods, or craft items. In some cases, it may be possible to monitor these lines of evidence to identify elite communities in spatially discrete neighborhoods.



Early Regional Centers: Evolution and Organization, Fig. 3 Idealized schematic of intra-site organization and interaction in (**a**) villages and (**b**) early regional centers. Population growth, large communal space, and monumental architecture are important characteristics of most early regional centers

Elite leadership roles normally develop when regional-level economic, political, or ideological institutions form.

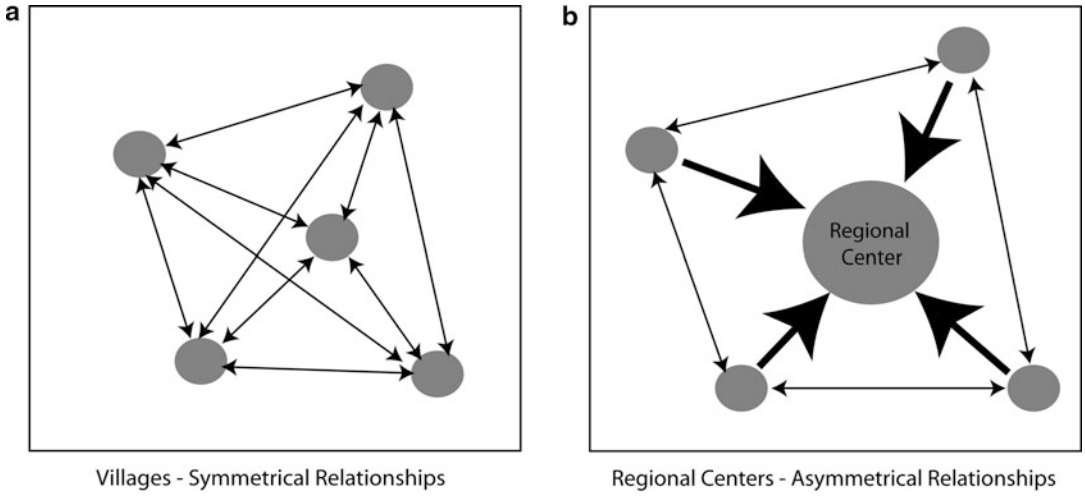
The intra-site configurations of human activity can vary significantly both within and between cultural contexts. For example, the layout of settlement sites in the US Southwest varies a great deal across the region. At Anasazi pueblos, public architecture is often in the form of large kivas, great houses, and plazas (Fish and Scarry 1999). In contrast, Hohokam settlements display ballcourts, platform mounds, and, at Paquime, nonresidential effigy mounds. Similarly, there is variability among residential architecture. While Puebloan settlements have highly nucleated room blocks, Hohokam settlements are dispersed with spaces between and within residential compounds.

Regional Scale

At the regional level, regional centers are the most critical settlement in an asymmetric interaction network involving people in surrounding settlements (Fig. 4). Because this centrality can take on economic, ideological, or political qualities, regional-scale organization can vary significantly.

Prominent settlements that organized key portions of the economy will show material evidence of their elevated economic standing. This could include signs that people in regional centers had greater or privileged access to exotic goods and craft items or maintained storage facilities for surplus foods shipped in from outlying settlements. Regional centers could also have assumed prominence through ideological means and thus become centralized settlements that structure the flow of people and ideas through ritual and religious networks. Archaeologists see evidence for this type of situation when centers contain spaces for ritual performances, buildings for housing ritual specialists and ceremonies, and relatively greater amounts of ritual paraphernalia.

Commonly, central settlements assumed their position through political means. Archaeologists have shown that regional centers are often the seat of elite personnel that asserted political authority region-wide. In a politically centralized system, outlying villages lost autonomy when decision-making power was co-opted by, or transferred to,



Early Regional Centers: Evolution and Organization, Fig. 4 Idealized schematic of regional organization and interaction in (**a**) village-level societies and (**b**) contexts where early regional centers develop. A primary characteristic in the emergence of early regional centers is the development and expansion of asymmetric regional interactions

a prominent leader, a process that has been linked to the emergence of chiefdoms (Marcus and Flannery 1996). Interestingly, studies of chiefdoms from around the world have demonstrated that substantial variation existed even within this type of politically centralized network. This highlights the importance of understanding a settlement system on a regional scale to better understand how political centralization developed and changed through time.

As people became attracted to a regional center's prominence, whether because of primarily economic, political, or ideological reasons, these emerging settlements would grow at the expense of neighboring settlements (Clark et al. 2010). The positive feedback between continued population growth and the regional importance of a center persists until these settlements and their regional networks decline and break apart, or take on new lives as even bigger, urban centers. Thus, regional demographic shifts are necessary components of the study of emergent regional centers (Barrier 2017).

Once regional centers emerged, it was often the case that important leaders developed interaction networks with leaders in centers from neighboring regions. In Mexico, for example, the early centers of San Lorenzo, San José Mogote, and Tlapacoya appear to have engaged in an exchange network of prestige goods including obsidian, marine shell, iron ore mirrors, turtle shell, and several types of fineware ceramics (Flannery and Marcus 2000). These elite-centric prestige economies may have played a key role in negotiating elite identities across regions as well as the relationships between the elite and the non-elite within the respective settlements themselves.

Trajectories and Dynamics of Early Regional Centers

Understanding early regional centers requires investigating the dynamics of social organization prior and subsequent to their emergence. After decades of research, archaeologists have increasingly emphasized that their rates of development and subsequent histories followed a series of different paths, marked by distinct patterns of emergence and change.

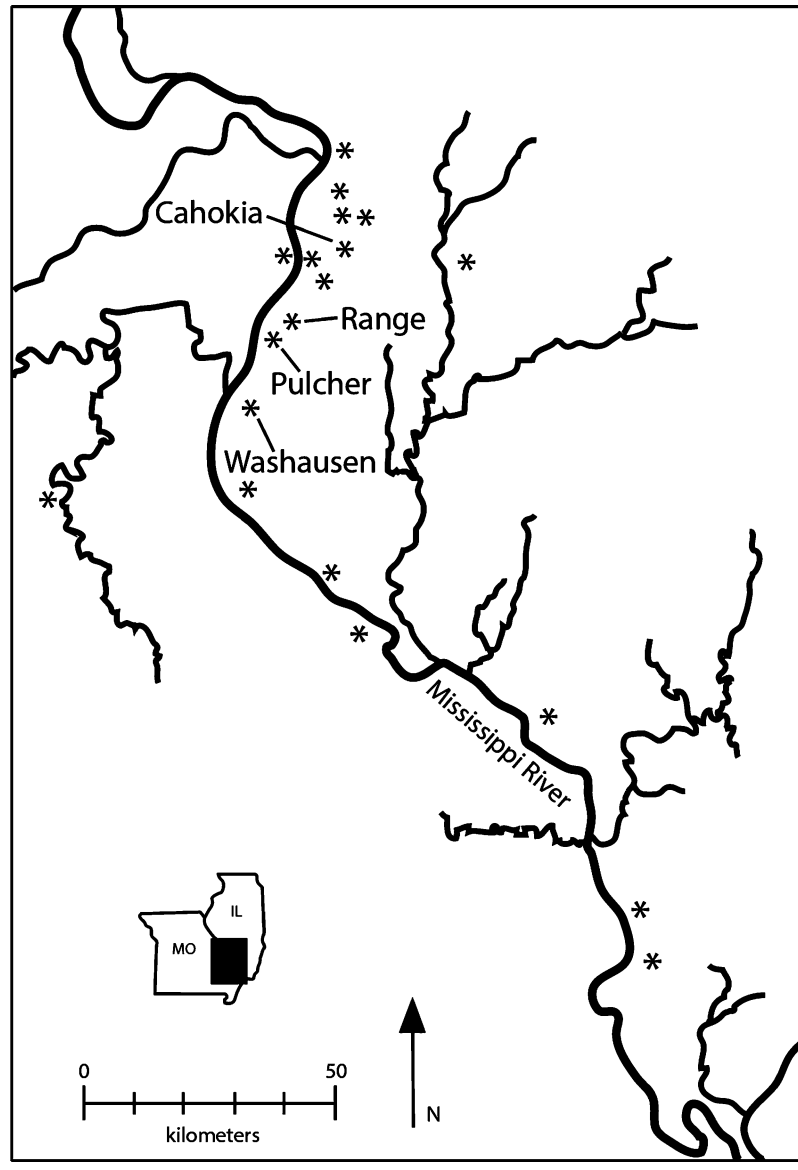
Although much of this discussion has focused on the emergence and organization of centers, archaeologists have shown that these settlements and their regional networks changed over time. After a few generations, most experienced significant declines in population, were taken over by other emerging centers, or were abandoned outright. People were not always able to solve the

novel problems arising from how these new social contexts were structured. For example, the kinds of social evolutionary changes associated with centralized regional developments only rarely directly led to the changes that spurred the development of social organizational forms like the state. Thus, it may be that the various forms of institutional life that developed with early regional centers often led to other and divergent evolutionary paths (Yoffee et al. 1999).

The prehistoric Mississippian period of the Southeastern United States provides numerous examples of regional center growth and decline (Fig. 2). Across this macroregion from about A.D. 1000 and up through European contact in the sixteenth century, several dozens to hundreds emerged as central nodes that organized regional populations through various means. Some of the earliest developed in the American Bottom portion of the Central Mississippi River Valley, near the modern-day US city of St. Louis, Missouri (Fig. 5). By A.D. 900, a few local villages showed signs of growth as several small family groups moved to these settlements. Although each family group built their houses around small courtyards, it was not until sometime in the tenth century that there is evidence for centralizing public spaces and specialized buildings more indicative of larger and more integrative institutions. The best excavated example of this type of settlement is the Range site (Kelly 1990). At Range, distinct families constructed their own house-courtyard groups around two, small central plazas and a handful of specialized buildings and ritual features. Archaeologists are unsure of the exact mechanisms of integration at this time, but the kinds of buildings, features, and artifacts recovered through excavations hint at the importance of ideological institutions involving new forms of religious symbolism and ritual adherence.

Growth at Range was not sustained, however, as archaeologists have documented a decline in population by sometime in the early eleventh century (Kelly 1990). This population decline appears to have resulted from the fissioning off of several individual family groups that ushered in a reorganization of the settlement newly focused upon only one central plaza. Concurrently, a series of other local settlements appear to have experienced rates of growth and changes unseen at Range (Barrier and Horsley 2014). Sites like Cahokia, Pulcher, Washausen, and a few others have evidence of new, larger-scale integrative social institutions. It is at these settlements during the eleventh century that people in the region first began constructing monumental earthen mounds around large open plazas. Data show that by A.D. 1050 these nucleated settlements served to integrate outlying populations scattered throughout the region living in smaller villages and farmsteads. Again, archaeologists are still weighing evidence to see exactly what kinds of integrative mechanisms were active, but asymmetrical regional networks were in place that served to organize agricultural production and bring together regional populations at centers for large ceremonies and rituals.

By the end of the late eleventh century, however, some of these centers were abandoned, others saw continued growth, and even newer regional centers were founded. What is particularly interesting about this example of multiple center growth and decline is that throughout each transformative case of aggregation and dispersal, a more protracted process of larger-scale integration accrued. In fact, the settlement at Cahokia grew so large that it may have been something more akin to an urban center (Kelly and Brown 2014; Pauketat 2009). The institutions structuring the Cahokian society took on a political nature not yet witnessed regionally. Residential neighborhoods at Cahokia were now larger, maintained their own institutional facilities and plazas, and were perhaps aligned according to a settlement-wide grid. The dominating feature of Cahokia was the largest prehistoric monument constructed north of Central Mexico, an earthen mound (named Monks Mound) that eventually stood around 100 feet in height. An extremely large open space marked the central point of the settlement (aptly called the Grand Plaza by archaeologists), which was ringed by smaller mound-and-plaza complexes. However, despite the fact that Cahokia outpaced neighboring settlements to become the de facto regional center, by A.D. 1200, signs of stress are evident as



Early Regional Centers: Evolution and Organization, Fig. 5 Map of the greater American Bottom region showing the location of several Mississippian period settlements, with sites mentioned in text highlighted

competition between population segments at Cahokia and throughout the region emerged. By the end of the A.D. 1300s, the Cahokia site and much of the American Bottom region were abandoned.

What this regional case demonstrates is (1) that early regional centers can be centralized along one or more dimensions, (2) that the institutions for integration were often insufficient for long-term and sustained success, (3) that the direct evolutionary development into larger and more regionally integrative centers may not often occur, and (4) that the cultural knowledge of successful and failed institutional arrangements may make it possible for later regional centralization processes to spur the development of more complex organizational formations.

International Perspectives

As a process that occurred in many places across the globe, the emergence of regional centers provides opportunities for cross-cultural comparisons. Identifying the organizational mechanisms, institutions, and tempos by which regional centers emerged and changed through time allows archaeologists to build context-specific models of social, economic, political, and ideological change. Comparing trajectories of the origins and evolution of regional centers allows for archaeologists to identify and better understand the differences between global and local processes.

Tempo of Early Regional Center Development

The tempo of change is a critical attribute of the emergence of early regional centers that varies from case to case. Archaeological research on the emergence of novel forms of social organization has placed renewed emphasis on the importance of chronology, timing, and tempo of human action and systemic change (Prentiss et al. 2009). The emergence of early regional centers in the Americas is an ideal context for highlighting the diversity in tempos of continuity and change in human social systems. Among the numerous ways central settlements can (and do) emerge, two alternative models for the tempo and social context of their emergence are highlighted. These models, linked with specific case studies, underscore the importance of analytical approaches to trajectories of human social organization that are nonlinear, dynamic, and embedded within both human agency and system-level perspectives.

Model 1: Regional Centers Emerge Slowly: A Consideration of Paso de la Amada

In this model, one existing village among many interacting villages gradually assumes a more central role within the regional network. Economic, political, and ideological institutions emerge separately, over a period of time, as the village grows (Lesure and Blake 2002). In Chiapas, Mexico, archaeologists working at Paso de la Amada have suggested this type of development. The village at Paso de la Amada was founded by 1900–1700 B.C. Within the early village, ceramic evidence suggests special-purpose vessels were used for drinking either corn beer or chocolate during festive occasions, and there is evidence that nonlocal obsidian was imported into the site (Clark and Blake 1994; Clark et al. 2010). It was not until almost 300 years after the initial founding of the site that some of the institutional changes in settlement, such as the presence of public architecture in the form of elevated platform mounds and plazas, were seen. Other evidence, from variability in settlement size within the region to differences in domestic house size, location, and complexity, suggest that Paso de la Amada became a regional political center, with some form of inequality. In this case, Paso de la Amada existed for a period of time, with some evidence of centralization emerging throughout the development of the village. Finally, by 1700–1500 B.C., the role of Paso de la Amada within the region had resulted in a qualitative change in its relationship to other villages in the area.

Model 2: Regional Centers Transformed Rapidly: A Consideration of Real Alto

In this model, one existing village within a regional network undergoes significant and rapid changes in economic, ideological, and/or political organization. Human agents play a vital role in the shift, as an institutional "package" associated with regional centralization is adopted. In this scenario, a more rapid demographic reorganization at the site and regional levels plays an important role in both necessitating and precipitating changes in the institutional mechanisms by which people and communities become integrated. This tempo of development and centralization can be seen at the site of Real Alto along the Pacific Coast in Southern Ecuador. Real Alto was initially settled as a small village around 4400 B.C., but it was not until circa 2900 B.C., when a reorganization of the site layout, regional economy, and demographic distribution quickly changed, that the settlement was transformed (Clark et al. 2010). The emergence of Real Alto as a regional center coincided with a quadrupling in site size, as much as a

doubling of on-site population, the construction of a central ceremonial precinct, and diversity in residential structures suggesting the presence of status differences.

Future Directions

Future research into early regional centers will benefit from an investment in three directions:

1. *Theoretical advancements*. Archaeologists can develop additional and more complex models for the emergence and development of early regional centers. These include integrating agency and system-level perspectives and designing research that can better identify and measure processes of institutionalization and interaction.
2. *Methodological advancements*. The study of early regional centers will continue to require a wide range of methodologies. An understanding of the regional context of these types of settlements will be advanced as more data and instruments become widely available and utilized, including the integration of satellite data (such as ASTER) and LIDAR imagery alongside more traditional survey approaches. Geophysical survey, including the use of magnetometry, resistivity, and ground-penetrating radar, may provide minimally invasive and cost-effective methods for understanding the layouts of large settlements and the makeup of regional settlement patterns. The integration of new methodological approaches to artifact studies, including the sourcing of materials through XRF and pXRF, can provide comparative data at both intra-site and regional scales. Perhaps most importantly, techniques for refining and generating more precise chronologies, including more accurate dating techniques, are needed both to ensure synchronic comparisons are warranted and to track diachronic changes in central settlements and their regional networks. The employment of Bayesian statistical methods for modeling site and regional chronologies is significantly aiding archaeologists' abilities to know the timing of historic events (Bayliss 2015).
3. *More case studies and comparative frameworks*. New case studies of early regional center emergence and evolution, designed to integrate multiple scales (from houses to macroregions), are needed. Differing historical trajectories identified with new case studies can be integrated into comparative global frameworks. Comparative projects will allow researchers to discuss early regional centers as a general phenomenon, perhaps with some modal organizational attributes, without requiring that early regional centers all looked the same or were the result of homogeneous social processes.

Cross-References

- ▶ Aerial Archaeology
- ▶ Archaeological Theory, Paradigm Shifts in
- ▶ Art of the Americas: North America
- ▶ Authority and Legitimacy in Political and Social Archaeology
- ▶ Ceramics: Scientific Analysis
- ▶ Chaco Canyon, Archaeology of
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- ▶ North American Moundbuilder Societies
- ▶ Paso de la Amada, Early Formative Chiefdoms in
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