The background of the cover is a deep blue sky. In the upper center, a bright meteor streaks diagonally from the top right towards the center. In the lower center, a large, glowing orange-yellow full moon is partially obscured by the dark, bare branches of trees. The overall scene is a night sky with celestial and natural elements.

THE ARCHAEOLOGY OF EVENTS

Cultural Change and Continuity in the Pre-Columbian Southeast

EDITED BY
ZACKARY I. GILMORE AND JASON M. O'DONOUGHUE

The Archaeology of Events

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Pre-Columbian Southeast

Edited by Zackary I. Gilmore and Jason M. O'Donoghue

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The Archaeology of Events

Introduction

The Enigma of the Event

Zackary I. Gilmore and Jason M. O'Donoghue

How are these incommensurables related to produce the historical process? How can a momentary incident, for example, resume and carry forth a whole historical trajectory of the relations between nations? How can these social totalities be reduced to individualities, thus allowing personal fates to shape the collective destinies? Such are fundamental enigmas of the event.

Sahlins 1991:7

The Enigma of the Event

The concept of the “event” has recently seen an explosion of interest across the social sciences as gradualist evolutionary models of historical change are increasingly undermined by evidence for punctuated and contingent moments of transformation (e.g., Nathanson 2009; Sewell 2005, 2008; Walters and Vayda 2009; White 2008). This development has been especially significant for the discipline of archaeology, where traditional accounts have all too often portrayed prehistoric societies as “cold” (sensu Lévi-Strauss 1966) and virtually unchanging for centuries or millennia. Over the past few years, however, the term “prehistory” itself has come under scrutiny as evidence has mounted to indicate that many of the rapidly transpiring historical processes thought to have been largely a product of modernity—interethnic interactions, migrations, religious movements, political collapses and reorganizations, wars, and the like—also played out among non-Western societies in the premodern world (Bradley 2002:3–5; Cobb 2005; Sassaman 2010a:1–5). Consequently, the notion of the context-specific, and yet broadly consequential, historical event has moved to the forefront of many archaeological explanations of prehistoric cultural dynamics, even in considerations of the relatively distant past (e.g., Beck et al. 2007; Bolender 2010a; Harding 2005; Lucas 2008; Thomas 2006).

Some of the most spectacular archaeological examples of eventful historical change have been revealed by recent research in the southeastern United States. New data indicate that several of the region’s most pivotal prehis-

torical developments, including the founding of Cahokia (Pauketat 2004a), the transformation of Moundville from urban center to vacated necropolis (Wilson 2010), and the construction of Poverty Point's Mound A (Kidder 2010a; Sherwood and Kidder 2011), were not protracted evolutionary processes but rather singular historical moments that significantly altered the trajectories of indigenous southeastern societies. In addition to these large-scale exceptional occurrences, southeastern archaeologists are increasingly realizing the significant role that even relatively localized everyday events such as building a house, crafting a pot, or depositing shell may have played in broader processes at the regional scale (Pluckhahn 2010a; Randall 2010; Sassaman 2010a; Wallis 2011).

The question of exactly how this happens, how localized, seemingly insignificant happenings can yield far-reaching consequences, is what Sahlins (1991:7) in the opening quote refers to as "the fundamental enigma of the event." Obviously, deciphering the relationship between the microscale and the macroscale in historical interpretation is no simple task and, in fact, remains one of the "central problems" in social theory (Giddens 1979; Robb and Pauketat 2013). This volume, nevertheless, consists of attempts to integrate the local and the regional, the specific and the general, using archaeological data from the Southeast. The contributing authors employ a variety of theoretical perspectives concerning the role of events in historical process and apply these to a broad assortment of archaeological contexts stretching across the entire Southeast and spanning 7000-plus years of pre-Columbian history. The types of events examined vary widely, as do their social and spatial scales, ranging from the establishment of massive political centers to the digging and infilling of individual pit features. Despite its breadth of subject matter, the volume is not intended as a comprehensive survey of important events in southeastern prehistory. Rather, it has three specific aims: (1) to critically examine the utility of the event as a theoretical concept in attempts to bridge the divide between different temporal and spatial scales within historical analyses, (2) to explore the potential for accessing events archaeologically and identify different methods for doing so, and (3) to contribute substantively to our understanding of the impact of events in various times and places in the ancient Southeast.

What is an Event?

The ascension of the event in archaeological explanation has paralleled other broadly influential theoretical developments that have been grouped together under the umbrella of "historical processualism." The major tenets of this

still-emerging paradigm were outlined a decade ago by Pauketat (2001,2003), who emphasized its foregrounding of historical “practices” over adaptive “behaviors” in explanations of cultural dynamics. One of the most significant ramifications of this behavior-practice distinction involves the scale at which archaeological explanations are sought. As socially or environmentally determined activities, behaviors are generally regarded as undifferentiated and normative, carried out in essentially the same manner and for the same reasons across broad expanses of space and time (Barr ett 2001). Explanations in this view are, consequently, usually limited to processes beyond the scale of actual human experience. Conversely, a focus on practices, as historically contingent and socially negotiated processes, eschews totalizing explanations in favor of localized, context-specific ones (Pauketat 2001). It is within this broader practice-centered theoretical milieu that the study of relatively short-term historical events has been most useful.

Paralleling this growing archaeological interest in the nature of events and their historical repercussions has been a great deal of disagreement regarding exactly what is meant by the term “event” (see comments and reply in Beck et al. 2007). While in its colloquial usage, the term can be applied to virtually any historical phenomenon from the Cretaceous-Paleogene extinction to the Great Depression to cleaning up after a meal, a more precise concept is needed if it is to retain any significant utility in archaeological interpretation. Because multiple recent archaeological treatments of the event have relied heavily on the works of Sahlins (1981,1985,1991) and, following him, historian William Sewell (2005), their ideas provide a useful starting point for discussing what precisely constitutes an eventful occurrence.

Sahlins’s theory of the event centers on the “structure of the conjuncture,” which he defines as “the practical realization of the cultural categories in a specific historical context, as expressed in the interested action of the historic agents, including the microsociology of their interaction” (1985:xiv). According to this theory, history is ordered by and experienced through culturally specific structures of meaning. In any act of reference to the real world (including everything from intercultural encounters to the routine practices of everyday life), however, these existing structural categories are put at risk because objective conditions often do not conform to cultural expectations. In such cases (i.e., events), existing structural principles are subject to re-evaluation and may be transformed. Thus, according to Sahlins’s (1985) now-famous example, Captain Cook’s chance arrival in Hawaii constituted an event that could not be fully accommodated within the existing Hawaiian cultural framework and ultimately forced a reworking of traditional structural principles. In his early consideration of the topic, Sahlins conceived of

the event relatively broadly, as not simply a happening (i.e., something that transpires at a specific place and time) but as a relation between a happening (including all of its contingent circumstances) and a structure. In short, he views the event as a “happening interpreted” (Sahlins 1985:53). In subsequent treatments, his focus seems to narrow somewhat to moments of historical transformation, as seen in his statement that “what makes an act or incident an event is precisely its contrast to the going order of things, its disruption of that order” (Sahlins 1991:45).

Responding to then influential theories such as Lévi-Strauss’s French Structuralism and Geertzian hermeneutics that stressed synchronic studies of symbolic systems and de-emphasized cultural change through time, Sahlins’s writings formed an important part of a broad-scale movement to historicize structure and demonstrate its vulnerability to the effects of human actions and other short-term events (e.g., Bourdieu 1977; Giddens 1984; Ortner 1984). His “possible theory of history” (Sahlins 1985:138) has, nevertheless, been the target of significant criticism, most of which is directed at his conception of structures as monolithic, overarching systems of meaning that characterize entire societies (e.g., Sewell 2005:205–206). This view is evident in Sahlins’s discussion of Hawaiian history in which he employs the terms “performative structures” and “prescriptive structures” to describe the respective historicities that characterized historical Hawaiian and British societies as wholes (Sahlins 1985:26–31). It is these structural differences that Sahlins then uses to explain the contrasting responses of the two groups to the event constituted by their chance encounter. This totalizing view of structure, however, makes modeling cultural change from the “inside” (i.e., in the absence of culture-contact situations) difficult. Even more importantly, this view has been largely undermined by ethnographic works that highlight the multiplicity of concurrent and often conflicting cultural schemas that invariably coexist *within* individual societies (e.g., Csonka 2005; Lederman 1986; Ortner 1990; Valeri 1990).

In a closely related theory of the event, Sewell (2005) builds on Sahlins’s ideas by interjecting a novel conception of structure. Starting with Giddens’s (1984:377) definition of structure as the rules and resources recursively implicated in the reproduction of social systems, Sewell makes two important theoretical maneuvers. First, he argues that for Sahlins’s theory of eventful change to be applicable outside of instances of intercultural contact, structure must be conceptualized as plural and as corresponding to different spheres of social practice rather than to distinct societies. Otherwise, structure, viewed as singular and coherent, lacks the internal differences, contradictions, and “novelties of reference” necessary to give rise to transformative events (Sewell 2005:205–207). Second, whereas Sahlins views structures as symbolic and Gid-

dens attributes it a purely “virtual” existence, Sewell argues that structures are better understood as sets of mutually sustaining *virtual* “schemas” (defined as “the generalizable procedures applied in the enactment/reproduction of social life” [Giddens 1984:21]) and *actual* resources (consisting of the real material objects and qualities used to enhance or maintain power). In this model, material resources are dependent on schemas for determining their value and directing their use, while schemas require resources for validating their existence and ensuring their reproduction (Sewell 2005:136–137). Although Sewell retains Giddens’s idea that structures are not fixed entities but rather continually evolving processes, in his view, structural change is initiated through the interplay of schemas and resources. Cultural change, in Sewell’s adaptation of Sahlins’s model, is always possible whenever structure is enacted (i.e., “risky”) because structures are multiple and intersecting, schemas are transposable to novel social contexts, and resources are polysemic and unpredictable (Sewell 2005:139–143).

With this reworked conception of structure in mind, Sewell (2005:27) defines events as “sequences of occurrences that result in transformations of structures.” He argues that events begin with a “rupture” or break in routine practice, an occurrence that takes place frequently and that generally has few lasting effects. Because local structures articulate with other, larger-scale ones, however, there is always the potential for even small ruptures to bring about a further cascading series of ruptures that result in the transformation of structure. These ruptures become eventful when they reach the point at which repair becomes difficult and novel rearticulation is possible. Conceived in this way, events are constituted by “(1) a ramified sequence of occurrences that (2) is recognized as notable by contemporaries, and that (3) results in a durable transformation of structures” (Sewell 2005:28).

By redefining structure as multiple, overlapping, and existing at different scales, Sewell’s theory of the event effectively overcomes many of the criticisms leveled at Sahlins’s original model. Furthermore, his emphasis on the role of material resources in initiating and subsequently reflecting eventful change has made it attractive to archaeologists investigating events in the prehistoric past (e.g., Beck et al. 2007; Bolender 2010b; Thompson et al. 2013). In the most direct archaeological application yet attempted, Beck et al. (2007) employed Sewell’s ideas regarding events to explain unexpected material disjunctures in four distinct contexts. In each of these case studies, relatively rapid changes in place are interpreted as a structural transformation marking the close of a significant historical event, the nature of which is then investigated. While it successfully demonstrates the accessibility of events (thus conceived) to archaeological interrogation, Beck et al.’s adoption of Sewell’s exclusive focus

on eventful transformation is in some ways problematic. Defining events as relatively rare instances when structures are transformed has the unfortunate effect of setting (stable) structure in opposition to (disruptive) events (Hoffman 2007; Ohnuki-Tierney 1995), even though this is the precise theoretical pitfall that Sewell (2005:199), and before him Sahlins (1985:53; 1991:3743), explicitly attempted to avoid. This perspective contrasts fundamentally with the idea that social structure exists only as it is instantiated in practice (i.e., events) and is therefore constantly in a state of “flux” or “becoming” (Giddens 1984; Pauketat 2001). According to the latter view, structure and event are not opposed but rather inseparable components of an ongoing dialectical process (Harding 2005; Joyce 2007; Ohnuki-Tierney 1995).

A focus on eventful transformation also ignores the important role that events play in structural reproduction (Gillespie 2007; Harding 2005; Hoffman 2007; Joyce 2007). If structures are *not* static but dynamic, then continuities in practice, especially over long periods of time, deserve the same level of consideration and analysis as practical ruptures. Many societies, in fact, stage elaborate ritual events in order to maintain the types of continuities that archaeologists too often take for granted (e.g., Lambek 2002; Morphy 1995). As Gillespie (2007:847) points out, “it is not a good trade-off to give ‘prehistoric’ people back their history only to take away their agency except in rare moments of a [transformative] historical event.” Ultimately, it makes little sense to make rigid characterizations regarding either transformation or reproduction because, as recognized by both Sahlins (1985:53) and Sewell (2005:21), all events necessarily involve elements of both. Whether one or the other is emphasized will almost always be determined by the questions being asked and the narrative being constructed.

A more effective approach to eventful analysis (although one not necessarily agreed upon by all of the authors) may be to return to a relatively broad notion of the concept, akin to Sahlins’s original (1985) formulation of events as happenings interpreted within particular structural contexts. Although the details of various “event” definitions differ significantly, most would agree that an important criterion for a happening to be considered eventful is its achievement of an impact that extends beyond the moment and place of its occurrence. The strength of Sahlins’s approach to events is that by foregrounding interpretation, analytical emphasis shifts somewhat away from *either* the details of the initial occurrence *or* the preexisting structural conditions in a given social context and focuses instead on the relation between the two (i.e., their “conjuncture”). It is the nature of this relation that ultimately determines which occurrences become amplified and gain a structural significance that is manifest in future practices. Such a perspective avoids artificially limiting

events to happenings of a particular nature or effect (e.g., moments of large-scale change) and instead recognizes the potential for any manner of contingent occurrence to contribute to ongoing processes of structuration (including both reproduction and transformation). While seemingly infinitely broad, this conception of events carries with it at least three very specific implications:

1. Events (as defined) are manifest at a scale commensurate with human experience.

Centering interpretation in eventful analysis has significant repercussions for the temporality at which events can be said to occur. Events do not merely occur as discrete, instantaneous “moments” but rather as processes with varying degrees of temporal depth. It is only logical that events, which are composed of multiple components (requiring at a minimum happenings and interpretive acts) and have beginnings and ends, necessarily unfold through time (Bailey 2007:208–209). If events are not in reality instantaneous, though, the question then becomes what, if any, scalar boundaries can be usefully placed on them. In addressing this question, a potentially valuable distinction can be drawn between events as experienced and events as asserted by an analyst. The term “experiential events” refers to happenings that are lived through, interpreted, and acted upon by agents occupying a particular social and cultural context. As such, they must necessarily occur, or at least be manifest in some fashion, at a scale commensurate with human perception. Put another way, experiential events occur in what Sassen (2010a:13) refers to as “real time” (i.e., the temporal scale at which decisions are made by people that ultimately determine the course of history; see also Lucas 2005). In absolute terms, experiential events, then, are restricted to happenings and processes that unfold within the scale of the human lifespan, perhaps on average no more than 50 years and only in extreme cases exceeding 100.

This is not to suggest that larger-scale, significant processes do not occur beyond the scale of human experience, as they clearly do. In fact, events in general can be said to possess a fractal quality (Sewell 2005:260), according to which all individual events are actually components of larger, more temporally and spatially expansive ones. Because of this, in the search for ultimate causation, it is easy for researchers (i.e., archaeologists, historians, and natural scientists) to link events and short-term processes together into ever-larger ones until a scale is reached that is wholly beyond actual human perception. These “analytical events,” unlike their experiential counterparts, are not tied to any particular group or context and are therefore potentially limitless in scale. From an analytical perspective, these macro-scale processes (i.e., events) may be shown to exert a substantial and measurable influence on a particular

historical trajectory. Moreover, due to the perspective-altering effects of increasing distance (discussed at length by advocates of “time perspectivism” [e.g., Bailey 1983; Bailey 2007; Holdaway and Wandsnider 2008; Hull 2005]), they may also, in hindsight, appear “eventful” in terms of initiating rapid, punctuated historical developments. If the ultimate goal, however, is to better understand the experiences and decision-making procedures of people in the past (not that this is the principle aim of all archaeological research; cf. Murray 2006; Robb and Pauketat 2013), then these macro-processes become meaningful only as they are manifest in real-time, experiential events (see also Dawdy’s [2006] discussion of the different scales of “disaster” events).

It should be noted that this distinction is not entirely clear-cut. Even experiential events have an analytical element in that they continue to be evaluated and interpreted retrospectively. Further, people in the past undoubtedly inferred events that they did not directly experience just as modern archaeologists do today (see Barrett 1999). The point being made is simply that analytical events whose scale exceeds human perception must be connected to smaller experiential events in explanations of human decision-making.

The relationship between experiential and analytical events can be effectively illustrated using the example of recent, human-induced climate change. Anthropogenic global warming, a macroscale process that began at least as early as the nineteenth century and potentially 8,000 years earlier, has been virtually universally acknowledged by the scientific community as a real phenomenon with measurable and far-reaching effects (Joint Science Academies 2005; Ruddiman 2005). Despite this fact, a substantial proportion of the U.S. population, unswayed by scientific data, is still able to deny its existence because the climatic changes involved are for the most part too gradual and incremental to be perceived in the absence of specialized technology and long-term records. For these people, climate change becomes “real” (in terms of affecting future patterns of practice) only as it is actualized in relatively short-term events (e.g., wildfires, crop failures, glacial collapses, etc.). Thus, global warming, as a multicentury process, while clearly significant and worthy of scientific analysis, may in the end provide little insight into the lived experiences and practical decisions of many average Americans.

2. Events are generated and interpreted as such within particular narratives.

As already noted, Sahlins’s distinction between happenings and events shifts focus from the initial occurrence from which the event emanates to the conjuncture of occurrence and structured interpretation that ultimately determines its historical significance. This definition highlights the fact that events are not objective, freestanding entities waiting to be discovered, but are in-

stead created and interpreted as such within narratives (Fogelson 1989:141; Meskell 2008; Trouillot 1995:25): “Narrative” in this case does not refer exclusively to texts but rather to any chronologically ordered (though not necessarily linear) story that is unified by a common theme or “plot” and has a beginning, middle, and end (sensu Pluciennik 1999:654). Narratives, in this sense, can be written or spoken, but they can also be performed (e.g., de Certeau 1984:115–18; Hill and Wright 1988) or constructed materially (e.g., Kidder 2011; Randall 2010; Santos-Granero 1998). They are what connect events together and give them coherence and meaning beyond the “mere” sequence provided by other forms of discourse (White 1981, 1987:16). Further, it is the narrative that determines the types and scales of happenings deemed eventful in the first place. Obviously, an occurrence that is pivotal to the playing out of one narrative may be entirely inconsequential to another. Thus, a story of European colonization may be filled with dramatic events such as intercultural encounters, battles, and forced migrations, while the story of a particular ceramic pot may, in contrast, consist of a series of comparatively innocuous technical practices such as selecting a raw material and applying a surface treatment. In each case, the relevant events are defined and ordered by the narrative itself. Importantly, this holds equally true whether one is discussing the narratives constructed by people in the distant past or those put forth by archaeologists in the present (Joyce 2002; Pluciennik 1999).

This second implication, however, comes with one important caveat. At least occasionally, events occur that are so unprecedented, and therefore unforeseeable, that they have the power to alter the course of the dominant narrative. For instance, using the above example, the effects of Superstorm Sandy thrust the notion of global climate change into American social and political consciousness to a degree far beyond that achieved by decades of effort on the part of environmental scientists (Bagley 2013; Strand 2012). So, while it is true that narratives ultimately determine events, some events may simply be too powerful to ignore.

A related consequence of defining events in terms of their interpretation within narratives is that it can be (and has been) argued that the “event” is a purely retrospective category, that events exist only in hindsight. The phenomenologist Shutz (1967:51) as cited in Carr (1986:37), for example, maintains that only through an “act of reflective attention” can experiences be “distinguished, brought into relief, marked out from one another.” Similarly, Koselleck (2004:105) suggests that only those experiences “separated *ex post* from the infinity of circumstance can be experienced by contemporary participants as a coherent event, as a discernible unity capable of narration” (see also Dolgin and Magdoff 1977:351). While it seems only logical that the sig-

nificance of an incident can be evaluated only *after* its occurrence, Carr (1986) offers an alternative viewpoint, arguing that all human encounters are experienced, even in the moment of their happening, in a narrative fashion. Drawing on the phenomenologist Edmund Husserl, he explains that events, like all other temporal phenomena, are experienced in a present that is temporally extended by “retentions” of the past and “protentions” of the future. Retention and protention are different from “memory” and “anticipation” in the usual sense of these terms because of their immediacy, their “functioning as horizons for ongoing, present experience” (Carr 1986:20–3). His point is that, due to their simultaneous presencing of past, present, and future, all events are experienced from the very beginning as structured narratives, replete with durations and discernible beginnings, middles, and ends. Even if one accepts Carr’s position, however, it is still certainly the case that the broader significance of many events (i.e., their precise impact on larger-scale historical processes) is established after the fact.

3. Power is always involved in the production of events.

If events are indeed created or produced rather than discovered, then issues relating to power differences are an important part of the equation. Power enters into the process of event formation in two distinct ways. The first concerns the agencies involved in the planning and orchestration of events designed to achieve some future purpose (Ortner 2001). All human practice is intentional and future-oriented to the extent that it is carried out with a certain expected outcome. This is most obvious in instances of premeditated, strategic actions that are consciously staged in order to affect some desired end. Events of this type are what Sassaman (2011:2) refers to as human *interventions*, “purposeful actions to change things from the way they are to what one imagines they should be.” Examples from the Southeast include the construction of massive monuments (e.g., Kidder 2010a; Pauketat 2004a; Sassaman and Randall 2012), the staging of large-scale, elaborate ceremonies (Claassen 2010; Fowler et al. 1999; Pauketat et al. 2002), and various other events designed to facilitate future memories and actually change the course of history. Although certainly less dramatic, everyday, nondiscursive events are equally enmeshed in issues of agency and power. Routine practices, while not always consciously planned or deliberate, are nevertheless a result of intentional subjects making decisions about how to best use their time and complete certain tasks (Hendon 2010:25). These decisions are always made within an existing power structure. Since there are always potential alternatives, no practice, regardless of its repetitiveness or seeming insignificance, is truly politically neutral (Barrett 1999; Pauketat and Alt 2005).

Once it is accepted that events are made and not merely recovered, it becomes clear that power is also a critical factor in the way that happenings are remembered and represented in retrospect. A simple correlation should not be expected between the magnitude of a happening as it occurs and its historical significance in hindsight (Trouillot 1995:16). This is because “narratives are orchestrated by the narrator to include a particular series of actions in a particular temporal order *for a particular purpose*” (Griffin 1992:49 [emphasis added]). In other words, events are not formed in a political vacuum but rather are interpreted and constituted as such by purposeful, historical actors. It is also important to keep in mind that events are not static but instead reconstituted through time as memories and interpretations change with shifting conditions (Hendon 2010:4). Because of the vital and active role played by past events in structuring future action (Valeri 1990), control over the production of historical knowledge is a potentially powerful political tool. Consequently, it may be that what matters most in the study of events are not the minute details of the original happenings but rather the mode and conditions of their recounting (Trouillot 1995:25).

This becomes especially clear in the study of “non-events.” This term does not refer to the absence of an event but rather to a diverse class of historical phenomena that emerge out of the frequent disagreement between history as is and cultural expectations of what it should be (Fogelson 1989; Randall 2010; Trouillot 1995). Non-events take a number of specific forms and include both events that never occurred but are nevertheless “imagined” to have taken place in order to sustain a preferred narrative (e.g., Paul Revere’s midnight ride; see also Fogelson 1989:142–143), as well as events that did occur but are subsequently denied or “silenced” (Trouillot 1995) due to their irreconcilability with dominant accounts. As an example of the latter type, Trouillot (1995:70–107) points to the Haitian Revolution, which, even as it occurred, was so unthinkable within the French worldview that it was officially dismissed as an utter impossibility. Thus, when examining events (and non-events) it is always important to consider how present action is justified by referencing the past and who is benefiting from the particular narrative being promoted (Valeri 1990).

Archaeological Events

The role of events in the past has not been a prevalent topic of study in Anglo-American archaeology since at least the 1960s, when reaction against the particularism of early-twentieth-century culture-historical archaeology led to an emphasis on process, systems, and the explication of phenomena

unfolding over the long term (Binford 1962, 1968; Clarke 1968; Trigger 2006). Even when archaeology experienced, along with other disciplines (McDonald 1996), a “historical turn” in the early 1990s, it drew the greatest influence from the structural history of the *longue durée* rather than from the narrative history of events (Bintliff 1991, 2004; Braudel 1972; Knapp 1992). Attention to events was further deflected by the emerging importance of the microscale of human agency after the millennial turn (e.g., Dobres and Robb 2000). As Lucas (2008:60–61) points out, the importance and explanatory power of events have been diminished, first by their subordination to process and then by their assimilation in structure.

If archeologists have had difficulty grappling with events, this is in large measure due to the perception that short-term phenomena are inaccessible because of both the nature of the archaeological record and the inconsistency between the precision of our chronometric methods and the scales of time experienced in an individual's lifetime. The most trenchant critique of an archaeological focus on events comes from the advocates of time perspectivism (Bailey 1983, 2007, 2008; Holdaway and Wandsnider 2008; Hull 2005). This approach rests on three premises that arguably undermine the archaeological accessibility of events. The first premise is simply that different phenomena operate over different temporal spans and that the temporal resolution of our observations must match that of the phenomena under consideration. In other words: “short-lived phenomena require highly resolved measures of time for their observation and study, while larger and more extensive phenomena require and permit a coarser scale of measurement” (Bailey 2007:201).

Second, time perspectivists argue that different temporal scales have both a distorting and revealing effect on our observations. On the one hand, phenomena become increasingly distorted and difficult to observe in detail the further removed in time they are. On the other, working with a large temporal scale can reveal relationships, patterns, and processes that are not apparent at smaller scales. The inverse is true as well—working at small scales reveals minute detail while obscuring larger-scale patterns, essentially losing the forest for the trees.

Finally, time perspectivism holds that the archaeological record is universally composed of palimpsests of varying size and resolution. The building of these palimpsests includes both additive and reductive processes such that at any given moment the superimposition of residues over the extant archaeological record carries with it the potential for erasure or distortion of earlier residues. Even the traces of a short-lived “moment in time” (Bailey 2007:208–209) aggregate and conflate multiple actions, meanings, and happenings of variable duration that both preexisted and followed the moment in ques-

tion. Thus the archaeological record contains multiple temporalities (Lucas 2005:37–43) and, indeed, this is an ongoing process: palimpsests envelop the present. For Bailey, palimpsests are neither detrimental nor a unique feature of the archaeological record. Instead, they are an inherent feature of the material world and an impetus for archaeologists to study a different class of phenomena (i.e., large-scale patterns and processes).

The implications of a time-perspectivist viewpoint for the archaeology of events are clear: the study of events requires a fine temporal resolution and is best accomplished by studies of the present or relatively recent past (Bailey 2007:201, 2008:23). Events in the ancient past are difficult, if not impossible, to study for two reasons. First, the requisite temporal resolution is inherently more difficult to acquire due to the deflated nature of the record. Second, the residues of ancient events are more likely to have been erased by subsequent palimpsestization and distorted by virtue of their distance in time.

However, while time perspectivism raises many valid points, particularly regarding the palimpsest nature of the archaeological record, these implications do not negate our ability to study events in the past. The recognition that we will never be able to recover evidence of all, or even most, past events is hardly reason to abandon the pursuit altogether and focus our attentions on a higher level of abstraction, recapitulating a temporalized version of Hawkes's Ladder of Inference in the process. The archaeological record consists *not* of the residues of past abstractions such as processes, structures, and institutions but rather of the material residues of short-term phenomena—actions, practices, happenings, and events (Shennan 1998). The inability to assign a precise date to an artifact, assemblage, or other material is a methodological problem and not necessarily inherent to the archaeological record itself.¹ As Lucas (2005:48) points out, though a Roman burial may be dated more precisely than a Neolithic burial, this does not indicate that the phenomena occurred over different durations. The temporal scales of events producing the archaeological record are commensurate regardless of their chronological resolution or antiquity. Furthermore, evidence of large-scale abstractions cannot be observed directly in the archaeological record but must be inferred from the material residues of the small scale. It therefore seems reasonable to suggest that investigation of these larger phenomena should be predicated on an understanding of the small scale, the very stuff of the archaeological record (Foxhall 2000).

Nevertheless, tacit recognition of archaeological palimpsests is reflected in three tactics archaeologists have applied to the study of events. The first approach is characterized by attempts to disassemble the palimpsest record and resolve the constituent components (Bailey 2007:203; Kassabaum et al.

2011). This approach has been aided by—and indeed provided some impetus for—advances in the study of formation processes, middle range theory, and chronometric methods (Boivin 2000; Whittle et al. 2010). The goal is to work down to small-scale phenomena by alleviating the distortion wrought by time while keeping in mind the fallacies of the “Pompeii premise” (Binford 1981).

Alternatively, archaeologists have attempted to obviate the palimpsest problem by focusing on those rare instances of pristine preservation that afford a fine temporal resolution and thus a window into the small-scale. Residues frozen by volcanic eruptions, ice, the sea, or similar geologic phenomena are spectacular and garner wide publicity (e.g., Sheets 2006; Spindler 1998; Staniforth 1997). However, they are also extremely rare and, as such, provide scant opportunity for comparison and little resemblance to the bulk of residues available to archaeologists (Bailey 2007:28, 2008:22).

Finally, the third approach focuses on the “big” events of the past, occurrences with such wide-ranging impacts that their material manifestation overcomes the palimpsests by virtue of volume and scale alone. This approach has seen recent elaboration, as exemplified by the methods of Beck and colleagues (2007). Following Sewell, they conceive of an event as a sequence of occurrences that transforms a structure through the rupture and rearticulation of mental schema and material resources. This perspective renders events amenable to archaeological investigation because it considers events to have both material and spatial ramifications. In particular, its proponents suggest that “the broader material context of the built environment offers a powerful means for . . . recognizing transformative events” (2007:836). However, as discussed above, this narrow definition of events precludes any consideration of social reproduction and constructs a past of long-term stasis punctuated by rapid disruption.

A slightly different elaboration of this approach is adopted by Lucas (2008), who argues that a conception of the event derived from history or sociology is inappropriate for archaeology. Rather, archaeologists “must consider events as material assemblages of people and objects that persist for shorter or greater duration” (2008:62). These events can be characterized in terms of their *residuality* and their *reversibility*. Residuality refers to the degree to which an event leaves material traces in the archaeological record. However, this does not equate simply to the surviving elements of the event (i.e., people and objects) but to the survival of the *material organization* of those elements. Residuality is directly tied to reversibility, that is, the ease with which elements of an event/assemblage can be rearranged or reorganized. In other words, reversibility is the relative inertia of material organization. To illustrate these

concepts Lucas contrasts two assemblages: books arranged on a shelf and a traffic system. The collection of books is highly reversible—they can easily be rearranged while leaving little or no indication of their former organization(s). In contrast the traffic system is highly irreversible. This assemblage—which includes not only disparate material elements but also the comportments and attitudes of drivers—could not be reorganized without massive effort. Highly irreversible assemblages are thus resistant to change and more likely to leave material residues.

Lucas argues that the material organization of most (everyday) events is characterized by high reversibility and low residuality and thus is not preserved in the archaeological record, though certainly some elements of these events do survive. Those events most accessible to archaeologists consist of material organizations with high irreversibility.² Further, the changes we see in the material record are changes in these irreversible material assemblages, which are “perhaps the most important over the long term and certainly at the level of temporal resolution we can normally expect to attain in archaeology” (Lucas 2008:63). Thus while Lucas does move us some way from a sociological or historical understanding of the event, ultimately these “archaeological events” are in accord with the structural transformative events discussed above, albeit with a bent toward their materiality.

The difficulty with these approaches to archaeological events is their understanding of events as discrete happenings in time (with the exception, perhaps, of Lucas). With this conception, the archaeological study of events does indeed become a question of preservation and the ability to establish a fine-grained chronology. Archaeologists are thus hamstrung by the perception that what is needed to effectively study events in the past is direct evidence of the happening itself. However, if an event is considered instead as a happening interpreted within a particular structural context (as discussed above), then a more fruitful approach is to examine not only the happening itself but also the ramifications of the event.

Viewed in this way, events are not limited to specific moments in time but instead “smear into the past and the future” (Thomas 2006:81) and are manifested in subsequent patterns of practice. Events become protracted in time as their impacts are played out. This protraction is enabled by the inherent materiality of events, which carries them into the present and extends their spatial reach beyond the place of the happening (Jones 2007). Further, the materiality of an event, to some extent at least, enables some interpretations while preventing others. According to Trouillot (1995:9), “what happened leaves traces, some of which are quite concrete—buildings, dead bodies, cen-

suses, monuments, diaries, political boundaries—that limit the range and significance of any historical narrative. This is one of many reasons why not any fiction can pass for history.”

So, while we might agree that the archaeological record is rife with palimpsests and that these are “not some distorted or degraded version of a message that needs to be restored” but, on the contrary, “to a large extent *are* the message” (Bailey 2007:209, emphasis original), we must acknowledge that this was a message perceived by people in the past as well. The material ramifications of past events are an enduring feature of the landscape confronted by people and enfolded into their sensibilities in the process of inhabitation (Barrett 1999). They are part of the medium through which people make sense of their world. Material remains thus should not be viewed as constituting a fragmentary, static *record* of past societies or behaviors but rather as playing an active role in their constitution (Barrett 2001).

The archaeological study of events, then, is not simply a matter of precisely defining specific moments in time. Nor is it a matter of writing “total histories” of societies or cultures (Harding 2005). Rather, focusing on events affords us a “window” into the dialectic of macro- and micro-scale phenomena through which we might better understand their articulation in social reproduction and transformation (Ohnuki-Tierney 1990:8). The role of events can be investigated by tracing genealogies of particular practices or institutions through “chains of ordered presents” (Harding 2005:97) to consider how events inflect the intersection of past experience and future expectation in a specific context (Barrett 1999; Joyce and Lopiparo 2005; Pauketat and Alt 2005). According to Harding (2005:97–98), “when these ‘presents’ are placed in their sequential order it may be possible to connect together the mnemonic and anticipatory relations of individual acts, and subsequently, create a ‘timeline’ and social biography. It may even be possible to chart this back to an event, or rupture in history, which acted as a catalyst for particular developments.” Pauketat and Alt (2005) illustrate the effectiveness of such a focused, “genealogical” approach in their examination of early Mississippian post-setting practices around Cahokia. Observing variation among archaeological post-molds and constructing a genealogy of post-setting practices exposed patterned differences that revealed the role of microscale post-setting “events” in the rise of the Cahokia polity and broader Mississippian culture. Likewise, Barrett (1999) links together burial practices that occurred in Britain between the Neolithic period and Iron Age to show how the cumulative effects of individual mortuary events changed the material system of references according to which people interpreted and engaged their own past. In both cases,

events are shown to be not only archaeologically visible but also extremely revealing with regard to larger-scale historical developments.

Why Focus on Events?

This gets us to our final point. If we accept that events are indeed accessible to archaeological investigation, the question then becomes what is to be gained by making them a focal point of research. The philosophical answer to this question begins with the common phenomenological assertion that time is a primordial and vital aspect of human existence. More than just a backdrop for human action or an objective means of measuring duration, human temporality affords the necessary basis for all present experience by providing a past that can be drawn upon and a future toward which we continually project ourselves (Carr 1986:8–25; Ingold 1998; Thomas 1996:40, 2006:81). Importantly, the way that people experience time is through culturally structured events. As Carr (1986:24–25) puts it, “just as we have no experience of space except by experiencing objects in space, so we experience time as events, things that take or take up time.” In short then, because humans are inherently temporal beings, a major prerequisite for the understanding of any past society is achieving some grasp of their particular sense of time, a sense that invariably develops out of their experience of events.

An archaeological focus on events is also advantageous for exposing phenomena and patterns that are invisible at larger scales. This is often the justification offered by microhistorians for their bottom-up approach to historical reconstruction (e.g., Walton et al. 2008:4; Maddox 2008:34; Blee 2008:51). Bruegel (2006:553) for example, maintains that although “the bird’s-eye view of history may be elegant and appear encompassing in its presentation of the chronological progress of an original blueprint,” when “viewed from below at a reduced scale, it is composed of a variety of discontinuous social experiences, each of which may give rise—even when reduced to a few typical traits—to a new, a different historical narrative on the dynamics of economic, social, and technical change.” Event-centered archaeology then, like microhistory, may be best described not as a coherent method or body of ideas but instead as a particular style or strategy of investigation, an “exploratory stance” (in the words of Maddox 2008) centered on the notion that experiences and actions at the local scale are never entirely reducible to the abstract macroprocesses to which they are frequently attributed (Hodder 2000:26; Koselleck 2004:110; Sewell 2005:219–227; Walton et al. 2008:4). Rather than the “anonymous” histories (Sassaman 2000:148) characteristic of many historical metanarratives,

by focusing on the intersection of microscales and macroscales, proponents of this perspective highlight the active role that individuals and communities play in the formation of their own histories (Comaroff 1982; Pauketat 2001).

Organization of the Volume

In the chapters that follow, the authors in this volume explore all of these and many other event-centered themes using data from the pre-Columbian Southeast. The volume is divided into three parts. Part I, "When Practice Becomes History," examines events spawned by the routine, largely nondiscursive actions of ancient Southeasterners going about their daily lives. Although they employ a variety of theoretical perspectives, these chapters all explore questions of how and under what conditions everyday practices can initiate and influence broader historical developments.

Chapter 1 deals explicitly with the methodological challenges of studying past events. Sassaman and O'Donoghue (following Kosselleck) begin with the premise that past experiences condition expectations of the future and that the relationship between experience and expectation is in constant flux. In particular they are concerned with the role of unlikely events—those events that are rare or unprecedented in the recent past and, thus, unanticipated—in structural reproduction and transformation. Importantly, the definition of unlikely events is dependent on knowledge of the experiential context. Using tree-ring data from South Carolina as a proxy, they develop a method for examining the "space of experience" during the Woodland and Mississippian periods. Tacking between experiential and generational temporal scales, they argue that fluctuations in the amplitude and frequency of unlikely events structure both expectations for the future and the relative stock put into the past as a source of knowledge and power.

In chapter 2, O'Donoghue tackles the inherent perspectivism of events by examining phenomena that only appear to be eventful. O'Donoghue argues that archaeologists too frequently treat ecological changes in the past as events that people passively responded and adapted to. However, in many cases these "events" are modern distillations of processes that unfolded sporadically, and in a patchwork fashion, over centuries or millennia. O'Donoghue examines one such "ecological founding event" using case material from Florida's St. Johns River valley, where the onset of artesian flow from scores of freshwater springs has been treated as the event that underwrote sedentism, the exploitation of aquatic resources, and the construction of shell mounds. Geographic-information-systems (GIS) modeling and archaeological data call this interpretation into question and suggest that springs may have been important for

far different reasons. This analysis reinforces the importance of distinguishing analytical from experiential events (see above).

In chapter 3, Moore suggests that a number of factors, including a dearth of radiocarbon dates, coarse recovery methods, and seemingly hopelessly intermingled deposits, have helped perpetuate the widespread misconception that the shell middens of Kentucky's middle Green River region are the product of gradual, essentially undifferentiated processes with little evidence for variability or punctuated change. Moore challenges this view by attempting to create an eventful narrative of the Chiggerville shell midden. He does this by focusing primarily on three distinct events, a burial, a meal, and the construction of a small rock cairn. Adopting a relational "dwelling" perspective (following Ingold), Moore maintains that each of these routine, microscale events contributed to the development of Chiggerville as a persistent meaningful place on the Archaic landscape. Thus, although Chiggerville is in many respects the epitome of an archaeological palimpsest, a focus on the discrete events implicated in the midden's construction has the potential to reveal a great deal about the lived experiences of those who inhabited it.

In chapter 4, Blessing critiques two assumptions, rooted in Western ideology, that are uncritically applied to the interpretation of pits and other archaeological features: (1) that the ritual and quotidian are separate spheres of life that have little bearing on one another and (2) that there exists a category of things called "trash" that is unclean, lacks utility, and should be disposed of in a separate place. These assumptions lead archaeologists to treat pits and burials as qualitatively different things. Using data from Stallings Island and related sites in Georgia and South Carolina, Blessing argues instead that the interment of people and the deposition of "rubbish" (e.g., shellfish, bone, nut-shell, pot sherds) were in fact aspects of a circulation of materials that collapsed distinctions like past/present/future and sacred/secular. These acts of exchange and deposition were events integral to the creation of material narratives, and thus to the formation of subjects, communities, and worlds.

In chapter 5, Pluckhahn examines the role of household-level decisions in the unfolding of two macroscale events that bounded the Late Woodland period in the Southeast: the "collapse" of Middle Woodland ceremonialism and the so-called Big Bang at Cahokia. Following Sewell, Pluckhahn conceives of events as sequences of ruptures that reorganize structures. Based on a comparison of households at the Kolomoki site in Georgia, he argues that both of the above-mentioned "bounding" events of the Late Woodland involved a series of structural ruptures that cascaded through different aspects of domestic life, including household autonomy, subsistence technology, and storage practices. Ultimately, Pluckhahn shows how the everyday decisions of

individual households played a crucial role in the playing out of these events in different areas of the Southeast. In doing so, he deftly illustrates the advantages of a multiscale approach to history for exposing human agency at a local level and for revealing the varied manners in which events are experienced and influenced by actors in diverse contexts.

Part II, "Historical Interventions," on the other hand, focuses on moments in southeastern prehistory when conscious, deliberate attempts were made to affect the course of history. The authors in this section focus primarily on a variety of relatively large-scale transformative events that include elaborate ceremonies, numerous forms of structured deposition, and the construction of monumental architecture.

In chapter 6, Gilmore examines the dialectical relationship between events and places using an assemblage of Late Archaic pits from Locus B at Silver Glen Run in northeast Florida. Initially utilized as shellfish-roasting facilities (likely for provisioning mound-centered feasting events), Gilmore argues that, over time, large-scale pit digging and infilling acquired greater significance at the site as old pits were increasingly cut into by new ones, facilitating repeated intersections between past and present practices. Ultimately, these pit practices became important events in their own right as layered fill deposits were strategically combined to form what were essentially underground monuments, depositional narratives intended to be exposed by future pit digging. To the extent that they structured subsequent practices in this location, Gilmore suggests that the enduring materiality of each of these seemingly benign features contributed to the "remaking" of Locus B from a place of sustained residence to a specialized locale geared toward ritual and remembrance.

In chapter 7, Spivey et al. focus on the most spectacular of all Archaic period interventions, the iconic Poverty Point site. Rejecting normative, deterministic models of hunter-gatherer interaction, the authors maintain that Poverty Point is best viewed not as an oversized village or practical "trade fair" location but rather as a palimpsest of regional-scale pilgrimage events. They suggest that these pilgrimage events arose out of the environmentally and socially unstable conditions of the Late Archaic and served to create and re-create a sense of community among geographically and culturally disparate groups from throughout the Southeast. In their view, by 3600 b.p., Poverty Point had become the region's "single attractor" for long-distance exchange and interaction, supplanting all preexisting networks.

In chapter 8, Rees and Lee attempt to reconstruct the Late Woodland history of the long-neglected Troyville site in Louisiana. Despite a number of recent disturbances at the site, the authors are able to combine a bevy of his-

torical descriptions with the results of recent fieldwork to illuminate a broad variety of events, ranging from the routine practices of individual actors to singular, highly ritualized moments of social transformation. Events of the latter type are exemplified by the construction stages of Mound 5, particularly the raising of an ancestral burial mound atop what had been a communal platform. Rees and Lee interpret this as a clear historical intervention, one that affected an important reworking of local power relations with widespread and long-lasting ramifications. Their chapter, like Moore's, demonstrates the possibility and value of wresting individual events from even the most challenging of archaeological palimpsests.

In chapter 9, the last chapter in part II, Cobb employs a microhistorical approach to articulate local- and regional-scale accounts of Mississippian beginnings. Specifically, he examines diversity in submound architecture from across the Southeast in an attempt to better understand the relationship between widespread Mississippian phenomena (such as mound building) and their local expression in diverse contexts. According to Cobb, transitions from submound to mound features constituted pivotal founding events, but, importantly, ones that played out in different ways depending on a number of social, historical, and geographical factors. Emphasizing the multiscalarity and "nestedness" of events, he concludes that the "grand event" of Mississippianization must be balanced by a consideration of the diverse experiences of people from throughout the region.

Part III consists of chapter 10, a closing commentary by David G. Anderson in which he draws connections between the individual contributions and discusses their implications for not only southeastern prehistory but also the broader prospects of an "eventful" archaeology. According to Anderson, the ideas articulated here signal an important ontological shift within the discipline. In his words: "we are no longer focusing on typologies of artifacts, sites, and societies but on understanding how culture and identity are made, maintained, and transformed. This is a very real change, a new way of looking at the archaeological record." We can only hope that others share this view, as ultimately the significance of this volume, like all events, will be measured by its impact on the perspectives and practices of those who experience it.

Notes

1. Both Bailey (2007:201) and Lucas (2005:47) point out ambiguity in the concept of temporal scale. They argue that the term encompasses two meanings: the temporal span or duration of a phenomenon and the resolution of observation—that is, the size of our temporal units of measure. Thus, temporal scale has both

an existential and a methodological meaning. However, while Bailey argues that the two are inextricably linked, Lucas suggests that the conflation of these meanings is what leads time perspectivists to argue that the size of our unit of analysis must match that of our unit of measurement.

2. Following this reasoning to its logical conclusion, the bias toward irreversible assemblages likely produces an illusion of stability or changelessness in certain archaeological contexts, masking potentially chaotic change in more mundane, quotidian assemblages. While the implications of this for archaeological reconstructions and for the predilection for origins and revolutions (Gamble 2007) is intriguing, Lucas does not pursue this line of thought.

I.
WHEN PRACTICE
BECOMES HISTORY

In the Unlikely Event: Method for Temporalizing the Experience of Change

Kenneth E. Sassaman and Jason M. O'Donoghue

This chapter addresses the changing relationship between experience and expectation in histories of unlikely events. *Unlikely events* in our sense of the phrase are events that fall outside the realm of expectation because they cannot be anticipated by prior experience. The concept is somewhat akin to Sahlins's (198,1991) definition of "events," as outlined by the editors in their introduction to this volume, but it does not require structural transformation. We agree that "what makes an act or incident an event is precisely its contrast to the going order of things" (Sahlins 1991:45) but not necessarily its "disruption of that order." In the classic example of encounters between Captain Cook and Native Hawaiians, Sahlins could not have found a more transformative set of circumstances. As Sewell (2005; see also Beck et al. 2007) has pointed out, however, structural transformation can also result from everyday incidences that individually have little impact but with increasing frequency and magnitude expose contradictions between past experience and objective conditions in the present. Moreover, Gillespie (2007), among others, points to the role of events in reproducing structure, as in rituals of renewal that contribute to continuity in practice, even in the context of changing objective conditions. We can thus consider how reproduction and transformation—like experience and expectation, or a remembered past and anticipated future in any given present—are two sides of the same coin. As such, we are obligated first to investigate the objective conditions by which certain cultural dispositions are formed and reproduced and then to consider changes in those conditions that make it difficult to reproduce structure through "traditional" practice, discursive or otherwise.

The objective conditions in question here are situated in the broader realm of climate change and human-environment relations. Global warming has garnered the attention of modern observers because we are witnessing present conditions and facing future expectations that exceed recent experience. 2012 was the warmest year on record in the United States since at least 1895, when record-keeping began, and it was the thirty-fourth consecutive year

with global temperatures above the twentieth-century average (NOAA 2012). Whether we attribute rising temperatures to anthropogenic inputs such as greenhouse gases or to the “normal” rhythms of orbital procession and other processes beyond human control, recent trends take us beyond memory and into the unknown. The extent to which “unlikely events” such as unprecedented annual temperatures are contributing to a transformation of structure is a matter of interpretation we leave to future historians. Here we address similar historical questions about cultural changes in the pre-Columbian American Southeast using tree-ring data and archaeological measures of practices that implicate cultural senses of time. Following Koselleck (2004 [1979]), we are concerned in this chapter with the relationship between the “space of experience” and the “horizon of expectation” in the ongoing reproduction of the temporality of structure, notably the effect of unlikely events in reproducing and transforming structure. Our primary concern is with methods for developing data on unlikely events, but we begin with a brief review of the theory that guides our effort.

Theorizing Experience and Expectation

Although time and space have seemingly “natural” qualities that can be measured, compared, and interpreted, they are, in fact, cultural constructions whose measurement, comparison, and interpretation are contingent on the complex totalities of situated human experience. Conceptions of time and space have thus been central to the project of phenomenology, which Husserl (1983 [1913]) conceived as the study of conscious experience from the first-person or subjective point of view and Heidegger (1962 [1927]) and others later expanded to include the generative qualities of phenomena to experience, as in the meaning of events or the movement of time to one’s sense of being. Heidegger’s analytical treatment of time is highly nuanced, at times confounding, and is clearly beyond the scope of this chapter. However, we can start with his hermeneutic circle of experience that enchains a chronological past, a lived present, and an anticipated future (Heidegger 1992 [1924]) and thus envisions history as the interpretation not simply of past experiences but of past possibilities, what Koselleck (2004) calls “futures past.” It follows that prospective futures are bound to the past when the interpretation of history is founded on repeated or enduring experience.

The German historian Reinhart Koselleck devoted most of his career to the methodology of history, much of it geared toward the understanding that historical time could not be reduced to natural time (Koselleck 2002, 2004; see also Zammito [2004] for a cogent account of Koselleck’s central

project). The essence of this claim is that time cannot be intuited or perceived through sensory apparatus but is instead conceptualized through the metaphor of motion in space. There are thus many (historical) times or layers to time (*Zeitschichten*), which then constitute the theoretical possibility of different historical accounts. In conceiving of time as multiscalar, Koselleck draws a parallel to Braudelian structural history, although he applies it not to historical reconstruction, as did Braudel (1972) but to the transcendental possibilities of alternate histories. He sought to understand how long-term, enduring structures (cf. *longue durée*) were constituted through the interplay between experience and expectation, and how changing relationships between the past and present led to new senses of time.

Inherent to all human beings, according to Koselleck (2004:259), is the “space of experience,” in which past things are present or can be remembered, and the “horizon of expectation,” in which the future is made present through anticipation. Each informs the interpretation of any given event, but they never coincide. For Koselleck (2004:262), the asymmetrical relationship between experience and expectation leads to new resolutions and, with these resolutions, historical time. What constitutes an *event* in this sense is the unexpected, the improbable. Forestalling the occurrence of events, of *surprises*, to use Koselleck’s term, is the space of experience in which past events are gathered together and ordered into patterns of recurrence or repetition. Events, by definition, cannot be anticipated; they betray imagined futures by breaking with patterned recognition. Confronting the event exposes the multi-layered nature of time, as explanations for its occurrence expand outward to seek conditions or causes beyond memory or recent experience. Here, then, is the enigma of history: in the short term events are common and change is constant; in the long term, history is never entirely new (Koselleck 2002:135).

Theorists of modernity offer insight on how the structure of capitalist economies has altered human perceptions of space and time. This discourse begins with Marx (1973 [1889]) and his fundamental understanding of capitalist labor processes, in which commodity production depends on constantly expanding markets to ensure profitability, to conquer new spaces, and to do so efficiently by reducing the time it takes to move from place to place. Modern transportation and communications technologies were integral to this process, but the structure of commodity production was itself the driver as capitalists sought ways to accelerate the conversion of use value into exchange value (Warf 2008:8–19). Geographer David Harvey (1990), in his analysis of the spatialization of capital, refers to this process as “time-space compression.” With expanding markets, technologies of transportation, and the penetration of capital globally, space conquered time. Harvey describes how the increas-

ingly “compressed” existence of modernity was not merely a consequence but an instrument of the material realities of capitalism. The time discipline of industrial production, as described, for example, by E. P. Thompson (1967), was among the apparatuses designed to manage labor, and with it profit. Instrumentation, record-keeping, actuary tables, and work schedules all served to render time predictable for the purpose of ensuring future outcomes. Moreover, such enforced discipline was naturalized and made to seem inevitable by the calibration of technologies such as clocks to the rhythms of nature (Leone and Shackel 1987).

An objective outcome of modernity and capitalism is an acceleration of change, wherein every future is expected to have never before been experienced. For Koselleck (2004:263–264) this new sense of time, *Neuzeit*, emerged when expectations for the future became distanced from all prior experience. As we outlined above, this outcome was hardly an unintended consequence of capital, but rather its intent. It is thus interesting to consider how the temporalities of premodern, precapitalist social lives may have likewise been manipulated to achieve certain ends. Judging from the writing of many modern theorists, this line of inquiry would appear unproductive. Like others since (e.g., Beck 1992; Giddens 2009), Koselleck (2004:264) glosses premodern worlds as worlds structured by the cycles of nature, the spaces of prior experience, and the invisible hand of fate. In this sense, expectations of the future depended “entirely on the experience of their predecessors, experience which in turn became those of their successors. If anything changed, then it changed so slowly and over so long a time that the breach separating previous experience and an expectation to be newly disclosed did not undermine the traditional world.”

It is beyond the scope of this chapter to outline the historical details that enable modern analysts to look back at the “events” of the Enlightenment, the Renaissance, and the Reformation and declare an end to tradition, but suffice it to note that the notion of progress encapsulates most of the salient details. Juxtaposing a moribund eschatology that no longer lived up to expectations with the novel experiences of transoceanic travel and discovery, a growing, worldly elite recognized that the horizons of expectation were no longer limited by the space of experience. This did not mean that the two were no longer related, but now, in contrast to premodern temporalities, in Koselleck’s sense of the term, the relationship was one of alterity, with tradition being something superseded or overcome by modernity. Once futures never before seen had arrived, the past would come to be seen for its fundamental “otherness.” Arguably, the writing of history from a Western point of view began with the encounter with the unknown *Other* (de Certeau 1988) along with its ensuing

tropes of the “primitive” and “primitiveness” that helped sequester the past as an experience useful only in its function as a contrast to things modern, usually, but not always (an exception being certain utopian movements) with the intent of rationalizing present and future action as “progressive.”

We can see in the historical particulars of modernity the complex interplay between spaces of experience and horizons of expectation, both in the living out of rapidly changing lives (modern/progress) and in its rhetorical use in the writing of history and prehistory (premodern/traditional). In considering the changing relationship between past and future, we guard against privileging rhetoric over objective history. Instead, we ask simply: Was modernity the only major rupture in temporality, the only time that expectations outpaced experience, and the only context in which the past was conceived as the primitive other? Perhaps, but that would appear to be an empirical issue, not an incontrovertible premise, once, that is, we accept that the temporality assumed for primitive people (essentially timelessness and the lack of a sense of determining one’s fate) exists to make modernity appear different and progressive.

In addressing these questions analytically, we confront the enduring impediment to contemplating the ideational structures of people of the ancient past: we do not have strong methods for inferring things like temporality from the sorts of material evidences available for observation. However, if we operate from Koselleck’s premise that historical time is never subsumed by natural time, then we have at least justification for expecting different senses of time to thrive under different histories of experience and for being responsive to events in a proactive, as well as reactive, manner. We thus begin by reconstructing the temporal structure of events from material evidence of past conditions and then hypothesize how horizons of expectation interplay with experience to variously reproduce and transform senses of time through the material traces that are potentially available to the archaeological gaze.

A useful point of departure in developing methods for analyzing changes in temporality is the recent literature on climate change. As the editors note in their introduction to this volume, humans do not experience climate, they experience manifestations of climate that are more immediate and more local than the global-scale forcing variables that shape climate (see also Pillatt 2012). This is as true of modern people as it is of their premodern counterparts, although through space-age technology the former also experience local-scale climate events (droughts, floods, tornados, earthquakes, tsunamis) elsewhere. Weather—defined here as the state of climate at any given time and place and occurring at scales humans can perceive in experiential time (subdiurnal and beyond) and in dimensions (rain, heat, darkness, wind, etc.)

we can detect with our sensory apparatus—is perhaps the more apt interface between humans and climate. How humans recognize patterned variation in weather and mobilize this variation as useful knowledge likely takes a variety of forms (empirical records, ecological cues, ritual cycles, and stories, among other virtual experiences). Whatever form it takes, in all societies knowledge of weather variation is a potentially valuable resource (Strauss and Orlove 2003), and an increasingly valuable one, we might imagine, when the cycles affording any semblance of order elapse too infrequently for all to experience firsthand.

Archaeologists are increasingly engaging in long-term projects that investigate how humans lived through events of weather and climate variability (e.g., Anderson et al. 1995; Anderson et al. 2012; Cooper and Peros 2010; Hegmon et al. 2008; Marquardt 2010a; McGovern et al. 2007; Nelson et al. 2010). A concern in all such projects is the effect of scale on pattern recognition, with analysts echoing the need to develop high-resolution data on both the paleoenvironmental and cultural-historical sides to achieve anything approaching experiential time, that is, the level at which changes experienced, recognized, and responded to by people are apprehended (McIntosh et al. 2000). With a dendrochronological record of climate and a built environment that extends back millennia, the American Southwest has been the North American epicenter of research linking climate and humans at annual or subannual scales (e.g., Dean et al. 1985). Theorizing about decades of such research in the Colorado Plateau, Jeffrey Dean (2000) offers some of the best insight into how fine-grained paleoenvironmental data can be structured in ways that may have been meaningful to those who experienced it.

Dean (2000:89) poses a question that bears directly on the present project: How did “societies accumulate, store, and retrieve information about the environment and viable responses to environmental variation?” His interest is in effective knowledge: not the means by which knowledge is transmitted *per se* but rather the content of that knowledge, namely, accounts of actual experience. Dean also foregrounds long-term structures as influences on people’s perception of the environment, thus adding an eventful dimension to cases of human displacement and resettlement, a common feature in Southwest history. With apparent attention to both structure and practice, Dean conceptualizes the problem both in terms familiar to modern social theory and, profitably, in terms of the model of complex adaptive systems (Gell-Mann 1994). In brief, complex adaptive systems are networks of interactions and relationships (as opposed to structures of discrete units) that are responsive to change as a result of experience. This last aspect—the role of experience—is particularly salient to the analysis as it becomes manifest as social memory.

As Dean (2000:91) notes, not all environmental variability and the experiences of its members are stored in social memory. Instead, they are gathered and ordered into what complexity theorists call schemata, essentially emergent structures of abstracted experience: “A schema organizes and codifies repetitive and nonrandom elements in a complex adaptive system’s experience into a model of reality that is highly condensed relative to the breadth of information and individual experiences that went into it” (Dean 2000:91). By organizing experience into coherent models, schemata place events and relationships into familiar categories and thus enable agents in complex systems to respond with some degree of certainty to conditions that arise, provided those conditions are familiar. Cultural schemata exist at multiple scales and can be hierarchical, increasing the likelihood that effective knowledge will be differentially distributed among agents, be they individuals or groupings based on any criteria.

To operationalize this theory, Dean turns to the structure of variation registered in a variety of paleoenvironmental data, notably tree-ring data. He describes measurable attributes of environmental variation, such as amplitude, periodicity, tempo, and spatial structure, and proposes that variation can be divided into two frequency bands, high and low, calibrated relative to the human generation, in this case 25 years. Low-frequency processes have cycles that exceed one human generation; high-frequency processes have cycles that last less than 25 years. Using paleoenvironmental data scaled to the yearly chronology of tree rings, Dean is able to locate four multigenerational periods over a 2,000-year interval of Colorado Plateau occupation when the frequency of variation shifted from low to high. In comparing the corresponding culture history of the region, Dean found that most major adaptive transformations were associated with regional-scale climatic phenomena that were so infrequent as to be excluded from traditional environmental knowledge systems. High-frequency variation was often encoded in ways that allowed communities to respond through adjustments that included relocation without structural change, but low-frequency variation (events) posed challenges to schemata as a result of the discord between experience and expectation.

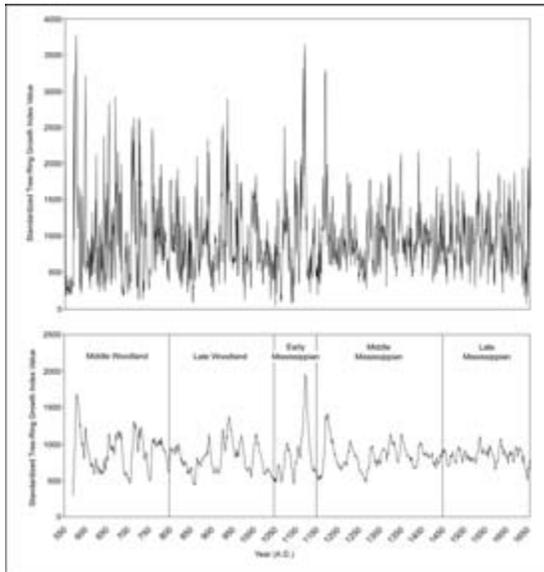
In sum, theories of the relationship between experience and expectation offer conceptual value to the archaeological investigation of unlikely events, but methods for documenting changing relationships address the more pressing challenge of structuring data on experience in ways that are culturally meaningful. Following Dean’s lead, we now take up an analysis of tree-ring data from the lower Southeast to detect changes in the structure of annual variations in environmental factors to hypothesize changes in the relationship between experience and expectation.

Structure of Variation in Tree-Ring Data

A wide array of tree-ring data is available from the Paleoclimatology branch of the National Climatic Data Center of the National Oceanic and Atmospheric Administration (NOAA).¹ A large fraction of the tree-ring data from the southeastern United States² is the product of the Tree Ring Laboratory (TRL) of the Department of Geosciences, University of Arkansas, directed by David W. Stahle. Sixty-six of the 139 datasets from the Southeast posted on the NOAA site as of May 2012 came from the TRL. Besides accounting for nearly half of all the data, the TRL also has developed the longest sequences, with 11 exceeding 500 years in duration and 4 exceeding 1,000 years. At 1,620 years in duration, the longest record comes from the Black River in North Carolina, a Coastal Plain tributary of the Cape Fear River (Stahle et al. 1988); it is followed by the 1,494-year record from the Black River in South Carolina (Stahle et al. 2009), a tributary of the Pee Dee River. We draw in the analyses that follow from the latter record, given its closer proximity to the Savannah River valley, from which much of our detailed culture history is derived. Although the NOAA website contains records in even closer proximity to the Savannah River—notably Four Hole Swamp and Ebenezer Creek, data from which Anderson (1994; Anderson et al. 1995) employed in his analysis of Mississippian culture history—the longer duration of the Black River sequence exposes patterned variation that is not apparent in chronologies less than one millennium in duration.

Raw data files on the NOAA website are standardized and averaged to produce site-specific chronologies. After averaging the rings from multiple trees in a stand and correcting for factors such as exponentially declining growth with age, the resulting (and unitless) index values serve as a relative measure of growth per year. Specifically, the values reflect departures in growth from the series mean—set at 1.0, and listed in database, as well as here, without the decimal, as 1000—for a given year. The values thus represent higher or lower tree growth for a given year. Without specific knowledge of the site and species in question (in this case, bald cypress, *Taxodium distichum*), index values cannot be equated directly with climate or other environmental factors. For our purposes, annual variation in standardized values will suffice to illustrate how experience with annual variation might shape the temporality of change.

The graph at the top of Figure 1.1 shows the distribution of tree-ring growth index values at Black River, South Carolina, for the period a.d. 550–1650. This particular chronology extends to 1993, but we have truncated it at a.d. 1650 to confine our discussion to the period prior to sustained European contact and colonization. Over the 1,101 years of this period, index values range from



1.1 Absolute frequency distribution of tree-ring growth index values at Black River, South Carolina, for the period a.d. 550–1650 (top) and 20-year rolling sum averages of the same data for the period a.d. 570–1650 (bottom).

a low of 44 to a high of 3,776, with an average of 959.64 and a standard deviation of 542.26. Variation in the values of the sequence is considerably greater in the first half than in the second half, particularly in the frequency of values exceeding 2,000. These generally occur as isolated spikes but occasionally in clusters of two or more consecutive years. The same holds true for values below 500, although the contrast in frequency during the first and second half of the period is subdued compared to the higher deviations. Still, clusters of values below 500 in the second half of the period (i.e. after a.d. 1100) sometimes span several years, as in the years from a.d. 1121 to a.d. 1136, and again from a.d. 1144 to a.d. 1152, episodes inferred by Anderson et al. (1995) as periods of prolonged drought, which arguably inhibited the onset of Mississippian-era settlement in the lower Savannah River valley.

Years or periods of extreme values are not hard to locate in the tree-ring record, but such events are not inherently meaningful without knowledge of how often they recur. As Dean (2000:106) has argued, the temporal structure of variation directly influences the way information about experience is encoded in social memory. For instance, low-frequency variation within cycles

greater than a human generation (20–25 years) may require more than firsthand experience to remain visible on future horizons, whereas high-frequency variation within cycles less than a human generation recur before firsthand experience is forgotten. With high enough frequency, cyclical variation may actually be noneventful because it is so familiar.

Many options exist for converting the annual variation of tree growth to experientially meaningful patterning. Here we simply produce a rolling 20-year average with an exponential function that discounts the influence of years with increasing distance from the present. The graph at the bottom of Figure 2.1 shows the results starting in a.d. 570, 20 years after the oldest tree ring. When later we turn to the recognition of unlikely events, years with extremely high or low values come into play, but for now we ignore them to take note of a more general feature of the graph, namely, the periodicity and amplitude of generational cycles. In this regard, three distinct patterns emerge: (1) low-frequency, high-amplitude cycles over the first three centuries; (2) low-frequency, variable-amplitude cycles over the next four centuries; and (3) high-frequency, low-amplitude cycles over the last four centuries. Patterned variation such as this is expected to have influenced variation in the temporality of change, notably the relationship between experience and expectation.

To examine the implications of transgenerational patterning in the tree-ring data, we impose on the lower graph in Figure 1.1 the cultural-historical taxa for the region. The chronological boundaries of these taxa deviate somewhat from the divisions inferred above, but they provide criteria of cultural variation that are independent of the dendrochronological data. At the risk of essentializing each period with its own, unique temporality, there are some remarkable linkages between the temporal structure of variation and modes of practice that invoke senses of time.

Table 1.1 provides summary statistics for 20-year moving averages by cultural-historical taxa. Mean values across taxa vary little, but some periods exhibit greater variation than others, notably the Middle Woodland and Early Mississippian periods. These same two periods exhibit the largest mean values and broad ranges skewed toward the upper end. In contrast, 20-year moving averages for the Late Mississippian period show less than half the variation of the earlier periods. The intervening Late Woodland and Middle Mississippian periods exhibit similar, moderate values for variance.

Another dimension of variation is revealed when we compare the 20-year and 60-year moving averages. The latter opens up the space of experience to encompass not only the firsthand experience of a generation but also those of parental and grandparental generations, whose experiences could be trans-

Table 1.1 Descriptive Statistics on 20- and 60-Year Exponentially Weighted Moving Averages* for Tree-Ring Growth Indices, Black River, South Carolina, Broken Down by Culture-Historical Period, a.d. 550–1650

20-yr exponentially weighted moving average						
	Mean	St. Dev.	CV	Min.	Max.	Range
Late Mississippian	841.17	100.52	0.12	495.94	1107.09	611.16
Middle Mississippian	837.56	173.78	0.21	474.46	1414.55	940.09
Early Mississippian	867.83	347.43	0.40	455.58	1954.14	1498.56
Late Woodland	806.54	197.45	0.24	435.36	1378.24	942.88
Middle Woodland**	899.81	257.85	0.29	294.01	1684.04	1390.03
60-yr exponentially weighted moving average						
	Mean	St. Dev.	CV	Min.	Max.	Range
Late Mississippian	957.13	99.22	0.10	624.13	1217.12	592.99
Middle Mississippian	951.39	168.49	0.18	583.87	1491.42	907.55
Early Mississippian	980.44	345.79	0.35	548.39	2063.90	1515.51
Late Woodland	919.77	197.17	0.21	537.18	1478.68	941.50
Middle Woodland**	979.63	206.50	0.21	599.46	1397.56	798.10

*The exponentially weighted moving average (EWMA) assigns exponentially decreasing weights to older observations. The weights are determined by the formula $S_t = \alpha \sum_{i=1}^n (1-\alpha)^{i-1} y_{t-i}$, where S is the EWMA at time t , α is the smoothing factor, n is the number of observations to be averaged, and y is the observed value at a given time-step. The smoothing factor (α) determines how quickly older observations are discounted. Values close to 0 discount older observations slowly while values close to 1 discount them quickly. A smoothing factor of 0.1 was used in this analysis.

**Although the tree-ring record begins in a.d. 550, 20-year EWMA values for the Middle Woodland period cannot be calculated until a.d. 570, while 60-year EWMA values cannot be calculated until a.d. 610.

mitted directly to descendants. The greatest difference between the two scales of observation is seen in the Middle Woodland period, when a 60-year purview reduces the 20-year variance considerably. Its numerical counterpart in the Early Mississippian period does not replicate the pattern; variation in the 60-year span is reduced over the 20-year span, but not in range, which is actually greater. Variance is not reduced appreciably with a 60-year purview in the Late Woodland, Middle Mississippian, and especially Late Mississippian periods. The implication for these periods is that the memory of variances in conditions that affect tree growth is not enhanced by experiences over more than one generation; indeed, during the Late Mississippian pe-

riod, each generation experienced the full range of variation that previously had elapsed over ten generations.

We may now ask how different structural modes in the frequency and amplitude of variation contributed to the incidence of unlikely events. Here we reintroduce the annual index values to determine whether any given year had a value outside the range of values for the previous 60 years, again, the time of direct experience. This happened 35 times in the 1,101 years in question. In Table 1.2 we break down the incidence of unlikely events and calculate generational rates of occurrence. These figures show again that the Middle Woodland period stands apart from the others in its low frequency of unlikely events, which occur only 3 times in 190 years, or only once every 3–4 generations on average. In real time, unlikely events occurred in a.d. 669, 687, and 723. None of the three unlikely events involved dramatically deviant values, with one only 90 points beyond the previous 60-year range of values and the other two only 45 and 36 points less than previous values. Both the low incidence and low amplitude of unlikely events results from the overall high level of variation in index values over the Middle Woodland period. Again, given that the 60-year range of values for this period substantially reduced generational-scale variance, a premium may have been placed on the knowledge of elders to not only recall the variance of previous generations but also anticipate the oscillations that recurred every 50–60 years from ca. a.d. 600 to at least a.d. 850.

The rate of unlikely events increased substantially in the subsequent Late Woodland period within an amplitude of variation similar to that of the Middle Woodland period but with less regularity in transgenerational structure. The 12 unlikely events of this 250-year period are actually divided into 3 distinct groups. The first group consists of four low-amplitude deviations (a.d. 825, 840, 852, 853) below the respective 60-year ranges of previous values, none being more than one generation apart, save the first one, which was over one century since the last (a.d. 723). The second group consists of five unlikely events (a.d. 863, 889, 922, 923, 935), all above the 60-year ranges of previous values, and all but one at moderate amplitude (186–37). Two of the events occurred more than one generation apart, but not by more than a fraction of a second generation. The third group consists of three moderate-to-high-amplitude deviations below prior ranges (a.d. 976, 1037, 1048), the first about two generations since the last, the second about three generations since the last. Overall, unlikely events during the Late Woodland period occurred once every generation in alternating groups of three to four generations. Unlike the Middle Woodland period, multigenerational patterning during the Late

Table 1.2. Generational Occurrence and Mean Magnitude of Unlikely Events Inferred from Tree-Ring Growth Indices, Black River, South Carolina, for Culture-Historical Period, a.d. 550–1650

Period	Duration (yrs.)	Genera- tions	60-year events	Events/ genera- tions	Mean abs. deviation	20-year events	20:60 year events ratio
Late Mississippian	200	10.0	10	1.0	138.9	20	2.0
Middle Mississippian	300	15.0	7	0.5	98.0	36	5.1
Early Mississippian	100	5.0	3	0.6	716.3	15	5.0
Late Woodland	250	12.5	12	1.0	142.0	34	2.8
Middle Woodland	190*	9.5	3	0.3	57.0	19	6.3

*The Middle Woodland period is truncated here, ranging from a.d. 610 to a.d. 799, to facilitate comparison of the frequency of events outside the purview of 20- and 60-year experiences.

Woodland period did not recur, undermining the utility of prior experience in anticipating change, specifically directional change.

Designated here as the century from a.d. 1050 to a.d. 1150, the Early Mississippian period was an era with three unlikely events (a.d. 1070, 1115, 1118), each marked by deviations much higher than those in the prior 60-year ranges. The amplitude of the first two deviations was unprecedented over the previous years of tree-ring data, nearly tripling the previous maximum value. These events are followed by a period of low annual values from a.d. 1121 to a.d. 1136, and again from a.d. 1144 to a.d. 1152; as noted earlier, Anderson et al. (1995) interprets these episodes of lower-than-average growth as prolonged droughts in the Savannah River valley and likely impediments to the establishment of Mississippian settlement in the region.

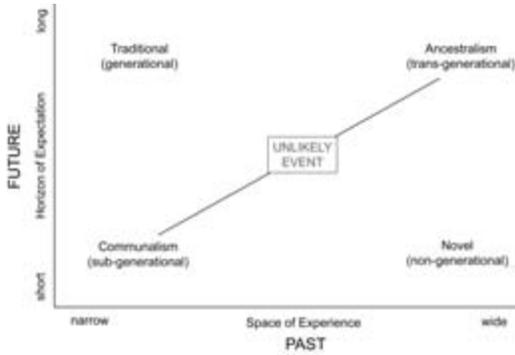
When Mississippian settlement began in earnest after a.d. 1150, in what we designate the Middle Mississippian period, the incidence of unlikely events remained about the same as in the previous century, but at much lower amplitude. More than six generations had elapsed between the last event of the Early Mississippian period (a.d. 1118) and the first event of the Middle Mississippian period (a.d. 1246). The following six events of the Middle Mississippian (a.d. 1266, 1317, 1345, 1373, 1387, 1421) occurred between 14 and 54 years apart, with little regularity in the direction and amplitude of change. Overall, the range of variation in rolling 20-year averages diminished over time, and by the end of the period, when the lower Savannah River valley was abandoned

(Anderson 1994), it had reached its lowest levels ever. Over the ensuing two centuries, in what we designate the Late Mississippian period, the incidence of unlikely events increased to an average of one per generation (a.d. 1455, 1462, 1521, 1529, 1587, 1615, 1635, 1638, 1643, 1649). Hidden by this average frequency are two years (a.d. 1521, 1587) with high-amplitude deviations outside the experience of the previous two generations but just within the time frame of the third prior generation, much like the Middle Woodland period. Unlike the Middle Woodland, however, deviations do not recur in predictable fashion. These two widely spaced events of the Late Mississippian era sandwich the incursion of three Spanish entradas in the region (a.d. 1539–1568), contributing perhaps to the uncertain futures of a rapidly changing world.

In sum, one could infer several distinct temporalities in the environmental experiences of Woodland and Mississippian denizens of the region if we are to take the tree-ring data as a proxy for ambient environmental conditions. Most distinctive are the temporalities of the beginning and end points of the time period in question, with Middle Woodland experience marked by low-frequency, multigenerational cycles of high-amplitude oscillations, and Middle to Late Mississippian experiences marked by high-frequency generational changes of generally low amplitude. The Late Woodland period is likewise distinctive in its high-frequency (generational and subgenerational) events, but during this time they are clustered in nonrecurring, multigenerational cycles. The ensuing Early Mississippian period accentuates the erratic changes of the prior period with extremely high-amplitude variations.

The inferred differences in temporalities of culture-historical periods in the Savannah River valley can also be summarized by the ratio of 20-year and 60-year events (see Table 1.2). During periods of frequent 20-year events and infrequent 60-year events, such as the Middle Woodland period, elders would have had efficacious knowledge of the expectations for the next generation or two. With decreasing ratios in the frequencies of 20- to 60-year events—which reach their lowest in the Late Mississippian period—the experience of elders would add nothing to the expectations of younger people because 20-year events are more likely to also be 60-year events, and thus beyond the range even of elders' experience.

It now remains, in the closing section of this chapter, to interpret patterned variation in the tree-ring data through the conceptual categories Kosselleck (2004) provides for understanding how historical time is formulated in the tension between experience and expectation. For the purpose of method building, our approach here is deliberately abstract, but we continue to draw on the culture history of the Savannah River and adjacent Carolina Coastal



1.2. Heuristic model of the relationship between experience and expectation in the generation of different temporalities.

Plain to illustrate how material outcomes may have shaped and been shaped by different temporalities.

In the Unlikely Event

Koselleck conceived of the “space of experience” and the “horizon of expectation” as asymmetrical categories whose changing relationships generate different senses of historical time and different temporalities (i.e., historicities). Playing off this theme, we offer in Figure 1.2 a model of the relationship between experience and expectation to describe and interpret different temporalities and then relate these to archaeological observations. As will become clear in what follows, we do not intend this exercise in modeling to be typological or explanatory but simply heuristic, offering some means of imagining alternative presents from the relationship between lived pasts and anticipated futures.

The space of experience is that which has been and is remembered; it is the present past. The horizon of expectation refers to the not-yet-experienced, the future made present. How does the shifting relationship between these two categories alter the temporality of history? Despite Koselleck’s (2004:260) insistence that the past and future never coincide,³ we begin our inquiry by considering that very possibility. If future expectations in any given present are simply those of a remembered past, then the horizon of expectation would covary positively with the space of experience. In Figure 1.2, then, we see that as experience widens, expectations expand. In the upper-right quad-

rant of this figure, the horizon of expectation is long because the space of experience is wide. Relating this to the temporalities inferred from tree-ring data, periods of recurring cycles spaced some three generations apart, as in the Middle Woodland period, would encourage long-term expectations, because long-term futures are predictable. We hasten to add that this sort of relationship does not obtain because of low variation in objective conditions, such as weather or resource yields, but rather because of the marked variation embedded within low-frequency cycles that are both remembered and anticipated at transgenerational scales.

We can also imagine how future horizons can be foreshortened by narrow spaces of experience. Again, this does not equate with the conditions of stability or stasis, which lack variation. Rather, it describes the structural condition of high-frequency variation and a lack of transgenerational repetition, as in the Late Woodland period described above. Changes in objective conditions occur at a subgenerational scale and are generally nonrecurring, or if they do recur, at cycles that exceed three generations. Under these conditions, futures are hard to imagine based on past experiences, beyond, that is, the expectation of constant change.

The hypothetical linear relationship between the space of experience and the horizon of expectation illustrated in Figure 2.2 enables us to imagine variations in the role of intergenerational knowledge in interpreting unlikely events. In the relationship implied in the upper-right quadrant of this figure, only elderly individuals would have knowledge of similar, prior events, whether they acquired such knowledge through firsthand experience or secondarily through predecessors who relayed their experience through discourse. Insofar as transgenerational cycles repeated themselves regularly, with similar amplitude, elders would have been able to describe accurately a horizon of expectation extending three or more generations into the future. It follows that conditions were conducive to the veneration of elders, and, by extension, ancestors. Worldwide, the veneration of ancestors is underpinned by the belief that the deceased have the ability to influence the fate of the living. Although we do not have a good sense of Middle Woodland mortuary practices in the immediate subregion of the tree-ring data, it was not uncommon in other parts of the Southeast and the Midwest for individuals to be interred in mounds and crypts designed to both house the remains of individuals accompanied by symbols of rank and manipulate their remains, presumably in rites that acknowledged their status in life. We thus suggest that ancestor veneration was encouraged and perpetuated in contexts of experience in which patterned variation was structured in transgenerational fashion, rendering the

knowledge of the elders efficacious to the anticipation of relatively long horizons of expectation.

Under the opposite objective conditions—when the space of experience is narrow because changes occur at rapid (subgenerational) rates, often with high amplitude, and never in transgenerational cycles—the horizon of expectation does not extend beyond the human generation and particular persons are not likely to be acknowledged for extrapolating beyond their own experience, as in the Late Woodland period. Again, data on mortuary treatment in the immediate area are sparse, but just to the north, in the Coastal Plain of North Carolina, Late Woodland interments were made in large ossuaries of intermingled persons (Ward and David 1999). One gets the sense that mortuary practice was meant to reflect and reproduce a communal sociality in which the identity of particular persons was subsumed under an egalitarian collective. Age may not have factored into status or rank, if such roles existed at all, and certainly not as a function of prognostication. Again, the only thing that could be said about the horizon of expectation is that change was expected to be frequent and nondirectional. Certainly elders would have been able to remind younger persons that environments' diminished capacities to support tree growth would improve with time, but they would not be able to say when and at what magnitude such a recovery would take place. The experience of elders would be no more or less useful than that of younger individuals.

To this point, we have noted implications of different temporalities for mortuary traditions, but other dimensions of cultural practice likewise implicate varying senses of time. For instance, the degree to which communities invested in infrastructure whose costs could be repaid over only a protracted time were banking on futures they could imagine with some confidence. Architecture, subsistence facilities (e.g., weirs, irrigation), and storage technology come immediately to mind. In these and other investments in the future, agents were not only counting on an outcome but also attempting to ensure that outcome by intervening in factors that would otherwise mitigate the relationship between experience and expectation. That is, they intervened in their own fate, as in the manner of modernity. As Anderson et al. (1995) argues, technologies such as storage can be very effective in offsetting the uncertainty of variable conditions, in this case rainfall, as it affected annual crop yields. In this sense, variations in the scale and organization of storage might very well be explained as alternate expectations based on prior experience, particularly as it relates to unlikely events. With storage geared toward the returns of only the ensuing year or two, spaces of experience beyond the human generation

are not implicated; investments in infrastructure with longer-term horizons would have been attended by experiences of commensurate scale.

Agriculture was not practiced during the Middle and Late Woodland periods in the study area, although storage of foodstuffs is implied by the use of large pits in some contexts. The overall pattern during these periods is one of decreased land-use intensity and redundancy from the Middle to Late Woodland. The latter is sometimes described as a period of devolution, as the ritual, settlement, and subsistence practices that lent a degree of conspicuousness and flamboyance to Middle Woodland sites gave way to the array of scattered, low-density, and low-diversity sites of the Late Woodland period (Nassaney and Cobb 1991). It is hard to imagine that fundamental change in the structure of variation registered in tree-ring data was not a factor in what appears to be a major rupture in Woodland history, but we add with haste that the tree-ring data are used here not to explain the physical conditions of environments *per se* but the structure of variation that shaped experience. It bears repeating that the central tendencies and variances of growth indices for these two periods do not appreciably differ; the only sharp contrast between the two is in the reduced variation afforded by the 60-year space of experience of the Middle Woodland period.

Full-blown agricultural societies were fully ensconced in the study area after a.d. 1150 (King 2012), when tree-ring data begins to assume a pattern of high-frequency, low-amplitude variation. The first century of this era was actually not unlike the centuries of the Middle Woodland period, with low-frequency, high-amplitude variation. Indeed, more than six generations had elapsed since the last unlikely event occurred, the longest stretch experienced over the period covered by the Black River tree-ring data. Again, this was hardly a consequence of environmental stability; instead, it was one of marked, nonrecurring variation. Still, the limited historical purchase of experience at this time did not apparently hamper the will of agents to plan and establish permanent settlements with labor-intensive infrastructure such as mounds, ditches, palisades, granaries, and more. Arguably, the narrow space of experience in horizons of expectation was superseded by a sense of time that took shape under different conditions. That is, Mississippian religion and politics, incubated elsewhere in the centuries preceding its manifestation in the study area, exemplify how the space of experience can be expanded geographically, without implicating more time, to broaden future horizons. For better or worse, once Mississippian communities committed to settlement permanence and capital investments in places, the pattern of variation seen in tree-ring data enters a period of extremely low-magnitude, but high-frequency change. Nearly every individual of every generation would have witnessed extremes

not seen in the previous 60 years, but that is because the amplitude of variation over each generation was so low. Thus, when the Savannah River valley was abandoned at a.d. 1450 (Anderson 1994) it was likely due not to unfavorable environmental conditions per se but to the inherent contradiction of a long horizon of expectation and a narrow space of actual experience. As Dean (2000:106) notes, microenvironments in a complex adaptive system contain past or potential future states that allow their members to maintain stability in the face of temporal variation, provided, that is, they are able to move.

Mississippian history in general, like that of modernity, reminds us of the vulnerability of societies that substitute technology and other infrastructure for the resilience that human displacement and resettlement enable. In both cases, a deeper time perspective would show that low-frequency events eventually recur. And, when interventions against alternative futures are implemented with the short-sightedness inculcated by high-frequency events, societal vulnerabilities are accentuated. Political economy and ideology intervene in these cases to break from the past in order to rationalize short-term future horizons. In this sense, unlikely events are “manufactured risks,” to borrow from Giddens (2009), when the horizon of expectation is penetrated by novel experience, thus severing the relationship between experience and expectation.

Conclusion

Our primary goal here has been to contribute to the development of methods that will enable archaeologists to examine how events are recognized and acted upon in the changing relationship between experience and expectation. We use tree-ring data because they are perhaps the finest-grained data available, but data on other, less fine-grained objective conditions may prove useful if they can be calibrated at scales no greater than one human generation, roughly 20–25 years (e.g., Sassaman 2012a). We also chose tree-ring data because they register routine, ambient variations in environment and thus signify the sorts of experiences people would have had in their day-to-day lives. We acknowledge that major ruptures in practice or tradition can be traced to the sorts of events Sahlin (1985) outlines, such as intercultural encounters, environmental catastrophes, wars, and the like. But we also acknowledge, following Sewell (2005), Gillespie (2007), and others, that less-dramatic events take place constantly and often contribute to the reproduction of structure, given their contrast with things taken for granted, causing people to take notice and intervene.

In simplified form, the method proposed here requires data on the space

of experience over multigenerational time frames. The types of experience for which data are needed depend on the questions asked. Tree-ring data inform us about the space of experience of trees, not humans, but they also serve as a proxy for environmental conditions that affected humans and were registered by them as social memory. Anderson (1994) converted tree-ring data into rainfall values and then into crop yields and storage capacity, an elegant method for linking climate data to histories of human intervention and vulnerability. Our method is to model changes in the relationship between experience and expectation that would have affected the way events were perceived and acted on. With data on objective conditions, we start by modeling the space of experience at the generational scale, adjusting for the attrition of memory and then characterizing its central tendencies and variances. We next ask how well the experience of any given generation captures that of the preceding two generations, the range of time during which firsthand experience could be shared. Situations in which the space of experience of three generations (60 years) substantially reduces variance in objective conditions are those in which the elderly members of society hold information valuable to future presents. When low-frequency variation such as this is structured in cycles of high amplitude, data on experiences going back several generations enables horizons of expectation to expand. Predictably, the opposite situation (high-frequency, low-amplitude variation) discourages deep-time perspectivism, and, with it, less regard for the experiences of elderly members of society.

Our effort here is admittedly preliminary and in great need of refinement. It goes without saying that archaeological data do not often lend themselves to inquiries such as ours, which is why the American Southwest and its dendrochronology of both environment and settlement has been the epicenter of agent-based modeling, and why Anderson et al. (1995) are left to lament the lack of fine-grained archaeological data to compare against a burgeoning dendrochronological record. We join in the lamentation but add with guarded optimism that other types of data may prove useful. For instance, we have yet to consider the role of mnemonic devices in encoding social memory. Our emphasis has been on firsthand experience and with it the generational time frames necessary to monitor firsthand experience. Mnemonic devices enable humans to transmit memories across generations. The specific content of these memories may not be retrievable from archaeological investigation, but their existence alone suggests efforts on the part of agents to expand the space of experience beyond the multigenerational time frame in which firsthand accounts can be shared through direct communication.

In closing, we return to our recent experience with global warming and ask if the significance of record temperatures today would be different if we had

records going back farther than 1895. And what if we had records that went back only to 1995? Certainly global temperatures at some point in the ancient past were higher than they are today, and they are likely to be even higher in the future. Our response to a climatic event such as a record-setting summer is thus constrained by both the space of experience (since 1895) and our horizons of expectation, which vary with one's understanding of scientific data, including its politicization (Hulme 2009). When attributed to conditions such as orbital procession, global warming is explicable in naturalistic terms and left to its own devices; when attributed to anthropogenic inputs such as greenhouse gases, global warming is an unfortunate but preventable event. One would hope that the arbitrator in these cases would be the historical record, whether that is composed of elders who witnessed similar conditions in the past or scientific measurements such as tree rings that serve as a proxy for changing climate. However, as we hope to have related in this chapter, history lies at the intersection of what happened and what one hopes or expects will happen. Archaeology is positioned to contribute to this line of inquiry.

Notes

1. The Paleoclimatology branch of the National Climatic Data Center of the National Oceanic and Atmospheric Administration (NOAA) website is at <http://www.ncdc.noaa.gov/paleo/treering.html>.

2. With the tree-ring database divided into states, the aggregate "Southeast" is herein defined as the states of North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee, Kentucky, Arkansas, Louisiana, and Mississippi.

3. As noted earlier, it would appear that Koselleck (2004:258) is referring specifically to the temporality of modernity (*Neuzeit*) when he asserts that the past and the future never coincide, namely, "that during *Neuzeit* the difference between experience and expectation has increasingly expanded; more precisely, that *Neuzeit* is first understood as a *neue Zeit* from the time that expectations have distanced themselves evermore from all previous experience" (Koselleck 2004:263). In sketching a history leading up to *Neuzeit*, Koselleck (2004:263–264) exposes the pervasive tendency of theorists of modernity to treat premodern temporalities as they do nature, where change is slow and nondisruptive and people lived by fate alone.

Beyond the Event Horizon

Moments of Consequence(?) in the St. Johns River Valley

Jason M. O'Donoghue

Studying events in the deep past is tr icky business. The distortion of time and the palimpsest nature of the material world conspire to blur the residues of discrete happenings in the past. Or rather, they blur the totality of events that might make up a thick history of a given people, time, and place. Where individual events have been identified and studied by archaeologists, they are typically broad transformations in material culture that have the appearance of rapidity. Often these are correlated with changes in climate at the local or regional scale that assume a causal role in explaining the eventful changes in human behavior.

The onset of the Mount Taylor period in Florida's St. Johns River valley is demarcated by the appearance of large shell mounds on the banks of the river some 7,000 years ago (Beasley 2009; Endonino 2010; Randall 2010, 2013; Wheeler et al. 2000). These constructions are indicative of unprecedented behavior, at least in the region, and are generally taken to be an index of the inception of a riverine adaptation and more sedentary settlement (e.g., Milanich 1994:87). It has been argued that shell mounds and the practices that gave rise to them were predicated on a "natural" event: the initiation of artesian flow from the many springs that today feed the St. Johns River (Miller 1992, 1998). Although surface water gradually increased over the course of the Early and Middle Holocene as sea levels rose, the St. Johns River likely did not attain its modern configuration until it began receiving fresh groundwater from artesian springs. The inhabitants of the region would have mapped on to nascent aquatic habitats, exploiting shellfish as a food resource and depositing their shells on the banks of the river. Under this scenario, "it seems probable that the appearance of people on the St. Johns River in such great numbers around 5,000 years ago coincided with the appearance of habitats for freshwater snails" (Miller 1998:68). Interpreted in this way, the initiation of spring flow appears as an ecological founding event—a rapid restructuring

of the landscape that provided the necessary and sufficient conditions for a specific adaptive strategy.

Intuitively, this explanation makes sense. People could not collect and deposit shells if the habitats for mollusks were not present. However, while intuitive, this explanation is not without problems. First, it perpetuates a perception of hunter-gatherers as ahistorical and reactionary. That is, change in human cultures is reduced to a process of adaptation to external stimuli with no consideration of internal dynamics as the driver of change. Second, this explanation assumes that shell mounds are simply middens, the palimpsest refuse of many small meals. By corollary it denies any intentionality or foresight to the shell mounds themselves and imposes our own biases onto the past. Finally, it has simply not been empirically tested. The onset of spring flow is hypothesized to follow Holocene sea-level rise and to initiate changes in aquatic ecology and human interactions with the river. But the timing and synchronicity of these events and the implications of a sudden influx of freshwater to the system have not been investigated.

Fortunately, recent work at several springs in the St. Johns River valley is casting light on these questions and causing us to rethink environmental and cultural histories of the region. In this chapter, I discuss the results of both field investigations and attempts to model the onset of artesian spring flow in the region. Mounting evidence calls into question the “eventfulness” of changes in hydrology and ecology, both in terms of the tempo with which they unfolded and, more importantly, the human responses they elicited. But before discussing this work, it is first necessary to outline the conception of archaeological events used here, particularly as they relate to non-events.

Events and Non-Events

When considering events in the past our commonsense understanding is often tacitly invoked. Ignoring for the moment the sea of ink that’s been spilled over the psychology and philosophy of events (e.g., Badiou 2005; Carr 1991; Taleb 2007), an event is generally considered to be an occurrence or happening that is recognized as having significance. To paraphrase Sahlins (1985:xiv), an event is a happening that has been interpreted and imbued with meaning. Typically we conceive of events as having a finite duration, though their boundaries can be difficult to demarcate. Events may happen rapidly, even instantly, or they may unfold over a protracted interval. Similarly variable are the spatial scale of events, the number of people who experience them, and their materiality, with some events leaving little material evidence of

their passing and others significantly more. But regardless of scope, it is recognized that something of consequence transpired; it was affective to those who experienced and/or interpreted it. The significance of an event is derived from its appropriation and interpretation in a given cultural order (Sahlins 1991:45) Eventfulness is thus dependent on cultural context. Further, the affective quality of events extends them through space and time; their repercussions give them life beyond their experiential temporality (Sahlins 1985, 1991; Sewell 2005). And if the happening itself varies in scale and extent, so too do the consequences.

In contrast to events are what Fogelson (1989) refers to as *non-events*. Again a commonplace understanding is a useful starting point. To indicate that an occurrence was non-eventful is to assert that nothing of consequence transpired. Whatever fallout may result is nondescript and insignificant. This again draws our attention to the importance of cultural context. But if an event is a happening interpreted, what, then, is a non-event? Can we say that a non-event is a happening not interpreted? This clearly cannot be the case. Non-events are interpreted happenings as well. They may be happenings that are dismissed, ignored, or simply overlooked, but whatever the case they are interpreted within a cultural context. However, in the case of the non-event the happening is deemed inconsequential.

Fogelson discusses several ways that non-events come into being. First, non-events may arise from differential recognition or variable valorization. In other words, for any given happening, some may recognize an event where others do not. Similarly, though there may be agreement that an event transpired, the significance or consequences of the event may be debated. A second form of non-event is the imagined event. This is an event that could or should have happened but did not. Nevertheless, imagined events affect individuals' actions and understandings because they either are asserted to have happened in the past or are anticipated in the future. A subtype of imagined events is the epitomizing event, "narratives that condense, encapsulate, and dramatize longer-term historical processes" (Fogelson 1989:143). These often provide compelling historical explanations, though they are fictions in the sense that the events recounted did not "actually" occur. A third form of non-event is the latent event, which is an event that has been overlooked because it does not fit into existing questions or narratives. Finally, a fourth form, denied events, are events that are so traumatic that their recollection is repressed and they are deliberately forgotten.

The point of Fogelson's scheme is not to provide a typology of non-events, but rather to show that there are multiple vehicles, justifications, and circumstances that contribute to the interpretation of any happening as significant

or insignificant, and thus as an event or a non-event. This highlights the relational quality of events and non-events, as both are constructed in the interplay between objective conditions and subjective perception and interpretation. The eventful is not solely dictated by what “actually happened,” but neither is it plucked out of the ether. Events, then, are an emergent quality of the human-inhabited world.

It is important to emphasize that the interpretation of incidences as significant or insignificant involves a certain perspectivism, such that “events may be recognized, defined, evaluated, and endowed with meaning differentially in different cultural traditions” (Fogelson 1989:135) or by different individuals or sects within a tradition. Indeed, the very distinction between event and non-event presupposes multiple interpreting observers. It is impossible for an occurrence to be recognized as a non-event without also being interpreted as an event by some other observer. These may be contemporaries with competing interests and differentials of power that dictate their ability to interpret occurrences. Or the observers may be separated in space or time, as in the distinction between events recognized by observers who lived through them and those recognized by researchers or analysts looking in (or back) from the outside (which the introduction to this volume discusses as experiential and analytical events). The more pertinent question, then, is not whether so me occurrence was eventful or not, but rather for whom was it an event or a non-event?

Further, non-events can become events retrospectively and thus are influenced by subsequent happenings. The distinction involves an attribution of meaning. What we recognize as events in hindsight may not have been interpreted as such by those who experienced them. What we see as events, then, may actually have been non-events at the time. If we are to avoid grafting our understanding of events onto the past, then it is insufficient to simply demonstrate that some happening transpired over a relatively short interval of time (i.e., an interval perceptible within a human generation or two). Rather, it is necessary to demonstrate if and how that happening was acknowledged by and incorporated into existing cultural traditions.

All of this redoubles the challenge facing archaeologists, who must tease out events from their material residues while continually guarding against the bias of their own subjective understanding of the world and what constitutes a “significant” happening. How are we to do this? One approach is to focus solely on historical events. As defined by Sahlin (1985, 1991), these are the happenings that cause a rupture in the articulation of structures and thus are moments of significant change. To some these are the only events worth considering (e.g., Beck et al. 2007), although there is some debate as

to whether the rearticulation of structures is limited to moments of existential chaos, or whether it can be realized in mundane, daily practices. Further, focusing solely on transformation disregards the eventfulness of structural reproduction, a point Sahlins (1991) recognized but did not resolve.

Lucas (2008) takes a slightly different approach, arguing that archaeologists should focus on the materiality of events. However, the sense of materiality Lucas employs is not to be found simply in the surviving objects or elements but rather is manifested in the material organizations of things as assemblages. These assemblages can be characterized in terms of two salient characteristics: reversibility and residuality. The reversibility of an assemblage is the ease with which it can be reorganized or reconfigured. *Residuality* refers to the likelihood that an assemblage will leave material traces. It is important to note that high residuality implies more than the survival of material objects. The organization of these objects into assemblages must itself be manifested as material traces. These two factors are inversely correlated, so that an assemblage that is easily reconfigured (i.e., has high reversibility) is unlikely to leave material traces (i.e., has low residuality).

Lucas argues that the material organization of most assemblages is not preserved in the archaeological record because they have both high reversibility and low residuality. The events that are accessible to archaeologists consist of changes in material organizations that are entrenched and carry great inertia—they have both high residuality and low reversibility. The reconfiguration of such an assemblage is an event that is apparent in the archaeological record.

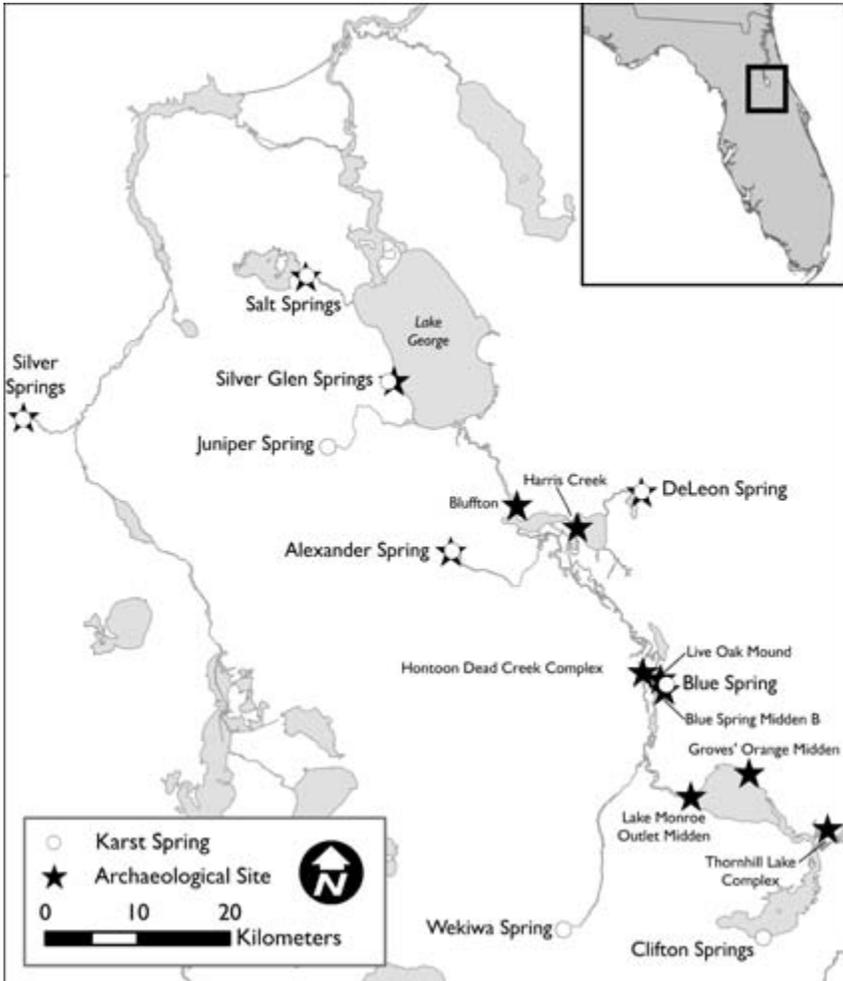
From this perspective the construction of large shell mounds and ridges by Mount Taylor people was an event inasmuch as it was the establishment of a material assemblage characterized by low reversibility and high residuality. The act of emplacing shell in particular locales along the river fundamentally altered the material circumstances of subsequent occurrences at that place. Once established these deposits could not be easily disassembled and they structured future material organizations. Similarly we might argue that the onset of spring flow was eventful if it significantly altered the local and regional ecology (i.e., the assemblage of beings, places, and objects). However, it is insufficient to assume that this phenomenon would be interpreted as significant, and hence eventful, by those who experienced it. In the remainder of this chapter I hope to demonstrate that the onset of spring flow was in fact a non-event to the inhabitants of the middle St. Johns River valley. Below I present a geographic information systems (GIS) model of the onset of artesian spring flow in the region before turning to a discussion of the archaeological evidence of the relationship between springs and shell mounds.

Modeling Spring Flow in the Middle St. Johns River Valley

Florida is home to one of the largest concentrations of freshwater springs in the world. In the middle St. Johns River valley alone 64 springs have been documented (Figure 2.1). The majority of these springs discharge water from the Floridan Aquifer System (FAS), a thick sequence of highly permeable carbonate rocks (i.e., limestone and dolomite) that are confined above and below by less permeable materials (Miller 1997). Artesian flow in springs is pressure dependent (Scott et al. 2004; White 2002). Pressure within the aquifer fluctuates as a result of several factors that vary within and between individual spring basins, such as precipitation, sea level, topography, soil characteristics, and variations in the physical properties of the aquifer (e.g., permeability). Aquifer pressure is measured and displayed as a potentiometric surface, defined as the level to which groundwater will rise in a tightly cased well.

There are essentially two requirements for spring flow at any given point on the landscape. First, the potentiometric surface of the FAS must be higher than the ground elevation. In other words there must be sufficient pressure in the aquifer to force water up and onto the surface. Second, there must be a pathway for the transmission of groundwater to the surface. As noted above, the FAS is in most places overlain by a layer of relatively impermeable materials. Where present, these materials confine the aquifer and prevent the flow of groundwater onto the surface. Thus, in order for a spring to flow this confining layer must be either absent or breached. If there is sufficient pressure but the confining layer is intact, groundwater will flow laterally to areas of lower pressure but will not discharge onto the ground surface. Where the confining layer is breached but there is insufficient aquifer pressure, closed surface depressions, such as sinkholes and swales, may form.

These criteria are obviously satisfied at the springs of the region today. However, it is unclear how long this has been the case. Given that fluctuations in sea level, precipitation, and evapotranspiration can all impact aquifer pressure, spring flow has likely fluctuated significantly over the course of the Holocene. There were probably few springs flowing during the late Pleistocene, when both sea level and, concomitantly, aquifer pressure were considerably lower. Or rather, few springs would be flowing in the locations they do today. However it is possible, if not likely, that numerous springs were present on portions of the Florida Platform that have since been inundated (Scott et al. 2004:13). Regardless, as sea level rose over the course of the Holocene, aquifer pressure presumably rose with it, reaching a point where springs would begin to flow. If the argument outlined above is correct and spring flow was a prerequisite to both the establishment of extensive wetland biomes and the



2.1. Location of freshwater springs in the middle St. Johns River valley.

appearance of shell mounds in the region, then we should expect that the onset of spring flow was relatively rapid and synchronous across the basin.

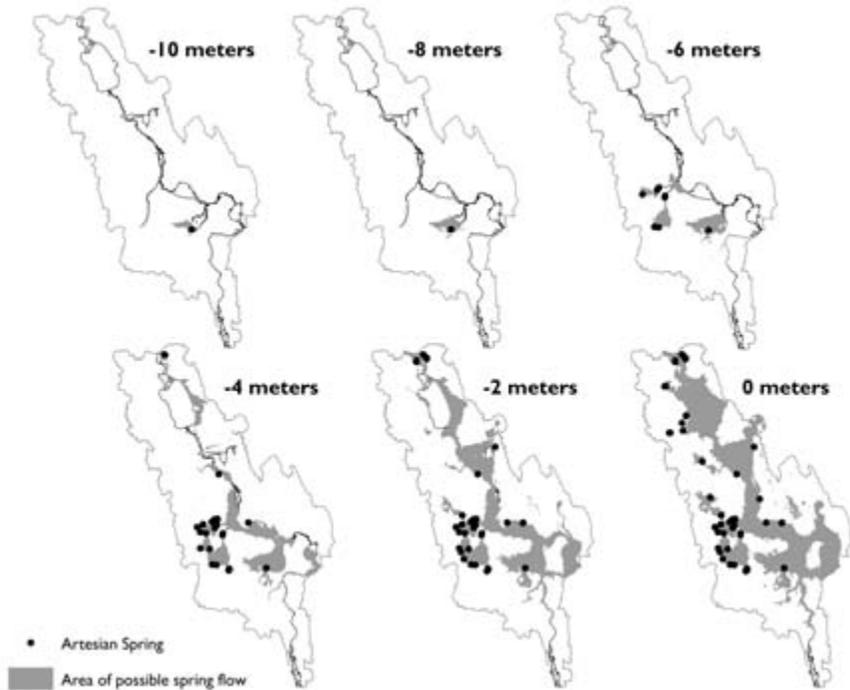
To explore the tempo of the initiation of artesian spring flow, I constructed a model of spring flow under conditions of decreased pressure in the FAS. This modeling effort carries several caveats. First, it assumes that the geometric configuration of the aquifer has not been drastically altered over the course of the Holocene. That is, there have not been significant structural geologic changes that altered the flow of groundwater. Second, it assumes that changes

in the potentiometric surface of the aquifer would be realized uniformly over the study area. Third, the model is not linked to specific reductions in sea level or precipitation as these do not correlate in a linear or simplistic manner with reductions in aquifer pressure. The individual effects of these variables (in addition to soil permeability, thickness of overlying sediments, and rate of evapotranspiration) are complex and difficult to disentangle. But, reduction in either has essentially the same effect: a net reduction of the pressure in the aquifer and thus a decreased potential for spring flow.

I constructed the model in ArcGIS using a digital elevation model with 15-m resolution developed by the Florida Geologic Survey (Arthur et al.2005). The locations of springs in the region were provided by the St. Johns River Water Management District. Groundwater withdrawals for domestic, agricultural, and industrial uses has altered the potentiometric surface of the FAS, so for this model the baseline potentiometric surface was derived from pre-development estimations produced by the USGS (Bush and Johnston 1988)A hydrologically correct raster was interpolated from the potentiometric isolines and laid over the digital elevation model. The elevation of the ground surface was then subtracted from the elevation of the aquifer's potentiometric surface on a cell-by-cell basis. The potential for spring flow exists where this differential is greater than zero (i.e., where the potentiometric surface is higher than the ground surface). This procedure was repeated for progressively lowered potentiometric surfaces to explore the conditions under which contemporary springs could have begun their flow, thus informing us on the pattern of the onset of spring flow in the region.

The model produced several interesting results (Figure 2.2). First, there is a high degree of variability, as the differentials at contemporary springs range from 0.5 m to over 12 m. This indicates that even a small reduction in aquifer pressure could cause some springs to stop flowing, while others would be much more resilient. It follows that there would be significant lag in the onset of flow at different springs.

The model indicates that it is unlikely that any springs would be flowing if the potentiometric surface of the aquifer were in excess of 12 m lower than present. Given that sea level in the late Pleistocene is estimated to be 100 m below present, it seems likely that these conditions prevailed at some point in the past. At 10 m below present a single spring, Clifton Springs, on the southern shore of Lake Jesup, could potentially flow. However, it would remain the only flowing spring in the region until the potentiometric surface increased to 6 m below present. Several additional springs would begin flowing under these conditions, but the majority of springs would not begin flowing until the potentiometric surface increased to 2 m below present. In-



2.2. Results of the GIS model showing areas of possible spring flow under conditions of lower than present potentiometric surface.

Interestingly there is some regularity to the pattern of spring initiation: the springs that would begin to flow first are in the southern portion of the valley (e.g., Clifton, Wekiva, and Rock springs) and are not the largest springs in the region. Springs in the northern portion of the study area wouldn't begin to flow until the potentiometric surface was much closer to present conditions. Indeed, some of the largest springs in the area (e.g., Silver Glen, Blue, and Alexander) would be among the last to begin flowing.

I will not pretend to suggest that this model precisely predicts the sequence of spring initiation in the region, but I do believe it provides some interesting points to consider regarding the eventfulness of spring flow. The GIS model suggests that the onset of spring flow may not have been a wide-scale occurrence that suddenly inundated the valley with groundwater. It is therefore also unlikely that the regional hydrology and ecology were rapidly restructured as a result of spring flow. Given that the springs of the region vary with regard to elevation, conduit depth, and the localized expression of the potentiometric surface, initial artesian flow may have been heterogeneous,

time transgressive, and punctuated. Further, it is difficult to know how the birth of a spring would be manifested. Many may have been preexisting depressions or groundwater-fed ponds that spilled over their banks as pressure increased. Or conduits may have been plugged with sediment that required significant pressure to flush. There are other possible scenarios as well, and in truth the initiation of spring flow was likely highly variable since it is dependent on the preexisting structural conditions at any given locale.

While the model indicates that the springs of the middle St. Johns River valley did not all begin flowing simultaneously, it is possible that groups of geographically related springs may have come on line in rapid succession. This was likely the case for the springs feeding into the western shore of Lake George. These six springs have differentials within 2 m of one another. Thus, other things being equal, these springs would have responded to increases in aquifer pressure roughly contemporaneously. However, the question remains whether this natural “event” had significant ramifications for those who experienced it. Fortunately, recent archaeological investigations along several springs in the Lake George watershed have generated data pertinent to this question.

Spring-Side Shell Deposition

The preceramic Archaic Mount Taylor period dates from ca. 7400–4600 cal b.p. and is traditionally defined by the inception of large, complex deposits of freshwater shellfish (Beasley 2009; Endonino 2010; Randall 2010, 2013; Wheeler et al. 2000). The dominant species of mollusk in these deposits is the banded mystery snail (*Viviparus georgianus*). Remains of the apple snail (*Pomacea paludosa*) and freshwater bivalves (*Unionidae* sp.) are commonly present as well, often in discrete deposits. A suite of artifact types is characteristic of Mount Taylor assemblages, although to some degree these crosscut boundaries with the preceding Early Archaic and subsequent ceramic Late Archaic Orange period. Rather it is the presence of shell that delimits the onset of the Mount Taylor period and the appearance of pottery that signals its terminus. Recent work has further clarified this definition and led to refinements in chronology and in our understanding of Mount Taylor lifeways (e.g., Endonino 2010; Randall 2010, 2013; Wheeler et al. 2000). Two phases are now recognized within the Mount Taylor period: an early Mount Taylor phase (ca. 7400–5600 cal b.p.) and a late Thornhill Lake phase (ca. 5600–4600 cal b.p.). The distinction is based largely on the emergence of a sand-and-shell-mound mortuary complex and the establishment of extraregional exchange networks during the Thornhill Lake phase (Beasley 2009; Endonino 2010).

As noted above, Miller (1992,1998) has suggested that spring flow is the key factor in explaining the appearance of shell sites on the St. Johns River, as the onset of artesian spring flow provided the ecological conditions that underwrote the riverine adaptation characteristic of the Mount Taylor way of life. As sea level and climate approached modern conditions at ca. 6,000-5,000 cal b.p., hydrostatic pressure within the FAS reached a tipping point, resulting in the onset of artesian spring flow. This new input of freshwater, coupled with rising seas, drowned the St. Johns River valley and led directly to the development of ecologically productive aquatic biomes. Importantly, Miller (1998:197) views this as a rapid change in the landscape: “the flooding of the St. Johns River Basin around 5,000 years ago must have been a sudden event, in geological time. Because the artesian flow of a spring is a step function . . . either on or off, there would have been little warning that the river basin was about to double in size.”

If the onset of spring flow was indeed eventful, then, in Lucas's terms, it should have precipitated a transformation in a material organization of high residuality and low reversibility. In this case the relevant transformation is the inception of shell mounding that indexes a new centrality of the river and aquatic resources in human thought and practice. The question, then, is whether this event is predicated on the onset of spring flow. If so, then two interrelated patterns should be apparent in the archaeological record. First, the initiation of spring flow would have occurred just prior to the onset of shell deposition in the region. Second, the earliest deposits at springs should be shell-bearing deposits that are largely quotidian in nature.

Taking the first of these patterns, the available evidence suggests that there was a significant lag between the onset of spring flow and the inception of shell mounding. The earliest documented shell-bearing deposits in the middle St. Johns River valley are the Live Oak (8VO41) and Hontoon Dead Creek (8VO214) mounds (Randall 2010:34–31; Randall and Sassaman 2005:83–106; Sassaman 2003:69–90; 2010). Both are crescent-shaped ridges, roughly 100 m long, 70 m wide, and 5 m high. Shell deposition began by ca. 7300 cal b.p. These mounds exhibit similar internal structure, with little evidence of daily habitation (e.g., charcoal, vertebrate fauna, lithic debris). Importantly, neither of these sites is proximate to a spring. Rather, both front freshwater marshes that have seen significant aggradation over the past 7,000 years.

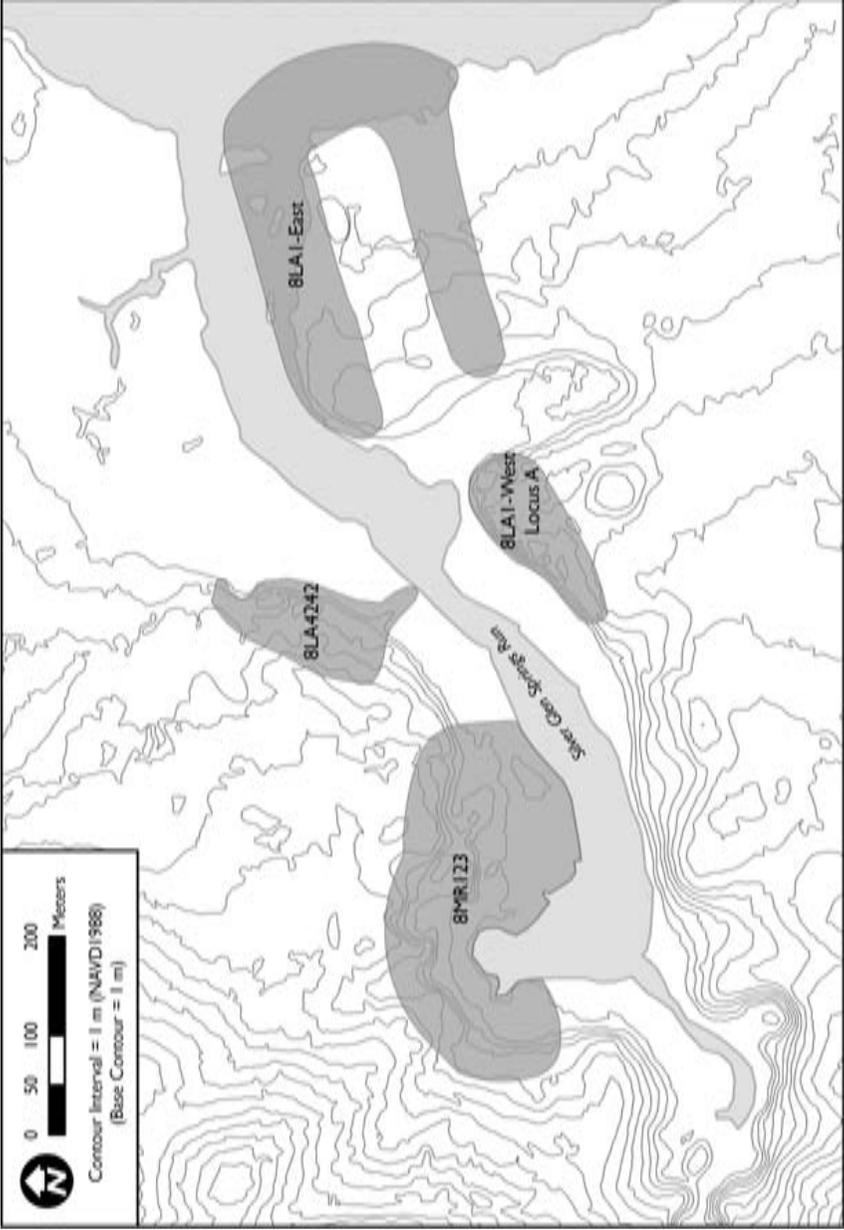
Dating the initiation of spring flow in the region is somewhat more tenuous. Taking the inundation of lakes as a proxy for rising water tables, analysis of pollen cores from Mud Lake suggests that significantly wetter conditions prevailed by ca. 9000 cal b.p. (Watts and Hansen 1988) This date is supported by evidence from recent excavations of the subaqueous Mount Taylor mid-

den at Salt Springs (8MR232 [O'Donoghue et al. 2011]). During the course of investigations several percussion cores were extracted to examine deposits not reached by the excavation trench. Water-lain deposits recovered from the cores were radiocarbon dated to 9470–9150 cal b.p. While this lone assay remains to be corroborated at other springs, it does indicate that at least some springs were flowing for several millennia prior to the inception of shell mounding.

The excavations at Salt Springs address the second pattern as well, indicating that in some cases the earliest spring-side deposits were devoid of shell (O'Donoghue et al. 2011). A test trench excavated perpendicular to the shore exposed a basal shell-free midden beneath shell-bearing deposits. The earliest documented anthropogenic deposits consist of stacked, contorted layers of grey and black sands, consistent with deposition in flowing water (Stratum II). Immediately overlying this was a thin layer of abundant whole *Viviparus* shell and grey sand (Stratum IB). The uppermost unit was comprised of very dark grey to brown organically stained sands with abundant *Viviparus* shell and common lenses of whole and crushed bivalve shell (Stratum IA). Radiocarbon assays indicate that the shell-free midden was deposited between 6600 and 6300 cal b.p., while the shell-bearing deposits were emplaced between 6300 and 5900 cal b.p. Thus it appears that people were visiting Salt Springs but not depositing shell there, despite contemporaneous shell deposition elsewhere in the St. Johns River valley.

The presence of a basal shell-free deposit calls into question the eventfulness of the onset of spring flow. The onset of flow at Salt Springs does not appear to have precipitated alterations in the material residues at the site. The event, in this case the deposition of shell, is disconnected from spring flow itself. This is evident elsewhere in the valley as well, outside the Lake George watershed. At Blue Springs (8VO43) Thornhill Lake-phase deposits were encountered, dating to ca. 5300–4600 cal b.p. (Sassaman 2003). These consist of a basal shell-free midden beneath a modest shell-bearing deposit. Abundant faunal remains, charcoal, and occasional lithic and marine shell tools attest to intensive daily habitation in this locale, both before and after the inception of shell fishing.

So there appear to be significant temporal lags between (1) the onset of spring flow, (2) the inception of shell fishing regionally, and (3) the deposition of shell at springs. In addition, there is emerging evidence that springs were significant places not because of the resources that could be extracted from them but because of the activities taking place there. This is best seen at Silver Glen Springs, where as many as four Mount Taylor shell deposits are located in the vicinity of the spring pool and run (Figure 2.3). Shell mounds



2.3. Map of the Silver Glen Run complex showing Mount Taylor-era deposits. (Reconstructions courtesy of Asa Randall.)

surrounding Silver Glen Springs were heavily damaged by shell mining operations in the early twentieth century, but intact basal deposits remain. These have been investigated by the University of Florida's Laboratory of Southeastern Archaeology and its St. Johns Archaeological Field School (Randall 2010; Randall et al. 2011; Sassaman et al. 2011). Site 8LA1-East consists of a large U-shaped shell mound, apparently the largest on the St. Johns River at the time of Wyman's (1875:9) visit. This mound appears to date largely to the ceramic Late Archaic Orange period (ca. 4600–3600 cal b.p.), although there is some indication that it was built upon an earlier Mount Taylor shell ridge (Sassaman et al. 2011).

Approximately 200 m to the west of 8LA1-East are two shell ridges on opposite sides of the spring run: 8LA1-West Locus A on the south and 8LA4242 on the north. Site 8LA1-West Locus A is a linear shell ridge measuring some 200 m long by 75 m wide (Randall 2010:31–37). Occupation of this locale began prior to 6300 cal b.p. The more irregular 8LA4242 measures 185 m long and 85 m wide and lies directly across the run.

Site 8MR123 surrounds the spring head and was described by Wyman (1875:9) as an “amphitheater” of shell. Randall and colleagues (2011) documented intact deposits adjacent to the pool and in the surrounding uplands (Randall et al. 2011). The earliest shell deposits encountered here date to 590–530 cal b.p., and thus the majority of shell emplacement appears to have occurred during the Thornhill Lake phase and subsequent Orange period. However, there is some evidence for basal, subaqueous shell-free deposits, suggesting a similar pattern to that observed at Blue Springs and Salt Springs.

Perhaps more pertinent to the eventfulness of spring flow at Silver Glen springs is the presence of mortuary facilities. Human remains have apparently been frequently encountered by locals at Silver Glen Springs, and they were documented in two locations during 2010 testing (Randall et al. 2011:37–38). The available evidence suggests that a sand mortuary mound was established at the onset of the Thornhill Lake phase, from 580–590 cal b.p. Whether the establishment of the mound was coincident with or predated shell deposition is unclear, but in either case its construction certainly affected subsequent practices at the spring.

The construction of mortuary facilities at springs is not isolated to Silver Glen springs. Mount Taylor deposits at Ponce de Leon Springs (8VO30), though obscured by nineteenth- and twentieth-century land alteration, apparently included a preceramic shell ridge encasing human burials at the spring head (Denson et al. 1995). In both cases the construction of mortuary facilities at springs postdated the initiation of spring flow by centuries, if not millennia. The events of significance at these springs—those that transformed

entrenched material organizations—were the establishment of, first, shell mounds and, later, mortuaries. These events were driven by human practice and seem largely unrelated to the hydrological “event” that fixed springs on the landscape.

Conclusion

If Salt and Silver Glen springs are representative of other springs in the region then it would appear that springs were indeed present on the landscape long before they became a locus for practices surrounding the deposition of shell and the burial of the dead. This is not to say that springs have been static; the configuration of springs, the intensity of their flow, and the clearness and quality of their waters have undoubtedly fluctuated. Further, while contemporary experience can inform us on the death of a spring, it is difficult to know what the birth of a spring would look like (as noted above), the tempo with which it would unfold, and how it would be received by local residents. Indeed, each spring has a unique ontogeny and history, both hydrologically and culturally. Modeling this history indicates that while the initiation of spring flow appears significant and eventful at first glance, it was not a synchronous event throughout the St. Johns River valley.

That said, I do not mean to suggest that springs were uneventful. Rather, what appears to be significant and eventful to us—the onset of spring flow and the ecological potential this brought about—does not appear to have had observable consequences with respect to shell mounding and the Mount Taylor tradition. It was thus rather non-eventful. On the other hand, the birth of a spring may have figured as a prominent event in myths and narratives recounted in the past. Indeed it may even have been foundational. But in terms of the perspective outlined above, it did not lead to significant reorganization of material organizations in any way that is apparent. These were no doubt important places in Florida's past, as they continue to be today. However, the events of significance at springs, at least in the middle St. Johns River valley, were not instigated by the springs' changing hydrology but were constructed through the material engagements that people initiated on their banks.

Acknowledgments

My thanks to Zack Gilmore, whose thoughts on events spawned the Southeastern Archaeological Conference symposium that we co-organized, ultimately leading to the publication of this volume. Many people have contributed to my thinking on events, shell mounds, and springs in the St. Johns

River valley, although not all will agree with my take on things. Ken Sassaman has been unflagging in his support of my research and is always willing to lend a critical ear. Susan Gillespie exposed me to the idea of the non-event and helped foster my understanding of the interplay between event and structure in historical processes.

Archaeological excavations at Salt Springs were facilitated and supported by the Florida Bureau of Archaeological Research, St. Johns River Water Management District, and U.S. Forest Service. Funding was provided by the Hyatt and Cici Brown Endowment for Florida Archaeology. Asa Randall provided the reconstructions illustrated in Figure 2.3. Despite the efforts and input of others, deficiencies of inference or interpretation no doubt remain. These are solely my own.

Hunter-Gatherer Histories

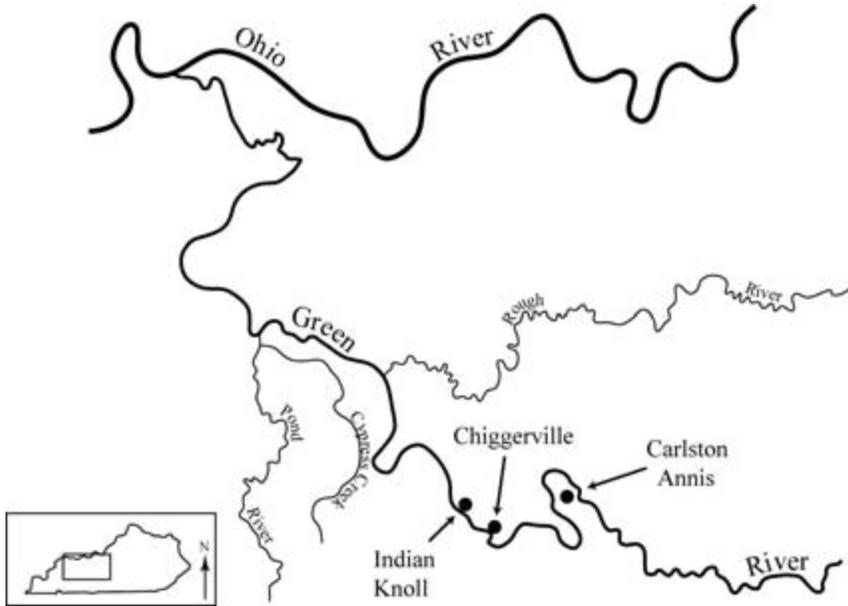
The Role of Events in the Construction of the Chiggerville Shell Midden

Christopher R. Moore

Introduction

The Chiggerville site is one of several Middle to Late Archaic shell middens located within Kentucky's middle Green River valley (Figure 3.1 Webb and Haag 1989). Unlike the better known Indian Knoll and Carlston Annis sites, which yielded a variety of diagnostic artifacts and radiocarbon dates indicating multiple occupations over a protracted period of time (Webb 1950,1977), the majority of the diagnostic artifacts and dates from Chiggerville indicate that the site's features and midden accumulated primarily during the Late Archaic period. Reanalysis of the 537 diagnostic hatched bifaces from the Works Progress Administration (WPA) excavations at Chiggerville indicated that 86 percent are Late Archaic stemmed forms. The predominantly Late Archaic age of the site was confirmed by excavations carried out in 2009 that yielded uncalibrated upper and lower midden dates of 4610 \pm 70 b.p. and 4530 \pm 70 b.p., respectively (Moore 2011).

Despite this, the lack of discrete living floors, dump episodes, and features within the Chiggerville shell midden means that much of the archaeological deposit has a coarse-grained temporal resolution. As a result, Chiggerville can be fairly classified as what Bailey (2007:204) calls a cumulative palimpsest, or an accumulation of material wherein "the successive episodes of deposition, or layers of activity, remain superimposed one upon the other without loss of evidence, but are so re-worked and mixed together that it is difficult or impossible to separate them out into their original constituents." This lack of resolution at sites like Chiggerville has led to the misconception that Archaic shell middens are all the same—that they were formed by homogeneous processes indicative of little cultural variability. In this chapter, I deconstruct this perspective by examining how a dwelling perspective permits revision of the interpretive potential of palimpsests. I do this by identifying



3.1. Map of the Green River region depicting locations of sites mentioned in text.

and discussing three events in the site's rich history: the first interment of a community member, a meal, and the construction of a small rock cairn.

Misleading Palimpsests

The tendency to group the Green River sites into a single cultural phenomenon derives from William S. Webb's original site reports. For instance, artifacts from Indian Knoll indicate significant Early, Middle, and Late Archaic components, and radiocarbon dates from the site span the Middle to Late Archaic (Marquardt and Watson 2005a; Webb 1974). Working in the mid-1940s, Webb had no access to radiocarbon dating, and publication of Archaic hafted biface chronologies derived from deeply buried stratified sites was still two decades away. As a result, Webb's published Indian Knoll report reduces the considerable variability we now know to be present at the site to a single trait list, stating that Indian Knoll "represents a 'pure' manifestation, uncontaminated by any other contemporary manifestation" (Webb 1974:235–236). Following the then-dominant Midwestern Taxonomic Method, Webb and DeJarnette (1942:35–37) grouped three sites, Indian Knoll, Chiggerville, and Ward, into

the Indian Knoll Focus, thus reducing three unique sites, each with distinct occupational histories, to redundant examples of a single atemporal archaeological culture.

Webb's conclusions regarding variability at the Green River sites and their uncritical application in regional syntheses (e.g., Caldwell 1958, Fowler 1959) were explicitly critiqued 20 years later in Martha Rolingson's (1967) dissertation. To evaluate the hypothesis that "the refuse accumulations built up gradually over a long period of time from sporadic occupations," Rolingson (1967:32) developed a detailed hafted biface typology and correlated these types to other objects using burial associations. As a result, Rolingson was able to tease out a Late Archaic Indian Knoll phase at several sites while recognizing the presence of both earlier and later components at many.

Unfortunately, Rolingson's important but unpublished work was largely overshadowed by two papers published around the same time by Howard Winters.¹ The first defined the exchange system of the 'Indian Knoll Culture' for a generation of archaeologists due to its publication in the seminal volume *New Perspectives in Archaeology* by Sally and Lewis Binford (Winters 1968). The second paper was published as the introduction to the University of Tennessee Press's republication of Webb's Indian Knoll report. In this paper and an earlier monograph on the Wabash River valley Riverton Culture, Winters (1969, 1974) defined an Indian Knoll Culture settlement system and characterized the Indian Knoll subsistence system as a narrow-spectrum harvesting economy. While Winters (1968:176) was aware of the multicomponent nature of the Green River sites, he considered other components to be of little consequence relative to "the massive concentration of artifacts assignable to the Indian Knoll Culture." Winters's highly influential papers strengthened the perspective that the dozens of Green River middens were examples of a singular cultural phenomenon while dismissing variability among these sites as a reflection of a single settlement system comprising different site types.

More recently, the significance of the multicomponent nature of the Green River shell middens has become more apparent. Work at Carlston Annis and other sites conducted as part of the Shell Mound Archaeological Project (SMAP) has identified the presence of a distinct shell-free midden at several sites, and a range of radiocarbon dates has provided unequivocal evidence of their temporal depth (Marquardt and Watson 2005b, c). Those who work in the region are now well aware of the variability represented by the Green River middens; however, major regional syntheses continue to reduce this variability and discuss the Green River Archaic as though describing a single cultural entity.

The fact that Chiggerville, Indian Knoll, and the other Green River sites are cumulative palimpsests has had a detrimental effect on our ability to interpret and explain their archaeological records. As mentioned previously, cumulative palimpsests are defined by a considerable amount of artifacts but a lack of resolution such that the material remains of distinct occupations become superimposed and intermixed. Rather than problematizing this aspect of shell-midden archaeology, many researchers have reduced the variability represented by these sites into a single essentialized unit of comparative study (the Green River Archaic). Winters's approach of ignoring the multicomponent and mixed character of the middens by dismissing smaller components as "statistically insignificant" (Winters 1974:xvii) renders a portion of the archaeological record mute.

The most typical alternative to this approach is to attempt to define site formation processes and 'reconstruct' the presumably original and, by extension, more authentic contexts within which artifacts were deposited at these sites. Such a perspective interprets palimpsests as created by a series of temporally bounded activities that have become obscured through postdepositional disturbances and modifications. This approach is the one taken by SMAP personnel (e.g., May 2005; Stein 2005) and is more satisfactory than Webb and Winters's reductionism. Unfortunately, it is heavily invested in Western perspectives on time and materiality that may have no bearing on how individuals experienced the tempo of their daily lives and the material processes that formed sites like Chiggerville and Indian Knoll. As a result, site formation approaches can provide very detailed and useful analyses of archaeological sites as objects but struggle to develop compelling narratives of the people who once lived at these sites.

A Dwelling Perspective

As a third alternative, I adopt a dwelling perspective, which interprets the archaeological record not as a series of discrete occurrences but as the result of temporally unbounded practices, with palimpsests being the predicted material outcomes of dwelling in an ever-evolving lifeworld (Moore and Thompson 2012). The approach to dwelling promoted here derives from the work of Tim Ingold (2000), who argues that hunter-gatherer perceptions of their environments are formed through the process of living, performing tasks, moving through landscapes, and interacting with other beings. Ingold (2000:153) contrasts his dwelling perspective with a Western building perspective, which posits "that people inhabit a world—of culture and society—to

which form and meaning have already been attached. It is assumed, in other words, that they must perforce ‘construct’ the world, in consciousness, before they can act in it.”

A dwelling perspective is an agent-based and relational approach that emphasizes the role of practice in the formation of identity, as well as the interconnected nature of the spatial and temporal dimensions of this process. From the perspective of a being-in-the-world, identities, places, and structuring principles are constantly evolving, gathering meaning through ever-changing relationships with other organism-persons, places, and ideas. Lifeworlds are always in the process of formation, continuously being created through interactions among humans, animals, and plants and reified in practice through the performance of everyday tasks, which act recursively to create and re-create the social relations that characterize the lifeworld (Ingold, 2000; Moore and Dekle 2010). The temporally unbounded nature of dwelling and the central role material culture plays in this process means that all archaeological sites, features, and objects are palimpsests of meaning (e.g., Bailey 2007:208; see also Gilmore and O’Donoghue’s discussion of the materiality of events in the introduction to this volume).

At first glance, the notion that everything—all sites, all objects—are palimpsests might seem to preclude any discussion of events, and this is a strong possibility if an event is narrowly defined as a moment in time. However, a dwelling perspective conceives of the lifeworld as ever-evolving, temporally unbounded, and created through the interactions of organism-persons and in movements through space (or interactions with places). Thus time and the temporality of dwelling has an explicitly spatial dimension, or what Ingold (2000) refers to as the *taskscape*. As he puts it, “Every task takes its meaning from its position within an ensemble of tasks, performed in a series or in parallel, and usually by many people working together. . . . It is to the entire ensemble of tasks, in their mutual interlocking, that I refer by the concept of *taskscape*. Just as the landscape is an array of related features, so—by analogy—the *taskscape* is an array of related activities” (Ingold 2000:195).

Tasks do not occur in isolation. Rather, they exist in time and are structured by place. *Taskscapes* and *landscapes* are mutually constituted in the process of dwelling as aspects of lifeworlds (Moore and Thompson 2012). Rather than moments in time, I contend, events, from a dwelling perspective, are defined both temporally and spatially; that is, they are moments in space-time (cf. introduction, this volume). Defined in this way, events possess both a temporality and a materiality, and it is through this materiality that events take on a life of their own. They become embedded in memory, inscribed on the

landscape, and memorialized in objects, and they acquire a kind of agency that permits them to transform structures (Beck et al. 2007; introduction, this volume; Sewell 1996).

In his critique of agency approaches in archaeology, Hodder (2000) points out how agent-based approaches tend to focus on the process of structuration rather than on individual lives. He argues that structures cannot explain events; instead, events are always underdetermined by structures, and the complexity of structures precludes their full realization in events (Hodder 1999, 2000). Lucas (2008) makes a similar argument in his discussion of the residuality of events. He argues that structures are opposed to events in that they “inhabit two temporal planes: the event as a particular occurrence on the one hand and structure as an enduring set of practices or beliefs on the other” (Lucas 2008:61). Lucas argues that since the archaeological record consists of residues of events, rather than residues of structures, archaeologists must ‘flatten’ time and replace scalar models of events with a material model that conceives of events both as people and objects and as the relationships among those people and objects.

This emphasis on the materiality and relational character of events is consistent with the dwelling perspective on events described above. Lucas’s two-dimensional metaphor differs from a dwelling perspective, however, in that it isolates events in two temporal locations—some point in the past and in the current archaeological record. For Lucas, the importance of events rests less in their importance in people’s lives and more in their resolution in the archaeological record. As a result, Lucas’s model fails to account for the enduring character of events (regardless of their residuality) and the degree to which some events play out throughout people’s lives. A dwelling perspective, on the other hand, which conceives of events as continually unfolding moments in space-time, emphasizes the relationships created (between people, objects, organisms, etc.) during events and the importance of these relationships in structuring future action.

As structures, events provide historical context for future events, and they represent the maintenance, creation, or dissolution of social relations in a particular social setting. They are structured by history but contingent upon the unpredictable nature of space-time, for example, someone just dropping by for a visit. Events are palimpsests of meaning and their spatial component gives meaning to place. When places derive meaning from palimpsests of events, they become persistent places, which further structure the location and timing of future events (Moore and Thompson 2012). So, while we should follow Hodder (1999, 2000) in developing thick descriptions of the archaeological

record by identifying and describing fragments of individual lives and events, we need also to be mindful of the structuring nature of events for it is their structuring character that creates history.

As Gilmore and O'Donoghue point out in the introduction to this volume, events become protracted as they are (re)experienced and (re)interpreted through material engagements. Event-centered archaeology often overemphasizes time and interprets space and materiality as consequences of events. Rather, it is at the intersection of temporality and materiality that eventful narratives become compelling. Time is unbounded, but place acts as a counterweight, materializing some narratives (e.g., the Great Mound at Troyville; see chapter 8, this volume) and muting others. It is typically by material means, often linked to place, that power manifests in the production of events (e.g., Beck et al. 2007). The value of an eventful archaeology lies not only in its focus on human temporality and the intersection of the microscale and the macroscale (see introduction, this volume) but also in its potential to integrate the temporal and spatial dimensions of the taskscape in such a way that archaeologists can begin to critically analyze histories as matrices of entangled temporalities and materialities (e.g., Hodder 2012) and the processes by which a few of these become dominant narratives.

Founding Events

The remainder of this chapter illustrates the structuring nature of events through a case study of three events in the history of the Chiggerville shell midden. The goal of this description is to deconstruct the prevailing view that the Green River middens are homogeneous cultural units and hopelessly mixed archaeological palimpsests. Further, I will illustrate how these three events structured future events and contributed to Chiggerville's meaning by defining the site as a persistent place. Chiggerville's history is a history of dwelling, a history of social relations that played out in moments in space-time that were themselves palimpsests of meaning. This section outlines an eventful narrative of a few of those moments.

Works Progress Administration personnel excavated a total of 117 individuals in 114 burials at Chiggerville (Moore 2011). But before Chiggerville was a mortuary site, it was just another spot in the Green River floodplain. Although the midden's general location was structured by the presence of the nearby Nun's Ripple mussel shoals (Morey et al. 2002), the specific area where the midden accumulated could have been closer to the river or adjusted to the west or east. However, at some point around 3300 cal b.c., the first member of a local hunter-gatherer community was interred at the later

location of the Chiggerville midden. This burial was an event, a moment in space-time that structured all subsequent use of this location.

In *Feasting with Shellfish*, Claassen (2010) argues that the earliest burials found at shell-bearing sites represent consecrating burials interred as part of founding rites. Such a proposition, while possible, is difficult to test with the available data. Nevertheless, I contend that even if these burials were not intentionally interred in an effort to create a sacred space, the creation of a persistent place would have been an unintentional consequence of just such a burial. Burial of the dead, whether a victim of violence (as Claassen contends) or a member of one's family, gave Chiggerville meaning and gave participants in the mortuary rite a reason to return to this place and to bury more dead there. Participation in the mortuary rite created relations between people, both living and dead, and relations of people to place. The first burial event at Chiggerville structured subsequent burials and explains why these later individuals were interred in the Chiggerville midden rather than somewhere else near Nun's Ripple.

But who was the first person buried at Chiggerville? Without 117 AMS dates and confirming fluoride dating, we may never be able to answer this question with much confidence. Claassen (2010:123) hypothesizes Burial No. 76 was the first person interred at the site given its great depth. However, examination of the field notes and maps and the fact that Burial No. 76 is described on the original WPA burial form as having been interred "partly in pit in subsoil, at base of shell" leads me to propose an alternative hypothesis.

Burial No. 114 was identified 2.4 feet below datum 120L10 in the south-central portion of the WPA excavation block. Unlike the other deeper burials at the site, which were found either in the shell or at the juncture of the shell and the subsoil, Burial No. 114 was located 1.1 feet below the top of the yellow subsoil. A fully flexed adult male, Burial No. 114 was lying on his left side in association with two dogs, one lying across his chest and the other to his side. The original osteological analysis by Skarland (1989) provided a conservative age estimation of 20 to 35 years, but Sullivan (1977) later revised this to 30 to 39 years.

Interestingly, Burial No. 114 provides even stronger evidence for Claassen's (2010) contention that initial burials at shell-bearing sites were victims of violence, or, alternatively, that they received special mortuary processing that make them appear as such. Burial No. 114 is missing his legs below the knees and the skull was removed and placed near his pelvis. Several perforated canines of a wolf or dog found at the neck suggest that he had been interred wearing a necklace. One of the teeth from the necklace had been moved along with the skull to near the pelvis. Webb and Haag (1989) state

that excavators found two disk shell beads with Burial No. 114, but these objects are not listed in the Webb Museum catalog and are not mentioned on the field burial forms. A perforated bone pointed implement listed among the objects from this burial in the Webb Museum catalog is not discernible in the burial photograph and so may be either an incidental grave association or a burial good.

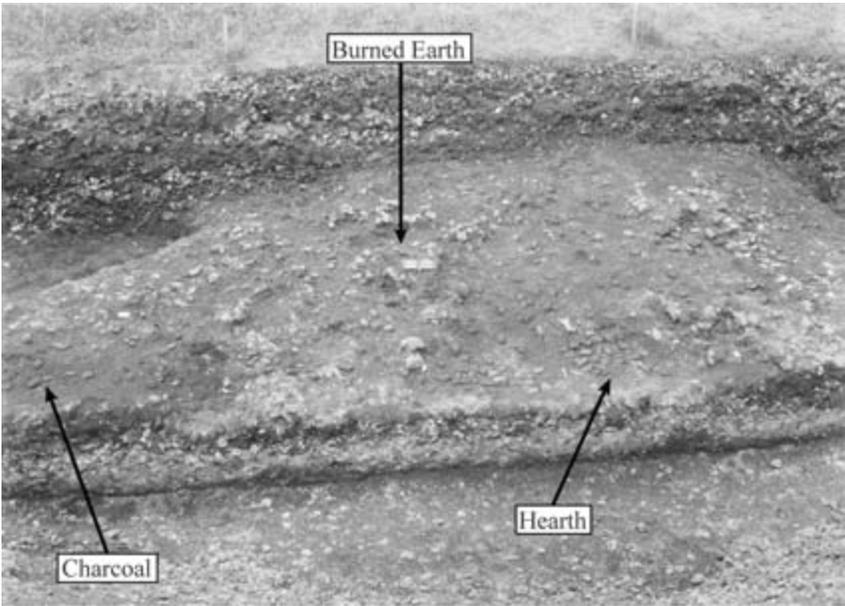
Even if Burial No. 114 was not the first member of the Chiggerville community interred at the site, the special nature of his mortuary treatment and his interment along with a rare canine-tooth necklace and two dogs mark his burial as a special moment in the site's history. This individual apparently led a unique life or died in such a way as to prompt members of his band, kin group, or companions to recover his body (if he were a victim of violence) or remove his head and to sacrifice two animals for burial with him (perhaps as companions or to protect the community from his spirit). The rarity of this kind of mortuary treatment at the Green River middens (and at Chiggerville in particular) suggests that this event is one that not many participants would soon forget. In Lucas's (2008) terms, it was an event with low reversibility. More importantly, it was an event that survivors referenced while carrying out daily tasks at the site, interpreting later mortuary rites and deciding how and where to bury future decedents.

Hearth and Home

But not all events need be major transforming moments in people's lives (cf. Beck et al. 2007; Sewell 1996). Some, like the event recorded in the form of Feature No. 17 at Chiggerville, provide insights into the daily practices that define structure. A domestic refuse and activity area, Feature No. 17 consisted of a large 18.6 m² (200 ft²) irregular area of fire-cracked rock (FCR), charcoal, burned earth, and burned shells (Figure 3.2). While it is possible that the feature represents several superimposed activities, the uniform depth of these materials suggests that the refuse accumulated over a relatively short period of time.

One interesting component of Feature No. 17 is a small burned area or hearth consisting of a layer of intentionally arranged FCR lying in a shallow concave basin (Figure 3.3). A localized concentration of charcoal was found immediately to the east of the hearth, and a patch of burned earth was found to the south. Although not curated, Figure 3.3 depicts several bones that may represent refuse from the activities that took place around the hearth.

Feature No. 17 is representative of the domestic activities that created most of the site. However, these activities did not occur in isolation but through



3.2.Feature No. 17 at the Chiggerville site. (Courtesy of the W. S. Webb Museum of Anthropology, University of Kentucky.)



3.3.Close-up of the rock-lined hearth in Feature No. 17. (Courtesy of the W. S. Webb Museum of Anthropology, University of Kentucky.)

the interaction of individuals. The food processing, cooking, chatting, storytelling, and play that took place during the construction and use of Feature No. 17 acted to build and maintain relations among the site's inhabitants—the members of the Chiggerville community. The hearth was likely the focus of this interaction. It created a social atmosphere and contributed to the creation of a community of culture by setting the stage for the formation of a shared habitus (Moore 2010). Furthermore, the fact that Feature No. 17 is found at a mortuary site illustrates the lack of distinction drawn between the ritual and the mundane at such sites. Eating, drinking, laughing, and dancing (that is, dwelling) atop the midden mortuaries was likely a means of including the ancestors in these activities—a means of maintaining relations with the dead (Moore and Thompson 2012).

Ritualized Contexts and Sacred Space

Finally, if depth is any indicator, then among the earliest interments at Chiggerville are Burial Nos. 31 and 3. That these two individuals are associated with one another is inferred from their nearness to a large pile of sandstone rocks located between and immediately south of the two burials. These rocks may represent a cache of sandstone procured for use in food processing. However, their proximity to Burial Nos. 31 and 3 and the fact that the pile rests atop a charcoal lens only 5 cm above these burials suggest that it is a rock cairn constructed to demarcate a mortuary space. The charcoal is evidence that fire was used as part of the mortuary rite. It should be noted that the term “cairn” is not mine—it was used by the WPA excavators in the descriptive notes on the original feature form.

That the rock cairn identified as Feature No. 26 demarcates a special moment in Chiggerville's history is further supported by the quantity and quality of materials interred with Burial Nos. 31 and 3. Burial No. 31 was a partly flexed child aged 9 to 12 years and found lying on its right side (Wyckhoff 1977). A dog was buried immediately behind the child, but disturbance of shell beads by the dog interment indicates that the dog burial intruded upon the child's grave. However, the existence of the cairn as a marker of the two burials lends credibility to the interpretation that the dog was intentionally placed with the child during a separate mortuary rite. Thus, the dog interment was structured by the previous mortuary rites and the construction of the rock cairn. Shell disk and tubular beads recovered with Burial No. 31 represent between three and seven distinct necklaces, bracelets, or other objects of adornment based on their sizes and positions in the burial photograph. A stone axe was recovered nearby and may be a grave association (Moore 2011).

Burial No. 32 was a fully flexed 20-to-29-year-old male found lying on his left side. According to the field burial forms, this individual was associated with shell beads, an awl or needle, a blackened bone tube or awl, and a stone ball. Analysis of the burial photograph and artifacts in the Webb Museum indicate that the 27 shell disk beads constitute a single necklace or other object of adornment placed on the individual's chest. Also in association in the photograph are a well-made bone pin and a broken bone awl, although the latter may be an incidental inclusion. The stone ball described in the field notes is a mano/hammerstone; it and a piece of antler tool production debitage also may be incidental inclusions. A perforated deer astragalus not mentioned in the field notes but recorded as associated with Burial No. 32 in the Webb Museum catalogue was likely a grave good based on its uniqueness in the Chiggerville assemblage.

Dwelling at Chiggerville

The very existence of these burials and features at Chiggerville illustrates the importance of events in the construction of the site. Each event informs us about individual lives and important moments in space-time that resulted in the site's creation. Furthermore, the events illustrate the unique character of each of the Green River middens. Chiggerville is not a smaller version of Indian Knoll or Carlston Annis. Each site has a unique local history that requires investigation.

Additionally, placing the events that formed the Chiggerville midden in a dwelling perspective allows us to consider the ways in which individuals created, maintained, and withdrew from social relationships and how meaning was attached to persistent places. For instance, the interment of the first burial at the site created connections between individuals but also structured the future use of a particular point on the landscape. This event was marked by special mortuary rites like the sacrifice and interment of two dogs and the removal of the individual's head and lower legs and placement of the skull near his pelvis. Regardless of whether Burial No. 114 was truly the first interment at Chiggerville, the event was a significant one that had meaning to those who participated in it—meaning that was likely translated into a kind of shared identity among those participants.

Feature No. 26 marks a distinct but equally important mortuary event that likewise served to foster social relations among both the living and the dead. That a rock cairn was constructed over a charcoal lens suggests that this mortuary event involved construction of a fire that likely had important symbolic meaning. Likewise, burial of the dead with several valuable objects such as

shell bead necklaces and bone pins emphasizes the special character of these interments. Finally, burial of a dog in this location at a later time harkens to the earlier interment of Burial No. 114 and suggests that dogs were important participants in mortuary rituals. Perhaps the burial of these dogs with the dead represents a means of establishing social relations among the ancestors and these other important organism-persons. That Burial No. 114 was wearing a wolf- or dog-tooth necklace may further support this assertion.

Finally, so that Chiggerville is not perceived entirely as a place for the dead, the routine domestic event marked by the hearth and refuse of Feature No. 17 provides an example of how routine events like cooking a meal, chatting around a fire, or telling a story served to create a sense of community and establish a connection with place. It also illustrates the lack of distinction that Green River hunter-gatherers drew between the ritualized practices of mortuary rites and the routine practices of daily life. In fact, our tendency to view the Green River middens as mortuary sites where a great deal of domestic activities took place illustrates our bias; the middens likely were perceived as domestic sites where the living spent a portion of their seasonal round communicating with and dwelling among their ancestors, who were as alive in spirit as were everyone else.

Concluding Thoughts

It is true that Chiggerville is a cumulative palimpsest; however, palimpsests are formed in practice and practices have meaning. Palimpsests of meaning, and the history and memories they evoke, contribute to the creation of persistent places—the cumulative result of structured moments in space-time (or events). Chiggerville's complexity, and the lack of resolution that results, is exactly the material signature expected to be produced by the temporally unbounded practices of hunter-gatherers dwelling in lifeworlds saturated by meaning (Moore and Thompson 2012). Understanding these lifeworlds requires that we derive thick descriptions of individual lived experiences from the archaeological record and place these experiences in their proper historical and geographical contexts. Palimpsests like Chiggerville, even those excavated long ago with coarse techniques, have far greater interpretive potential than is often realized.

Constructing eventful narratives is one approach to interpreting thick descriptions of the archaeological record. These eventful narratives of lived experience at sites like Chiggerville, while necessarily incomplete (e.g., Lucas 2008), are a means of describing and problematizing microscalar, social-site

formation processes. The residues of the events discussed in this chapter were excavated more than 70 years ago, but more recent excavations of an activity area like Feature No. 17, for instance, would yield additional faunal and botanical data that would further enrich an eventful narrative, expanding its interpretive potential and enlivening the event. Microstratigraphy, spatial analyses, and other specialized techniques could contribute additional contextual data that would enhance the plausibility of eventful interpretations.

As one reviewer pointed out, the narrative I have constructed, while consistent with the material record (and, thus, not *merely* a ‘just so’ story) is but one possible narrative that likely will not persuade any who do not accept the theoretical premise from which it was derived. This is as it should be; I am an actor in the creation of Chiggerville history, and the narratives I create are part of the historical matrix of entangled temporalities and materialities associated with the site. A critical evaluation of history requires critically evaluating the interpreters, and, insofar as history and interpretation are entangled processes, it should be the case that the ‘best explanation’ is inferred only for the time being (cf. Fogelin 2007). In the meantime, it is my hope that the narrative I have constructed does give some voice to those individuals whose lives I presume to describe.

This brings me to a final note about the value of developing the kinds of interpretive microhistories promoted in this chapter. Eventful narratives of past lived experiences are engaging and interesting. The archaeological residues of events provide vignettes into the lives of real people; they provide a means by which nonarchaeologists (who find very little of interest in lengthy theoretical discourse, piles of broken rocks, or lists of ceramic types) can make emotional connections with the past. The term “eventful archaeology” implies something important; it evokes a metaphor of movement and excitement and captures one’s attention. Our stories of the past take many forms, but eventful narratives are ones with names, faces, familiar places, and dialogue. Such stories, and the interest they create among nonarchaeologists, may be the most effective form of public archaeology.

Acknowledgments

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couraging comments for which I am grateful. Finally, thanks to two anonymous reviewers whose comments have helped me see (and perhaps clarify) the value of an eventful archaeology.

Note

1. The publication of these chapters was an event in and of itself in Archaic period studies. An eventful analysis of the history of southeastern archaeology has yet to be attempted, but Rees and Lee's discussion (see chapter 8, this volume) of the history of events and non-events associated with the study of Troyville demonstrates that such an analysis warrants consideration (see also chapter 10, this volume).

Pits for the Ancestors

Meggan E. Blessing

Over the course of approximately 2,000 years, in the middle Savannah River valley, Stallings and affiliated peoples excavated, filled, and buried a myriad of pits across contexts referencing daily life, death, and cosmological orders. Evident within these depositional histories are intersubjective moments (Pauketat and Alt 2005:214; Sahlin 1988) that simultaneously embody several scales of practice. Ultimately, these events are centered on the creation of communities, speaking to the coalescence of separate traditions within a common setting. Central to the creation of these relationships was Stallings Island, a place that served as an arena for the installation of a new social order. Pit features throughout the Stallings region typically included various combinations of freshwater shellfish, soapstone, bone, hickory nut, pottery, and stone, but these elements were combined in ways at Stallings Island not registered elsewhere in the Savannah River valley (Sassaman 2006:145). Confined to a specific time and place, these pits personified new acts of culture making (Pauketat and Alt 2005) while their material biographies referenced eventful pasts.

Events, Practice, and the Ontology of Things

Stallings history provides an excellent example of the production of material narratives (see also introduction, this volume), highlighting how seemingly small-scale events aimed at social reproduction can also be instrumental in generating substantial change. Pit features and the materials within them are opportunities for examining how repeated acts of physicality pertain to the creation of place and the shaping of communities (e.g., Pauketat and Alt 2005). In current approaches, depositional practices are understood to be provocative acts that are essential components in the production of identity and transgenerational memories (e.g., Mills and Walker eds. 2008) and that are often avenues wherein actors “construct, de-construct, or re-construct cultures” (Pauketat and Alt 2005:214). As the material aspects of particular events centered on the incorporation of multiple subjectivities, pit features can

encapsulate different relationships of identity and power. The scope of these relationships is elucidated through a scalar approach that recognizes varying levels of community integration, situating pit features within the purview of individual site histories as well as the greater Stallings region. And a focus here on the microscale is not to deny the potential role of large-scale events such as migrations or the coming together of different cultures in triggering structural transformations (e.g., Beck et al. 2007; Sewell 2005), but rather is an attempt to understand how these happenings may have been assimilated and further manipulated through daily life.

Because subjectivities are relational, they are continually being shaped by their ongoing interactions with different aspects of the world, making for highly contextual experiences shaped by the setting of a location, the persons involved, and any number of emotions that may be evoked in the carrying out of these specific acts (Jones 2001; Pauketat and Alt 2005; Pollard 2001). As such, practices are always open to interpretation, calling to mind Sahlins's (1985:ix) empirical risks or Sewell's (2005:140-143) axioms for the processes underlying structural change. No happening will be similarly perceived or defined by all members of a given community, making even small-scale practices generative, and therefore, influential with regard to our understanding of larger historical narratives.

Exploring pit features as experiential events calls for us to think differently about the ontological categories applied to pit contents, in addition to those questions regarding function and meaning. Typically, outside of those contexts that include burials, or ones that are otherwise "anomalous," large pits filled with undifferentiated mixes of animal bones and other various broken materials are often regarded as trash receptacles. While pits were certainly meant for the containment of things, the classification of their contents as "rubbish" is questionable, and as Chapman (2000a:61) notes, this classification is based on concepts of discard and worth that are primarily Western in origin. It also casts rituals as types of actions categorically different from those composing daily life, in contrast to more holistic approaches that eschew rigid divisions between what is sacred and what is secular (Bell 1997; Bradley 2003; Brück 1999). To treat materials as simply discarded trash, then, limits the scope of our interpretations and assumes that they are no longer actively shaping the living or being engaged by them (Chapman 2000:62-63).

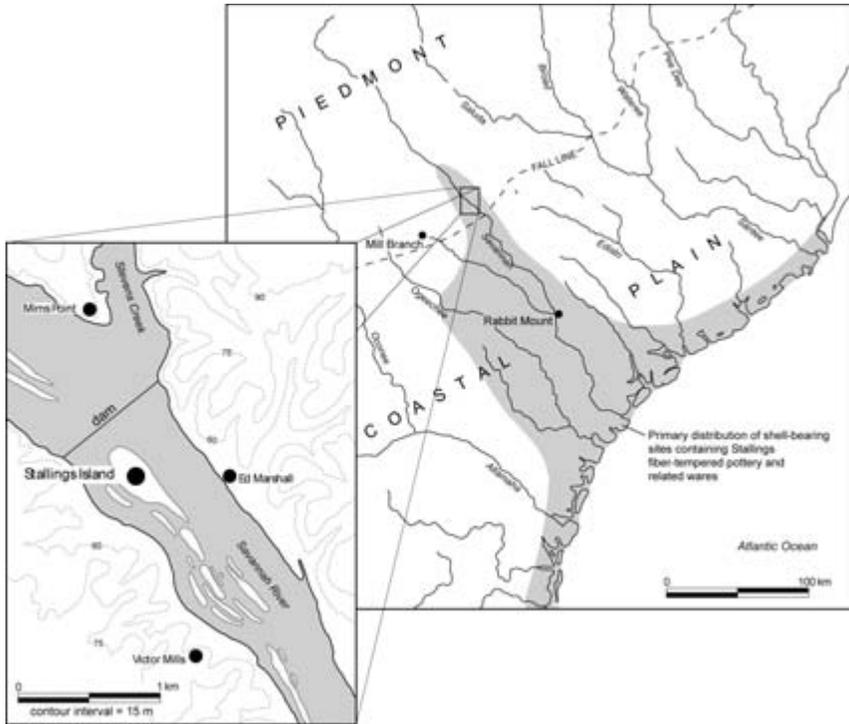
So while generally treated as straightforward enterprises, the excavation and infilling of pits more likely unfolded as a series of multisensory performances with the potential to involve otherworldly engagements (Jones 2001; Pollard 2008; Walker 2008), as the burial of things "took account of the status and agency of the materials...in order to deal with them in an appropri-

ate fashion" (Pollard 2001:38). Olsen's (2003:88) challenge to comprehend objects as beings embraces a posthumanism that dissolves the boundaries between subject and object, and thus actor and acted upon. Rather than passive receptacles for human will, objects and other entities, as the ontological equivalents of humans (e.g., Alberti and Bray 2009; Hallowell 1960; Nadasdy 2007; Viveiros de Castro 1998,2004), may be endowed with powers capable of affecting human lives, further cementing their role as active participants in the creation of society (Alberti and Bray 2009; Latour 1998).

When the contents of pits are considered alongside other spheres of practice, they constitute a network of materials linked through what Jones (2001), drawing on Butler (1998), refers to as citational chains. As attributions, their place within these chains depends on varying degrees of similarity that may be evoked through form, material associations, and context of deposition. With cultural relevance extending across large temporal and spatial dimensions, ancestral objects and associated acts of physicality are major forces in evoking the past, suggesting continuity as an important structuring principle for the present. At the same time, however, they are also instrumental in shaping the future as they "establish the potentiality of and constraints on subsequent action" (Gillespie 2010:103; see also Pauketat and Alt 2005:24).

In viewing practices as historically situated chains of references, it is possible to trace specific genealogies across multiple experiential scales (Pauketat and Alt 2005; see also Joyce 2008; Joyce and Lopiparo 2005; Mills and Walker 2008). In general, practices are guided by locally accepted styles of deposition that speak to aspects of overarching aesthetics (Pollard 2001). It is also likely that the inhabitation of past residues (Barrett 1999) had a profound influence on the objects and practices central to the production and maintenance of memories and meaning in the present. The repeated use of familiar materials, particularly in highly charged contexts, would position the ancestors as continuing sources of identity who influenced how, where, and in whose presence particular acts of physicality were performed (Gillespie 2010:103).

The citational chains of those who came before were "historical artifacts" that served as continuous points of reference (Gillespie 2010:103) and were manipulated and ordered in ways that made sense in the present. In the case of Stallings communities, these processes of transformation were initiated through episodes of intense interactions, seemingly adhering to theories of wholesale, eventful change centered on the imposition of outside forces (e.g., Sahlins 1988), but in actuality they were fragmented, protracted, and to some degree contested. Scores of generations participated in these acts of cultural production, and embedded within them are multiple reinventions of significance and meaning. The construction, modification, and recreation of place

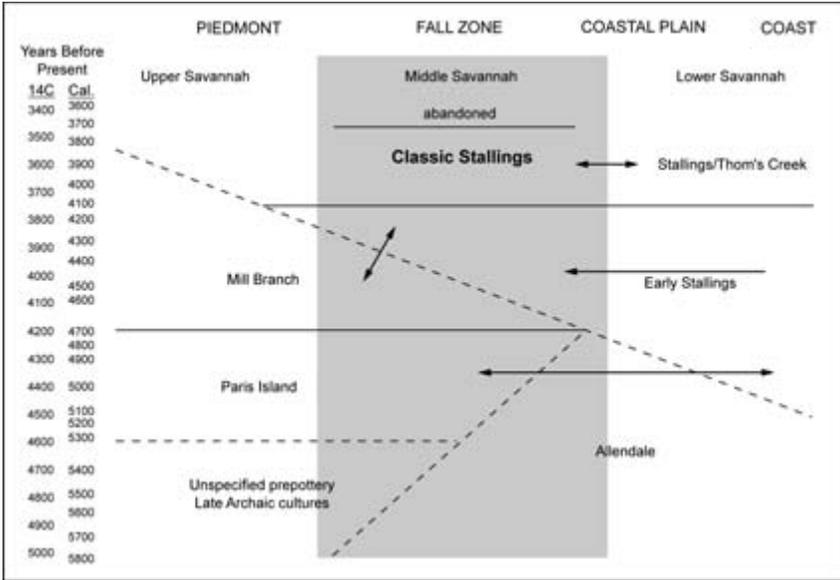


4.1. Map of the Savannah River valley and inset of middle Savannah area with sites mentioned in the text. (Adapted from Sassaman 2006:xvii.)

through acts of physicality were critical aspects of these processes. As materials were combined through novel ways and circumstances, these places, in turn, became instrumental in transforming social relations and identities (e.g., Gillespie 2008:116).

The Emergence of Stallings Communities

Stallings and affiliated peoples dug an incredible amount of pit features over a period of approximately 2,000 years (ca. 5800–3800 cal b.p.), infilling them with a variety of substances and objects that had regionwide significance. Stallings-related sites in the middle Savannah River valley were often located in the same places previously occupied by groups indigenous to the area, standing to further confound the delineation of separate traditions of practice (Figure 4.1). Despite these broadly shared values surrounding certain objects, however, individual communities interred and configured these



4.2. Chart of Late Archaic culture history of the Savannah River valley. (Adapted from Sassaman 2006:27)

materials in ways that were culturally specific, as is evident through differences in the size and shape of features and the combinations of the objects buried within them. Given this region's complex culture history involving the integration of several different ethnic communities through processes of ethnogenesis (Sassaman 1998a, 2006; Sassaman et al. 2006), the temporal, and sometimes spatial, circumscription of specific pit-digging practices have been instrumental in creating larger sequences of depositional histories. These genealogies are further informed through the diverse inventory of depositional contexts recovered from sites ranging from shorter-term seasonally visited places to intensely occupied villages.

Although Stallings history was originally envisaged as the gradual progression of a single people centered on the occupation of a preeminent landform (Claffin 1981; Fairbanks 1942), contemporary work in the greater Savannah River region suggests otherwise (Anderson and Joseph 1988; Elliott et al. 1994; Ledbetter 1995; Sassaman 1998a, 2006; Sassaman et al. 2006; Sassaman and Randall 2007; Stoltman 1974) (Figure 4.2). Subsumed within the various household deposits, pit features, and burials are small-scale events that chronicle the confrontation and accommodation of practices between Piedmont indigenes and groups of Stallings migrants from the middle Coastal

Plain. Stallings heritage in the Savannah River valley can ultimately be traced back to Allendale communities that established themselves in the Coastal Plain around 5800 cal b.p.

Allendale peoples and their immediate descendants, to quote Sassaman (2006:43), became “cultural brokers of change,” further integrating communities more than 200 km apart through relations of exchange and presumably intermarriage. Communities indigenous to the Piedmont, known archaeologically as the Parris Island (5350–700 cal b.p.) and Mill Branch (4700–4200 cal b.p.) cultures, were responsible for the manufacture of soapstone cooking slabs. These slabs, in turn, were exchanged with coastal groups further east for marine shell and beads. Although the role of Allendale peoples in these processes is not completely understood, the weight of the evidence suggests that they were instrumental in the creation of early pottery, innovated through relationships with those groups living directly on the coast, and the fusion of this technology with soapstone cooking slabs (Sassaman 2006:43).

Early Stallings communities emerged out of this cultural milieu, becoming archaeologically visible around 5100 cal b.p. (Sassaman et al. 2006:552) Rabbit Mount, in the Coastal Plain, has some of the earliest regional fiber-tempered pottery (Stoltman 1974), one of the hallmarks of Stallings communities, and is the first place where both kinds of cooking technology are found in conjunction with one another (Sassaman 2006:50). While Coastal Plain communities were well acquainted with the properties and performance of soapstone, which was necessary for preparing food in their plain, shallow-basin pots not geared for direct-heat cooking, Parris Island peoples and their Mill Branch descendants did not produce or accept pottery (Sassaman 1998a, 2006).

The resolve to eschew this innovation on the part of Parris Island and Mill Branch peoples was potentially strengthened as Early Stallings groups began intensifying their presence within the middle Savannah at approximately 4500 cal b.p., embarking on what appear to have been seasonal forays across the fall line to collect, store, and retrieve mast resources and hunt for sturgeon. The coming together of indigenous and immigrant communities to celebrate the arrival of these fishes upriver was likely instrumental in forging and reaffirming interpersonal ties. Presumably, it is out of these encounters, coupled with their longstanding relationships of exchange, that the settlement of groups of Early Stallings peoples within the middle Savannah River valley was enabled (Sassaman et al. 2006:552).

Although likely marrying into Early Stallings families (see Sassaman 2006: 83–90; Sassaman and Rudolphi 2001), the descendants of Parris Island groups did not fully embrace their neighbors. Mill Branch peoples coexisted, at least part of the time, alongside Stallings communities but after 4500 cal b.p. the

middle Savannah floodplain became increasingly saturated with Early Stallings settlements (Sassaman et al. 2006:552). Their villages were placed in reference to Stallings Island, and so were often built on top of previously established sites. Figuring prominently in the lives of local groups, this is where Parris Island and Mill Branch families buried their kin while concomitantly depositing vast amounts of shellfish and other materials over the slope of the island. Notably, however, there is very little evidence to suggest that the island was routinely visited by Early Stallings peoples, considering the lack of early fiber-tempered pottery at the island (Sassaman et al. 2006:552).

Despite the fact that most evidence implies that the foundational relationships between these disparate groups were at least tolerated, if not outright amicable, it appears that they began to deteriorate around this time period. While Stallings communities may have selected the location of sites as part of a concerted effort to assert similarity with previously established traditions, it seems that they may have inadvertently created greater distance.

Some notable differences also existed between these communities regarding the deposition of certain materials, potentially resulting in conflicting ideas about the ontological status of things and how they should be incorporated into the landscape. Two hundred and fifty years into the Mill Branch phase resistant factions left the valley for the interriverine zones where life carried on without the use of shellfish and apart from sacred places associated with the river, including Stallings Island. Then, around 4,200 years ago, these peoples left the Savannah River valley completely.

This total abandonment of their ancestral lands coincided with the rise of Classic Stallings (4200–3800 cal b.p.), the presumed ethnogenetic outcome of these earlier relations (Sassaman 1993a; Sassaman 2006; Sassaman et al. 2006). The coalescence of Classic Stallings communities transpired over a 400-year period that encapsulated intensifying social relations centered on new expressions of materiality (Sassaman et al. 2006), including the drag and jab decorated pottery for which Classic Stallings peoples are known. Once again Stallings Island was brought to the fore of intercommunity relationships, as the landform was the site of a Classic period circular village, wherein it was rememorialized as a place for the dead. Two other circular village footprints were also uncovered at Ed Marshall and Mims Point (Sassaman et al. 2006:553–557).

Based on the distribution of pit features and the extent of shellfish deposition, these villages likely consisted of eight to nine evenly spaced households encircling a plaza approximately 15 m in diameter. Associated features were diverse, including various combinations of large and deep, and small and shallow, pits, in addition to at least one, often centralized, hearth.

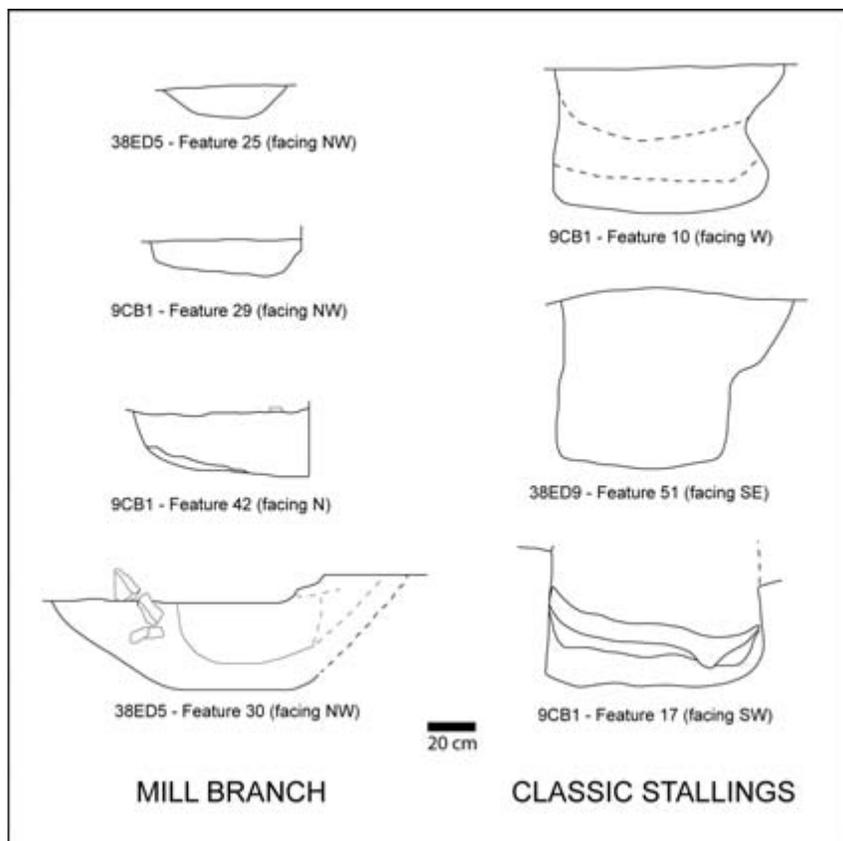
Unlike the circular villages at Ed Marshall and Mims Point, the plaza on the island contains dozens of Classic Stallings inhumations (Sassaman et al. 2006:556–557). The arrangement and layout of burials within the plaza entails a highly structured space, but with a considerable amount of variation regarding interment matrices, body orientation, and associated items. Stallings Island is also the only place in the river valley where carinated bowls were routinely deposited. Drawing on Mississippian analogues, their overall form and surface designs suggest that these were primarily used as serving rather than cooking vessels (Sassaman et al. 2006:557–559). Coupled with large amounts of sturgeon, specialized capture technology, and features suggestive of mass processing (Claffin 1931), it can be assumed that Stallings Island was the place for feasting with the dead (Sassaman 2006:145).

Variation in Pit Features and Burials

Despite the obvious difference in content, pit features and burials cannot be fully understood apart from one another, as they are components of larger referential networks. The same objects and materials incorporated into pits were often included in burial matrices, particularly those of Classic Stallings affiliation. And while their shared materials are implemented in ways that refer to broader aesthetic qualities, variation in the structure and contents of pits across time and space point to different citational histories (e.g., Gillespie 2010:105) as each of these communities had their own way of constructing place.

Parris Island and Mill Branch pits have structures and morphologies unlike those created by their Stallings neighbors. These peoples routinely excavated shallow basins, as exemplified at the Ed Marshall site, 30–40 cm in diameter and about 25 cm deep (Sassaman 2006:73) (Figure 4.3). Often undifferentiated mixes of soapstone slabs, bone, and metavolcanic tools were buried against a backdrop of dark, charcoal-impregnated and nutshell-rich fill, but in general, the density of materials is considerably less than the quantities incorporated into Stallings-affiliated pits. Some of these basins also included rare combinations of fauna and flora. In Feature 25 at Ed Marshall (see Figure 4.3) Mill Branch peoples filled the pit with the leg bones of a juvenile canid and significant quantities of burned acorn hulls (Sassaman 2006:73).

The prevalence of mast resources and soapstone across multiple depositional contexts suggests that the uplands were a potent place for Parris Island and Mill Branch peoples. Notably, Mill Branch houses, at least in these areas, are themselves shallow pits. One example from Warren County, Georgia was 4 by 5 m and approximately 35 cm deep a depth that mirrors the structure of



4.3. Select profiles of Mill Branch and Classic Stallings features illustrating the differences in pit morphologies.

the basins created at riverine sites. Parallels are also seen in the kinds of materials deposited. More than 7,000 artifacts of soapstone, debitage, bannerstones, Savannah River stemmed points, and other ground stone tools were deposited within the structure's walls and around the charcoal—rich hearth suggesting that the house was used repeatedly and in a consistent manner (Ledbetter 1995 in Sassaman 2006:67–69).

One thing Parris Island and Mill Branch pits were not was major receptacles for the emplacement of shell (Sassaman 2006:73). Freshwater bivalves are often a background component of their small basins, but they rarely occur in the quantities witnessed for Stallings-affiliated pit features. In general, the consumption and deposition of shellfish in the Savannah River valley was protracted, but it certainly intensified through the Late Archaic. The earli-

est occurrence of shell deposition comes from Mims Point, where freshwater bivalves accompanied the burial of an adult female (Sassaman 1998b; 2006). Her relatives also interred her with bone, Morrow Mountain-like projectile points, debitage, and cracked rock—integral material components of daily life, but also potentially the remnants of a mortuary feast (Sassaman 1998b). Notably, shellfish were not buried outside of mortuary contexts during this period (Sassaman 2006:149).

These mortuary practices were carried forward, in part, by Parris Island and Mill Branch communities at Stallings Island, as in the case of an older individual who was laid in a shallow pit cut 15.2 cm into the yellow-clay substrate and covered with black soil filled with shells, animal remains, and a variety of broken artifacts. At the same time, however, they also began depositing shellfish outside of burials, the majority of which is limited to Stallings Island. Only here did Piedmont communities continually throw shell around the perimeter of the island, effectively encasing it in a ring of bivalves, a practice that ultimately may have stemmed from their relationships with Early Stallings communities (Sassaman 2006:149).

In contrast to the basins of Parris Island and Mill Branch groups, some of the earliest examples of Stallings pits in the middle Savannah region (ca. 4500 cal b.p.) are large silos cut into the clay at the Victor Mills site (Sassaman 2006:108–11). Completely excavated examples revealed burned sides and bottoms that were covered with a layer of charcoal. The fill, composed mostly of mottled soil and clay, also contained nut fragments and additional charcoal. More than two dozen of these intercepting features were recorded at Victor Mills, ranging from 75 to 100 cm in diameter, with some slightly more than 1 m deep. Extrapolating across the rest of the site, there are probably at least 120 pits likely representing the work of several households (Sassaman 2006:110). Presumably, they were designed for the large-scale storage of nutshell and instantiate some of the first major efforts by Early Stallings people to rework the landscape of this part of the river valley.

Interestingly though, there is little evidence to suggest that people were living at Victor Mills. Rather, it appears that factions of Early Stallings groups made short-lived trips upriver from the Coastal Plain to retrieve their nut stores periodically (Sassaman 2006:111). This site does contain, however, some of the earliest shellfish remains of Stallings origin in the middle Savannah. A small shell-bearing deposit replete with plain pottery, a number of quartz tools, and the remains of small fishes was emplaced downslope from the large pits.

That all shell-related deposition at the site was confined to the ground surface is worth noting, as it followed the preferred method of shellfish deposi-

tion enacted at Stallings Island by local groups. Currently, little is known about the subterranean deposition of shellfish during the earliest phase of Stallings history. A pit with distinct shell lenses and plain fiber-tempered pottery was recovered from Rabbit Mount, but Stoltman (1974:57) was dubious about its Stallings origin because post-Archaic artifacts were also found within the fill. Large shell-filled pits are well documented, however, for the later part of the Early Stallings phase. Examples at Ed Marshall, the site of an Early Stallings village, often contained large quantities of shellfish, signaling one of the first times that this material was put into the ground in such substantial amounts. Some of these pits were also filled with accompanying soapstone, charcoal, bone, nuts, plain pottery, and stone.

It is also important to emphasize here that despite differences between the context and manner of deposition at Victor Mills and that at Ed Marshall, in both cases shellfish were deposited in the absence of associated mortuary practices. The impetus behind the transformation in shell deposition at Ed Marshall is not completely understood, but appears to be related to the lack of Early Stallings burials in the middle Savannah—a point that will be returned to later.

Notably, Mims Point, Ed Marshall, and the promontory of Stallings Island are not shell mounds in the typical sense of the word. Instead, they are amalgamations of intersecting, shell-filled pits (Sassaman 1996:1; 2006), the majority of which can be attributed to Classic Stallings peoples. As noted, village-related pit features were diverse, encompassing morphologies more inclusive than those excavated by Parris Island and Mill Branch peoples. Nevertheless, Stallings groups continued to fill them with ancestrally important materials. At Mims Point, the two better-documented pit clusters each contained a large pit 1 m wide and just as deep located to the right of an entrance that faced the central plaza (Sassaman et al. 2006:555). Their size and depth suggests that they were initially used for storage. In one of these pits, Feature 51, a number of large fishhooks, socketed antler points, drag and jab pottery, groundstone objects, projectiles and knives of multiple raw materials, soapstone slabs, shellfish, abundant fauna remains, and well-preserved botanicals were incorporated into the fill (see Figure 4.3). The majority of these items were highly fragmented, which is especially the case for the pottery. Also of note is the number of vessels buried in this deposit, as very few of the sherds crossmend with one another and generally represent one vessel each.

Stallings Island too boasts a considerable number of Classic Stallings content-rich pits, some of which have structures that evoke historically situated practices. Created within this place were a number of pits lacking counterparts elsewhere in the river valley (see Sassaman 2006:145). Feature 10 (see

Figure 4.3), for example, was packed with thousands of fish bones, while Feature 2's base was lined with extremely large freshwater bivalve shells. Two other pits recovered by the Cosgroves in 1929 at opposite ends of the island's east-west axis were filled with "quantities" of small cone-shaped shells. These shells were not identified in the field notes, but they might be *Marginea* shells, and if so, they were imported from the Atlantic coast.

Other notable features include at least 10 stratified pits constructed from variable layers of ash, shellfish, charcoal, nutshell, bone, and diagnostic artifacts. The distribution of these pits throughout the Cosgroves' excavation block suggests that they were associated with individual households. One example, Feature 17 (see Figure 4.3), contained four distinct strata wherein a layer of shell and a layer of charcoal were straddled by two large deposits of dark-brown soil. Artifacts were differentially distributed throughout the pit and highly fragmented. Drag and jab potsherds were abundant and accounted for a number of different vessels. The debitage was composed of a variety of raw materials, including chert that derived from the Coastal Plain. Despite the thick layer of charcoal, however, none of the other materials in the pit were burned, supporting the inference that the botanicals were ignited elsewhere before being incorporated into the pit fill. Three of the other stratified features at the island also contained fragments of carinated vessels, suggesting that the contents of these pits potentially stem from the remains of mortuary feasts.

Several Classic Stallings community members were actually interred in stratified pits, further strengthening their tie to mortuary-related practices. In one example, a middle-aged individual was emplaced semiflexed in a pit cut 45.7cm into the clay. This person was laid on top of charcoal, shell, and ashes, and then covered with a black soil full of shell and animal remains. Several whole stone drills and points and fragmented pottery were also included in the interment. Some other Classic Stallings community members were also buried in matrices that generally distinguish these interments from earlier Parris Island and Mill Branch interments, with emphasis often placed on specific materials. One individual's body was surrounded by a layer of charcoal, while several others were interred within dense matrices of primarily shell.

Material Citations and the Production of Narratives

The flow of mutual substances across communities engendered an enchainé (Chapman 2000b) landscape permeated with the presence of other times, persons, and places. Likewise, the incorporation of commonly associated materials into multiple spheres of action served to inextricably integrate the

political, social, and cosmological domains. Drawing on a wide array of citational fields, the reworking of material resources by Stallings actors was a key component in the production of depositional narratives. As noted, these acts, in part, may have been efforts to diminish aspects of difference, representing only a few among many that ultimately situated Stallings Island as the center of these frames of reference.

Islands, along with caves, springs, and other unique landscape features, were considered by some southeastern Native Americans groups to be portals to the underworld (Hudson 1976:xx). We cannot necessarily assume that prominent places on the landscape carried similar meanings thousands of years earlier, but there is enough evidence to suggest that, at the very least, Stallings Island was considered to be a powerful place. This is not to deny concerted efforts on the parts of humans in making places, but it does recognize that some may be inherently more powerful than others and perhaps capable of altering the properties of the persons and objects buried there (e.g., Zedeño 2009:412). Shellfish were also associated with the underworld and aspects of renewal and rebirth, the powers of which were channeled through a variety of forms and contexts of action (e.g., Claassen 2010:173–175). In fact, a longstanding association between various kinds of shellfish and mortuary contexts occurred throughout the Southeast in the Archaic period (Claassen 2010; Randall 2010; Sassaman 2006; Sassaman and Randall 2012). The relationship between shellfish and the dead remained important throughout the middle Savannah even as the patterns of shell deposition changed over time to include non-mortuary contexts. The lack of Early Stallings burials in the middle Savannah is likely attributable to these peoples' relationship with Stallings Island, which as previously mentioned was avoided for several centuries. The weight of the evidence seems to suggest that lingering claims to ancestral rights on the parts of indigenous communities might have precluded any attempts by Early Stallings peoples to make the island and thus the ancestors their own, preventing the interment of individuals altogether.

Instead, Early Stallings peoples focused on the making of places through a number of novel, yet referential, acts. For example, the size, scale, and frequency of storage pits at Victor Mills were without precedent in the river valley, although their contents did cite materials regularly buried and transformed through fire by Parris Island and Mill Branch groups. Likewise, they eventually began to manipulate shellfish in new ways by transitioning its deposition from above to below the ground—a transformation that coincides with the permanent settlement of Early Stallings communities in the middle Savannah. Carrying forward with aspects of earlier mortuary practices, but lacking the social purchase to engage Stallings Island in locally acceptable

ways, Early Stallings peoples possibly created substitute burials (e.g., Gillespie 2008; Jones 2001) via the deposition of quantities of shell into large pits at a place directly across from Stallings Island (i.e. the Ed Marshall site). In so doing, they drew on established associations between shellfish and the dead but also anticipated practices to come with the burial of some Classic Stallings individuals in matrices of dense shell.

Not only was the routine deposition of large quantities of shell into the ground unprecedented for that time and place but these acts also might be conceived as attempts on the parts of Stallings communities to transform the present into their vision of the future through the creation of silences (Trouillot 1995) or “strategic forgetting that makes the production of certain narratives possible” (Gillespie 2008:12). In this particular case the large-scale burial of shellfish set the stage for the reoccupation of Stallings Island by Classic Stallings peoples.

Operating within a landscape rife with the material presence of past events, Stallings peoples continually encountered Parris Island and Mill Branch household deposits, pits, caches, and burials. Accordingly, these acts of physicality were instrumental in shaping subsequent ones (e.g., Gillespie 2008, 2010), positioning pits and the substances within them as reciprocal agents of change. As contingencies, they were simultaneously memorial- and future-oriented, influencing the structuring of space during Early and Classic Stallings times.

In their referencing of prior actions, pits and burials point to the ancestors as active forces in shaping the present. There is some, albeit limited, evidence to suggest that Stallings communities reopened earlier burials, adding new substances or manipulating bones. Certain burials within the village plaza at Stallings Island were disturbed by later interments or appear to have been revisited, as some were missing body parts or were recovered as solitary elements such as skulls and jaws. Digging through the old residues at Stallings Island and bringing up objects of the past was one way of explicitly establishing these connections for Classic Stallings peoples. Chapman (2000a:64) proffers that in so doing the temporal range is extended and might be considered an act of exchange, as old objects are incorporated with new ones. Likewise, those materials placed in the ground are often found broken and without their counterparts, suggesting that the connecting pieces might have been retained by the living (see Gillespie 2010:113). By including these materials within interments, the newly dead could be linked to the ancestors who in turn, could continue to be connected to the future cycles of specific houses (Chapman 2000a:69). Through these acts of social fragmentation (Chapman 2000a:68), the disassembling of some objects may also have entailed the dis-

assembling and redistribution of persons, further expanding the networks of relationships.

It is also feasible that fragments of the same objects and materials incorporated within burials were also deposited into household pits. Given these connections, we might approach storage pits like the ones at Mims Point as something other than repurposed trash receptacles. Even though the size and shape of these pits are citations of the Early Stallings silos at Victor Mills, they differ substantially in the contents of their fill. Feature 51, for example, was filled with an array of what were probably carefully selected, yet highly fragmented, objects, bringing together aspects of materiality with their own particular histories that were employed across diverse spheres of action. If the cycles of pits are tied to the cycles of associated houses, then their infilling may be considered to be the death of that pit and may potentially be connected with the death of a particular family member or the house itself (Chapman 2000; see also Pollard 2001).

That the creation and unfolding of social relations are materially instantiated through the contents of pits is particularly evident in the stratified ones that were created at Stallings Island. Again, these deposits occur only within the last 400 years of Stallings communities' time in the middle Savannah. It stands to reason that these features were probably microcosms of the greater Savannah River valley narrative, considering that they embody the key material elements of Stallings, Parris Island, and Mill Branch identities, in addition to those groups living on the Atlantic coast in a landscape of competing memories (see Gillespie 2008:127). These pits were history as envisaged by Classic Stallings peoples, rendered through distinct layers of shellfish, burned botanicals, ash, and diagnostic artifacts. And the variable compositions of these pits suggest that they might have been tied to the identity of specific households. With structures that coincide with those of several Classic Stallings burials, it could be proffered that the contents of these pits are the residues of feasting events centered around the dead and that they too were buried in the same manner as later Stallings communities buried their kin. These mortuary feasts carried forward aspects from earlier traditions, and given the emphasis placed on the large-scale deposition of shellfish and anadromous fish were probably associated with facets of renewal and rebirth.

These practices continued relatively unabated at Stallings Islands until approximately 3,800 years ago, after which Classic Stallings communities generally stopped depositing shellfish in the river valley and dispersed to the uplands and other surrounding regions. Rather than a result of economic crises fueled through overexploitation, it appears that the dissolution of Classic Stallings groups was primarily tied to aspects of social reproduction (Sassa-

man 2006:164). The stratified pits created at Stallings Island were the culminations of a series of events at least partially aimed at the amelioration of tensions over contested place and identity and concerted efforts to make explicit connections with the past. But with the rise of soapstone-vessel technology through descendants of relocated Mill Branch communities in Northwest Georgia and this technology's instrumentality in the establishment of other prominent places such as Poverty Point (Sassaman 2006:171), the maintenance of relationships tied to the river valley, and necessarily with those who came before, may have lost its salience over time, distancing the relevance of the past for informing the present (e.g., Barrett 1999).

Conclusion

For Stallings and related peoples the production of material narratives was carried out through the inscription of predominantly microscale acts, highlighting the influence of short-term and often community-level events in directing aspects of broad-scale change. In the repeated deposition of a variety of mutually valued materials, Late Archaic communities in the middle Savannah River valley effectively created depositional genealogies that shaped subsequent practices and spoke to aspects of group identity. Although a seemingly circumscribed act, the creation of pit features had temporal and spatial effects that extended beyond their initial formation, as objects and other aspects of physicality carried within them the experiences, and thus the memories, of the persons and places through which they were channeled. Certainly maintaining connections to earlier times and other places through a number of practices, Stallings peoples nonetheless created a world that was distinctly their own.

Acknowledgments

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Households Making History

An Eventful Temporality of the Late Woodland Period at Kolomoki (9ER1)

Thomas J. Pluckhahn

To what extent do households affect historical change? In her self-labeled “subversive” account of one of the world’s great historical transformations—the origins of the modern world system—historian Mary S. Hartman (2004) argues that a form of household relations particular to northwestern Europe prior to the modern era—that is, late marriage, coupled with a nuclear family structure and neo-local residence—provided a “prior and distinctive development” that permitted the rise of capitalism and the origins of the nation-state after 1500. Hartman’s explanation stands in contrast to the “disembodied historical forces” historians have long favored in their explanation of this and other major structural transformations (Hartman 2004:210,242). This tendency is not limited to historians; despite more than three decades of interest in households, and more than two decades of studies invoking the importance of agency, archaeologists have too seldom been willing to grant agency to households and their constituents in historical transformations.

The undervaluing of households as agents of change is exemplified by archaeological interpretations of one of the great junctures in the prehistory of eastern North America: the Late Woodland period. On one side of this juncture stood the complex, but relatively egalitarian societies of the Middle Woodland period (300 b.c. to a.d. 400) and on the other the hierarchical societies of the Mississippian (a.d. 1050 to 1500). Recent scholarship posits that the transitions between the Middle and early Late Woodland (Carr and Case 2008:28; McElrath et al. 2000:14–16; Yerkes 1988:1) and again between the terminal Late Woodland¹ and Early Mississippian (Beck et al. 2007; Pauketat 1994, 1997a, 1997b, 2004a, 2004b, 2007) are best viewed as historical events—that is, relatively abrupt and dramatic transformations of existing structures. Three major transformations in the Late Woodland are generally implicated in these events, although there is variability in the timing and extent of these changes across the Eastern Woodlands. As described by McElrath and colleagues (2000:23), these transformations consist of:

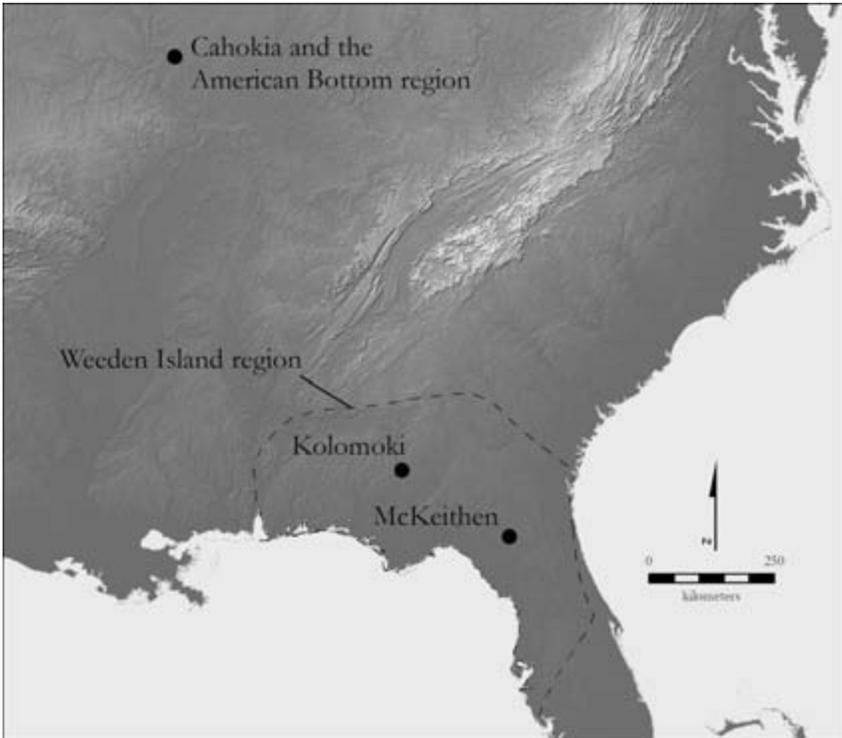
- 1) a major population resettlement following the breakup of the Hopewell Interaction Sphere and the general decline of the Middle Woodland lifestyle;
- 2) the widespread adoption of the bow and arrow; and
- 3) the adoption of a maize-based agricultural economy.

All of these changes clearly entail fundamental shifts in the organization of the domestic economy, but they have rarely been attributed to the agency of households. Instead, these transformations have been credited to a variety of disembodied historical forces, from population pressure (e.g., Muller 1997), to warfare (e.g., Dye 2009), to evolutionary change (e.g., Peregrine 1992).

This report investigates changes in households and their implications for the structural transformations that mark the beginning and the end of the Late Woodland period. The study focuses on the Kolomoki site, in the lower Chattahoochee Valley of southwestern Georgia (Figure 5.1). I compare two excavation blocks containing the remains of two distinct Late Woodland archaeological households. As the largest site of the Weeden Island complex of the Gulf Coast and adjacent interior portions of Alabama, Florida, and Georgia, Kolomoki is ideally suited to such a study. Weeden Island has often been viewed as a bridge spanning the dark ages between the “climaxes” of the Middle Woodland and Mississippian periods (e.g., Muller 1997:123; Nassaney and Cobb 1991:34; Willey 1966:289), a perspective stemming from the fact that many of the hallmarks of the former period—mound construction and long-distance exchange—continued later here than elsewhere in the Southeast. While the pattern was delayed, however, the same transformations noted by McElrath et al. (2000:23) for the Late Woodland period generally also took place at Kolomoki.

I approach the transformation of Late Woodland societies from an event-based perspective situated in the work of Sewell (2005). As described in more detail below, the advantages of this approach for considering the role of households in structural change are two-fold. First, an event-based perspective shifts the focus to events and conjunctures (Sewell 2005), thus highlighting shorter-term social formations such as households. Next, and relatedly, by avoiding the teleology and uniformitarian assumptions of stage-based temporalities (Sewell 2005), an event-based perspective permits a better understanding of how structural transformations such as those characterizing the Late Woodland, although similar across a broad region and perhaps even triggered by the same event, can vary locally in character and tempo.

Thus, an eventful temporality frame of reference moves us closer to solving what Gerritsen (2004:151) has referred to as one of the most vexing issues in archaeology: “how views of domestic life as lived by knowledgeable agents



5.1. Locations of Kolomoki and other sites mentioned in the text.

can be integrated with models of (long-term) structural change” (Gerritsen 2004:151). Changes in households at Kolomoki, placed in the context of trends across the broader region, demonstrate that disjunctions at the end of the Middle Woodland cascaded through multiple domains of domestic organization in a context-dependent manner, owing largely to the agency of households. Kolomoki was abandoned in the Terminal Late Woodland; thus, the archaeology there has little direct bearing on our understanding of the a.d. 1050 Big Bang at Cahokia that ushered in a new, Mississippian, lifestyle. Nevertheless, a comparison of Late Woodland households at Kolomoki with those in the American Bottom permits some tentative observations regarding how households may have been implicated in this structural transformation.

Lost Households of the Late Woodland

A brief review of the literature illustrates the extent to which households have been neglected in accounts of the structural transformations of the Late

Woodland period. The otherwise exhaustive survey of Late Woodland societies in the Midwest by Emerson and colleagues (2000) contains only 15 instances of the term “household” in its 26 separately authored chapters and more than 700 pages of text. The seminal edited volume on the Late Woodland Southeast by Nassaney and Cobb (1991), as well as the more recent overview of the Woodland Southeast by Anderson and Mainfort (2002), contain still fewer references to households.

There are practical reasons for the lack of attention granted to Late Woodland households. First, the Late Woodland period was omitted from many of the original cultural historical chronologies for the region and earned only slight consideration in many of the second-generation syntheses. Griffin (1952:361–36), for example, made only passing reference to the Late Woodland as “a period of rest and quiescence.” In some areas, archaeological understanding of the Late Woodland period has continued to suffer from the resulting lack of clear diagnostic markers (e.g., Rudolph 1999).

More important, relatively few Late Woodland houses have been excavated (Steere 2011:79), perhaps because in many areas residential mobility was high and houses were lightly constructed, making the identification of archaeological households less secure. Cobb and Nassaney (2002:538–53), based on a perceived lack of substantial houses or planned communities during the Woodland period, argue that the “institutionalization” of domestic space—presumably including household-based production and consumption—did not occur until the subsequent Mississippian period.

There are also methodological and conceptual issues that transcend the archaeology of the Woodland period. Households emerged as a topic of study among archaeologists in the 1970s, and early treatments fit squarely in the processual paradigm, with households viewed as basic building blocks of larger social formations and windows on evolutionary processes (Gerritsen 2004:142; Sabloff and Ashmore 2001:22; for recent reviews of household archaeology, see Nash 2009; Pluckhahn 2010a; Robin 2003). As Pauketat (2000; 2007:45–46) has argued, this approach reduced households to “static and uniform organizational units.” One might expect such conceptual problems to have been alleviated with the turn to agency and practice in archaeology within the last two decades, and there have been advances in the understanding of households as divergent, internally divided, and externally connected social formations (e.g., Hendon 1996; Marcoux 2010; Rodning 2004; Rogers 1995; Souvatzki 2008; Wesson 2008; Wilson 2008). Yet the problem persists at least in part because, as Johnson (2006:123) notes, many of archaeology’s most basic classificatory concepts—cultures, phases, and types—undermine the visibility of agency in the archaeological record in their emphasis on similarity over variability.

Hartman (2006:31) suggests that the failure to grant greater agency to households may stem from a conceptual bind much broader than the terms of archaeological discourse. She attributes the problem to the contemporary social milieu in which our research takes place:

Accustomed to seeing their own households as embattled and weakened, many would dismiss the suggestion that there was ever a time when typical household settings exercised immense influence, not only in structuring women's and men's daily lives but also in generating lasting change beyond households and in setting crucial conditions on the nature of that change. In the contemporary world, after all, we are used to the idea that the arrow of change always moves from institutions back to households, that households are always reactors to outside developments and never places from which far-reaching transformation might emanate.

I would extend Hartman's argument further: the denial of household agency arises not only from our view of contemporary social institutions but also from the manner in which we conceive of the temporality of history. Specifically, our tendency to emphasize long-term institutions and structures as the determinants of historical change reduces the relevance of shorter-term cycles and events (Sewell 2005), including shorter-term social formations such as households.

Finding Late Woodland Households

I utilize several strategies to emphasize households as agents of change in structural transformations rather than as simply reactors to external forces. First and most obviously, agency is highlighted by defining the unit of analysis and reporting as the household (Johnson 2006:124–125), focus specifically on the “archaeological household,” which Nash (2009:224) describes as a “co-residential group that used the occupation surface, features, and the artifact assemblage of a dwelling,” with “dwelling” defined as including one or more closely related structures and both indoor and outdoor spaces.

Relatedly, we can achieve a greater appreciation of the agency of households in historical change by comparing two households closely related in time and space. Archaeological constructs such as phase and type cannot be entirely avoided, but the problems with these are at least partially mitigated through comparison of sequentially occupied households, each of which was occupied for a relatively brief interval and together span a single, approximately 300-year-long period.

Finally, I conceive of historical change in terms of the “eventful temporality” described by Sewell (2005) and introduced to archaeological contexts by Beck, Bolender, and colleagues (Beck et al. 2007; contributors to Bolender 2010). Briefly (see the introduction to this volume for a more extended discussion), Sewell (2005:100) defines an eventful temporality as one that “takes into account the transformation of structure by events.” Structure is conceived of in terms of the “rules and resources” of Giddens (1984) but made more concrete through several key conceptual advances. Perhaps most important, Sewell (2005:131) revises Giddens’s poorly defined “rules” as schemas, defined as generalizable or transposable rules and procedures that are applied in social life. Sewell (2005:13–137) also redirects Giddens’s notion of resources away from the “virtual” to include both actual (material) human and nonhuman resources. Events transform structures in three steps: “(1) a series of context-dependent occurrences produce (2) a cascade of disarticulations between previously reliable resources and schemas, finally resulting in (3) the opportunity—and necessity—for novel rearticulations of social structure” (Bolender 2010:5).

An eventful archaeology has obvious appeal for understanding seemingly sudden structural transformations, such as those bounding the Late Woodland period. Conceptual challenges remain, however. First, events are difficult to bound in time and space; they may overlap and interpenetrate (Sewell 2005:260–261) (see also introduction and chapter 1, this volume). A related challenge is conceptualizing the nature of agency in an eventful archaeology. Beck and colleagues (2007:845), in their application of Sewell’s work, define agency as “the potential to transform prevailing structures.” Gillespie (2007:847) cautions that this limits agency to “rare moments of historical event.” Beck and colleagues (2007:856) refute this charge in the abstract, but their case studies show little regard for agency and agents removed from events in time and space. Thus, an eventful archaeology risks reducing the Late Woodland to a static interregnum and Late Woodland peoples to passive recipients of history produced elsewhere, by others.

As Sewell (2005:260–261) notes, however, events may overlap and interpenetrate. They are also fractal; what appears to be one event may in fact comprise several. Indeed, events are best conceived of as sequences of ruptures that reorganize structures rather than as discrete moments in time (Beck et al. 2007; Sewell 2005:261). Sewell (2005:100) notes that events are path dependent: “what has happened at an earlier point in time will affect the possible outcomes of a sequence of events occurring at a later point in time.” They are also heterogeneous in causality and historically contingent (Sewell 2005:83–103). These characteristics make an eventful temporality well suited to the consideration of households in long-term, structural change. The focus

on shorter time frames and the emphasis on historical contingency provide a means for highlighting causative forces of a more limited temporal and spatial scale, including social formations such as households. Further, an event-based perspective allows us to understand how structural transformations, while perhaps originating with events that are concentrated in space and time, can have repercussions that vary locally in character and tempo.

Comparing Late Woodland Archaeological Households at Kolomoki

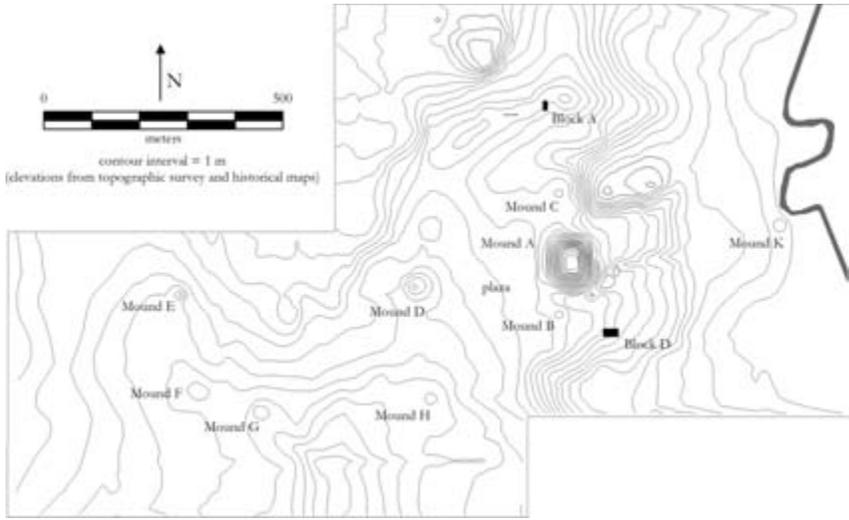
Two archaeological households have been identified in discrete excavation blocks at Kolomoki (Figure 5.2). Block A consists of 29 1×1-m excavation units in the northeastern portion of the site, 19 of which formed a contiguous block (Figure 5.3) (Pluckhahn 2003; Pluckhahn et al. 2006). Carbon dates place remains in Block A between cal a.d. 550 to 650, in the early/middle Late Woodland (Table 5.1). Block D, located about 300 m to the south, comprises 52m² of excavation, including a contiguous block of 38 m² (Pluckhahn 2011). This occupation dates principally between cal a.d. 750 to 850, or the late/terminal Late Woodland.

Unfortunately, as discussed above (see also Steere 2011:79), the household archaeology of the Late Woodland period societies of the Southeast is poorly developed. In that this analysis is based on only two archaeological households, the results of this comparison cannot be generalized uncritically to the community at Kolomoki as a whole, let alone to the lower Chattahoochee or the wider region. Nevertheless, I present evidence that the changes identified in the comparison of Blocks A and D may hold for other households at Kolomoki, as well as for other communities in the region.

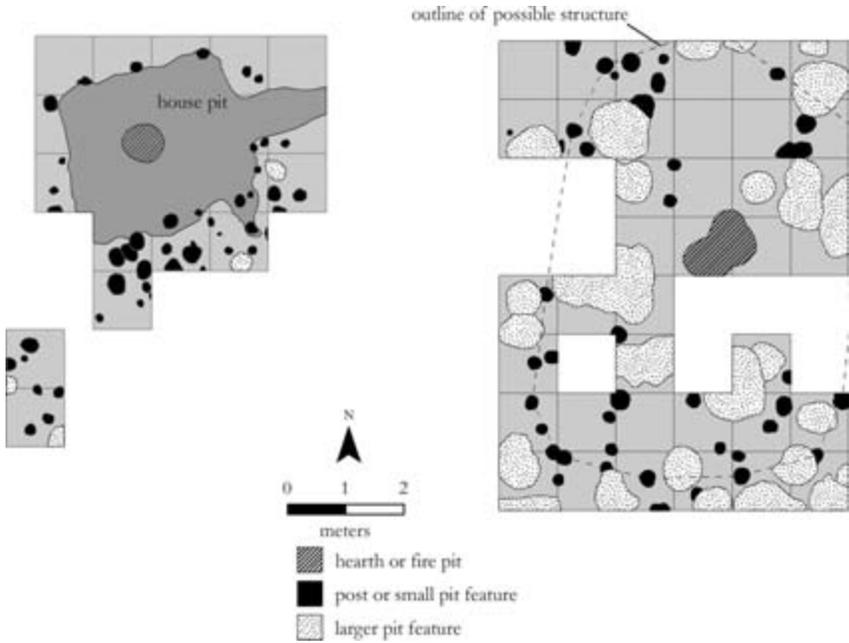
The two archaeological households straddle an important divide. While Block A was inhabited, the settlement plan at Kolomoki took the form of a large, U-shaped village centered on an immense plaza (Pluckhahn 2003). By the time of the Block D occupation, this formal plan had broken down and households were dispersed in less regular clusters. This settlement shift was coincident with a decline in public ceremony. Most of the mounds, including the two burial mounds (Mounds D and E), were constructed during the Middle Woodland (Pluckhahn 2003: 185–201). However, mound construction continued into the early/middle Late Woodland, concurrent with the Block A household; earthworks dating to this interval include two small dome-shaped mounds of uncertain purpose (Mounds B and C) and two low platform mounds used as stages for rituals (Mounds F and H) (Pluckhahn 2003:207–215). No mounds are coeval with the Block D household, suggesting public ceremony had ceased.

Table 5.1 Radiocarbon Dates from Blocks A and D at Kolomoki

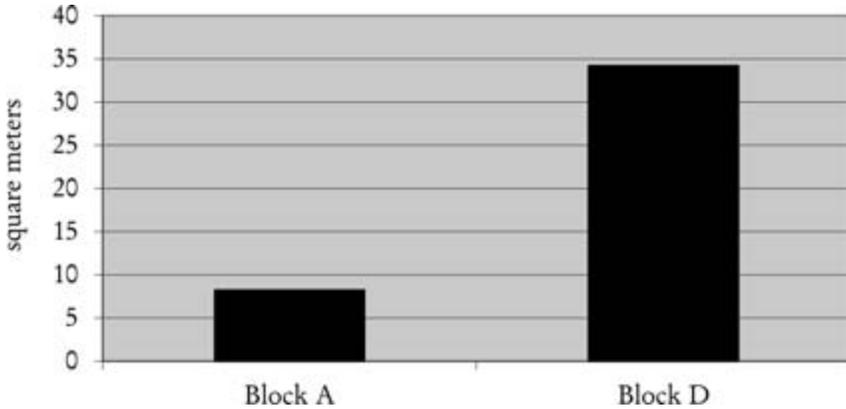
Number	Context	Service	Material	$^{13}\text{C}/^{12}\text{C}$ ratio	Conventional radiocarbon age	2 sigma calibrated results
Block A						
Beta-165118	Feature 131, Zone A	AMS	bone	-20.7 ‰	1160 ± 40 b.p.	a.d. 780 to 980
Beta-161791	Feature 131, Zone B	radiometric	wood charcoal	-25.0 ‰	1280 ± 70 b.p.	a.d. 640 to 900
Beta-234443	Feature 57, Zone B	AMS	maize kernel	-27.4 ‰	1420 ± 40 b.p.	a.d. 570 to 660
Beta-206785	Feature 57, Zone A	radiometric	<i>Carya</i> nutshell	-26.1 ‰	1480 ± 40 b.p.	a.d. 540 to 660
Beta-206786	Feature 57, Zone B	radiometric	<i>Carya</i> nutshell	-25.3 ‰	1550 ± 40 b.p.	a.d. 420 to 610
Block D						
Beta-284228	Feature 191A	AMS	<i>Carya</i> nutshell	-23.8 ‰	1060 ± 40 b.p.	a.d. 890 to 1020
Beta-242563	Feature 171	radiometric	<i>Carya</i> nutshell	-23.3 ‰	1140 ± 40 b.p.	a.d. 780 to 990
Beta-284227	Feature 147B, Zone B	AMS	<i>Carya</i> nutshell	-23.4 ‰	1150 ± 40 b.p.	a.d. 780 to 980
Beta-161790	TU18, Feature 34	radiometric	wood charcoal	-25.0 ‰	1290 ± 60 b.p.	a.d. 650 to 880



5.2. Map of the Kolomoki site, with locations of Blocks A and D.



5.3. Comparison of early/middle Late Woodland structure from Block A (left) and late/terminal Late Woodland structure from Block D (right).

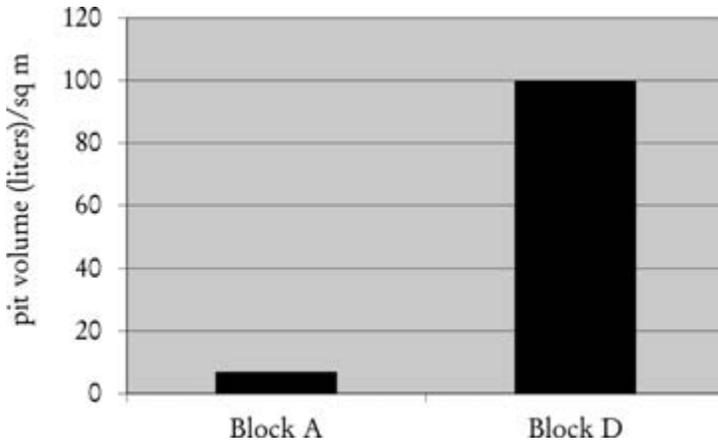


5.4. Comparison of floor area of structures in Blocks A and D.

The archaeological households in Blocks A and D differ obviously with respect to architecture. Remains in Block A include a pithouse measuring 2.5 by 3 m and 80 cm deep centered on a fire pit, with a projecting entrance ramp. This house is similar to “keyhole” structures in the Midwest (Binford et al. 1970; Kelly et al. 1987; Kelly et al. 1990a, 1990b) and less elaborate semi-subterranean structures in the immediate region (Espenshade et al. 1998; Jenkins and Ensor 1981; Price 1999; Shelby 2011). These likewise date primarily to the Middle or early Late Woodland periods. In contrast, an oval pattern of post features in the core area of Block D suggests a single set post structure 7.3 m long and 5.2 m wide, roughly centered on a possible hearth. The structure in Block D corresponds closely with late/terminal Late Woodland houses elsewhere in the Weeden Island area (Milanich 1977; Mickwee 2009).

The two houses differ dramatically in size. The pithouse in Block A has a floor area (8.2 m²) about one-quarter that of the structure in Block D (34.2 m²) (Figure 5.4). Although floor area does not correlate directly with number of occupants (Goody 1958; Narrol 1962; Wiessner 1977), other lines of evidence (discussed below) corroborate an increase in the size of the co-resident group in the transition from early to late Late Woodland.

Another obvious contrast is in storage; comparison of the blocks reveals a ten-fold increase in the volume of storage pits (Figure 5.5). Equally notable is the context of storage. There are no storage pits in the interior of the structure in Block A, while there are several large bell- and basin-shaped pits in the interior of the house in Block D. The increase and privatization of storage were not limited to households at Kolmoki; early Late Woodland pithouses at other sites in the area are similarly deficient in storage and generally lack



5.5. Comparison of the volume of pit features in Blocks A and D.

internal storage facilities (e.g., Shelby 2011), while on late Late Woodland sites storage pits are common both inside and outside of structures (e.g., Milanich 1974).

Differences in storage and household size do not appear to be related to shifts in diet or environment. Subsistence throughout the Late Woodland period centered on wild plant and animal resources, supplemented by cultigens. Mast resources dominate the macrobotanical assemblages (Table 5.2) (Pluckhahn 2003, 2011; Pluckhahn et al. 2006). Maize and sunflower were present in small quantities in Block A (6 percent and 3 percent ubiquity, respectively), but absent from Block D. Pollen and phytolith studies confirm that maize and other cultigens were still grown in the late Late Woodland but were not a major component of the diet or materials stored in pits. Charcoal assemblages comprise similar arrays of trees and shrubs (Table 5.3), suggesting no major climatic shifts.

The faunal assemblages overwhelmingly comprise white-tailed deer (Table 5.4), especially cuts with high meat utility (Pluckhahn 2003; Pluckhahn et al. 2006). The Block A assemblage was retrieved mainly from the pithouse fill, which was deposited rapidly. This, combined with the low richness and skewed element distribution, prompted Pluckhahn et al. (2006:267–268) to interpret the assemblage as the product of one or two small-scale feasts facilitated by communal deer hunts removed from the village. The Block D assemblage was retrieved from a number of features that filled over an extended interval, thus representing a pattern of more individualized but still wide-ranging deer hunting.

Table 5.2. Comparison of Macrobotanical Assemblages (Excluding Wood Charcoal) from Blocks A and D

	Block A			Block D		
	Count	Ubiquity	Count	Ubiquity	Count	Ubiquity
Mast						
	9	15.15	22	17.14		
acorn (<i>Quercus</i> sp.) nutshell, cap						
hickory (<i>Carya</i> sp.) nutshell	361	69.70	140	54.29		
walnut (<i>Juglandaceae</i> sp.) nutshell						
hazelnut (<i>Corylus</i> sp.) nutshell	2	3.03	8	11.43		
Domesticates						
sunflower (<i>Helianthus annuus</i>)	1	3.03				
maize (<i>Zea mays</i>) cob, kernel	10	6.06				
Starchy/herbaceous						
pigweed (<i>Amaranthus</i> sp.) seed	2	3.03				
yellowrocket (<i>Barbarea</i> sp.) seed			1	2.86		
unidentified grass (Poaceae) seed			9	2.86		
goosefoot (<i>Chenopodium</i> sp.) seed	1	3.03	1	2.86		
Wild fleshy fruits						
hackberry (<i>Celtis occidentalis</i>) seed	1	3.03				
peppervine (<i>Ampelopsis</i> sp.) seed			1	2.86		
blackgum (<i>Nyssa sylvatica</i>) seed			1	2.86		
huckleberry (<i>Gaylussacia</i> sp.) seed	3	3.03				
Medicinal plants						
bedstraw (<i>Galium</i> sp.) seed	1	3.03				
Saint Johnswort (Hypericaceae) seed	43	15.15				
checkermallow (<i>Sidalcea neomexicana</i>) seed	2	3.03				
pokeweed (<i>Phytolacca americana</i>) seed	1	3.03				
violet (<i>Viola</i> sp.) seed	1	3.03				
unidentified seed, c.f. <i>Brassica</i> sp.			1	2.86		
four-seeded mercury (<i>Acalypha virginiana</i>) seed			2	5.71		
rush (<i>Juncus</i> sp.) seed	2	3.03				

Table 5.3. Comparison of Wood Charcoal Assemblages from Blocks A and D

	Block A		Block D	
	Count	Ubiquity	Count	Ubiquity
Oak (<i>Quercus</i> sp.)	6	15.15	22	2.86
Red oak (<i>Quercus rubra</i>)	9	6.06	63	54.29
White oak (<i>Quercus alba</i>)	16	12.12	27	25.71
Post oak (<i>Quercus stellata</i>)			3	8.57
Hickory (<i>Carya</i> sp.)	1	3.03	9	20.00
Butternut/walnut (<i>Juglans</i> sp.)	8	9.09	9	5.71
Maple (<i>Acer</i> sp.)	2	6.06	20	22.86
American chestnut (<i>Castanea dentata</i>)	1	3.03	1	2.86
Common persimmon (<i>Diospyros virginiana</i>)	1	3.03		
Black gum (<i>Nyssa</i> sp.)			5	8.57
Ash (<i>Fraxinus</i> sp.)	3	3.03		
Eastern hophornbeam (<i>Ostrya virginiana</i>)	1	3.03		
Flowering dogwood (<i>Cornus florida</i>)			1	2.86
Sycamore (<i>Platanus occidentalis</i>)	6	9.09	3	2.86
Cherry (<i>Prunus</i> sp.)	5	3.03	12	5.71
Elm/hackberry (<i>Ulmaceae</i>)	7	9.09	3	5.71
Basswood (<i>Tilia americana</i>)			2	2.86
Willow (<i>Salix</i> sp.)			2	2.86
Cottonwood (<i>Populus deltoides</i>)			10	11.43
Ironwood (<i>Ostrya virginiana</i>)			4	8.57
Honey locust (<i>Gledetsia triancanthos</i>)			2	2.86
Black locust (<i>Robinia pseudoacacia</i>)	1	3.03	2	5.71
Unidentifiable hardwood	157	72.73	87	51.43
Eastern redcedar (<i>Juniperus virginiana</i>)	16	12.12	12	11.43
Pine (<i>Pinus</i> sp.)	791	96.97	873	100.00
Cane (<i>Arundinaria</i> sp.)	57	30.30	51	48.57

Table 5.4. Comparison of Faunal Assemblages from Blocks A and D

Taxon	Description	NISP				MNI				Weight (g)				Biomass (kg)			
		Block A		Block D		Block A		Block D		Block A		Block D		Block A		Block D	
Osteichthyes	Indeterminate bony fish	1		1		6.3		0.01						<0.01		0	
Testudines	Indeterminate turtle	8	4					1.08	0.6					0.03	0.1	0.02	0.1
<i>Terrapene carolina</i>	Eastern box turtle	1		1		6.3	1	0.45	0.9					0.02	0	0.03	0.2
Aves	Indeterminate bird	85	9					9.5	0.8					0.16	0.3	0.02	0.1
<i>Mele-agris gallopavo</i>	Wild turkey	6	3	1	1	6.3	1	2.33	0.6					0.04	0.1	0.01	0.1
Mammalia	Indeterminate mammal	5,943	1435					2,298.26	749.7					27.88	53.6	10.17	55.5
<i>Sciurus niger</i>	Fox squirrel	1		1		6.3		0.36						0.01	0		
<i>Urocyon cinereo-argenteus</i>	Gray fox	1		1		6.3		0.60						0.02	0		
<i>Ursus americanus</i>	Black bear		1				1		0.1							<0.01	0
<i>Procyon lotor</i>	Raccoon	1		1		6.3		1.22						0.03	0.1		
<i>Odocoileus virginianus</i>	White-tailed deer	308	142	10	10	62.5	10	1,926.21	580.8					23.78	45.8	8.08	44.1
Vertebrata	Indeterminate vertebrate							79.60	167.6								
TOTAL		6,355	1,595	16	13			4,319.62	1501.1					51.97		18.33	

Table 5.5. Relative Frequencies of Surface Treatments in Identifiable Woodland Pottery Assemblages from Blocks A and D

Surface treatment	Block A (n = 8,515)	Block D (n = 9,272)
	percent	percent
Plain	59.92	77.18
Complicated stamped	39.32	10.19
Dentate stamped	0.03	0
Incised	0.12	3.68
Punctate	0.07	3.38
Net marked	0	0.39
Ridge pinched	0	0.08
Red filmed	0.42	4.92
Check stamped	0	0.14
Cord marked	0	0.04
Other	0.12	0

While environment and diet remained similar, there were changes in the ceramics used to cook, store, and serve food (Pluckhahn 2003, 2010b). Decorations characteristic of Weeden Island wares (punctuation, red filming, and incising) each contribute less than 1 percent of the assemblage from Block A but are more common in Block D (Table 5.5). At the contemporaneous McKeithen site, several of these were identified as “prestige” wares based on their greater frequency of nonlocal pastes, higher production-step measures, greater standardization in design, and more restricted spatial distributions (Cordell 1983, 1984; Kohler 1978; Milanich et al. 1997). A minimum-number-of-vessel (MNV) analysis reveals concomitant changes in vessel forms (Table 5.6); most conspicuous is the pronounced increase in serving vessels (restricted bowls and plates) associated with prestige pottery.

Temporal differences are also evident in hafted biface assemblages (Table 5.7). Most striking is the appearance of small triangular bifaces, a form commonly interpreted as characteristic of a new, or at least improved, bow-and-arrow technology (Blitz 1988; Nassaney and Pyle 1999; Pluckhahn and Norman 2011; Seaman 1992). The examples from Block D are the identified only from Kolomoki, suggesting this occupation was coincident with the introduction of the form. Households at Kolomoki were slow in adopting this technology; arrow points become common in the archaeological record in the Midwest around cal a.d. 600 (McElrath et al. 2000:18), and appear on other Weeden Island sites by a.d. 500 (Milanich et al. 1997:88).

Table 5.6. Relative Frequencies of Vessel Forms Identified in MNV Analysis of Ceramics from Blocks A and D

Vessel form	Block A (n = 55) percent	Block D (n = 57) percent
Simple bowl/unrestricted jar	23.64	24.56
Restricted bowl	12.73	19.30
Open bowl	18.18	17.54
Collared jar	30.91	15.79
Neckless jar	10.91	12.28
Cup	1.82	1.75
Dish/plate	1.82	8.77

Table 5.7 Comparison of the Relative Frequencies of Hafted Biface Types in Blocks A and D

Type	Block A percent	Block D percent
Probable dart points		
Bakers Creek	25.81	13.16
Broward	12.90	2.63
Duval Type 1	3.23	0
Duval Type 2	6.45	7.90
Duval Type 3	3.23	2.63
Ebenezer	3.23	10.53
Florida Copena (lanceolate/triangular)	6.45	0
Florida Copena (notched)	9.68	0
Jacks Reef	0	2.63
New Market	3.23	15.80
Swan Lake	3.23	7.90
Swannanoa	3.23	5.26
Tampa	0	2.63
Weeden Island Straight Stemmed provisional type	6.45 3.23	2.63 0
Probable arrow points		
Woodland/Mississippian Triangular	0	13.16
TOTAL	100.00	100.00

Household Change in the Late Woodland

In the Midwest, the transition between the Middle and Late Woodland periods at cal a.d. 400 is defined by a decline in the construction of burial mounds and a shift in settlement from floodplain to uplands (McElrath et al. 2000:14–16). These changes are also true of the Weeden Island area, although the timing was delayed by several centuries. Dunnell and Greenlee (1999) review the social and political factors invoked by archaeologists to explain this “collapse” and find them deficient, because they have few testable implications (cultural fatigue, outside influence, internal sociopolitical strife) or their expectations do not match the archaeological record (warfare, agriculture, bow and arrow). Citing the ubiquity and simultaneity of changes across the Midwest, McElrath et al. (2000:15) posit an environmental trigger—perhaps a shift in flooding regimes.

Given its upland location, Kolomoki would have been little affected by flooding, but changes in sea level may have affected Weeden Island groups closer to the coast (Marquardt 2010a). Drought has also been invoked as an explanation (Smith 2009:176; see also chapter 1, this volume). Still, there are no obvious indications of major climatic change in the botanical assemblages from Blocks A and D at Kolomoki. This, coupled with the persistence of mound building for several centuries after the Midwestern collapse, suggests that any broad-scale environmental crises were mitigated by human agency.

Regardless of proximate cause, the decline in burial-mound construction and the dispersal of settlement reflect rifts in the structures that held sway through the Middle Woodland period. It is now commonly agreed that Middle Woodland ceremonies intertwined themes of mourning, world renewal, and rites of passage (Carr 2006b:475–476, 2008; Carr and Case 2008; Hall 1979:25–261, 1997; Knight 1990a, 2001; Romain 2000:167–19, 2009) and were organized around extended, fictive kin groups (such as clans and moieties) and sodalities that crosscut kinship and residence (Carr 2006a, 2008; Carr and Case 2008). These groups, as well as the more distant social ties they manifested, probably declined in importance as the ceremonies they sponsored and supervised became smaller, less extravagant, and less frequent. Thus there were fundamental changes in the resources and schemas dictating the constitution of kin and community.

The themes underwriting Middle Woodland ceremony were not forgotten, however, even if they were less often expressed in public ceremony. Small platform mounds were constructed at Kolomoki in the early/middle Late Woodland. Knight (1990a, 2001) argues that activities undertaken on the summits of these and similar mounds in the region—including the repeti-

tive placement of large posts and the displaying of meat on scaffolding—were directed to communal rites of world renewal. Given the persistence of these practices, it is not surprising that early/middle Late Woodland households at Kolomoki remained economically interdependent. The paucity of storage, combined with the small size of houses and the evidence for communal hunting, suggest that production and consumption was organized at a level above the co-resident group, by lineages or the community as a whole. This is corroborated by the placement of houses in an oval pattern around a public plaza (a pattern typical of the Weeden Island area [Russo et al. 2006]), suggesting suprahousehold economic cooperation (Flannery 1972,2002; Kelly et al. 2005:414; Peregrine 1992; Wilson 1991). Households thus likely continued to maintain structures that encouraged the pooling of effort and resources. The value placed on shared labor may have been strong enough to discourage the adoption of the bow and arrow, even as it came into more frequent use in surrounding areas.

Domestic production and consumption were radically transformed in the interval from cal a.d. 650 to 750, as evidenced first and most dramatically by an increase in the number and size of storage pits (McElrath et al. 2000:18). This is sometimes attributed to intensified maize production (Steere 2011:197) but maize was clearly not the impetus for increased storage at Kolomoki, where pits were employed mainly for storing mast. Even in the American Bottom region of the Midwest, where maize became more important in the terminal Late Woodland, increased storage predates intensive cultivation (McElrath et al. 2000:18).

The increase and privatization of storage suggest greater household autonomy (DeBoer 1988; Hendon 2000; Wesson 1999,2008). At Kolomoki, the changes in storage are coincident with the collapse of the mound-building tradition. I argue that these trends are related and reflect another structural disjunction: the social rules and mechanisms for sharing were transformed as communal ceremony withered and households exercised greater control over food production and consumption (see also Nassaney 1992,2000,2001). Specifically, the reciprocal social obligations formerly exercised in public ceremony gave way to less formal relationships materialized in household-based food rituals, as indicated by the specialized serving vessels in domestic assemblages from Block D and elsewhere in Kolomoki.

Also coincident with these changes is the adoption of a new or improved arrow technology (Blitz 1988; Nassaney and Pyle 1999; Seaman 1992). By permitting increased efficiency in individual hunting, the bow and arrow negated the need for the coordinated drives that were more common when hunting with darts (Bettinger 1999; Hall 1980). The delayed and gradual adoption of

this technology at Kolomoki suggests that the socially embedded nature of hunting discouraged the adoption of new technologies while community-level institutions were strong. However, as households became more autonomous, technologies supporting individualized hunting presented an attractive option. The switch to individualized hunting likely accelerated the rift in schemas that regarded many food resources as public goods, as Bettinger (1999) argues for the Great Basin.

Thus, by around cal a.d. 850, households at Kolo moki and elsewhere in eastern North America began removing themselves from formalized collective ritual, developing greater storage capacity, and adopting new technologies that permitted greater efficiency in hunting. Like households everywhere, they were still embedded in larger social networks (Düring and Marciniak 2006; Hendon 1996; Pauketat 2007:45–6; Souvatzi 2008), but, compared with earlier generations, they exercised greater autonomy over their own production and consumption.

After cal a.d. 850, late/terminal Late Woodland households at Kolomoki differed from those in some parts of eastern North America, particularly the American Bottom, in several key respects, and these differences help explain the divergent trajectories these regions would take over the next few centuries. First, households at Kolomoki chose not to intensify the effort devoted to horticulture. The pattern is typical of the Weeden Island area, where maize is uncommon until Middle Mississippian times (Ashley and Rolland 2009; Mickwee 2009; Milanich 1974; c.f. Kohler 1991). In contrast, in the American Bottom the ubiquity of maize had increased to around 40 percent by cal a.d. 900 (Fortier and McElrath 2002; McElrath et al. 2000:18).

The decision not to devote more effort to farming played a crucial role in other points of divergence. First, households at Kolomoki were less residentially stable, probably regularly dispatching task groups and perhaps shifting residence seasonally or in longer-term cycles. Koldehoff and Galloy (2005) suggest that terminal Late Woodland households in the American Bottom were also less sedentary than many have assumed, but this likely changed with the intensification of maize production (McElrath et al. 2000:18).

The higher mobility of households at Kolomoki would have impeded population increase. At the same time, at Kolomoki and elsewhere in the Weeden Island region, coresident groups became larger, probably more commonly incorporating extended families under a single roof (Peregrine 1992; Steere 2011:72–3). Larger, extended family households are favored where the demands of scheduling are great, because while parents are away there are other adults in residence to assist with childcare and other household duties (Pasternak and Ember 1976; see also Wilk and Rathje 1982). Constraints on or-

ganization may also favor large households where community-level institutions are weak (Johnson 1982).

As households in the Weeden Island area became larger, those in the American Bottom may have become more attenuated (Steere 2010:72–3). Fortier and McElrath (2002) report considerable diversity in domestic architecture and community organization in the American Bottom region during the terminal Late Woodland. Nevertheless, the predominant pattern consisted of very small houses, sometimes occurring in relative isolation and other times clustered around small courtyards (Fortier and McElrath 2002; Kelly et al. 1990a, 1990b; Steere 2011). Although the clustering of houses suggests a degree of sharing in household activities, the presence of internal hearths and storage pits (Kelly et al. 1987; Kelly et al. 1990a, 1990b) indicates independence in production and consumption. The pattern is one that would be expected with a mixture of independent, small, nuclear family households and multiple-family household groups in which the conjugal couple maintained some degree of economic autonomy (and thus could be considered separate households) (Wilk 1983, 1988:13).

The diversity of architecture in the terminal Late Woodland American Bottom suggests that households varied in form. Still, I argue that the nuclear family emerged as the “normative household” (Wilk 1988:137), form held as ideal, if subject to frequent variation based on economic strategies and the domestic developmental cycle. It is also true that households do not necessarily act in concert (Blanton 1995; Hendon 1996; Wilk 1988; Yanagisako 1979), but to assert households can respond strategically to opportunities and constraints is not to deny internal differences in interest or authority (Hartman 2004:95).

Various authors have implicated the emergence of nuclear family households as a key component of the Mississippian transformation in the American Bottom, but this development is generally regarded as following the initial push toward Mississippian, whether conceptualized as evolutionary and materialist (Peregrine 1992) or historic and political (Pauketat 2000a:33–35, 2007; Rogers 1995). In contrast, I suggest that the development of smaller, more residentially stable, and more autonomous households—in many cases composed of nuclear families—constituted a “prior and distinctive development” (Hartman 2004) permitting the rapid entrenchment of a new Mississippian political order in the American Bottom after the a.d. 1050 event. Conversely, the uncommonness of this household form in the Kolo moki area helps explain why a Mississippian lifestyle did not develop here until a.d. 1100–1200, when it was introduced by migrants from elsewhere in the Mississippianized Southeast (Blitz and Lorenz 2006:136–137). The same may

be true of other areas; Steere (2011:186–187) notes that the small houses of the Late Woodland period in the American Bottom resemble those in southeastern Missouri and west-central Alabama, where a Mississippian social order developed relatively early (see Anderson 1999), and contrast with the larger houses found in areas to the east where Mississippian appeared later.

Why might this form of household have been a contributing factor to the a.d. 1050 event and subsequent Mississippianization of the region? Peregrine (1992) argues that smaller, nuclear households promoted competition, thus fostering intensification of maize production and ultimately greater social stratification. Wilk and Rathje (1982:23–24) observe that intensified agricultural production favors smaller households, since more can be produced per worker from a given unit of land (assuming no need for substantial land modifications requiring larger task groups, such as irrigation systems).

Smaller households provide other potential advantages. First, they are more mobile (Hartman 2004:105–106; Wilk and Rathje 1982:62). In the case of the development of the modern nation-state, the nuclear households of western Europe were better able to position themselves with respect to emerging employment opportunities (Hartman 2004). In the case of the Mississippian event, smaller households could more easily relocate as the geopolitical landscape shifted, first with the reorganization of space in the Big Bang at Cahokia, then with the founding of new communities on Cahokia's periphery, and ultimately with the migration of Mississippian households away from the American Bottom.

Next, the structure of smaller households makes them more amenable to new forms of socio-political organization. Hartman (2004:105–106) makes this case in regard to the pattern of nuclear households that took hold in northern and western Europe in the years preceding the development of modern nation-states, noting that this system “enables and encourages greater flexibility of response to new situations, inviting a certain creativity”: “As the sole married adults in residence, couples . . . do not live daily with the accumulated weight of generations of practice passed down within the husband's family. Neither spouse is obliged to engage in what may become decades of deference to the wishes of the resident elder generation.” In contrast, the extended household pattern that was more common elsewhere in Europe provided advantages for scheduling but emphasized tradition over innovation, since married couples face long apprenticeships in household management under members of an older generation (Hartman 2004:105).

As Hartman (2004) further notes, the nuclear household comes with a price: with only one married adult couple in residence, there is no cushion of support in regard to scheduling of household chores or provisioning in

the event of the death or disability of one of the conjugal pair (see also Laslett 1988). Where nuclear families predominate, this relative insecurity in the face of weakened familial ties is often mitigated by collective social and political institutions. Extrapolating to the Mississippian example, the smaller households of the American Bottom were more amenable to new forms of authority, such as the political patronage described by Pauketat (1994:10–140, 2004a:78–80), even if this meant they would eventually and largely unwittingly forego some of the autonomy gained over the course of the Late Woodland (Pauketat 2000b).

Mississippian political authority was built on the coopting of existing traditions, including many of the same collective rituals and perhaps some of the same themes (Pauketat 2000b). These traditions were not borrowed wholesale, however. Middle Woodland ceremonies were undertaken by households deeply interconnected economically through schemas that encouraged the pooling of subsistence resources. Domestic space and activities were yet to be fully institutionalized (Cobb and Nassaney 2002:538–53; see also Wilson 1991). Middle Woodland rituals were organized around extended kin groups and sodalities that crosscut households and communities (Carr 2006a, 2008; Carr and Case 2008).

In contrast, as a result of changes during the Late Woodland, the collective rituals of the Mississippian period were undertaken by households that were more or less autonomous in terms of domestic activities. This, coupled with the increased scale of Mississippian ritual, at least as practiced in the American Bottom, provided a foundation for the realignment of these rituals around political factions (Pauketat 2000b). Thus, the schemas and resources that underlay collective rituals were rearticulated in novel ways.

Conclusion

Nassaney and Cobb suggest that “the undoing of Middle Woodland and all it entailed is *simultaneously* the emergence of Mississippian” (1991:34, emphasis in original). Describing these changes as “simultaneous” is appropriate in the sense that events bounding the Late Woodland period were related. The collapse of public ceremony and the dispersal of settlement at the end of the Middle Woodland period reflect ruptures in structures by which communities and extended kin networks were conceived and constituted. These ruptures cascaded across multiple domains of domestic life, perhaps most fundamentally the sharing of labor and resources, resulting in Late Woodland households being less beholden to others and more autonomous in production and consumption.

Thus was the “undoing” of the Middle Woodland, but the “emergence” of the Mississippian would depend on additional, context-dependent ruptures in domestic organization, including the manner in which family and household were defined. Households at Kolomoki chose not to invest heavily in the growing of maize; relatedly, they mostly retained an extended household structure that, while well suited to the scheduling demands of hunter-gatherers, favored the maintenance of existing practices and traditions by keeping generations together. In contrast, households in the American Bottom intensified maize cultivation and, in the process, frequently adopted a smaller form of household that was more efficient for horticultural production, potentially more mobile, and—lacking both the support and constraints afforded by having an older generation in residence—more favorably inclined to new forms of political organization.

These changes were not simultaneous in a literal sense, however, and this points to a problem in the conceptualization of change in prehistory. Archaeologists are adept at describing stable, long-term structures (Braudel’s *longue durée*) but are arguably less skilled at describing structural change. The turn to theories of practice and structuration reinforces this problem, since these emphasize the reproduction of structures (Dornan 2002:306–308). As Smith (1992:25) observes, “Archaeology needs a construct that can treat 200–400 year intervals in a dynamic, not static framework.”

Hence the appeal of the event as reconceptualized in the work of Sewell. Broadening the frame of reference to include short-term phenomena like households reveals that the manner in which these ruptures cascaded through structural domains was context dependent and filtered through human agency. Souvatzi (2008:25) observes that we should avoid the assumption that “novel reorientations, developments, and changes are something that happens elsewhere to which households merely respond.” Of course, the transformative power of actors varies with structural constraints, social position, and historical circumstance (Sewell 2005:144–145). I do not argue that changes in households directly or single-handedly caused either the collapse of Middle Woodland ceremonialism or the a.d. 1050 Big Bang. However, self-determined transformations in domestic life were crucial to both events, as well as their longer-term repercussions. In this sense, the households of the Late Woodland period were truly “making history.”

Note

1. I avoid “Emergent Mississippian” owing to its teleology (Cobb and Garrow 1996; Fortier and McElrath 2002).

II.
HISTORICAL INTERVENTIONS

Subterranean Histories

Pit Events and Place-Making in Late Archaic Florida

Zackary I. Gilmore

In this chapter, I examine a series of historical events that occurred during the Late Archaic period (ca. 5600–3600 cal b.p.) at the Silver Glen Run complex in northeastern Florida. In doing this, I follow Sahlin (1985:xiv) in viewing events not simply as happenings or occurrences but rather as relations between happenings and existing structural influences and Sewell (2005:127–43 following Giddens 1984) in regarding structure as multiple and composed of both material and immaterial elements (refer to the introduction, this volume, for a more in-depth discussion of Sewell’s thoughts on this topic). According to this line of thought, happenings become historically significant (i.e., “eventful”) only as they are interpreted within a cultural framework. And whereas happenings occur constantly and sometimes with little or no lasting effect, events achieve a structural impact beyond the immediate context of their occurrence, an impact that is manifested in reinforced or reworked patterns of future practice. In short, then, for my purposes, an event is defined simply as a happening with culturally ascribed historical consequences. As discussed in the introduction to this volume, the question of how exactly these consequences transpire, how a seemingly discrete episode becomes amplified so as to attain a more generalized cultural and historical significance, is what Sahlin (1991:4) has referred to as the “fundamental enigma of the event.”

A recurring theoretical question with regard to events concerns the magnitude of impact necessary for something to be judged “eventful” (see comments and response in Beck et al. 2007; Sahlin 1991:86). While few would question the eventfulness of Captain Cook’s famous encounter with native Hawaiians or the taking of the Bastille during the French Revolution, disagreement arises over whether the same historical import should be ascribed to everyday occurrences and practices such as forming a pot, building a house, or preparing a meal. If viewed as environmentally or socially determined normative behaviors, these activities are decidedly uneventful because they simply recapitulate some larger unseen system. If, however, each practice is recognized as a historically contingent and socially negotiated process (*sensu*

Giddens 1984; Pauketat 2001), then every act has at least the potential to incite eventful structural change. This is because everyday practices take place under constantly shifting social and material conditions. In these fluid circumstances, established structural relations are continuously put at “risk” as contradictions arise between cultural expectations and objective realities (Sahlins 1985). Every practice thus involves the potential for creative reinterpretation, an “inter-subjective moment” during which everyday actions can take on new forms and meanings in relation to novel conditions (Pauketat and Alt 2005:27; Sahlins 1985). Consequently, events, defined in terms of structural impact, need not be restricted to exceptional historical occurrences but also include the stuff of everyday experience.

Traditional archaeological accounts of the Archaic period in the Southeast have generally depicted it as an era of relative continuity or stasis. Cultural change, where acknowledged at all, is most often portrayed as slow and gradual and is attributed to evolutionary rather than historical processes (Sassaman 2004, 2010a, 2011a). A persistent focus on artifact typologies and functional analyses, combined with inadequate chronologies, have largely obscured Archaic cultural variation and precluded the understanding of short-term, context-specific events (Sassaman 2000:148). Recognizing historical events in the archaeological record requires getting beyond broad generalizations that characterize most Archaic studies and accessing variability in practice at a resolution commensurate with actual human experience (Sassaman 2010a:13). Methodologically, one way to do this is to focus on features. As discrete, often sealed contexts, features offer a means of isolating individual practices to a degree that is usually unattainable within the complex palimpsests of general archaeological deposits. By directing attention toward the practical variability evident in features and relating it to changes in social and historical contexts at different scales, pivotal moments of social transformation can be recognized and understood, even in the relatively distant past (e.g., Moore, this volume; Pauketat and Alt 2005).

The events of concern here involved the digging and infilling of hundreds of extraordinarily large pits. Pits are rarely considered noteworthy by archaeologists due to their commonality and penchant for collecting everyday “garbage.” To the contrary, they are most often viewed as normative and largely interchangeable subsistence features with little need for problematization. I hope to show that these particular features were far more than mere refuse containers. Instead, I suggest that through repeated, ritualized acts of pit digging and deposition, the Late Archaic inhabitants of Silver Glen Run orchestrated a series of material “interventions” (Sassaman 2012a) deliberate future-oriented attempts to affect the course of history. By situating these micro-scale

pit events within a genealogy of Archaic depositional practices, I argue that they played an active role in transforming the Silver Glen Run complex and establishing it as a place of regional significance where Late Archaic people gathered for purposes of remembrance and engagement with the past.

Events of Place

Perhaps predictably, given its status as a historical concept, the notion of the event is most often invoked in relation to various aspects of time—chronology, duration, periodicity, and the like. In recent archaeological treatments, issues such as increasing temporal resolution (e.g., Gearey et al. 2009; Whittle et al. 2010), the relationship between short-term events and other timescales (e.g., Bintliff 2010; Gosden and Kirsanow 2006; Van Dyke 2008), and the distorting effects of temporal distance (e.g., Bailey 2007; Holdaway and Wandsnider 2008) have largely dominated discussion. However, given that events are as much spatial as they are temporal (Casey 1996:37; Sewell 2005:29), it is somewhat surprising that comparatively less consideration has been given to their dynamic relationship to place (for exceptions, see Beck et al. 2007; Moore, this volume). As Basso (1996:86-87) puts it, “Placeless events are an impossibility; everything that happens must happen somewhere. The location of an event is an integral aspect of the event itself, and therefore identifying the event’s location is essential to properly depicting—and effectively picturing—the event’s occurrence.”

People and places are mutually constituted through a historical process that Basso (1996) refers to as “interanimation.” In this view, places are not simply static backdrops for human action but rather are created and maintained through the ongoing engagement between human and nonhuman actors in a given location (see also Barrett and Ko 2009; Ingold 1995; Tilley 2004). In other words, places are produced via social practice. Through various acts of place-making—from the building of a house to the planting of a garden—people continuously give shape and significance to the world around them. Over time, individual places acquire specific associations and meanings due to the social memories generated by the particular practices and events that have taken place there, as well as through their relationship to other related places in the landscape (Thomas 2001, 2008). At the same time, once created, places become active participants in processes of social reproduction and change. Much of the structuring power of places results from their durable materiality, as they are typically chock-full of the material residues of the past practices through which they were created and modified. As Barrett (1999:257) argues, “each generation can be regarded as having to confront its

own archaeology as the material remains of its past piled up before it" (see also Gillespie 2008; Wallis 2008). These material remains encourage some practices and constrain others by facilitating particular interpretations, directing movement, and providing symbolic cues that demarcate appropriate forms of interaction (Barrett 1999, 2001; Richardson 1982). In this way, particular places and the broader landscapes into which they articulate constitute "systems of reference in which each human action that is performed is intelligible in the context of past and future acts" (Thomas 2001:174).

The notion of place (and materiality more generally) as both the outcome and medium of social action (Barrett 2001:53 following Giddens 1984) offers archaeologists at least one (although certainly not the only) means of addressing Sahlins's perceived "enigma." Each material practice draws on (i.e., cites or references) evidence of past practices and also contributes to the material conditions in which future ones will be conducted and interpreted (Jones 2005; Pauketat and Alt 2005). Following from this, every act has at least the potential to be "eventful" to the extent that it is projected forward through time and (through its durable contribution to place) exerts a structuring influence that transcends the moment of its occurrence. Barrett (1999), in a frequently cited example from prehistoric Britain, effectively illustrates how micro-scale events can culminate in macro-scale structural transformation through their alteration of place-based systems of reference. During the Bronze Age a new mortuary tradition developed through a series of individual mortuary events that eventually resulted in large, layered burial mounds. According to Barrett, this layering facilitated a new linear conception of time that broke with earlier Neolithic ideas and ultimately triggered a far-reaching transformation in regional historical consciousness. Similarly, Gillespie (2008) describes how Complex A at the large Olmec site of La Venta was, over multiple generations, continually made and remade as an important civic-ceremonial center through a series of formalized depositional events highlighted by elaborate foundation caches. Through intertwined processes of place modification and memory-making, new categories of persons emerged at La Venta whereby society itself was repeatedly re-created. In both cases, individual micro-scale acts produced macro-scale outcomes due to their enduring material contributions to a particular place.

Deposition as Social Practice

As exemplified at La Venta, one of the most common crosscultural strategies of place-making is the patterned deposition of particular substances and objects in various locations on the landscape. Traditionally, most of the materials

deposited outside the purview of formal contexts such as burials or caches have been interpreted as “garbage” or “rubbish” and their deposition as a simple case of waste “disposal” (e.g., Needham and Spence 1997; Schiffer 1987). The archaeological value of such deposits has been most often evaluated in terms of the original activities that produced them rather than the deposits’ own potential significance. Recently though, a growing number of archaeologists (Chapman 2000a, c; McNiven 2013; Pollard 2008; Thomas 1999a) have critiqued the application of concepts such as rubbish in non-Western contexts. Chapman (2000c) points out that the term betrays two culturally specific, ideological assumptions, neither of which should be uncritically applied to prehistoric contexts: 1) that rubbish constitutes something that was once active and dynamic but is now “dead” and of no more use, and 2) that because of its ineffectual position within society, rubbish should be separated from processes of the living.

An extensive literature now exists that argues that deposition is not merely reflective of social practice but in fact *is* social practice and worthy of study in its own right (e.g., McNiven 2013; Mills and Walker 2008; Pollard 2001; Richards and Thomas 1998; Thomas 1999a). As Pollard (2001, 2008) maintains, all deposition, even when routinized and nondiscursive, is structured to the extent that it is conducted according to a particular cultural sensibility or “aesthetic” judgment regarding what is appropriate in different contexts. This aesthetic can be expected to permeate virtually every decision affecting depositional practice, including the types, qualities, and arrangements of buried materials, the location and temporality of their emplacement, and the bodily dispositions of those participating (Pollard 2001:38). However, while all cultural deposits are important loci of social negotiation, deposition is at least occasionally used as a very conscious and deliberate strategy for making material statements about the world, often regarding the history and identity of places or the nature of social and political relations (Randall 2011). Late Prehistoric Araucanians of southern Chile, for example, constructed during elaborate mortuary ceremonies mounds whose layered soils were intended to represent and maintain the continuity of relations between the living and the dead (Dillehay 2007:166). Likewise, the mixing of human bone and various objects in the ditches at the Neolithic Etton enclosure was a conscious strategy used to forge a sense of community among otherwise dispersed groups (Pollard 2008:58). As Pollard (2008:44) suggests, “one could think of deposition as embodying a continuum of practices, some routinized and largely unconsidered, others overt performances.”

Far from passive and lifeless products of waste disposal, then, deposited materials have repeatedly been shown to actively participate in social life

in a number of ways, including evoking memories related to specific events and places (Dawdy 2006; Jordan 2003), setting precedents for future practices (Gillespie 2010; Moore 1986; Thomas 1999a), and creating or reinforcing social relationships (Cameron 2002; Chapman 2000d; Gillespie 2008). The agencies exerted by deposited materials derive from a variety of sources, beginning with the highly social and performative nature of many depositional events, which gathered together diverse combinations of people and materials at important times and places, generating shared experiences and cultivating particular social memories. This contributes to what Bell (1992) claims is one of the primary effects of ritualized action in general: the production of agents oriented in a particular way (see also Joyce 2008). Agentive power also sometimes emanates from objects themselves, particularly those whose origins, histories, or material characteristics provide them with inalienable qualities and render them capable of “presencing” distant people, places, and events and creating enduring material relationships through processes of “enchainment” (Chapman 2000d; Pollard 2008; Weiner 1992).

Quite often, however, depositional potency derives less from the inherent power of particular objects and substances and more from the relations created by their combination and arrangement in a specific context. In this respect, many cultural deposits have a great deal in common with ceremonial bundles, perhaps best known among indigenous North Americans but made and used by societies worldwide (Pauketat 2013; Zedeño 2008:363). Bundles are composed of two or more items (each of which often refers to a specific person or event) that are held together by some sort of wrapping. The objects contained within bundles interact with each other in powerful and diverse ways depending on the specific social and historical circumstances of their joining. According to Zedeño (2008:364), “while an object has its own properties and realms of interaction, when two or more objects are combined, their interactive capabilities integrate to become a new object—the bundle—that is more than the sum of its parts.” The same can be said of many materials deposited in the earth. While they all have their own predepositional meanings and associations, once combined with other materials in a given location those initial meanings may be transformed or even overridden completely by the power of the assemblage (i.e., bundle) as a whole (Pollard 2001:30; Stahl 2008:171). Thus, diverse depositional practices that have all too frequently been glossed as simple acts of refuse *disposal* might, at least in some instances, be more accurately described as processes of *transposal*. Transposal, in this sense, refers to the propensity for some forms of deposition to affect the symbolic recontextualization of an object or set of objects from one category of meaning to another. So, while a Neolithic pot or stone tool may have initially been

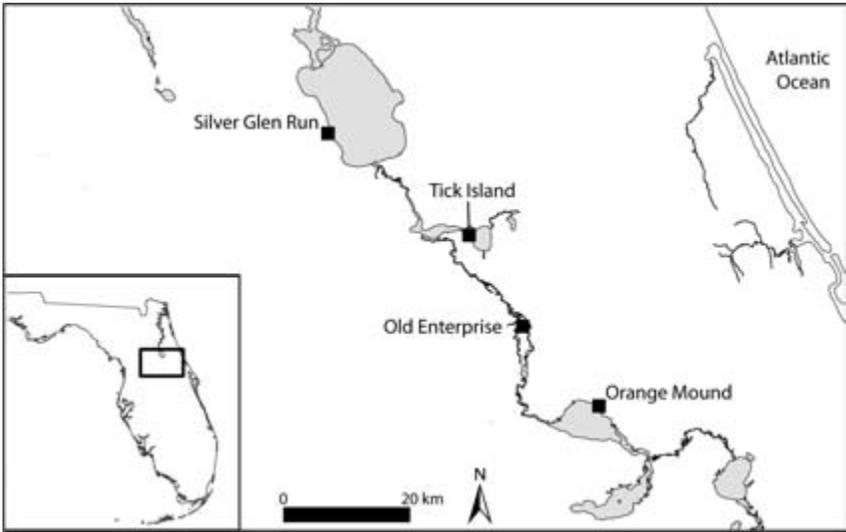
valued primarily in terms of its practical use, once it was broken and deposited within a ditched enclosure alongside other tools, pots, and human bone, it was transformed into a symbol of community cohesion (Pollard 2008).

A Brief Genealogy of Archaic Shell Deposition at the Silver Glen Run Complex

Pits and other depositional contexts that preserve evidence of individual practices are amenable to eventful analysis via what has been termed a “genealogical” approach (Pauketat and Alt 2005; Thomas 1999a). Methodologically, this involves documenting variability in a particular practice or institution across space and through time, thus forming a “genealogy of practice” that can then be compared to other genealogies at different scales. By linking individual acts together, these genealogies provide a sound basis for recognizing historical developments such as intensification or ritualization in relation to broader patterns of historical practice (Stahl 2008:185). According to Harding (2005:98), over time it may even be possible to trace these developments back to a specific “event” or “tear in history” that acted as their initial catalyst.

One of the defining characteristics of Middle and Late Archaic societies in the St. Johns River valley of northeastern Florida is the widespread practice of depositing shellfish (primarily freshwater gastropod and bivalve) remains at various points on the landscape. This practice began with the advent of large-scale shell fishing in the region by at least 7400 cal b.p. and continued in one form or another for the next six to seven millennia. During the preceramic Mount Taylor period (ca. 7400–4600 cal b.p.) hundreds of shell-matrix places were constructed of various configurations and scales, including dozens of large-scale mounds and ridges (Randall 2010; Sassaman and Randall 2012). Some of these accumulated gradually through repeated acts of habitation in the same location, while others were constructed rapidly and served as grandiose monuments and/or mortuaries. Randall (2010, 2011) and Sassaman (2010a) argue that by constructing monuments out of shell and other materials such as sand and swamp muck, Mount Taylor people inscribed various histories onto the landscape that could be revisited, commemorated, and augmented on important occasions. Shell, during this time, acted as a versatile and powerful substance that cut a cross many different spheres of meaning, being used variously as a staple food, building material, burial medium, and material mnemonic.

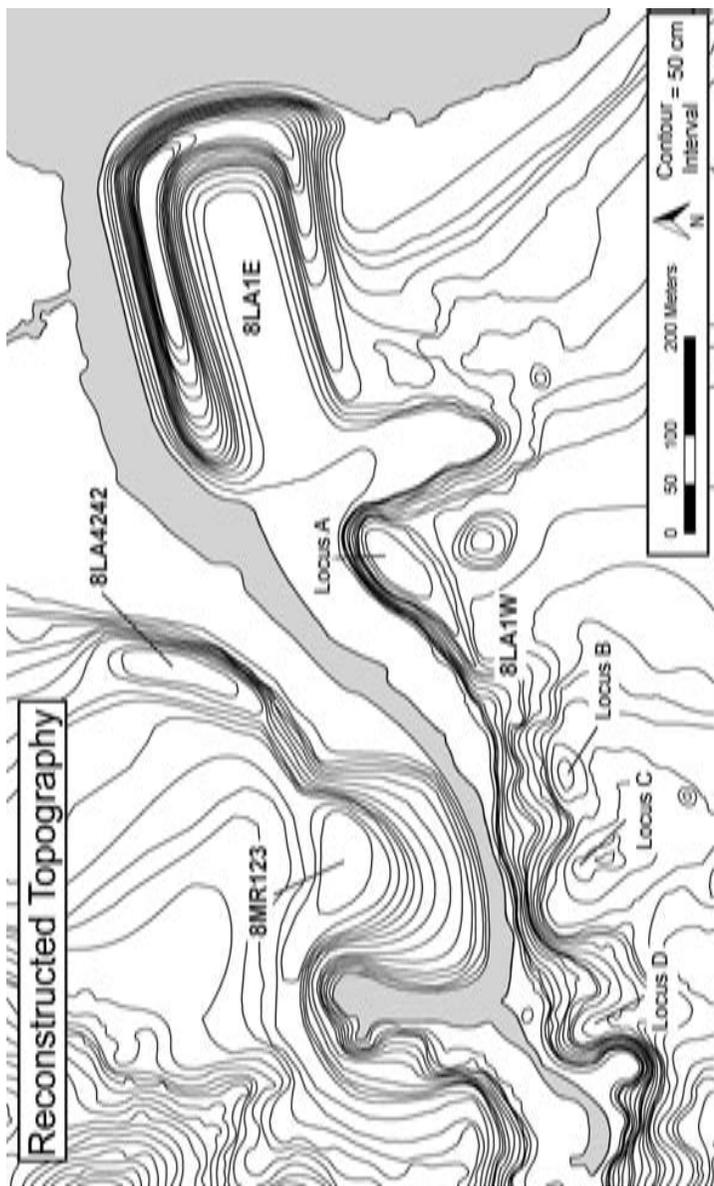
While shell deposition continued through subsequent Orange times (ca. 4600–3600 cal b.p.), this period witnessed a massive regional-scale reorganization of depositional practices in which active shell mounding was halted



6.1. Orange period shell mound sites in the middle St. Johns River valley.

at all but a few (perhaps as little as four) previously existing Mount Taylor sites (Figure 6.1) (Randall and Sassaman 2010). In at least three of these locations, Orange period people enlarged and added onto defunct Mount Taylor mortuary mounds, forming massive, multilobed shell complexes. This shift in landscape use corresponded with a number of other significant cultural developments, including the appearance of the area's first ceramic technology, a marked reduction in nonlocal objects, and changes in both settlement and mortuary practices.

All of these developments are clearly manifest at the Silver Glen Run complex (Figure 6.2), the northernmost of the known Orange period mound centers in the middle St. Johns River valley. The complex is located along a spring run that drains into Lake George, an expanded segment of the river that forms the second largest body of water in Florida. The complex consists of an elaborate array of shell-free and shell-bearing features including shell mounds, ridges, and sheet middens that span the Middle and Late Archaic, as well as later periods (Randall et al. 2011; Sassaman et al. 2011). The earliest large-scale shell deposition occurred there during the middle part of the preceramic Mount Taylor period (ca. 6300–5750 cal b.p.) along the southern margin of the spring run (Locus A at 8LA1W). The substantial aboveground cultural deposits at Locus A appear to have resulted from the repeated construction and inhabitation of small house mounds that, over time, began to



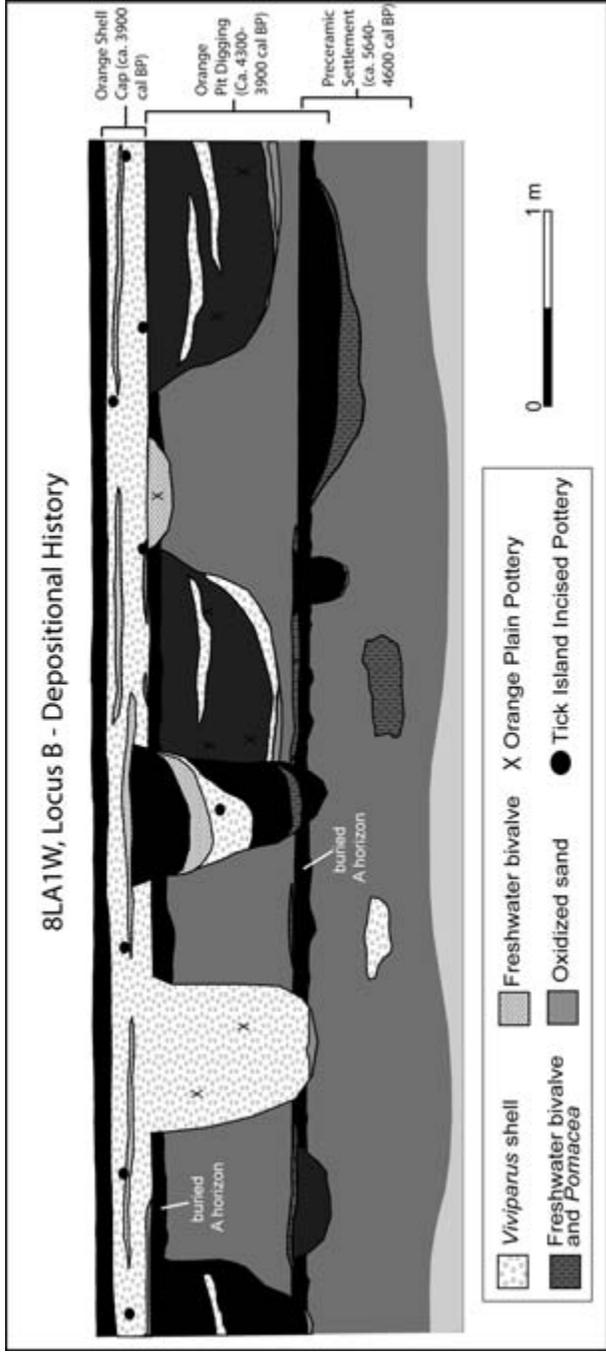
6.2. Map of the Silver Glen Run complex showing the reconstructed Late Archaic topography of site 8LA1 and estimated outlines of the shell mounds at sites 8MR123 and 8LA4242. (Topography reconstructions courtesy of Asa R. Randall.)

overlap and accumulate in a tell-like fashion, eventually forming an expansive shell ridge measuring approximately 200 m long and 3 to 4 m high (Sassaman and Randall 2011). A similar ridge (8LA4242) was recently discovered directly across the spring run from Locus A (Randall et al. 2011).

The complex's subsequent Late Archaic inhabitation included the construction of two massive mounds that Wyman (1875:38) refers to as "the most gigantic deposits of shell met with on the waters of the St. Johns." According to Wyman, the larger of the two mounds (8LA1E) was located at the mouth of the spring run and formed an enormous U-shaped enclosure measuring roughly 300 m long and approximately 6 to 8 m tall at its highest point. He describes the other mound (8MR123) as "an amphitheater of shell" surrounding the pool of the spring. Both mounds began as preceramic mortuaries that were subsequently expanded and built up by the subsequent Orange period occupants of the site. Although both features were severely affected by early-twentieth-century shell mining, recent archaeological testing of intact remnants largely supports Wyman's descriptions (Randall et al. 2011; Sassaman 2011b).

The only Late Archaic deposits unaffected by shell mining occur in two adjacent areas (designated Locus B and Locus C) less than a kilometer to the southwest of the 8LA1E shell mound (Gilmore 2011). Locus B, the focus of this chapter, consists of a slightly curvilinear shell node that opens toward the spring run and rises only about a meter above the surrounding landscape at its highest point. The well-preserved stratified deposits at Locus B (Figure 6.3) reveal a dynamic depositional history and shifting relationship to the broader landscape. Locus B was initially utilized during the late preceramic period as the site of a small-scale, intermittent settlement. The deposits making up this component include at least four stacked occupational surfaces lined with thin layers of bivalve shell mixed with occasional vertebrate fauna and a variety of tools and debitage made of stone, bone, and marine shell. A number of small pits were dug down from these surfaces and infilled with similar materials. The broad variety and relatively high frequency of artifacts and features suggest a domestic, residential use of Locus B during this interval.

Coincident with the appearance of Orange pottery in this location (ca. 4300 cal b.p.), Locus B was transformed from a small settlement to a specialized shellfish-processing locality replete with scores of massive, overlapping pits. These pits are mostly distributed across an approximate 700 m² area just off the western edge of Locus B's shell node, although isolated examples have also been uncovered farther to the east and west. They are, for the most part, densely packed, and they frequently overlap, many apparently having been dug one on top of another. The scale of these features dwarfs virtually any-



6.3. Schematic showing the Late Archaic depositional sequence at Silver Glen Run's Locus B.

thing found either before or after in the complex's 8000-plus years of prehistoric occupation. Most examples measure between 70 and 120 cm in diameter and many exceed 1 m in depth. The largest is well over 2 m wide and more than 1 m deep exhibiting an estimated volume of over 2.5 m³. Pit shape varies considerably, ranging from broad, deep basins to narrow, straight-sided shafts (Gilmore 2011).

The fill in the Locus B pits also varies widely. Several of the pits have lenses of bright orange oxidized sand, charcoal, and concreted whole mussel shell lining their bottoms, suggesting that at least some of them were used for roasting shellfish. None contain a substantial quantity of either vertebrate fauna or artifacts, save for modest amounts of fragmented and undecorated Orange fiber-tempered pottery. While all the pits contain some quantity of shell, the frequency, composition, condition (i.e., degree of crushing, burning, and weathering), and structure of shell deposits is quite heterogeneous. Some are filled primarily with sand and contain only a trace of shell, while others appear to have been infilled in one massive depositional episode. The most striking features, however, are those containing layer after layer of shell of different types and conditions, which is indicative of a series of discrete depositional acts. Deposition into one large pit (Feature 38), for example, began with a thick layer of dense whole, banded mystery snail (*Viviparus georgianus*) that over time became concreted. A 20-cm thick layer of crushed and burned mussel shell was then deposited before the pit was finally topped off with sand and another layer of whole and crushed mystery snail. In another example (Feature 104), infilling began with the deposition of a 20-cm layer of mixed shell (including apple snail [*Pomacea*], mystery snail, and bivalve) followed by a layer of unusually large whole apple snails. A thin lens of mostly shell-free sand was then either emplaced or simply allowed to accumulate in the still-open feature. Subsequently, another layer of whole apple snail was laid down, followed directly by a layer of whole paired and unopened mussel shells. On top of the mussels was a thin stratum of very dark, almost black, organically enriched sand, and finally, a layer of lighter brown sand. While virtually every pit contains a unique fill sequence, the constituents of individual layers are replicated across pits, suggesting that they were combined according to particular "recipes" or "grammars" in different locations.

Shortly following the cessation of large-scale pit digging (at ca. 3900 cal b.p.), a large quantity of whole *Viviparus* shell was deposited across the surface of Locus B, an event that marked another major transition in the site's history. This "shell cap" forms a 30–50 cm thick, mostly homogeneous stratum of unconsolidated shell that in many places contains little or no soil matrix. Like the pits below it, this stratum contains only sparse vertebrate fauna and

artifacts aside from a small amount of fiber-tempered pottery. In contrast to the undecorated sherds from the pits, however, many of those recovered from this overlying deposit exhibit the curvilinear incisions and punctuations typical of a relatively rare variety of Orange pottery called Tick Island Incised (Bullen 1972). The overall homogeneity of the deposit, the lack of evidence for trampling, and the paucity of vertebrate fauna all indicate that this layer of shell was emplaced relatively rapidly, probably in the course of one or a few large-scale depositional acts. Importantly, the shell cap is virtually coextensive with the pits underlying it and in some places appears to have infilled open pits, in effect turning what must have been a pocked, uneven surface into a relatively flat and smooth one. This mantle of shell is not unlike the ones that have been found to cover discontinued Mount Taylor habitation sites (Randall 2010; Sassaman 2010a; Sassaman and Randall 2012) and perhaps constitutes the renewal of a long-lived tradition of ritually marking transitions in the use of a place by capping it with clean, whole shell.

Locus B Pits as Historical Events

Unfortunately, because they are ubiquitous in many regions and may appear largely interchangeable upon cursory examination, pit features are, more often than not, lumped together and given little weight in archaeological interpretations. Pit fill, in particular, which is generally assumed to be unrelated to a feature's primary function, is prone to being dismissed as mere secondary refuse, a result of casual discard into a convenient receptacle. As Chapman (2000a:61) notes, the "humble pit" represents a class of feature that has been "much maligned, ignored, or otherwise maltreated" in many archaeological narratives (cf. Blessing, this volume).

With regard to Locus B, the tendency to undervalue pit deposits is exacerbated by a general reluctance on the part of many regional archaeologists to attribute a cultural significance to shellfish beyond their status as an abundant subsistence resource (e.g., Crothers and Bernbeck 2004; Marquardt 2010a,b; Trinkley 1985). Although Archaic sites with large piles of earth (e.g., Saunders 1994) are readily accepted as purposefully constructed monuments, mounded deposits of shell, because they are assumed to be composed largely of food remains, are often regarded as incidental, gradual accumulations of domestic garbage. Based on this firmly entrenched perspective, pit deposits such as those uncovered at Locus B are unlikely to be investigated for any purpose beyond the simple reconstruction of Late Archaic dietary habits. In contrast, I argue that acts of pit digging and deposition represented more than the mindless repetition of subsistence-related behaviors, conducted for the same

reasons and in the same manner independent of context. Instead, like all social practices, they reflect the historically conditioned decisions of knowledgeable and intentional actors occupying particular material and social settings. As such, it should come as little surprise that, at least occasionally, pit-related practices constituted important historical events with substantial roles in processes of cultural categorization and meaning production.

Multiple attributes of Locus B pits suggest that they held significance beyond their practical utility as, initially, shell-roasting facilities and, subsequently, refuse containers. Most obvious is their size. While several contemporary shell-matrix sites in the broader region include shell-filled pits (e.g., Janus Research 1995; Saunders 2004; Trinkley 1985), the extraordinary size and frequency of those at Locus B set them apart from other documented feature assemblages. The sheer scale of digging and shellfish-processing suggested by the pits seems out of proportion with the everyday subsistence requirements of small kin-based hunter-gatherer groups occupying a diverse and productive environment. With no evidence suggesting, and presumably little need for, long-term storage at the site, an alternative possibility is that the pits were geared toward the rapid production of great amounts of food, perhaps for consumption at the periodic feasting events hypothesized to have taken place at the nearby shell mounds (i.e., 8LA1E and 8MR123). The content of the pits also suggests a meaning beyond the purely mundane. Unlike some earlier instances of ritualized deposition in the same region (e.g., Endonino 2008; Wheeler et al. 2000), the Locus B pits are not marked by an abundance of unusual or exotic objects, save for one modified deer mandible that was likely part of a mask and a few marine-shell disk beads found scattered across multiple features. They are instead distinguished more by a paucity of many materials frequently found within general midden deposits throughout the region (e.g., Russo et al. 1992; Sassaman 2003; Sassaman and Randall 2011), including vertebrate fauna, lithic/marine-shell tools and debitage, and paleofeces. If the pits were infilled through casual acts of refuse disposal, one would expect those materials to form major constituents.

As noted above, the bulk of the pit deposits is composed of shell that varies considerably in terms of both size and condition and was combined in a unique manner in every excavated pit, often resulting in elaborate stratified fill sequences. At a roughly coeval site in South Carolina, Trinkley (1985) interpreted similarly layered (although substantially smaller) pits as containing the remains of successive meal dumps. In this scenario, the pits were used repeatedly for roasting shellfish that were removed, consumed, and then disposed of back into the pits before the next batch was processed. Presumably, this sequence was repeated until the pits were topped off and another had

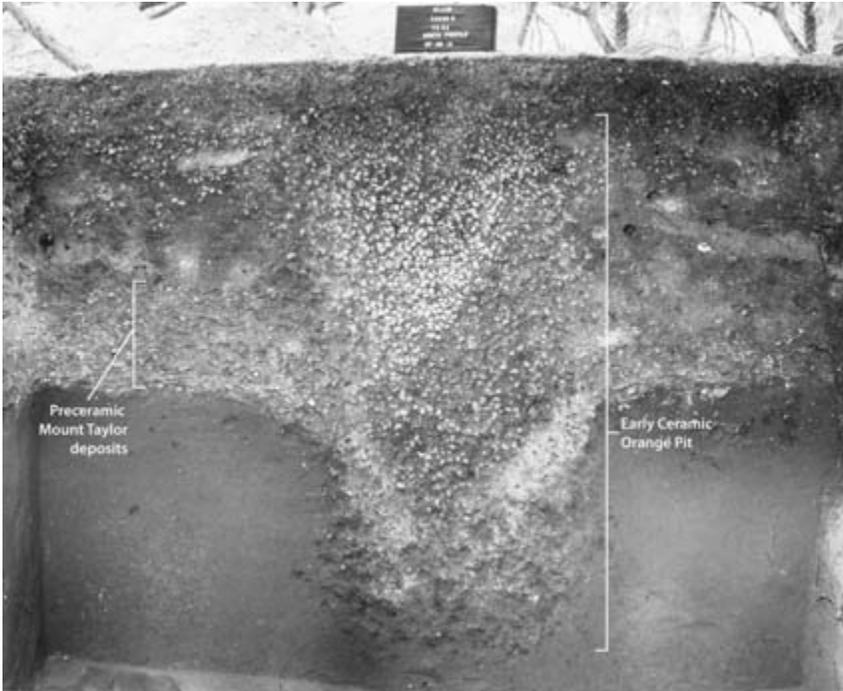
to be dug. At least three factors render this interpretation inadequate for explaining the layered pit fills at Locus B. First, evidence for roasting (heat-oxidized sand, burned shell, large charcoal lumps), where it exists, occurs in only a single layer lining the bottoms of pits. Based on Trinkley's hypothesis, one would expect a layer of thermal alteration between every individual shell stratum. Second, three of the excavated pits at Locus B contained strata composed of whole, unopened, and unburned bivalve shells, indicating that they were neither cooked nor consumed. And finally, pit deposition at Locus B appears to have taken place rapidly, with very little time elapsing between the deposition of the first layer and the last. Almost all the shell layers within the pits sit directly on top of one another with no intervening sediment accumulation or soil formation. Moreover, none of the more than two dozen massive pit features either excavated or encountered in profiles at Locus B show any evidence of having collapsed in on themselves. Based on firsthand experience excavating test units into the site's soft unconsolidated sand, if left open, pits would have been subject to structural failure during the first substantial rainfall. The fact that not a single excavated example did fail suggests that they were infilled almost immediately, not over a period of several days as implied in the "meal-dump" scenario.

An interpretation more consistent with the archaeological evidence is that the pits were infilled soon after they were dug, perhaps as part of a single continuous depositional process involving a variety of materials selected from a number of different sources. The short period of time indicated between pit digging and pit filling at first seems at odds with the highly weathered condition of the shell composing some pit deposits (see Becket and MacGregor 2012:58–9 for a similar observation). In addition, the diverse combinations of shellfish species, along with frequent disparities in the extent of weathering, burning, and crushing between layers in the same pit, make it unlikely that all the shell in the pits underwent the same process of collection, roasting, and consumption prior to immediate deposition. It instead points to a diverse array of predepositional taphonomic histories in which some materials were deposited soon after harvesting, some after they were processed and consumed, and still others only after they had been left out in the elements for some length of time. The fact that materials with such diverse histories ended up in the same features negates the likelihood of casual discard and instead suggests that they were intentionally selected for a particular purpose and combined in meaningful ways. It is possible that individual shells composing the pit-deposit layers derived from specific important events such as feasts or other communal ceremonies and had to be dealt with in a particular manner (see Walker 1995). These residues may have been stockpiled for some

period of time before their inclusion in a pit. If so, then the layered pits may have served as “bundled” histories, used for linking particular events together and ordering them to form complex historical narratives. Like all bundles, it was not so much the inherent value of the substances themselves (in this case individual shell deposits) but rather the symbolic transposal achieved via their combination that made them meaningful.

In effect, these deposits would have constituted inverted, subterranean shell mounds, homologous to the countless above-ground monuments that marked and structured the Late Archaic landscape. However, unlike above-ground mounds, which rely on being seen and interacted with for much of their effect, the underground “mounds” at Locus B were completely obscured even as they were constructed. One might question what the point was of building a subterranean monument that no one would ever see. Part of the answer to this question may be provided by Küchler (1999) and others (e.g., Gillespie 2008; Hendon 2010:113; Mills 2008) who argue somewhat paradoxically that the memory of an event can be heightened or reinforced through symbolic acts of forgetting, which include the destruction or concealment of associated objects. Based on this idea, the deposition and burial of residues from important occurrences such as feasts or other ceremonies may have functioned to memorialize these events, as well as the places where they transpired. This is the basic idea used by Thomas (1999a:72; 2000:80) to explain the common Neolithic practice of siting monuments atop assemblages of old infilled pits, some of which had been dug generations earlier. However, in this case, while the burial of shell deposits may well have enhanced particular memories, the distributional data show that many of the Locus B deposits were in fact re-exposed and viewed as new pits were dug that intercut old ones. These would have been encountered by Late Archaic people in much the same way that they are by modern archaeologists—in profile, with the entire sequence of deposits made visible and begging for interpretation. Far from ancillary, it is this aspect of the Locus B pits that I argue holds the key to understanding their eventfulness.

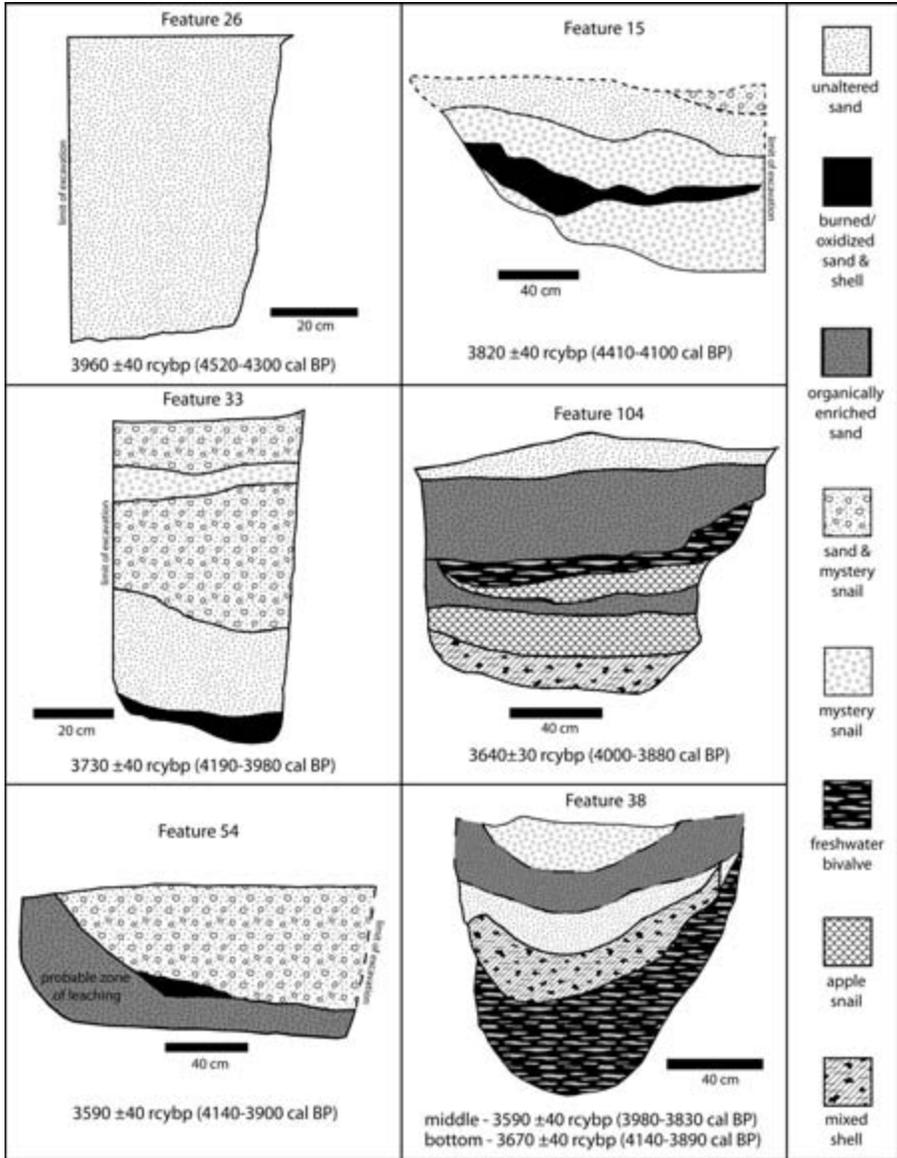
As already discussed, the features in question were sited in a location that had been used previously by preceramic people as a small-scale settlement. The first Orange period pits excavated at Locus B would have intersected deposits from this earlier occupation (Figure 6.4), granting their diggers access to a relatively distant past and perhaps adding another layer of meaning to the massive-scale roasting activities taking place there. As this practice was repeated through time, Orange pits also began to intersect each other, exposing material reminders of more recent people and occurrences. Eventually, as these features covered the site, the encountering of old infilled pits



6.4. Test unit profile (2 m in width) from Silver Glen Run's Locus B showing a large Orange period pit (Feature 73) cutting through preexisting Mount Taylor domestic deposits.

must have become the expected outcome of, and probably even added motivation for, continued digging. The cumulative effects of these repeated material engagements can be seen by examining diachronic changes in pit deposition practices. When dated pits are placed in chronological order, a pattern emerges that shows increasing depositional complexity through time (Figure 6.5). While the earliest pits appear to have been filled in one or a few distinct episodes, the later ones (e.g., Features 38 and 104) exhibit more elaborate sequences of shell and earth. In addition, most of the pits with the most complex layered fills exhibit no basal oxidation or any other evidence that they were ever used for roasting.

As soon as the first pit was excavated and infilled at Locus B, it would have exerted a structuring influence on all subsequent digging in that location due to its enduring material presence and the memories it facilitated. As time elapsed and old pits were uncovered with growing frequency, pit deposition may have become an increasingly deliberate effort to write a particular



6.5. Chronologically ordered (from top left to bottom right) vertical profiles of radiocarbon-dated Orange period pits from Silver Glen Run's Locus B.

history into the Locus B landscape, with the knowledge that it would eventually be uncovered by subsequent digging. By the final stages of large-scale pit digging at the site, a number of pits appear to have been dug for the explicit purpose of receiving shell deposits. At this point, pits were no longer just a means of memorializing other events such as mounding and feasting ceremonies. They instead became important events in their own right, gaining influence by citing (*sensu* Butler 1993; Jones 2005) already well-established shell-mound traditions but altering them in important and strategic ways. Unlike their aboveground counterparts, which were susceptible to being observed and experienced by anyone within a certain distance of them, the buried mounds at Locus B would have allowed the site's Orange period inhabitants to regulate the timing and circumstances of their opening (much like a traditional bundle), possibly in ways that heightened their impact. Like more traditional monuments, while memorializing and relying on the authority of the past, the Locus B pit deposits were oriented primarily toward achieving a particular future by preconfiguring a lasting point of reference into the landscape. Depositional practices, in this context, were part of a deliberate strategy, or "intervention" (Sassaman 2012a) geared toward the production of future memories (*cf.* Eves 1996).

Pit Events and the "Making" of the Silver Glen Run Complex

By fixing a meaningful set of objects at a particular spot on the landscape, pit deposition was a particularly effective means of establishing the identity of a place and durably linking it to specific kinds of activities or events (Carver 2011; Thomas 1999a, 2000). As discussed above, the pit events at Locus B involved interaction with the past as earlier materials were repeatedly exposed and new depositional narratives were inscribed into the ground. Here, I argue that these practices not only established the Silver Glen Run complex as a new kind of place but also implicated the site in broader transformational processes.

As already alluded to, the beginning of the Orange period was marked by a number of regional-scale changes in material practice. Many of these developments are linked to an apparent shift in historical consciousness. Mount Taylor people had a long tradition of burying the dead in shell or sand mounds near settlements. However, there is no evidence that this practice continued into the Orange period. In fact, virtually no Orange period burials have been encountered in the middle St. Johns River valley (in either domestic or ceremonial contexts), suggesting that whatever Orange people did with their dead, it involved separating their remains from contexts of everyday living. This

shift in burial practice points to an important alteration in historicity—from Mount Taylor times, when mortuary treatments positioned past and present side by side, to the Orange period, when, for the most part, the past was kept at a distance from everyday life. In addition, whereas Mount Taylor people repeatedly settled in the same locations, constructing conspicuous material histories in the form of tell-like mounds of debris (e.g., Silver Glen Run's Locus A), the few known Orange settlements in this area appear scattered and relatively ephemeral. And although Orange components are sometimes found within a few tens of meters of Mount Taylor mounds, the mounds themselves appear to have been actively avoided in all but a few known cases, one of those being the Silver Glen Run complex (Randall 2010). Thus, in direct contrast to Orange settlements, where the past was intentionally avoided, practices in these specialized ceremonial locations seem to have been geared explicitly toward accessing and drawing on the past as a potentially powerful social resource.

Pit-digging and shell deposition at Locus B must have played an integral role in these history-making efforts. By gathering diverse materials and holding them together in particular configurations, pits, in many respects, constitute depositional bundles par excellence. As Thomas (2012:5) notes, “the filled pit is a stable context within which a series of biographies terminate and are ‘bundled together.’” However, unlike traditional portable bundles that accrue power by changing hands and moving between places, pits are fixed in space but circulate through time as they are excavated through layer after layer of past deposits. Crossculturally, digging into the earth is thought to have involved the transgression of an important boundary between the past and the present or between this world and another (e.g., Chapman 2000a; Darvill 2012; Davies and Robb 2004; Knight 1999; Kunen et al. 2002; Pauketat 2008; Thomas 1999b). Rather than a neutral form of refuse disposal, then, pit deposition at Locus B may have constituted a quite literal “exchange with the ancestors” as old materials were removed and new ones put in their place (Chapman 2000a:64). The symbolic and material potency of these exchanges rapidly transformed Locus B from a place of residence to one of large-scale ritualized processing and finally to a place of discursive historical production. The durability of the pits’ influence can be seen in a subsequent place-altering event: the capping of Locus B in shell. This constituted yet another material intervention in Locus B’s dynamic Late Archaic history, one that perhaps memorialized the pits while simultaneously offering an opportunity to start anew.

At a larger scale, in concert with the piling of shell at the sites of Mount Taylor burials, the pits helped to redefine the entire Silver Glen Run com-

plex as a place of remembering for Orange people, a place where the past could be accessed and employed as a social resource in the present. Feasts and mounding rituals at Silver Glen Run were likely attended by relatively large groups of culturally distinct people from different areas. Consequently, acts of digging and shell deposition, especially at the scale witnessed at Locus B, would have been incorporated into the bodily memories of geographically and socially diverse participants, just as they were durably inscribed into the Silver Glen Run landscape (*sensu* Connerton 1998). As a result, the Locus B pits not only affected the material conditions in which future pit practices were conducted in this particular location but also would have transcended the local by interjecting and cementing Silver Glen Run, as a specific kind of place, into the broader social memories of peoples subsequently dispersed throughout the region.

Conclusion

The study of historical events, whether by historians or archaeologists, is too often restricted to rare, exceptional incidents such as colonial encounters, battles, and large-scale natural disasters. While unquestionably producing important and far-reaching historical consequences, preoccupation with such occurrences largely obscures the potential eventfulness of more regular, seemingly mundane practices. I have argued here that one significant way that discrete, micro-scale occurrences can achieve macro-scale effects is through the material modification of place. By creating and altering the material contexts through which people go about their lives, even the most routine activities have the potential to transcend the moment of their execution and shape future patterns of practice. Moreover, participation in these place-altering activities produces enduring social memories that may extend far beyond a single location. By adopting a genealogical approach and linking related acts together through time, it is possible (and I would argue worthwhile) for archaeologists to identify and interpret the processes through which everyday practices are elevated to the status of historical events.

In this chapter, I focused on the historical developments spurred by a series of pit-related practices that occurred during the Late Archaic period at the Silver Glen Run complex. From an ecofunctionalist perspective such as those that have largely dominated Archaic hunter-gatherer research, the shell-filled pits at Locus B are likely to be interpreted as resource-extraction tools, simple shellfish-roasting facilities that were filled with garbage after falling out of use. However, while examination of these pits collectively may lead to the conclusion that they are relatively unremarkable save for their size, con-

sidering them individually within the historical context of their execution reveals their cultural importance. Within the narrative of Silver Glen Run, each pit can be considered eventful because every act of digging altered the material conditions under which subsequent homologous acts were to be conducted and interpreted. As a result, practices related to pit digging and shell deposition were transformed, as were the structures according to which their meanings were established. In this way, each small-scale pit event was not only structured by but also contributed to the broad-scale historical processes through which the Silver Glen Run complex came to be inhabited as a place of remembrance and ritual. While it is still unclear what ultimately triggered these processes at a regional scale, be it an in-migration of nonlocal peoples, a sudden climatic change, or a far-reaching social movement, by studying social practices at a local scale, we can at least begin to understand the events through which these processes were actually experienced and sustained.

Obviously pit digging and deposition was but one of many strategies that Archaic hunter-gatherers used in the creation of place and the production of meaning. Additional examples include monument construction, extralocal exchange, technostylistic practices, and undoubtedly a whole host of others that have yet to be considered. By ratcheting down the scale at which we examine Archaic histories and focusing on the individual events of which they are composed, it is possible to avoid the “disturbing anonymity” (Sassaman 2000:148) that characterizes many archaeological accounts of “prehistory” and attain a better understanding of the past as it was actually experienced.

Acknowledgments

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Pilgrimage to Poverty Point?

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

From time to time the archaeologist is confronted with the need to explain human products that seem to go well beyond the needs of what we would ourselves consider “rational.”

Renfrew 2001:17

Much has been written in the last 50 years about the enigmatic character of Poverty Point, the Late Archaic site located on the stone-free Macon Ridge in the Lower Mississippi River Valley (LMV) (Gibson 2000, 2004, 2007; Kidder 2010, 2011; Sassaman 2004, 2010:53–66; Sassaman and Heckenberger 2004). The material remains uncovered there continue to elude easy ethnographic analogy and description, leading to the proposal of a wide diversity of models to account for the archaeologically defined characteristics of the site. The challenge of accurately describing Poverty Point is derived not only from its atypical archaeological assemblage but also from the full weight of the history of hunter-gatherer and North American archaeological research.

We argue that none of the previously proposed models adequately explain the assemblages excavated from Poverty Point. After a fresh analysis of data at the Poverty Point site, we have come to believe that looking away from traditional hunter-gatherer behavioral models and toward other avenues of analogy potentially offers a more fruitful path of conceptualization. Hunter-gatherer behavior is more often described as having an economic impetus and is less often attributed to the kinds of symbolic, social, or ritual intentions regularly ascribed to agricultural groups (Kelly 1995; Lee and DeVore 1968; Sassaman and Holley 2011). This focus on cultural ecology causes a blurring of behavioral events over time. No individual agent or action is privileged over another because they are all geared toward the same end. We argue that the behavior seen at Poverty Point does not follow this logic.

One of the major stumbling blocks that prevents researchers from considering other models is the way in which we, as archaeologists, have been conceptualizing time and history at Poverty Point. Approaching analysis and interpretation with the expectation of discovering a contiguous material-culture group, whose members behaved as in a simplistic hunter-gatherer model, has yielded sparse results. The models do not fit. The people did not behave as

expected. Instead, we propose replacing this traditional viewpoint, which regards large archaeological sites as loci of single, discrete culture groups occupying space over long periods of time, with a scale and conceptual framework more akin to an “event.” Converting our own thinking on Poverty Point to an event-based approach helps orient our analysis with recent findings about mound construction chronology (Ortmann and Kidder 2013), trade networks (Ortmann 2010; Spivey 2011), and site abandonment (Kidder 2006; Kidder and Sassaman 2009; Sassaman 2010: 89–204) within the search for analogous models.

In broadening our thinking about Poverty Point and the people who inhabited that space during the Late Archaic, we have come to believe that the site may have been a place of pilgrimage. To explain how we arrived at this conclusion, we discuss the nature of pilgrimage and its relevance to non-Western societies. Then, we lay out our evidence for and argument on why we have concluded that Poverty Point is a place of pilgrimage.

Because none of the explanatory models proposed thus far for Poverty Point accurately describe the behavior the extant data supports, we must look outside of traditional ways of conceptualizing hunter-gatherer behavior, as well as the prehistory of North America, to find an appropriate analogy. In this vein, we follow Ken Ames (2004) and imagine what hunter-gatherer complexity might look like in resource-rich temperate climates before colonization transformed cultural organization. Poverty Point offers an unprecedented opportunity to do just that.

What is Pilgrimage?

In the most basic sense, pilgrimages are made to places of real or constructed origin; to quote the *Catholic Encyclopedia*, pilgrimages are made to “locations where the gods or heroes were born or wrought some great action or died, or the shrines where the deity had already signified it to be his pleasure to work wonders. *Once theophanies are localized, pilgrimages necessarily follow*” (Jarrett 1911; emphasis added). The largest assemblies of humans on earth occur at the pilgrimage sites of world religions. Turner argues that pilgrimage invokes *communitas* (1974; Turner and Turner 1978). Pilgrimage emphasizes the universal quality of unmediated communication with others; secular and hierarchical statuses are ideally (but not always) flattened in favor of egalitarian relations, and social identities are exchanged for universal participation (Turner 1974: 200–202). Geographic identities are rendered moot by pilgrims’ incorporation into the membership of a liminal community; the pilgrim is

marked as one who has crossed boundaries, real and imagined, which confers status and prestige (Turner 1974:196, 202; Turner and Turner 1978:7–9).

Throughout the history of its study, pilgrimage has been reserved as a trapping of “state-level” societies or communities with “history” (Turner and Turner 1978:17–19). The Turners deny that “rites of passage,” as they describe pilgrimage-like behavior, are present in groups without “history” (Turner and Turner 1978:8–17). The basis of this exclusion, the Turners claim, is that while tribal groups expect a pilgrimage to heal the malady that spurred it, Western pilgrims expect to find no “corporeal remedy” for their ailments through the action of pilgrimage (Turner and Turner 1978:14). The Turners also differentiate between pilgrimages taken based on a religion with a “historical foundation” and those religions based on “myths” derived from a historically untraceable deep time, again affirming the former as true pilgrimage and the latter as a poor facsimile (Turner and Turner 1978: 17). Their “classification of pilgrimages” is solidly Judeo-Christian in focus and fails to account for the possibility that the act of pilgrimage is innately human and spread throughout human cultures (McCorriston 2011).

In contrast to the Turner model of *communitas*, Eade and Sallnow (1991) argue that the act of pilgrimage and pilgrimage places are loci of conflict and contestation. In this frame, the ritual place is a site of contested meaning and interpretation; multivocality and pluralism, as opposed to *communitas*, are the important concepts. These competing perspectives, however, crystallize around the concept that pilgrimage is about creating and recreating community. To assume there is only one worldview embedded in pilgrimage participation is nonsensical and glosses one of the most critical elements of the pilgrimage process: the creation of identity and participation through the suspension of the normal rules of behavior. Through their deconstruction of the Turnerian concept of the pilgrimage, Eade and Sallnow propose the other extreme, calling such a place “a religious void” (1991:5) available for each person to paint with their own interpretation (Coleman and Elsner 1994:3). Their rejection of *communitas* aligns with historical data that demonstrates that community building is not, in fact, the end result of all pilgrimages (Coleman and Elsner 1994:8).

There are many models for pilgrimage in the culturally Western and geographically Eurasian world. The Muslim hajj (Petersen 1994), Christian and Catholic pilgrimages across the world (Coleman and Elsner 1994; Harbison 1994), Hindu pilgrimage (Stanley 1992), and secular travels such as Star Trek fans attending a national convention (Jindra 1994) are just a few examples. Pilgrimages often have temporal cycles: some are associated with feasts and

others with calendrical punctuation; others are more regular (e.g., the pilgrimage to Lourdes, France); and still others are episodic or even single acts undertaken by individuals acting alone. In short, whether their event horizons are timed to cycles (calendars or celestial events) or follow a personal schedule, pilgrimages are events—occurrences that are sharply localized at a single point in space and time. In theory, the accumulation of archaeological remains at pilgrimage sites represents the palimpsesting of events—across space (e.g., different mounds/temples/shrines) reflecting the temporal boundaries of these pilgrimage events.

In 1994, *World Archaeology* published a special issue on pilgrimage in the archaeological record. None of these articles focused on pilgrimage in American Indian societies. In fact, no rigorous narrative or analysis of pilgrimage in the archaeology of North America has been published, its first substantive treatment being Wesler (2012:260–271; but see also Pauketat 2008, 2010, for insights that foreshadow our argument). While in the modern world the concept of pilgrimage has been explored largely in relation to the great world religions, we know that pilgrimages also take place among the so-called tribal societies outside of North America. Nuer pilgrims from the Nile River valley in Africa, for example, traveled long distances and constructed a mound nearly 15 m tall to mark and honor the place of the prophet Ngundeng. This mound served as a sacred “vessel” for containing the pilgrimage offerings brought from far-flung villages and placed within the mound as a way of participating in a larger community.

Ngundeng’s Mound fixed a permanent site through which Divinity could be approached and at which it could appear. The very solidity of the Mound helped to expand Ngundeng’s influence. . . . Those who came to help build the Mound, and those who brought mud and ashes to maintain it became part of a moral community and were involved in an activity which was supposed to bring life to them and their kin. . . . Individuals could come . . . whole sections [of the Lou clan] would send delegations . . . Many of Ngundeng’s sacrifices were intended to have a universal effect, ensuring the well-being not just of individuals, or single sections, or even just of the Lou, but for all adherents of DENG. ‘He built the Mound so that people will sit in one place,’ one of his grandsons commented [Johnson 1994:105–106].

We are also reminded that a prophetic person or persons can galvanize social actions in ways that will be archaeologically difficult, though not always impossible, to recover (Pauketat 2010:79–81). Prophets and prophetic

leaders are often found at points of conflict and crisis; however, they are also syncretizers. Their behavior required community building and culture making; historically, American Indian prophetic leaders (e.g., Wavoka, Handsome Lake, the Shawnee Prophet and his brother Tecumseh) repackaged or re-invented traditions in very active, charged, and dynamic ways. Native American leaders built a lasting cultural legacy that was contingent on the “materiality” and “spatiality” of the narrative they preached (Pauketat 2010:179). Their ideas and prophecies were realized in practice. The Ghost Dance may be one of the best examples of this practice, but we could include material items (e.g., clothing, staffs, prayer sticks, medicine bags, belts, maps, and art), songs, oration, and especially places (e.g., Prophetstown) in the list of materiality and spatiality.

We have in the historical record of Ngundeng’s Mound an exemplar of how a prophetic person—in this case a minor player initially proclaimed as a healer—materialized and localized his prophesy and the ways this theophany was “used” by leaders and followers, to create community and to suspend the nominal cultural rules and norms, at least for a period of time.

He [Ngundeng] fell into a trance. . . . At the end of this period word was passed far and wide summoning all tribesmen of the Nuer clans. . . . Blood feuds were forgotten. . . . [From a large area of southern Sudan] tribesmen foregathered at the behest of Ngundeng. . . . At dawn on the following morning he carried the first load of earth to the site he had chosen . . . and thus was begun the building of the Pyramid [Coriat 1939:224].

The building of the mound was a gigantic task. It was constructed of wet ashes mixed with baked and unbaked earth, for the material was excavated from two large vacated cattle camps. . . . It does not seem that there was any systematic conscription of labor . . . but people came voluntarily from all over the countryside to assist . . . and often brought sacrifices. . . . When the food they had brought with them was finished they would return home and their place would be taken by other pilgrims. . . . It is said that people brought handfuls of ashes to add to the mound . . . as an act of piety [Evans-Pritchard 1955:62–63].

In a slightly different but perhaps more relevant context, Australian hunter-gatherers practice what we would define as pilgrimage as a part of “dreamtime.” Dreamtime involves the physical movement of an individual or group

across a sacralized landscape with visitations to shrines and sacred places that follow songlines handed down across generations. These processions are events on the personal scale; the songs, dances, rock art, and shrines are the embodiment of ancestral theophanies.

For our purpose it is worth considering that there also is a topography of pilgrimage, an idea that Coleman and Elsner found was missing in some anthropological treatments of pilgrimage (1994:7). By neglecting the physical landscape's role in shaping and creating both the necessity and experience of the pilgrimage, anthropology has avoided one of the central aspects to both American Indian ritual life and the realities of archaeological research (Pauketat 2007). Given the importance of places as mnemonic anchors in the histories and moral construction of American Indian lives (Basso 1996; Nabokov 2002), this would further bias us against discovering the places of pilgrimage in North America.

Pilgrimages occur at different spatial scales: local, regional, and global. Participants at these different levels are drawn from distinct geographic and ritual/religious/national catchments. The geographic contexts of these pilgrimages are reflected in the spatial catchment of the pilgrims. As noted by Turner (197; Turner and Turner 1978), for example, pilgrims don't randomly flow into a pilgrimage center; instead, they come, usually together, from defined places; in many instances these places have real geographic boundaries—valleys, certain towns, basins, or coastal localities. Thus, there exists the possibility that we could archaeologically detect the catchment area of a pilgrimage by examining the distinctive material assemblages of pilgrims—assuming of course that they are conveying to the pilgrimage center material offerings.

Given that most of those who study pilgrimage are focused on historical, rather than archaeological, data, few approach the task of defining material correlates for pilgrimage sites. In the most widely known attempt to discuss pilgrimages archaeologically, Colin Renfrew (2001) analyzes Chaco Canyon as a Location of High Devotional Expression (LHDE). He does not directly address pilgrimage sites as a category but instead encompasses pilgrimage sites within this less restrictive term, thus including sites originating from cultures with both “highly ordered” controlling bodies and those “lack[ing] any coherent organizing capacity” (2001:23). The material correlates for LHDE allow for both the sacred and the profane to occur and focus mainly on the existence of exotic and specialized materials (2001:8) and the discovery of features that would have required large populations to build and utilize (2001:19).

Wesler (2012:261268–26) most recently discussed the difficulty of correlating the material remains we find archaeologically with the concept of

pilgrimage, which has not been clearly defined in archaeological terms. He notes that researchers too often muddle the distinction between festival centers and pilgrimage centers. The vital difference is the size of the catchment area from which attendees are drawn. Local populations inhabit festival centers that may not be occupied year-round, but those who occupy pilgrimage centers may come throughout the year and often are from more distant locales. The important diagnostic artifacts in distinguishing the two types (i.e. festival centers versus pilgrimage centers) are the prevalence of trade items at the site in question and of tokens taken from that site to a place of more permanent residence for the pilgrimage attendees. Scholars of pilgrimage are careful to note that the trade items found at the pilgrimage site can, and are predicted to, be in small quantities and are not of nominally defined economic utility (Morinis 1992). Along the same lines, the souvenirs of the pilgrimage brought back home from the site by travelers are expected to be scarce and without the hallmarks of expected economic or technological value (Preston 1992; Wesler 2012:266).

Modeling Poverty Point

Attempts to understand and model Poverty Point have often been rooted in a traditional hunter-gatherer utilitarian framework. This paradigm was an obvious ill fit with Poverty Point data from the beginning, leading to Ford and Webb's argument for agrarian Mesoamerican influences on the site (Ford and Webb 1956; Ford 1969; Webb 1968, 1982). The lack of evidence for domesticated plants at Poverty Point (Ward 1998) led to a dismissal of this model (Gibson 1973, 1980). The proposal that Poverty Point was a complex chiefdom was then widely asserted (Gibson 1973; Webb 1968, 1982).

A handful of models have been proposed that take into account the stark differences between the archaeology we see at Poverty Point and the material remains of other hunter-gatherer groups. Gibson's interpretations are now that the mounds represent the physical manifestation of magic that buffers against a metaphysical but potentially real threat (Gibson 2000:185–186, 230, 270–271). To Hamilton (1999), the mounds are tangible means for reducing risk. In this scheme, the construction of mounds diverts human energy from reproduction to production and thereby acts to prevent overpopulation in the face of uncertain returns. Jackson's trade-fair model (1986, 1991) and Willey's vacant-ceremonial-center model (1957) were once popular but are now out of favor (Gibson 1987). Both explanatory models assume that the site was occupied seasonally, with the former attributing an economic purpose to site occupancy and the latter a noneconomic purpose. The final two perspec-

tives are Kidder and Sassaman's multiethnic aggregation model (Kidder 2011; Kidder and Sassaman 2009; Sassaman 2005, Sassaman and Heckenberger 2004) and Gibson's local population origin model (2007). The local population origin model argues that Poverty Point is an "integrated community or closed society" as opposed to "a unique event or specialized practice" (Gibson 2000:11,222) whose *raison d'être* was the import of raw materials (Gibson 2000:219–28):

Poverty Point's realm was an area confirmed by . . . exchange of a common array of technological materials. Exchange meant economics and politics. Any time more than a handful of people became involved in anything, especially in something economically vital, interaction inevitably becomes politically infused. Poverty Point's political economy focused on getting vital technological raw materials into as many needy hands as possible [Gibson 1998:29].

According to this view, Poverty Point was a regional center whose absorption of the surrounding population would account for the spike in population seen in the Late Archaic. In contrast, the multiethnic aggregation model argues against this perspective, given that the smaller populations in the local region during the Middle Archaic could not have supported the seemingly rapid gain in population numbers from the Middle to Late Archaic at Poverty Point. One of the notable recent findings in the region is the apparent mound-construction hiatus in this part of the LMV and in its tributaries after the Middle Archaic and before the onset of Poverty Point as a major site (Saunders 2010,2012).

With the exception of the multiethnic aggregation and vacant-ceremonial-center models, each of these proposals are static and focused on—even obsessed with—the mundane tasks of daily living, to the exclusion of the kind of complex intentionality we ascribe to nonhunter-gatherer groups. There is an underlying assumption that the site exists to fulfill an economically utilitarian function. The local-population model fashions Poverty Point as an oversized town that exists to import lithics into a region where no lithics exist. The trade-fair model posits that the site served to facilitate the exchange of economically valued goods among far-flung communities. Underpinning this notion is the concept that hunter-gatherers who live in an uncertain and fluctuating environment practice risk-minimization strategies wherein information flow is a primary commodity (Whallon 2006,2011). Even seeing Poverty Point as an elaborate contraceptive device (Hamilton 1999) relegates to the commonplace what appears to be exceptional monument construction by

nearly every measure. Many researchers present the banal, ordinary stuff of life as the only viable option, in spite of the fact that Poverty Point possesses one of the most enigmatic archaeological signatures ever found. There is no shortage of southeastern sites that are explained by the mundane; Poverty Point simply is not one of them. What, then, is the hard evidence separating Poverty Point from this gaggle of contemporary prosaic sites?

Poverty Point Data

Occupied since ca. 3600 cal b.p., Poverty Point's history of occupation is complex and marked by a series of construction events and spatial and, potentially, social reorganizations. Surface-collected remains show that the earliest occupation in the site area goes back to the Paleoindian period, and there are modest quantities of Early and Middle Archaic remains scattered across the eastern edge of Macon Ridge within the site boundaries. There is an apparent occupational hiatus ca. 4800–3600 cal b.p. Beginning ca. 3600 cal b.p. there is a substantial occupation across much of the core area of the site, most notably along and near the eastern edge of Macon Ridge. At the time of initial occupation there was limited earthen monumental construction. So far, only Mound B has been dated to this initial occupation period. Recent geophysical surveys and limited test excavations in the open plaza area indicate that the earliest inhabitants were erecting large 10–20 m diameter circular structures made up of 60–70 cm diameter single-set posts. These structures were eventually dismantled and the posts removed. The function of these structures or features is unknown, but their size and the use of large single-set posts indicates a considerable investment in labor. These structures can be considered monumental architecture, especially in the context of a purely hunting, fishing, and gathering subsistence lifestyle.

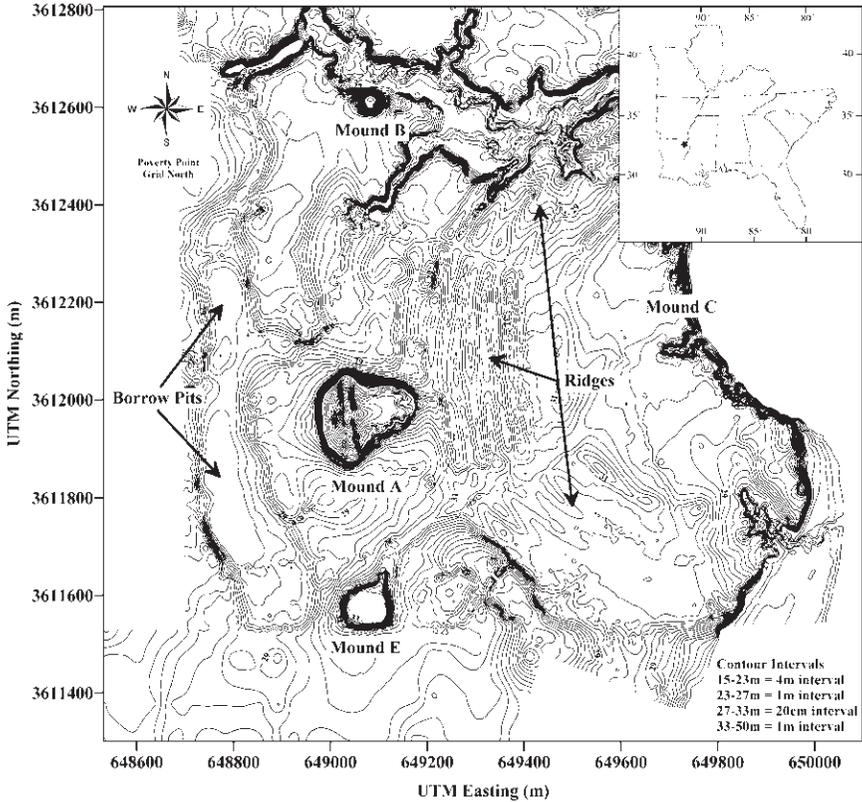
This initial occupation episode is widespread, and contemporary remains are found beneath the plaza and under what would become the ridges. Limited radiocarbon dating of these remains suggests that the occupation lasted some 200 years, from ca. 3600–3400 cal b.p. At present it is unclear whether this was a permanent village or whether these remains mark repeated visits to the site over the duration of the dated occupation span. The early inhabitants of the site were importing lithic materials across very long distances at this time. One of the most notable lithic raw material types in these early deposits is Burlington chert, sourced to the central Mississippi River area around modern St. Louis, Missouri, nearly 700 km to the north of Poverty Point. One study found that in seven test pits that penetrated to the earliest occupation zone, Burlington chert remains (tools and debitage) from the initial

occupation levels weighed nearly 16 kg. In contrast, only 4 kg of so-called local pebble chert, which is derived from gravels along the edges of the Mississippi Valley 50–75 km from Poverty Point, was recovered from the same contexts. At this time other lithic sources were being tapped, but in much smaller quantities. Still, the network of chert imported to the site encompassed a good deal of the Mississippi Valley and its tributaries.

Beginning ca. 3400 cal b.p., the site underwent a dramatic transformation. The most notable occurrence was the construction of the six earthen ridges and some of the mounds (Figure 7.1). Associated with these physical changes are shifts in material culture use and alteration of the raw material resource network. Although the data should be understood as provisional because it contains relatively few radiocarbon dates, the sequence of events leading to the radical reconfiguration of the site appears to begin with the termination of the use of Mound B. This mound, which had begun its life as a flat-topped platform mound, was covered with a thick mantle of earth and the mound and its immediate surroundings seem to have been abandoned and never used again. Similarly, the single-post “buildings” were carefully taken apart and the postholes filled.

After these “terminations,” there were several important additions. One is the beginning of the use of Mound C. Here, a series of thin (usually only a few centimeters thick) use or occupation surfaces were created, briefly used for unknown purposes, and then capped with carefully selected fills. This process of surface construction-use-fill was repeated multiple times, creating a low rise (the shape is not known at this time because of erosion on the east side of the mound). Mound C began as a low-rise, potentially platform mound and was used for perhaps 100 years before being capped by the addition of a conical mass of earthen fill that covered the underlying use surfaces. This fill was peculiar in that it was not midden-stained or organically enriched but nonetheless contained abundant artifacts.

At the same time that Mound C was being erected and used, the concentric ridges were being built. The precise chronological relationships among these ridges is not clear at present—they may have been built in some order or they may have been constructed more or less at the same time. In any case, they were built quite quickly, most likely within a generation. They were created by borrowing earth from areas immediately adjacent to the ridges, creating a shallow ditch between each of the ridges. The ridges are assumed to have been built to support houses or structures on their surfaces, but modern agriculture and more than 3,000 years of erosion and soil development have obliterated any obvious evidence of habitation, although some features, notably fire pits and earthen-oven cooking pits, have been uncovered. Artifacts



71. Map of the Poverty Point site. Map data courtesy of the Louisiana Division of Archaeology.

are common on the ridges, the flanks of the ridges, and the ditches at their bases. In contrast to the pre-ridge-construction deposits, the raw materials found in and on the ridges come from a very diverse and far-flung network of sources. It is clear that the catchment of interaction and importation of raw materials to the site had undergone a significant change starting with the building of ridges and mounds. At roughly the same time as the ridges were being built, and at least after the initial surfaces of Mound C were deposited, the inner or plaza part of the site was covered with up to 75 cm of fill, creating a level surface and burying the single-post structures previously erected on the ground surface.

The final construction activity at the site is the erection of Mound A. This mound, which is the second largest earthen monument in the United States, was built at the western edge of the outermost ridge. Excavations and coring of

the mound demonstrate that much of the mound was constructed over a wet, swampy depression roughly 1–2 m deep. There is a reasonably clear sense of the construction sequence for Mound A. First, the vegetation of the swampy depression was burned. Immediately after, a thin (5– $\bar{5}$ cm thick) layer of tan-to-white fine silt was deposited across the swampy depression. The mound was then erected very rapidly. We believe that the western conical portion of the mound was built first. This part was erected at the western edge of the swampy depression and only part of it covers this feature. The western conical part of the mound is built with distinctive, fairly homogenous soils that appear to have been mined or borrowed from the surface or an area near the surface of Macon Ridge. The platform along the east end of the mound was then added on. Here the soils are more heterogeneous and appear to come from contexts deeper within Macon Ridge. Shallow depressions to the north and to the west of the mound are likely borrow areas. Once the cone and platform were built a ramp was added to join the two features.

Radiocarbon dates from short-lived plant remains date the onset of construction to a mean age of 3264 cal b.p. (Kidder et al. 2009: Figure 75). Our data indicate that the mound was built very rapidly. Once construction started there is no evidence that it ceased until the mound reached its full form. There are no cultural stages, natural soil horizons, or erosion features within the mound except at the base of the ramp joining the cone to the platform. We posit that the mound was built in from as little as three months to not much more than a year. It certainly was not erected over multiple years or generations. With a volume of $\sim 238,500\text{m}^3$, this duration of construction implies a workforce ranging from between 1,000 and 3,000 laborers plus their families. The function of the mound has never been established. There are almost no artifacts within the parts of the mound that have been cored or excavated, and no cultural features (floors, pits, houses) have been detected within or on the summit of the cone or the platform. The surface of the mound and its flanks are nearly devoid of artifacts, suggesting that if the mound was used for some purposes the inhabitants were careful not to leave behind material-culture residues. The construction of Mound A appears to have involved highly ritualized events and extremely complex construction techniques (Kidder 2010, 2011; Sherwood and Kidder 2011). The rapid yet structurally ordered events of monument construction at Poverty Point imply that the event of building these earthworks was itself imbued with ritual meaning.

Beyond that, Poverty Point defies purely rational economic models related to lithic procurement and/or resource-buffering scenarios. The materials that were imported were redundant in a purely functional sense. At Poverty Point, lithic material acquisition provides a unique window into the decision-making

process that the people at the site used, given that there is no naturally occurring lithic material on Macon Ridge (Bass 1981; Gibson 2000). Lithics are so numerous at the site that Gibson based his understanding of Poverty Point politics on their transport and utilization (Gibson 1998:39). What archaeologists term “local” lithic material at Poverty Point is Citronelle gravels found, at closest, a two-day round-trip from the site. To even acquire “local chert” (Citronelle gravel) an inhabitant would have to travel in excess of 50 km to the east or west. This is a two-day journey at a minimum, even accounting for the use of waterways, because these resources are situated across the grain of rivers and streams and thus require a considerable effort to reach (Bass 1981:4; Collins 1984:8; Gibson 1994:148). These source areas were occupied by populations that did not share all the obvious aspects of Poverty Point culture, which implies that there must have been a system of exchange that allowed material to cross social, political, and likely linguistic boundaries.

Although Citronelle gravel is the closest lithic source, and was often utilized for the creation of blades and microdrills (Johnson 1983, 1998; Ortmann 2007:292; Webb and Gibson 1981) in almost every context at Poverty Point nonlocal chert—defined here as chert coming from in excess of 500 km away—predominates. Nonlocal chert almost always constitutes more than 50 percent of any given assemblage of lithics and frequently constitutes more than 75 percent (Gibson 2000:220–221). It is important to note here that nonlocal chert is not represented by a few pieces or even a few hundred pieces. The quantities found at Poverty Point of Burlington chert, Cobden/Dongala, “Northern gray,” and novaculite, to name some of the most popular raw material variants, are remarkable and can be measured in metric tons (Gibson 2000:219–22).

One of the most common sources of nonlocal stone was the Burlington chert source, located at least 650 km upriver from the site (Spivey 2011). This well-known lithic source produces fine white chert and includes the Crescent Hills Quarry, which was used extensively during the Archaic and also in later precontact times (Ray 2007:194). The Burlington chert found at Poverty Point, however, is of low technological quality, containing voids and crinoids that make it unsuitable for most lithic tools (Gibson 2000:90; Spivey 2011:37–78). Ives (1984:190) contends that crinoids are found less often than expected in Burlington chert, making the selection of this material for long-distance trade even more surprising. Lest we attribute this appearance of substandard Burlington chert to down-the-line selection of the more preferred materials, we must note that the Late Archaic groups located between the nonlocal sources and Poverty Point do not demonstrate this pattern in their assemblages (Gibson 2000:234–235; Johnson 1991; Sassaman 2004:356). We argue

instead that had the impetus for lithic acquisition been the retrieval of the closest lithic source appropriate for fulfilling a technological and economic need, the people at Poverty Point would not have been importing low-quality lithics from a geographically remote source.

Poverty Point's trade produced commodities that were incorporated into the functional domain: cutting tools, drills, axes, adzes, points, and the like. There was an emphasis on the mundane, but lost in the vast quantities of functional stone is a plethora of nonutilitarian material and material shaped into goods that arguably transcend nominal functionality. However, the context for these finds is not clear. Some exotic nonutilitarian goods are found in caches or pits (e.g., caches of copper beads, caches of plummet, and a pit filled with more than 300 broken steatite vessel sherds [Webb 1941]), but many are incorporated into middens and are found in what appear to be domestic-like contexts.

An enduring challenge to understanding Poverty Point as a source of economic exchange is the near complete absence of goods that can be clearly defined as having been traded out from Poverty Point. The major diagnostic of exchange from Poverty Point are small, red jasper owl beads that are distinctively manufactured and assumed to be produced at Poverty Point. A very small number of these beads have been found outside of the Poverty Point site area. Recently, Hays et al. have done in-depth analysis of baked-clay objects (BCOs), including Poverty Point Objects (PPOs), across the Southeast (Hays et al. 2010; Hays et al. 2011). In a petrographic thin-section study of the paste composition of these BCOs, they have found that BCOs from northwestern Florida and the LMV were likely made at the Poverty Point site (Hays et al. 2010). This poses a clear conundrum: Why would people trade a mundane object such as a PPO from Poverty Point to people in Florida? Hays et al. mention these as possible "keepsakes" but more strongly hypothesize that they were a part of a "traveling kitchen kit" (2010:8–9). We believe, though, that these PPOs could be the souvenirs or tokens of pilgrimage that Wesler (2012:266–267) was looking for as a diagnostic artifact that would separate pilgrimage centers from festival centers.

Discussion

Compared to the amount of material imported to Poverty Point sites, relatively little is exported; thus, Poverty Point appears to be an inwardly driven process, drawing people and raw materials to the site from across the Southeast. According to Wesler, this material signature is precisely what is expected from a pilgrimage site (2012:260–27). The variability in material culture at the

site points to the possibility of occupation by people of highly diverse backgrounds. We hypothesize that the massive construction projects undertaken at Poverty Point after ca. 3400 cal b.p. were about creating or re-creating a new, shared cosmology and cultural narrative to provide *communitas* for participants with varied geographic, ethnic, or social origins. Because pilgrimage has multivalent social properties, we do not discount the idea that the community constructed through visitation to Poverty Point reflects the contestations of various actors; in the end, though, the construction of earthen features and the complex topography of the site suggest an agreed upon plan or shared vision or at least shared participation in a vision. This creation of a new place, whose size would have been so large that the local “rural” population would not have been able to account for its scale, is a hallmark of Renfrew’s version of a pilgrimage site, the LHDE (2001:19).

These data reflect that pilgrimage sites and their geography aren’t static; meanings shift and mutate, catchments evolve, and power and prestige are transformed through practice. For example, Poverty Point’s lithic catchment evolved through time. In the earliest stratigraphic levels the predominant raw materials are drawn from a circumscribed few geographic source areas. In stratigraphically later contexts, the catchment broadens and draws in an ever-larger and more diverse body of lithic materials from all directions, reflecting, we believe, an everlarger catchment of visitors (Spivey 2011).

The nominal explanation for the varying lithic selection is that these changes reflect adjustments to altered economic opportunities and to evolving functional requirements. Pilgrimage histories indicate just the opposite, however; economic functions follow ritual behavior, with pilgrimage entraining economic function (Morinis 1992; Turner 1974; Turner and Turner 1978). Pilgrims, attracted to the sacred, create a context for secular transactions, both along the way and at the place of devotion (Renfrew 2001:19). The pilgrim’s progress is marked by a diversity of economic and utilitarian transactions—the exchange of food, gifts, information, and ideas (Preston 1992). As paths converge upon the center place, the networks of these interactions become denser and more diverse and increasingly reflect the breadth of the pilgrimage’s catchment. Poverty Point is the indisputable center of these catchments, but it is only one of many sites that may have been part of the pilgrimage process. The pattern of rare, exotic, or long-distance lithic material being brought to the site from a diverse resource catchment is quite evident in the chipped stone assemblage, but it is also observed at Poverty Point with other nonlocal goods and materials. For example, steatite vessels were imported when local pottery was available (Webb 1982). Similarly, nonlocal pottery was imported when local pottery and steatite were already obtainable (Hays and Weinstein

2004; Ortmann and Kidder 2004). There is also a considerable investment in the production or importation of nonutilitarian items (e.g., quartz crystals, bannerstones, beads, gorgets, decorated tablets) made with exotic and unusual raw material (Webb 1982:58–6). We suspect that these materials were integral to the formation of group identities and alliances and indicate ritual or religious behavior that has been ignored or undervalued.

Pilgrimage surfaces most clearly “in periods of destruction and rapid social change, such as in the waning of the Roman Empire and in the waning of the Middle Ages.” During “transitional period[s] of history, when many institutionalized social forms and modes of thought are in question,” pilgrimage thrives (Turner 197:172). Similar transitional periods can be seen in the archaeological record of the LMV, one of which is the gap found between the mound-building traditions of the Middle and Late Archaic. We used to think that Middle Archaic mound building marked the beginning of an uninterrupted tradition of earthen mound construction practiced in the LMV throughout later prehistory; however, data now reveal a long temporal gap (ca. 4750–3700 cal b.p.) in mound-building traditions in the LMV (Saunders 2010, 2012). While we still lack a full explanation for the Middle Archaic hiatus, there are sufficient data to indicate that this hiatus is a real historical event. Recent work demonstrates episodes of avulsion at ca. 5200 and another between 5000–4300 cal b.p., the latter resulting in a major reconfiguration of the Mississippi River system, ca. 4500–4300 (Prokocki 2010). The LMV is not completely abandoned at this time, but settlement densities are certainly much lower in comparison to earlier and later times (Kidder et al. 2008a). Poverty Point emerges from just such an interval, marked by major reconfigurations of the social and natural landscapes of the LMV. It is in these environmentally uncertain contexts that we can see pilgrimage as one possible externally influenced way by which Late Archaic peoples created new histories and adapted to cultural plurality.

Anderson, Sassaman, and others argue that Late Archaic societies were undergoing major social, demographic, and ideological shifts, including increased sedentism, larger community size, and the emergence of strong territorial systems with less permeable boundaries (Anderson 2002, 2004, 2012; Anderson and Sassaman 2012:7–93; Russo 2004; Sassaman 2010:13–21, 2011). As a result, later Archaic fisher-foragers were developing strong group identities, and for the first time, much of eastern North America witnessed the emergence of societies characterized by social, economic, and ideological distinctiveness. Later Archaic communities had to find innovative ways to interact and coexist with each other.

To provide formal and safe places for interaction, Late Archaic commu-

nities constructed earthworks (shell rings, mounds, ridges, etc.) to serve as ritual precincts. These places emerge in resource-rich and highly productive environments where large(er) populations could congregate. In these contexts, ritual vouchsafed mutually beneficial interaction in the context of increasing territoriality toward the end of the Archaic.

As Sassaman suggests, “Poverty Point was the ultimate ethnogenic event of ancient Native America” (Sassaman 2005:358). We agree: “Making men or other personages at this point likely involved journeys by individuals to locations of real or stipulated ancestry to acquire objects necessary for initiation or other life-stage ceremonies” (Sassaman 2005:358).

Ken Ames asked us to “Imagine Hunter-Gatherer Complexity,” and we have taken his proposition to heart. Pilgrimage is alien in this context in part because hunter-gatherers—even complex ones—are not supposed to do this sort of thing, a point emphasized by the Turners (1978). They are not thought to have complex ritual behavior or elaborate religious practices because they are busy scratching out an existence in the face of uncertain environments. In this vein, social interactions among hunter-gatherers are driven by the need to minimize resource conflicts and uncertainty. The movement of exotic goods and tokens is seen as an epiphenomenon that provides a context for sharing information (Whallon 2006, 2011). Ritual elaboration is an excuse, even an unconscious action (Hamilton 1999), to undertake the real business of hunter-gatherers—eking out an existence.

We want to reframe the debate away from the presumption that economic imperatives are the sole driver of hunter-gatherer social change. People living at Poverty Point-era sites did not need to trade across vast distances to get their basic tool stone. From a wholly utilitarian position, in fact, the idea that people should go hundreds of kilometers out of their way to get raw material—some of it of dubious quality—is preposterous. We argue instead that economic interactions were entrained within more ritual-religious processes. This argument inverts the classic hunter-gatherer paradigm and insists that in this historical instance, outside of the basic tasks of daily subsistence needs, the economic activities of sharing and social mobilization are actually the outcome of a complex set of social interactions, perhaps across a very large landscape and multiple linguistic, political, and cultural boundaries.

There is, however, a wider context that asks us to pause to consider how we conceive of Poverty Point and, indeed, the entire history of eastern North America. Part of the Poverty Point paradox is that the site evidently plays a wider role in the larger Archaic world of the Southeast. Prior to Poverty Point, or at least prior to ca. 4000 cal b.p., the Archaic of the Southeast was integrated by a complex, overlapping, and geographically widespread network

of interactions and interconnections, moderated or mediated by the exchange of goods among and between communities and regions (e.g., Anderson and Sassaman 2012; Jefferies 1995, 1996, 1997, 2004; Kidder and Sassaman 2009; Sassaman 2010).

These patterns conform for the most part to what Whallon called “network mobility” or “informational mobility.” That is, “mobility involved in the establishment and maintenance of regional social networks and the flow of critical information through them’ and which ‘is a varied combination of individual, family, or ritual/ceremonial movements, few or none of which much resemble typical logistical or residential foraging movements” (Whallon 2006:261).

In effect, these exchanges situated economically vital materials and ideas within a context of mobility that was generated for a variety of reasons. In the Poverty Point context, it is important to note that there is, however, no evidence of a singular node of interaction in any location across the East. Some areas, for example, the Green River, may have participated more fully in some of these exchanges, but this may well be a reflection of demography (or even archaeology) as much as economic or social power (Sassaman 2010).

There is a decided shift, however, in the period after 3600 cal b.p. The shift is marked by a change in the flow of interaction and exchange. The networks of interaction that once wove together the Archaic of the East disappear, perhaps suddenly, and are replaced by a new phenomenon—one focused on and exemplified at Poverty Point and to a lesser extent at related and contemporary communities in the LMV. Poverty Point is now the attractor, and essentially the only attractor, in the East. The existing networks collapse or disappear. Nothing tangible exists that takes their place(s). Poverty Point becomes a black hole where goods flow in and little that is tangible flows out. Outside of the Poverty Point core area in the LMV, there is essentially no material sign of interaction with Poverty Point material culture at sites within the Poverty Point exchange catchment, which encompasses much of the midcontinent, the Southeast and the East. However manifest, Poverty Point enfolds into itself the role(s) once filled by the exchange networks that twined together the societies of the East.

Imagining this sort of complexity for Poverty Point may seem extreme, in part because it is exceedingly difficult to determine why pilgrimages occur. The reasons may be wholly idiosyncratic or they may be based on the emergence of prophetic persons or theophanies whose manifestation is archaeologically invisible or perhaps even intangible. Christian pilgrimage, after all, is based on miracle births, visions by children, and apparitions on walls, screens, or even in toasted cheese sandwiches. The archaeology of Poverty Point suggests that interpreting the site as a process or continuum of unbroken behavior may

not be the best approach. Considering it as an event-based process—where each monument and artifact has a distinctive history associated with a human action—provides a new way of framing Poverty Point in distinction to previous attempts to model its complexity. We have argued elsewhere that Poverty Point is *sui generis* and can only be understood by embracing its distinction (Kidder 2011; Kidder et al. 2008b). In this way our thinking resonates with Renfrew’s argument that “there are some sites . . . which we can only begin to make intelligible to us as if we regard them as the product of a powerful imaginative symbolic system (‘a dream’) of which we have at first sight no very clear idea” (2001:17).

At this point we cannot and do not pretend to be able to *prove* that pilgrimage is the cause for the structure of Poverty Point and its associated sites. Nor do we claim to know *why* Poverty Point may have become a pilgrimage site. However, we are confident that the explanation for the production and reproduction of Poverty Point communities lies in understanding the ritual histories of these remarkable sites.

Acknowledgments

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On the Monumentality of Events

Refiguring Late Woodland Culture History at Troyville

Mark A. Rees and Aubra L. Lee

In late April and early May 1927 a series of precipitous events culminated in what is remembered by many as the worst flood in U.S. history. Each crevasse of the Mississippi River was precipitated by a host of unfortunate occurrences, both environmental and cultural. The great flood of 1927 was unintentionally engineered, a result of ill-considered levee construction, settlement of the alluvial valley, and human modifications of drainage patterns for more than a century (Barry 1997; Reuss 2004). That such so-called natural disasters are in fact anthropogenic appears to be one of the most difficult history lessons yet to be learned (Freudenburg et al. 2009).

In 1927 James A. Ford graduated from high school in Clinton, Mississippi; that same year he found employment collecting artifacts for the Mississippi Department of Archives and History.

Although Jim Ford and his friend Moreau Chambers lacked archaeological training, they were introduced to Henry Collins, a fellow Mississippian and an archaeologist with the Smithsonian Institution (Brown 1978:3; Haag et al. 2002:8; Willey 1969:62). The encounter was propitious for southeastern archaeology, as Ford (1935a, 1935b, 1936) quickly learned the systematic methods necessary to establish regional chronologies and connect the newly created timelines to historically documented Native American tribes in what became known as the direct historical approach (Ford and Willey 1941; Gibson 1998:31–2; O'Brien and Lyman 1998:4–53, 63–87).

Ford's accomplishments with ceramics and stratigraphy in the advancement of a culture historical approach have afforded him a prominent status in the history of American archaeology. He freely acknowledged, however, that his culture chronology was arbitrarily delineated and "determined by historical accident" (Ford 1951:13). The culture history of the Lower Mississippi Valley (LMV) might have been substantially altered if the efforts of Ford and others had been ordered differently. If so, it was not merely Ford's (1935a, 1936) seminal work at Peck Village and other sites in the LMV that influenced subsequent understandings of regional culture history; Ford's trip to

Alaska with Henry Collins from 1931 to 1932 inadvertently affected later interpretations of the Late Woodland period (ca. a.d. 400–1200). It was while Ford was in Alaska that Winslow Walker, Collins's colleague from the Smithsonian, conducted salvage excavations at the Troyville Mound site. Ford had returned from Alaska and was present at the Conference on Southern Prehistory in Birmingham, Alabama, in December 1932 when Walker (1932:42–48) described the leveling of the Great Mound at Troyville and its unusual contents (Gibson 1982:260–261; O'Brien and Lyman 2001:4).

Responding years later in the Greenhouse report to criticisms of the Troyville period as an unwarranted subdivision of the Marksville and Coles Creek periods, Ford (1951:13) opined that each served only as heuristic, chronological units of cultural continuity (see also Ford 1938; cf. Phillips et al. 1951:427–428). The Troyville culture and period, now commonly subsumed within the Baytown period (a.d. 400–700), have since been problematically regarded as “artificial segments of a cultural continuum” (Gibson 1984:33; cf. Belmont 1984:94; Phillips 1970:908–910). That Ford was in Alaska and did not take part in the excavations at Troyville, but began with Marksville and Coles Creek at Peck Village and created Troyville only later from the standpoint of the Greenhouse report, constitutes a chain of events (and non-events) that continues to influence understandings of Late Woodland culture history in the LMV. Countless other events are thought to be decisive in advancing knowledge of undocumented indigenous pasts, such as the establishment of the Bureau of American Ethnology's Division of Mound Exploration, the founding of the Southeastern Archaeological Conference in 1938, several New Deal archaeology programs, the development of radiocarbon dating, and passage of the National Historic Preservation Act of 1966 (Anderson and Sassaman 2012:1–28). It seems odd, then, that archaeologists have only recently begun to seriously consider the importance of pre-Columbian, Native American events.

History, Materiality, and Power

For some time it has been remarked that culture history is undergoing a renaissance of sorts in the Southeast (e.g., Barker and Pauketat 1992:3). Recent studies on the historical and cultural significance of archaeologically discernible events are not happenstance but represent a methodical extension of trends preceded by a turn toward history in cultural anthropology and archaeology three decades ago (e.g., Hodder 1986; Ohnuki-Tierney 1990; Ortner 1984). The upshot of events was assumed much earlier by archaeologists promulgating a culture historical approach to occurrences of ceramic types

and certain diagnostic culture traits, technological innovations, diffusion, migrations, site unit intrusions, and places of origin (e.g., Phillips 1970:953–954; Phillips et al. 1951:451–454; Willey et al. 1956; Willey and Phillips 1958:1,51). The subsequent move toward synchronic and systemic generalizations concerning ecological adaptations and cultural evolution tended to disregard and even categorically dismiss the pursuit of events as irrelevant in explaining historical trajectories. From the perspective of both normative culture history and systems-oriented processualism, events as well as the places where events transpired seemed trivial and interchangeable. Consummate occurrences and exceptional places were overlooked in both instances in favor of comparative generalizations and taxonomies, transitional units, cultural continuities, gradual adaptations, and long-term patterns or trends (e.g., Dragoo 1976:19–20; Griffin 1967:86–89; Haag 1978:6–8; Phillips 1970:969; Smith 1986:43–57; Steponaitis 1986:379–387).

Antagonistic debates over history as composed of particularistic, stochastic events, on the one hand, and cultural evolution as a causal, systemic process, on the other, so popular only a few decades ago, have given way to interest in agency, identity, and how cultural traditions were produced and transformed through historical processes (Pauketat 2001; Pauketat and Meskell 2010). The admissibility of events has increased with the acknowledgment of the role of historical contingencies, contextual meanings, and interrelated agents (Brumfiel 2003; Dornan 2002). Concomitant ecological and structural constraints are inadequate to account for any people *with history*, irrespective of the presence or absence of the written word or of misguided attempts to segregate the past (Trigger 1991; Wolf 1982). Events occurred throughout the past with varying significance ascribed in the past and present, for “time has no independent existence apart from the order of events by which we measure it” (Einstein, in Barnett 1952:21–22). Specific events not only occur at specific times and places but also are encoded in and retrieved from particular locations in the brain as episodic memories (Hasselmo 2012). Representations of the past based on individual and social memories thus semiotically link event and place. As a measure of time and place, rate and scale, and order and association, events, it turns out, are integral to the explanation of process (Fogelson 1980:133; cf. Binford 1968).

As the editors of this volume describe in the introduction, recent considerations of events by archaeologists have been influenced by historical anthropology and practice theory (e.g., Beck et al. 2007; Bolender, ed. 2010). It is worth reemphasizing that these considerations were prompted by archaeological events, from studies that focused attention on punctuated rather than gradualist changes to the accumulation of data that allow for finer grained

regional chronologies and richly contextualized explanations. As Gilmore and O'Donoghue point out, Native American societies in the Southeast experienced "singular historical moments" on different temporal and spatial scales. Such transformative, exceptional events and long-term, seemingly inadvertent, sequential events can be contrasted with routine occurrences of everyday life, comparable to the *Annaliste* distinction between *conjuncture*, the *longue durée*, and *histoire événementielle* (Bintliff 1991; Knapp 1992).

While archaeologists are challenged with developing methodologies to distinguish between and interpret localized, micro-scale occurrences, on the one hand, and major, macro-scale events, on the other, any narrative of such proceedings might still be regarded as little more than chronicle or culture historical synthesis (Taylor 1983:25–4). The proximate causes and consequences of any particular event cannot account for historical processes of anthropological relevance, especially with regard to comparative generalizations, ecological constraints, and the *longue durée*. Fortunately, historical anthropologists have shown that history is not merely the "temporal aspect of experience" (White 1949:9) or "one damned thing after another" but the contested organization and interconnectedness of cultural practices, ideologies, social relations, and resources (Wolf 1990:50, 1999:64–67; see also Comaroff 1982; Comaroff and Comaroff 1991, 1992; Friedman 1992). In launching such a comparative undertaking, Eric Wolf (1999:8) remarks, "it is not the events of history that we are after, but the processes that underlie and shape such events."

An unfolding dialectic of cultural structures and transformative events therefore seems reasonable in explaining historical discontinuities and long-term change. Marshall Sahlins (e.g., 1981, 1985) famously explored just such an approach by contextualizing events in relation to historical transformations as the disruption of an established cultural order or "structure of the conjuncture." Drawing additionally on Sewell (e.g., 2005), Beck et al. (2007) advance an "eventful archaeology" in which certain events produce radical breaks or "ruptures" in patterns of built environment and material culture, signifying a disjuncture in social structures and related schemas (i.e., virtual procedures in social reproduction). The rearticulation of schemas and resources is of particular interest, in that transformative events are archaeologically accessible through materiality and "the sudden appearance of novel patterns in material culture" (Beck et al. 2007:844). Materiality refers here to the simultaneously material, symbolic, and meaningful dimensions of lived experience (Conkey 1999; DeMarrais 2004; Meskell 2005; Pauketat 2003).

Short of presuming a false dichotomy of totalizing structures and transformative, contingent events (as seen in "durable ruptures"), an eventful archaeology notably seeks to ground agency in structural change. Such an approach

gains support through the framing of structures and schemas within historical contexts, selecting material evidence of disjuncture and rearticulation, and asserting transformative events through “creative manifestations of agency” (Beck et al. 2007:845). Of relevance are Gilmore and O’Donoughue’s observations (in the introduction) that structures, as well as schemas, are plural, multivalent, conflicted, and, like events, nested within multiscale, sequential hierarchies. Within any historical context, structures and events are not opposed but processual, raising the related issues of signification and significance (Wolf 1990:92–93). Which events are to be selected as significant? Gilmore and O’Donoughue suggest connections can be drawn between experiential and analytical events, the latter often tied to macroscale, retrospective assessments of significance. While the experience of events surrounding the flood of 1927 informs historical narratives, its broader significance can be understood in relation to the anthropogenic landscapes of the alluvial valley and deltaic plain, to coastal subsidence, and to the escalating loss of wetlands. Events are selected and interpreted in the present day, through narratives, places, and materiality designated to represent the past. Archaeology has the unique capacity to detect and order undocumented and seemingly unrelated events, conferring new and pertinent anthropological meanings upon the recent and remote past.

That indigenous prehistory has for so long been characterized in terms of premodern, ostensibly eventless traditions, sociopolitical types, and systemic adaptations—in contrast to peoples with agency and history—exposes the power relations inherent in historical representation (Cobb 2005; Wolf 1999). Just as power shapes the narrative through the selection and omission of places and events, Michel-Rolph Trouillot (1995:28) illustrates how “power is constitutive of the story.” The archaeology of events should consequently track and address the interrelated experiential and analytical trajectories of power relations. The disjuncture and rearticulation of structures through transformative events might otherwise be reduced to the agencies of materiality as some equivocal, creative force. Wolf’s (1990:93) exegesis on the relationship between tactical power and structural power is compelling in this regard, the central insight being that social structures and power relations are most visibly expressed “in instances where major organizational transformations put signification under challenge.” This would include the unlikely, the improbable, the unanticipated, and unprecedented events within lived experience, social memory, and the horizon of expectation discussed by Sassaman and O’Donoughue (chapter 1, this volume). The materiality of such watershed events, analytically signified as durable ruptures or historical conjunctures, exposes the experiential realignment of structural and organizational power.

Instead of some overarching, uniform structure, such power is best conceived through performance or practice, as intrinsically relational and contested, with interconnected material (“economic”), ideological (“symbolic”), and coercive (“political”) sources (DeMarrais et al. 1996; Earle 1991, 1997).

Considering the connections between power relations, materiality, and transformative events, monumentality and associated rituals are among the most visible contexts in which historical conjunctures are manifested. Monumentality refers to power relations legitimized and contested in the construction and use, renovation or alteration, reuse, interpretation, and reinterpretation of monuments within commemorative landscapes. Monumentality constitutes archaeologically accessible palimpsests, whether partially erased or remodeled, for which significance is recurrently attached to place (e.g., Bailey 2007; Kassabaum et al. 2011). Rituals comprise standardized and often repetitive, symbolic practices and utterances that are intrinsic to political-religious processes and, consequently, to experiential realignments of structural and organizational power (Kertzer 1988:9). Ritual performances in commemorative landscapes represent a “consummation” of social convention and power relations (Rappaport 1979:197). The most powerful acts of creation are manifest in the “union of form and substance,” meaning both the “informing of substance and substantiation of form” (Rappaport 1999:55). Before earthen monuments could be constructed as mnemonic places of creation, the earth itself had to be ritually consecrated, thus setting in motion a series of semiotically enchainned events.

The authoritative reinterpretation and rearticulation of meanings through ritual performances can instigate and herald a new social order based on a pretext of continuity (Cohen 1974:36–39). Social imperatives and meanings replicated through materiality are open to rearticulation through a process of transubstantiation, which facilitates the charismatic reinvention of tradition and punctuated historical changes or “cultural acceleration” (Urban 2006:67–79). Monumentality and rituals in monumental contexts are fundamental to social complexity, or societies in which changing power relations affect the organization of diversity and distribution of meanings (Hannerz 1992:4–5). Both monumentality and associated rituals directly connect with materiality, as physical representations, embodiments, and reenactments of power relations. The monumentality of events alludes to these historical connections, in which power relations are played out.

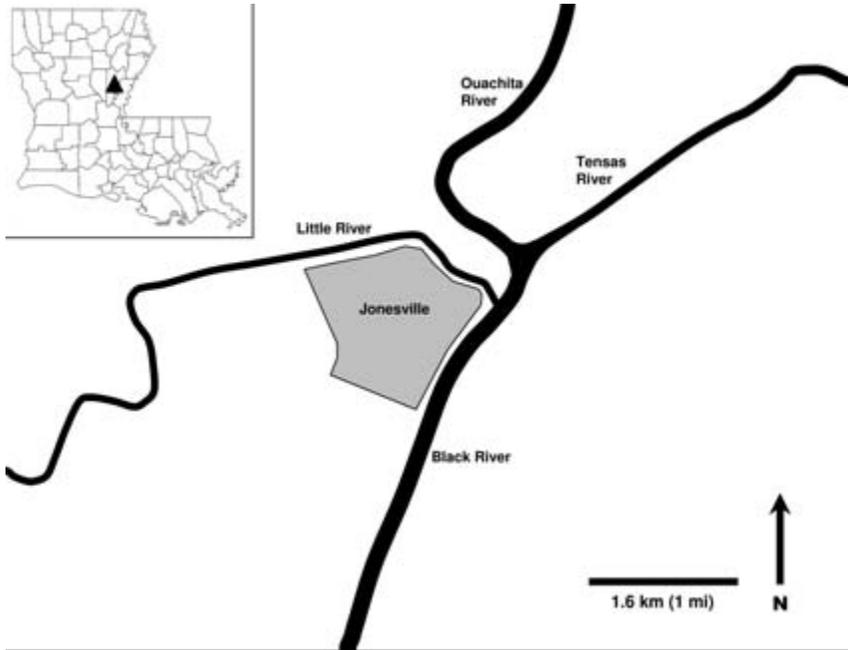
Returning to Troyville, it seems surprising that such a unique, monumental place has for so long been associated with a period and culture regarded as unremarkable, just one of many “transitional units” and “good gray cultures” in the LMV (Gibson 1982:27; Williams and Brain 1983:43). Troyville is hardly

mentioned and even omitted in some overviews of the Late Woodland period (e.g., Anderson and Sassaman 2012:128; Bense 1994:175–178; Nassaney and Cobb 1991; Smith 1986:50–53; Steponaitis 1986:383–388; Williams 1956:58). Jennings (1952:24) went so far as to describe Troyville as “nothing more than a transition site,” an unexceptional setting presumably bereft of any decisive (or at least demonstrable) events. Yet subsequent well-known events some 1,200 years later, leading to the near obliteration of its monumental architecture, are part of the story. Its representation as a culture historical subdivision of Marksville and Coles Creek is another. If Troyville culture has remained a problematic or ambiguous concept, the site has been easier to write off as a cautionary tale of unnecessary destruction.

Historical narratives of Troyville have in large part been made up of obliteration, protracted silences, and non-events, which have nonetheless influenced understandings of the Late Woodland period in the LMV (Fogelson 1999:142–143). Recent events involving investigations of newly discovered intact archaeological deposits at Troyville provide a different narrative and alternative history. Palimpsests of materiality and monumentality indicate sequential events associated with the extraordinary construction of earthworks, ceremonial practices and rituals, and the associated habitation of this important, yet poorly understood, place. Taking Jim Ford’s (1995:13) admonition to heart regarding historical accident and arbitrariness, the reconceptualization of a Late Woodland culture history that begins with Troyville, at the Troyville Mound site, is long overdue.

Troyville Revisited

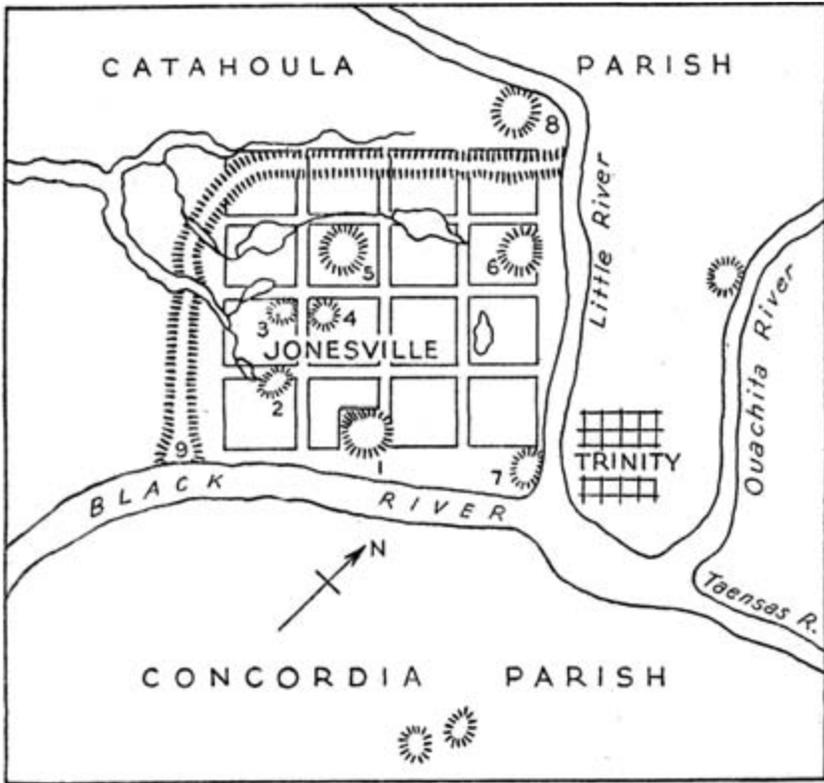
Few places loom as large in the history of LMV archaeology as the site of Troyville, located in the present-day town of Jonesville, Louisiana, where the confluence of the Ouachita, Taensa, and Little rivers forms the Black River (Figure 8.1). Named after Troy plantation, the site’s notoriety stems in large part from Walker’s (1936) Bureau of American Ethnology report on salvage excavations of 1911 and 1912, by which time much of the remaining portions of the largest mound had been removed to provide fill dirt for an approach ramp and bridge over the Black River. From its destruction arose the renowned description of the “Great Mound” (Mound 5), which at the time of its construction would have been one of the largest monuments in North America (LA Division of Archaeology 2008:44; Neuman 1984:171). According to early accounts, the Great Mound was a three-tiered, 24-m (80-foot) high earthen monument consisting of a steep conical mound built on top of a two-stage platform mound (Walker 1936:5–13). The earliest recorded description comes



8.1. Map of Troyville in Jonesville, Louisiana.

from the naturalist William Dunbar in 1806. In his report to President Thomas Jefferson, Dunbar mentions a “stupendous turret” on the Great Mound, four additional 6-m (20-foot) high platform mounds, and surrounding embankment (in Walker 1936:5–6). Walker (1936) describes nine mounds: seven within the embankment, an eighth on Little River outside of the embankment, and a ninth on the southern end of the embankment (Figure 8.2). Walker’s report on Troyville cast a long shadow across the lower valley in relating the demolition of such extraordinary, yet poorly documented, monumental architecture.

As previously mentioned, the present-day understanding of Troyville culture stems from Ford’s (1951:1348, 124–125) report on the Greenhouse site, in which he described the Troyville period as a temporal subdivision of Marksville and Coles Creek based largely on ceramics, with only passing reference to Walker’s salvage excavations at Troyville (see also Ford and Willey 1941:345). The cultural and chronological associations of Troyville have subsequently been the focus of much deliberation and debate centered on ceramic continuities or discontinuities with Marksville, Baytown, and Coles Creek. In the process Troyville has been conceived as a period, a culture, a phase, and various combinations of these (e.g., Belmont 1967:27–30, 1984; Gibson 1984:32–



8.2. Map of the Troyville Mound site. (From Walker, 1986, Fig. 4.)

37; Haag 1978:6-7; Jeter and Williams 198:147-148, 152; Neuman 1984:10-24; Phillips 1970:908-910; Williams and Brain 1983:44-405). Since Walker's (1986) excavations focused on the salvage of the lower levels of Mound 5 and produced no detailed ceramic analysis, the type site contributed relatively little to this debate (see Phillips 1970:910).

With the monumental architecture of Troyville very nearly erased, the site became merely one of many mound sites attributed to the Late Woodland period in the LMV. Baytown period sites, in which Troyville is presently included, are thought to have been associated with egalitarian, communally integrated societies that preceded more hierarchical and politically centralized Coles Creek societies (e.g., Kidder 1998:128-133; Roe and Schilling 2010:158-159). From a neo-evolutionary perspective, Coles Creek culture was composed of simple chiefdoms or small, incipient chiefdoms lacking agricultural intensification (Kidder 1992:156-157; Steponaitis 1986:386). Lesser

known Troyville components that preceded Coles Creek culture are consequently regarded as relatively less complex, almost certainly not representing chiefdoms, and more akin to communally organized, Middle Woodland communities such as Marksville (Kidder 2004:554–555). The Baytown period has nonetheless remained an obscure, three-centuries-long transitional period between Marksville and Coles Creek. The Troyville site, nearly silenced 80 years ago, has scarcely played a role in the historical narrative.

Recent investigations by Earth Search, Inc. (ESI) have shed new light on the Troyville site and challenge present understanding of the Baytown period, Troyville culture, and the origins of Coles Creek. Data recovery and monitoring investigations, conducted from 2005 to 2009 and reported in greater detail elsewhere (Lee 2010; Lee et al. 2011), provide the basis for a more detailed history of the site and a revised regional culture history. The following sections focus on the evidence for the construction of embankments and residential space, mound construction, and the deposition of ceramics within these contexts. Additional evidence is presented for ritual feasting and renewal ceremonies, including sacred-fire symbolism. In the process, a new interpretation of the Troyville site emerges. The present-day remnants of the Troyville site can be conceived as a palimpsest inscribed with monumental events, some now largely erased, that immediately precede Coles Creek culture and monumentality. The sequential construction, use, and alteration of Troyville, and attempts to obliterate the earthworks, constitute a chain of events that involves the symbolic demarcation of ceremonial space, domesticity, commemoration and renewal, and erasure and reinscription. These transformative events are in the end addressed as historical conjuncture and precedent and in relation to structural power and representations of Late Woodland culture history.

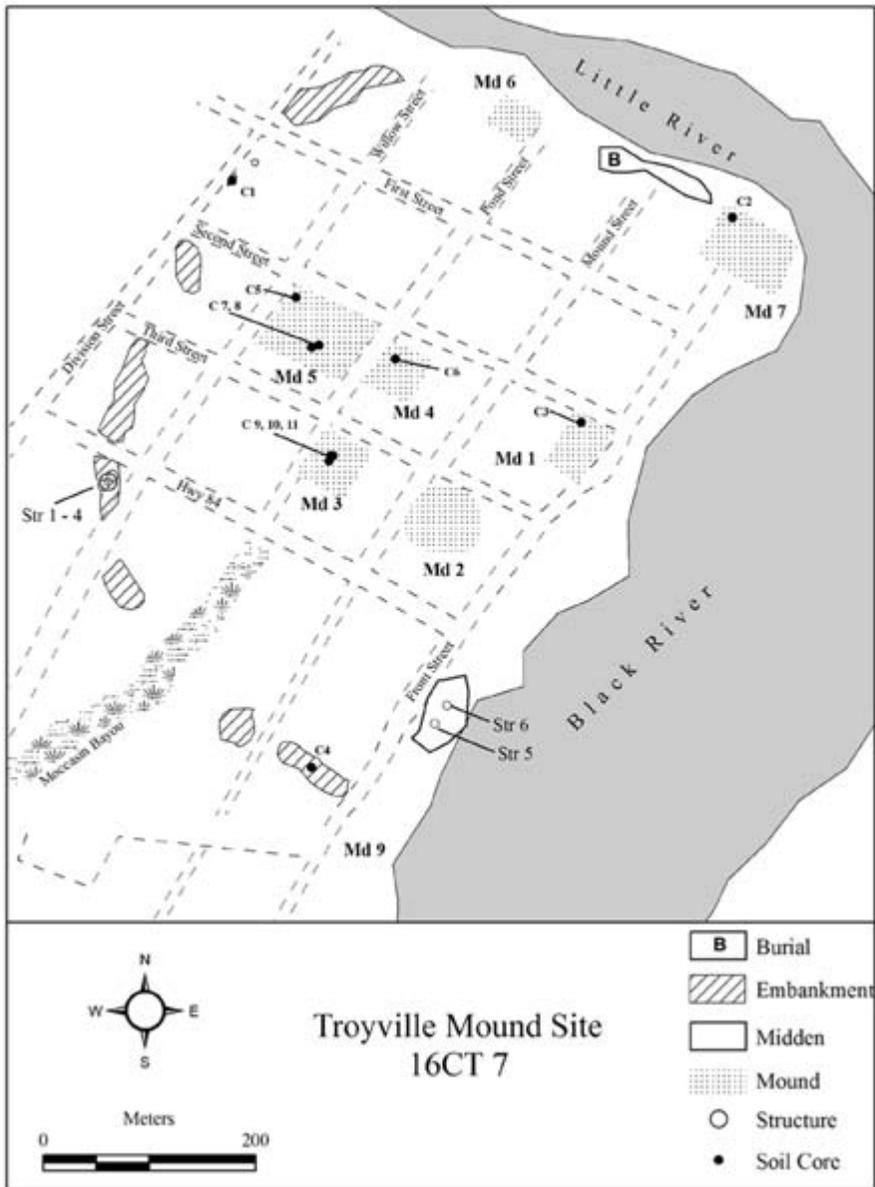
Embankment Construction and Residential Space

Walker (1936:35–36) speculated that the embankment at Troyville may have served as a defensive fortification, with a palisade on top and an exterior ditch or moat. The semicircular or D-shaped earthen embankment was reportedly 3 m (10 ft) high and extended from Little River on the north to Black River on the south. Only isolated portions of the embankment remain visible above the ground surface. Since the embankment was nearly leveled without ever having been systematically studied, estimates of its shape and the area it enclosed have ranged widely (from 20 ha to 162 ha). Nineteenth- and early-twentieth-century accounts describe it first as arc-shaped and then as rectangular, as depicted in the map produced by Walker (1936:11, Figure 4) based on information from George Beyer and Cyrus Thomas. Caleb Forshey de-

scribed the embankment as semicircular in 1841, with a second, much larger embankment said to enclose three mounds approximately 1.6 km (1 mi) south of Troyville (Walker 1936:4–16). The existence of the earthworks to the south has not been confirmed, and the Troyville embankment has not produced any evidence of a palisade, fortification, or exterior ditch.

Studies of similar embankments at mound sites dating from the Middle Woodland period have suggested their uses in demarcating ceremonial spaces, such as interior mortuary precincts or as astronomical alignments with cosmological significance (Jones and Kuttruff 1998:52–55; McGimsey 2010:120–124; Lepper 2004:77–80; Seaman 2004:67–71). This appears to be the case at the better-known Marksville site, located only 59 km (37 mi) southwest of Troyville. At Marksville a conical mortuary mound (Mound 4) and at least two platform mounds (Mounds 2 and 6) were built within the principal enclosure (Embankment A). The main enclosure at Marksville, however, constitutes only part of a much larger ceremonial landscape that may have extended over 2.4 km (1.5 mi) along the Prairie Terrace. There is no evidence from Marksville to support residential use of the embankment, which represents a single construction event. Residential debris at Marksville appears to have been isolated to the edge and upper slope of the bluff (Kidder 2002:75–76; McGimsey et al. 2005:83). As at other Middle Woodland sites, the Marksville embankment delineates the ceremonial precinct of a largely vacant mortuary center, a sacred place where corporate groups periodically came together for ritual, celestial, and even cosmological events (Davis 2005).

The embankment at Troyville, although roughly similar in length and shape to Embankment A at Marksville (334 ft or 103 m), upon closer inspection appears to have been very different. Cores from two remaining sections of the Troyville embankment indicate two separate construction events, with a midden deposit of varying thickness in between (Saunders and Jones 2003:64). Several earlier investigations similarly noted high densities of ceramic sherds and midden along intact portions of the embankment (Cusick et al. 1995; Gibson 1985a:252–257; Walker 1936:35–37). Investigations by ESI recorded evidence of residential structures and domestic debris on the intact, yet truncated, lower Stage 1 surface of the embankment (Figure 8.3; Lee 2006:5; Lee et al. 2011). Three distinct midden deposits were recorded along the east side of the embankment. A total of 132 cultural features were recorded on the lower surface of the embankment, consisting mostly of post molds ($n = 103$) and a variety of pits. Four circular structures (Nos. 1–4), ranging from 7 m (23 ft) to 12 m (39 ft) in diameter, were identified from the position and alignment of the post molds (Lee et al. 2011).

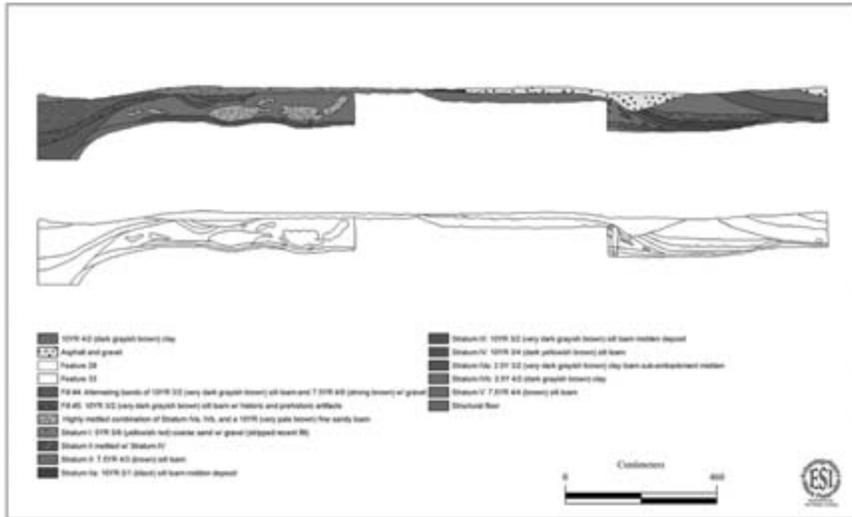
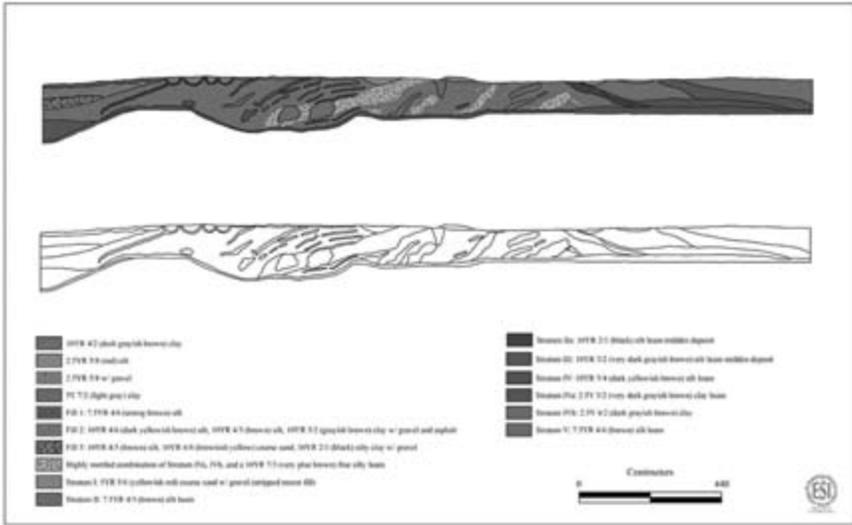


8.3. Map of the Troyville Mound site, showing the locations of the embankment, mounds, and areas investigated by ESI. (From Lee 2010:44, Fig. 8.1.)

Construction of the embankment, or at least its northern portion, appears to have begun as early as cal a.d. 540 (Lee 2006:Table 1;Lee et al. 2011:Table 6.4). It was built with basket loads of clay, silt, and sandy loam, creating a complex series of thin, clay layers interspersed between thicker layers of silt and sand (Figure 8.4). In the area of embankment investigated by ESI, alternating layers of midden and clay were found along the east flank. Substantial residential midden (20 cm thick) began to develop soon after the first stage of the embankment was completed. Sometime around cal a.d. 620 or 630, the midden was covered with a layer of gray clay. A second midden was subsequently deposited on top of this clay, until sometime between cal a.d. 720 and 760, when it too was covered with a layer of red clay (Cusick et al. 1995:Table 10–2;Lee 2006:Table 1;Lee et al. 2011:Table 6.4). Finally, a third residential midden accumulated on top of the red clay.

Additional areas of domestic refuse, including cooking and trash pits filled with ceramic sherds, were recorded along the Little and Black rivers, west of Mound 7 and north of Mound 9 (Hunter and Baker 1979;Lee 2010:147–149). Walker (1936:32–35) described a cemetery or burial ground with at least 12 individuals in three burials along Little River west of Mound 7. Earth Search, Inc. recorded a midden north of Mound 9 that included 25 pit features and posts from one oval structure (No. 5) and one circular structure (No. 6), 8.5 m (27ft) across and 9 m (29 ft) in diameter, respectively. Radiometric assays from the midden, posts, and pit features indicate that occupation of the riverbank began around cal a.d. 650 and continued into the early Coles Creek period, around cal a.d. 780 (Lee 2006, 2010:149–151). There is also limited evidence to indicate that the riverbank was occupied during the late Coles Creek and Plaquemine periods (Lee et al. 2011:244–250,468–470, Table 7). As so much of the site has been impacted by mound demolition and the development of Jonesville, it is uncertain whether residential space extended from the riverbanks to the embankment during the seventh or eighth centuries a.d.

Decorated ceramics from Troyville are predominately terminal varieties of Churupa Punctated, Marksville Incised, and Marksville Stamped. These wares follow well-established trends, such as decreased line width on incised wares and increasingly coarse rocker stamping, but exhibit overall continuity in decorative method and design between the Marksville and Baytown periods (Hunter et al. 1995;Ryan 2004; Saunders et al. 2005,2006). The most striking example of this long-lived tradition is a small, necked jar (Figure 8.5), decorated with a complicated curvilinear design and dentate stamped background, with three lines of punctates along the rim. This design is nearly identical to that of Marksville vessels decorated in a similar manner, despite having been produced approximately three centuries earlier. From such stylistic consistency



8.4. Profiles of Trenches 2 (top) and 3 (bottom) from the embankment. (From Lee 2010:109,118, Figs. 36 and 45.)



8.5. Small-necked jar from Feature 49 at Troyville.

stems the argument for cultural continuity and gradual transition rather than discontinuity (e.g., Ford 1951; cf. Phillips 1970:908–910). The Marksville vessels, however, are mostly associated with mortuary contexts, while the Marksville vessels from Troyville are associated with residential space and mound-top ceremonialism.

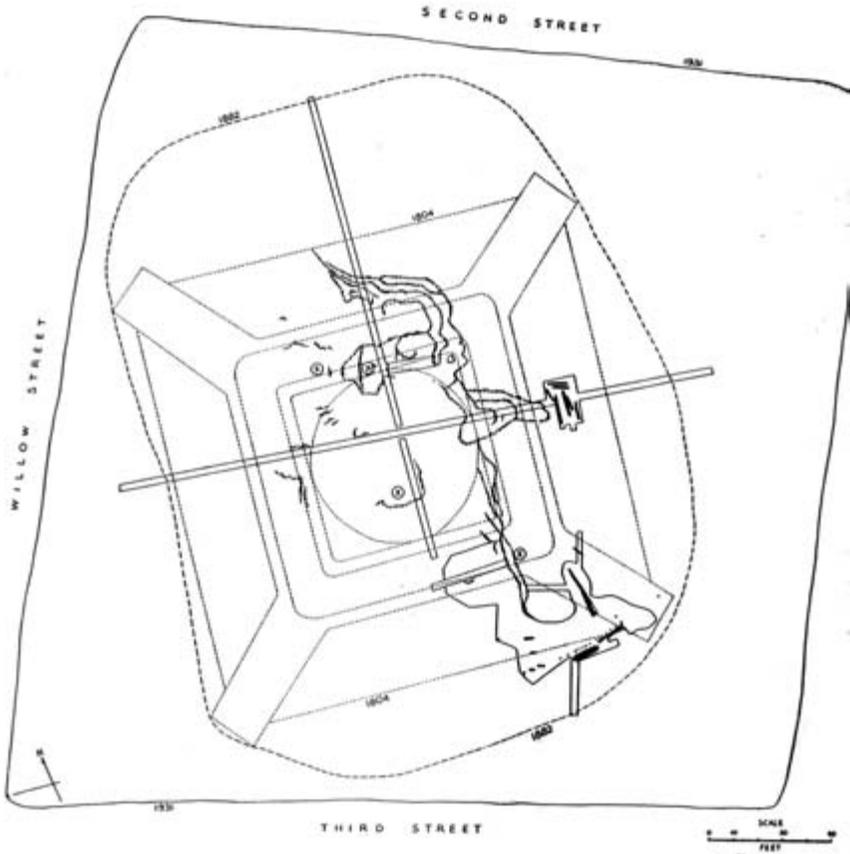
Mound Construction

Piecing together events associated with the construction and use of mounds at Troyville requires taking into account successive alterations, damages, demolition, and removal. Of nine known mounds, all had been severely impacted by looting and municipal construction by the time of Walker's (1936) investigation, to the extent that the site was considered to have been already mostly destroyed (Neuman 1984:170–172). Investigations by the Louisiana Regional Archaeology Program demonstrated that significant portions of the site re-

main intact, including those offering evidence of earthwork construction and use (Saunders and Jones 2003; Saunders et al. 2006, 2010). While Mounds 1 and 2 are both known to contain indigenous burials, Mound 1 has been better protected by the addition of a historic cemetery. Mound 3 was thought have been destroyed by modern residential construction (Walker 1936:12–13), but approximately 75 cm (3 in) of mound fill and a possible feature were recorded in soil cores (Saunders and Jones 2003:66, Appendix II).

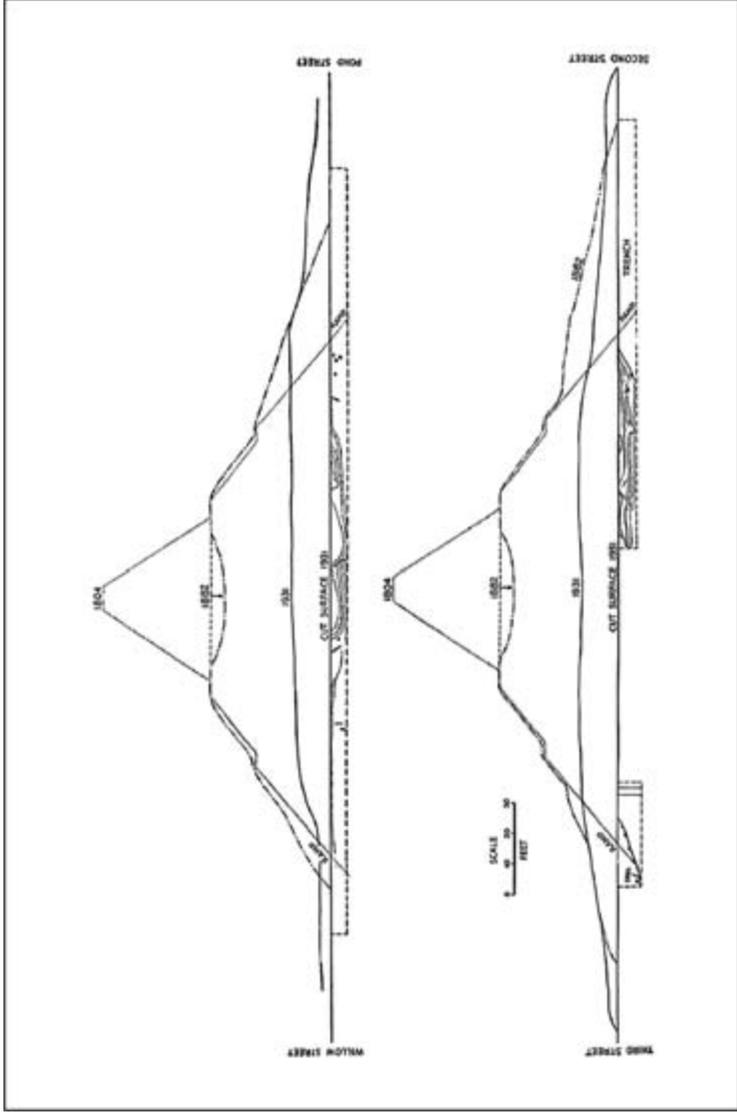
Coring and excavation at the location of Mound 4 indicate at least three construction stages dating from the Baytown period, with a submound deposit dating from the Marksville period and covered by Arkansas River alluvium (Saunders et al. 2010:39–43). Based on excavations on the north flank, Joe Saunders suggested that Mound 4 may have been enclosed at one time by a wooden palisade (Saunders and Jones 2003:64; Saunders et al. 2006:29). Charcoal from a small pit (50 cm dia. by 50 cm deep) located near the center of Mound 4 produced a median radiocarbon date of cal a.d. 650, during the late Baytown period (Saunders et al. 2006:61–62, Tables 7 and 9). Considerably less is known about Mounds 6 through 9. Two stages of construction may remain at the location of Mound 6, although it was already severely damaged by the end of the nineteenth century (Walker 1936:32). Mound 7 was leveled for boat landing access at the confluence of the Black and Little rivers, but intact residential midden was recorded above and below a layer of mound fill (Saunders and Jones 2003:64). The upper midden dates from the Coles Creek period, while the lower midden dates from the Baytown period, suggesting an intermediate date for the single intact construction stage. Remnants of Mound 9 lay beneath a modern house.

The lower platform of Mound 5, the Great Mound, was more systematically investigated by Walker (1936:16–31). Mound 5 was described as the second-highest mound in eastern North America, and at an estimated 626,700 cubic feet, it may also have ranked as one of the largest (Gibson 1936:54–60; Walker 1936:4–12). It is further distinguished in terms of its “unrivaled” construction (Neuman 1981:173). Mound 5 was composed of a lower platform, estimated to have been 55 m (180 ft) wide at its base and 9 m (30 ft) high, which supported a second platform approximately 4.6 m (15 ft) high (Figure 8.6). A steep conical mound on top of the second terrace was described as 10.7 m (35 ft) high, bringing Mound 5 to an estimated total height of 24.4 m (80 ft; Figure 8.7). Ramps were constructed at the four corners of the lower platform, with a possible causeway connecting Mounds 4 and 5 (Walker 1936:27). Walker (1936:8–9) relates various explanations for the configuration and height of Mound 5, including its possible use as a “ceremonial fire tower” or signal tower.



8.6. Plan of the Great Mound. (From Walker, 1936, Fig. 6.)

In 1931 the remaining portions of the upper platform and top of the lower platform were removed by steam shovel to build an approach ramp for the Long-Allen Bridge. Walker's trench excavations began at the nearly leveled base of the lower platform and exposed 1.5 to 1.8 m (5 to 6 f) of remaining mound fill above the premound surface (Figure 8.8). The lower platform consisted of alternating layers of clay, wooden boards, logs, and river cane, with some masses of cane measuring more than 1 m (3 ft) thick and secured with stakes and logs (Lee 2010:116). A portion of a human cranium was discovered under one of the logs near the southeast ramp, leading Walker (1936:22) to surmise that accounts of human remains from the upper levels may have been correct. The condition and context of the cranium suggest a sacrifice or trophy skull, rather than a primary or secondary interment.

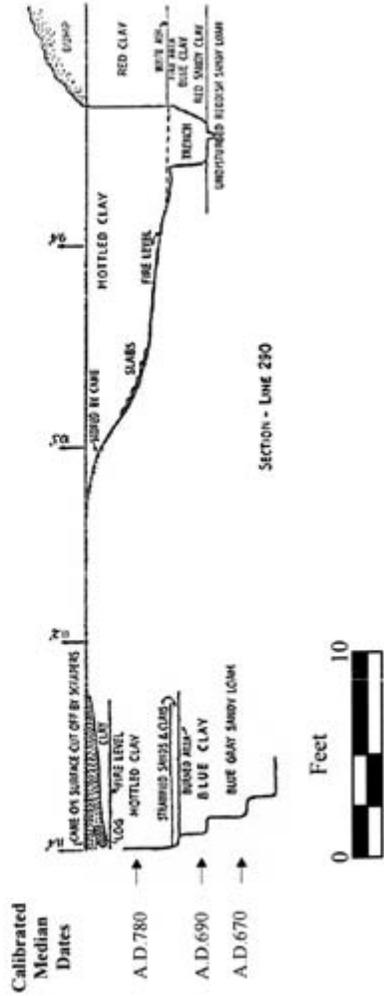
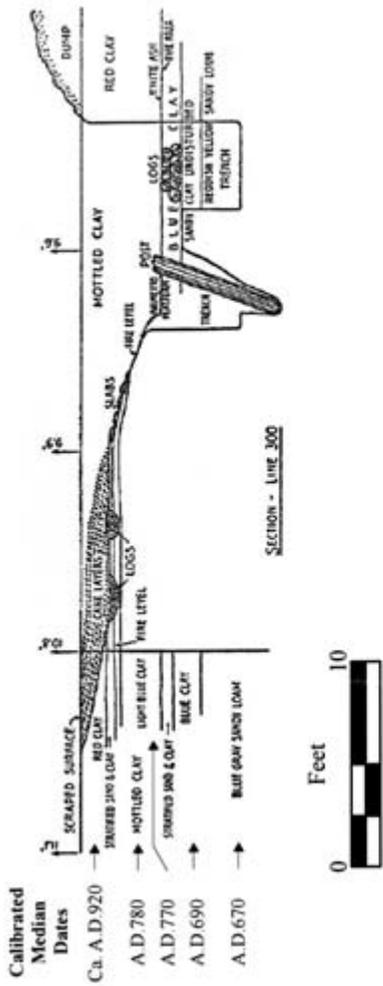


8.7 Cross-sections of the Great Mound. (Walker, 1936, Fig. 3.)

Walker (1936:20–21) recorded portions of two domes of clay and cane on the north and south sides of the Great Mound and what he thought to be an earlier interior or “inner mound,” with areas of burned wood, charcoal, and scorched earth containing pottery sherds and fragments of animal bones. He referred to this “fire level” of the inner mound in the south pit as “camp-site debris” (Walker 1936:20–24). It was covered with a lens of sand and clay and then sealed with a thick layer of red clay (Walker 1936:8, Figure 7). Walker uncovered an east–west alignment of 15 post molds nearby, extending 12.2 m (40 ft) at the base of the mound slope. The posts were irregularly spaced, between one and three feet apart, and, according to Walker, intruded above the fire level. This series of posts formed a palisade-like screen or partition along the south side of the mound. Erosional deposition and the stumps of two small pecan trees indicate that some interval of time had passed, subsequent to the fire level and construction of the partition, before mound building resumed.

Despite the severity of damages to Mound 5, recent investigations indicate that between 1 m (3.3 ft) and 1.8 m (6 ft) of mound deposits and potentially associated features may remain intact beneath modern buildings and yards (Handley et al. 2006:Figure 11–1; Saunders and Jones 2003:59–68; Saunders et al. 2010:41–43). Recent investigations by ESI for the new alignment of the Long–Allen Bridge recorded construction materials associated with Mound 5 as described by Walker (1936:16–31), including redeposited mound fill and river cane that had been moved to build the approach ramp. The layers of cane, some woven with cane splints, were oriented at 90 degrees and associated with small wooden pegs used to secure the layers during mound construction. The redeposited mound fill contained relatively few ceramic sherds, most of which are types generally associated with the late Marksville period (Lee et al. 2011:299).

Five samples of river cane were collected from intact soil horizons that had been placed in the approach ramp. Radiocarbon dates from these samples were correlated with Walker’s stratigraphic sequence based on soil descriptions (Figure 8.9). The lowest stratum in the sequence (Walker’s blue–gray sandy loam) returned a median date of cal a.d. 670 (a 2-sigma range of a.d. 640–770). The blue clay above this blue–gray sandy loam produced a median date of a.d. 690 (a 2-sigma range of 660–810). These strata were separated from soils higher in the sequence by an extensive burned area. Samples from two strata just above the burned level (Walker’s light–blue clay and mottled clay) produced median dates of cal a.d. 770 (a 2-sigma range of a.d. 670–880) and a.d. 780 (a 2-sigma range of a.d. 690–900) respectively. These layers of mound fill were covered by Walker’s fire level, which was then capped with



8.9. Stratigraphic profiles of the Great Mound South Pit excavation by Walker (top; 1986, Fig. 7) correlated with calibrated median 14C dates from the West Approach Ramp (bottom; Lee et al. 2011, Fig. 227).

red clay. The cane sample from the red clay produced three intercepts of cal a.d. 900, 920, and 980, with a two-sigma range of a.d. 870 to 1010 (Lee et al. 2011:292–299, Table 9, Figs. 226 and 227). Four of these five dates coincide with the only other radiocarbon date for Mound 5. A sample of river cane collected by Walker from the lower platform was radiocarbon dated to cal a.d. 679–778 (2-sigma range), indicating that construction of Mound 5 began during the late Baytown period and continued at least into the early Coles Creek period (Lee et al. 2011:299; Saunders et al. 2005:Table 5; Saunders et al. 2006:62).

Ritual Feasting and Renewal Ceremonies

Ritual feasting during the Baytown period has been suggested based on the presence of large bathtub-shaped roasting pits on the peripheries of sites, often associated with concentrations of animal bones, ceramics, and intense burning (Belmont 1984:88–90; Ford 1951:28–30; Kidder 1992:152). Walker's (1936:20–21) description of ceramic refuse, animal bones, and burned logs in the “fire level” on the lower stage of Mound 5 might be construed as evidence of feasting in the context of platform ceremonialism and renewal. Saunders recovered sherds of at least 30 different ceramic vessels from the small pit near the center of Mound 4 (Saunders et al. 2006: 61–62, Table 9). The most common vessel forms are platters and large, shallow bowls. Given their context within Mound 4, these ceramic sherds appear to be refuse from a large feast. The ceramics are predominantly Marksville types, despite a radiocarbon date of cal a.d. 650, which places this event in the late Baytown period (Saunders et al. 2006:61–62, Tables 7 and 9).

Comparison of vessel form and size indicates no major differences between Marksville and Baytown assemblages, except for the appearance of bottles and carinated bowls at the end of the Baytown period. Vessels from Marksville and Baytown mortuary contexts are generally smaller than those from contemporary domestic contexts (Gibson et al. 2003:82–89, Tables 10.8 and 10.9). Deep bowls, pots, and large jars were used for food preparation, cooking, and storage. Platters and large, shallow bowls were used to serve food and are more common in mound contexts. Differences in the orifice diameters of vessels from Troyville correlate with different depositional contexts. Orifice diameters from embankment and riverbank contexts cluster between 15 and 30 cm, while those from Mound 4 range from 30 to 50 cm. Vessels from mound contexts are larger than those used elsewhere on the site, as well as those used at other sites (Lee et al. 2011; Saunders et al. 2006:61–64). This further suggests that ritual feasts were associated with mound-top ceremonialism, perhaps involving residents and nonresidents of Troyville. Although

few plant and animal remains have been recovered from Troyville, there is evidence that wild plant seeds, fruits, white-tailed deer, and fish were consumed and presumably served at feasts (Lee et al. 2011:423–454).

Ritual feasting would have been associated with purification and renewal ceremonies during the Baytown period, representing a shift from Hopewellian-like mortuary rituals focused around interments within central platforms to political-religious events on mound summits (Gibson 1996:52–53; McGimsey 2010:123–29). Earthen platforms dating from at least the Middle Woodland period in the Southeast served as communal arenas for staging feasts, oratory, renewal ceremonies, and community events (Knight 2001:37–38; Lindauer and Blitz 1997:11–17). Although large feasts may have been public events, the preparations and associated ceremonial performances would have been orchestrated and controlled by aspiring political-ritual specialists (Blitz 1998a; Pauketat 2002). Kidder (1998:136–149) has suggested that mound precincts became increasingly exclusive and elite-oriented during the Coles Creek period (see also Kidder 2002:86, 2004:554). The beginnings of a more exclusionary platform mound ceremonialism at Troyville are indicated by the construction of palisades or partitions around Mounds 4 and 5. Ritual feasts coordinated from mound summits would indicate more exclusionary control of esoteric knowledge, sacred time, and space.

Such annual or periodic events at Troyville may represent early antecedents of the Busk or Green Corn ceremonialism (Hudson 1976:365–375; Knight 2001:38; Swanton 1928a:54–614). Given the absence of maize from Troyville and early Coles Creek contexts, ritual feasting would have focused instead on renewal of the annual ecological cycle. Even today the Green Corn Ceremony is not simply a celebration of the harvest. Among the Yuchi it combines “a new fire ritual, a world renewal ceremony, a means of ensuring community health, a purification ceremony, a homecoming reunion, a tribal festival, and a means of communicating Yuchi values” (Jackson 2003:64). Having surveyed variations and similarities across the Eastern Woodlands, Witthoff (1949:84–85) suggested Green Corn ceremonialism was a later development and “remodification” of preagricultural, hunter-gatherer rituals originating in the Southeast.

An unusual motif, designated the “Troyville Glyph,” has been found on sherds of three vessels from Mound 4, Mound 5, and the embankment (Figure 8.10). The motif is an incised circle with four short, incised lines spaced equidistantly around the circumference. The vessel from Mound 4 has three punctations in the center of the circle, forming a triangle. A single punctation is present in the center of the circle on the other sherds. Short, curvilinear lines around the circle on the vessel from the embankment suggest variants

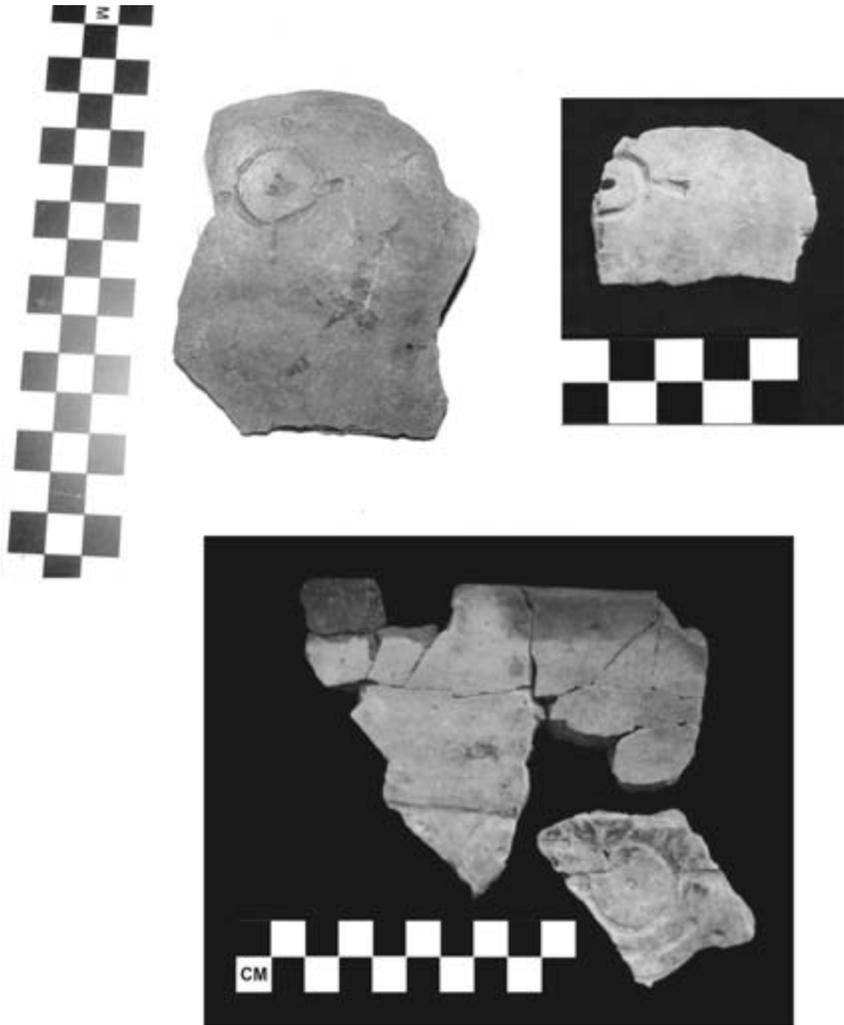
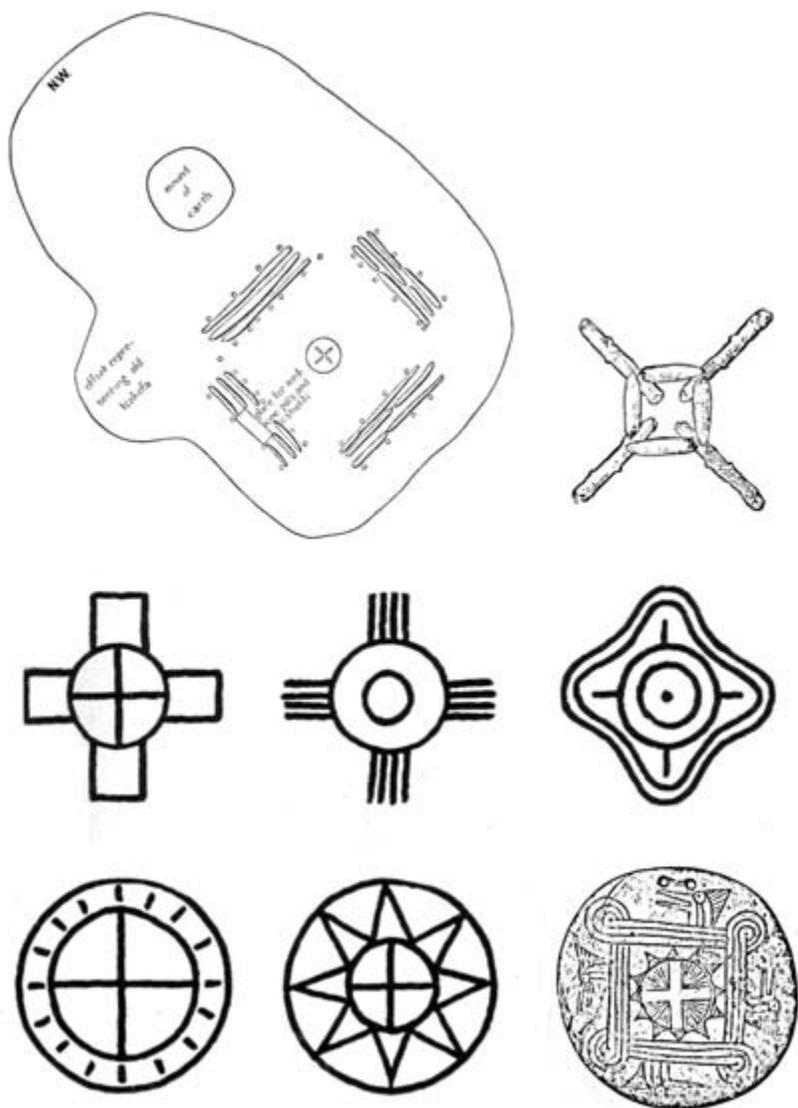


Figure 8.10. Troyville Glyph. Upper left: Marksville Incised, *variety Steele Bayou*, from Mound 4, Feature 1 (Saunders et al. 2006:46, Plate 9); Upper right: Marksville Incised, *variety Scott*, from the West Approach Ramp, Pass 12, Stratum X (Lee et al. 2010:35, Fig. 255); Lower: Marksville Incised, *variety Steele Bayou* from the embankment, Feature 136 (Troyville Glyph at bottom right; Lee et al. 2010:354 Fig. 258).

of the same recurrent design (Saunders et al. 2006:45). The Troyville Glyph is nearly identical to historic and contemporary illustrations of the Creek sacred fire, rekindled as the “central ritual event” of the annual Green Corn Ceremony (Figure 8.11; Hall 1998:274; e.g., Swanton 1928a:55; Figure 108, 1928b:27, Figure 48). Although variants were practiced throughout the Southeast, in the Creek town of Little Talasi the annual ceremony began with the lighting of the sacred fire. Four logs were placed in the new fire, one from each of the four corners of the square ground. The ceremony concluded on the fourth day with a ritual feast comprising large amounts and a wide range of foods (Witthoff 1949:56–57).

Saunders interpreted the Troyville Glyph as similar to the cross and circle of the Southeastern Ceremonial Complex (Saunders et al. 2006:45). The cross-and-circle motif is among the oldest and most widespread iconographic themes in the Southeast, dating from at least the Early Woodland period (Muller 1998:13,16). Sun-circle and cross-and-circle motifs in Mississippian contexts are associated with the four corners and vertical axis of the world, as well as the sacred fire (Figure 8.11; Emerson 1997a:20–222, 1997b; Howard 1968, Figure 1; Hudson 1976:12–123, 126; Lankford 2004:208–21, 2007:20–22; Waring 1977:33–38; Waring and Holder 1977:9–10). The square ground of the Green Corn Ceremony similarly represents a quadripartite, “stratified world symbol” with the sacred fire in the center (Witthoff 1949:83). Drawing parallels between the square grounds and platform mounds, Hall (1998:274) suggests that lighting of the sacred fire “formerly must have taken place in a mound-top temple.” Among the Cherokee the sacred fire was lit on a small mound in the plaza (Kniffen et al. 1987:260). The Natchez maintained their eternal fire in a temple (Swanton 1911:171–172). The Troyville Glyph represents a preagricultural and autochthonous sacred fire, primordial symbolism nonetheless associated with purification, world renewal, and ritual feasting likely orchestrated from mound-top precincts.

There is ample evidence for the use of fire in monumental construction and renewal at Troyville, as well as at other sites dating from the late Marksville to early Coles Creek periods. Concentrations of charcoal and burned trees have been discovered in different locations beneath the embankment at Troyville, indicating that the ground was cleared and burned prior to construction (Lee et al. 2011; Saunders and Jones 2003:62–68). The low-lying area selected for Mound 5 was cleared and burned before construction commenced. The top of each stage was subsequently burned and sealed with layers of soil before the next stage was built. The burning and sealing of Stage 1 in Mound 5 preserved the remains of 37 plant species, in addition to animal bones and pottery (Walker 1936:38–9). Among the flora collected and likely



8.11. Sacred-fire symbolism and the cross-and-circle motif. Top left: Sacred fire of the Chiaha busk, from Swanton (1928a:55; fig. 108); Top Right: Tukabahchee ceremonial ground in 1912, with sacred fire in center, from Swanton (1928b:27, Fig. 48); Two bottom rows: Mississippian cross-and-circle iconography on shell disks, from Howard (1968, Fig. 1. Used with permission of the Missouri Archaeological Society.)

to have been consumed or otherwise used in feasts were dewberry (*Rubus*), elderberry (*Sambucus*), goosefoot (*Chenopodium*), gourd (*Cucurbita pepo*), grape (*Vitis*), knotweed (*Polygonum*), passionfruit (*Passiflora*), persimmon (*Diospyros virginiana*), and pigweed (*Amaranthus*). Other plants such as nightshade (*Solanum*), pokeweed (*Phytolacca*), purslane (*Portulaca*), and spurge (*Euphorbia*) have ethnohistorically known medicinal uses and may represent esoteric uses in renewal ceremonies (Erichson-Brown 1979; Moerman 1998; Vogel 1970).

Site Summary

A new history of Troyville is emerging based on the evidence for embankment and mound construction, residential space, ritual feasting, and renewal. A more precise chronology brings a chain of events into focus. Construction of the embankment may have initially delineated a ceremonial enclosure or sacred precinct for mortuary ritual, but if so, it was soon transformed into domestic space, as indicated by Structure 3 and a substantial residential midden (both dating from ca. a.d. 570–620). From the earliest stages of construction, the embankment was either originally designated or very soon revamped as domestic space. The people living in Structure 3 were Troyville residents or moved to Troyville, perhaps to take part in monumental construction, ritual feasts, and renewal ceremonies. In contrast to preceding Middle Woodland ceremonialism at Marksville, the earthworks and surrounding spaces at Troyville seem crowded with residents. From the perspective of the Ouachita Valley, Gibson (1985b:23–25, 1996:59) went as far as to describe the movement of people to Troyville as “incipient urbanism.”

At what appears to have been a significant juncture, around a.d. 620 or 630, the midden on the embankment was sealed with gray clay. Construction of Mound 5 began soon afterward. Domestic use of the embankment and riverbank was thereafter pronounced, as residential midden accumulated in those areas from the mid-seventh century until around cal a.d. 780 (Lee 2011:149–151). People living in Structure 4 on the embankment may have also participated in ritual feasts or witnessed political-religious ceremonies centered on Mounds 4 and 5 sometime during the mid-to-late seventh century. Some of those gathered may have been excluded from more esoteric transactions by a partition or palisade on the summit of Mound 4. Ceramic vessels incised with the Troyville Glyph evoke the sacred-fire symbolism of a quadripartite cosmos and world renewal, as seen in subsequent Mississippian iconography and later Green Corn ceremonialism of many southeastern tribes.

The ritual uses of fire in clearing, purification, and preparing surfaces for subsequent construction are evident beneath the embankment and within Mound 5. The great conflagration within the lower platform of Mound 5,

Walker's (1936:20–21) "fire level," is now known to date to sometime after a.d. 780. This momentous occurrence may have marked a turning point, in that access to activities taking place on platform mounds appears to have become more exclusionary. The initial segregation of space by construction of a partition above the fire level on Mound 5 may indicate efforts to create a more socially restricted, political-ritual precinct. The continued encroachment of residences, such as Structures 1 and 2 on the embankment and Structure 6 on the riverbank, accompanied this partitioning and may represent one impetus for increased segregation and ritual exclusivity.

Renewal and transformation of ceremonial space following a.d. 780 was likely rapid and decisive, initiated in sacred-fire symbolism and punctuated by a sequence of unrivaled construction events. Since the second stage and conical dome of Mound 5 had been destroyed before Walker began his investigation, the precise timing and sequence of events have been erased. The obliteration of the second terrace and conical mound on its summit make it impossible to know exactly when these stages were constructed. It is useful in this regard to consider Troyville as a palimpsest, in which expunged layers have residual signatures elsewhere, along the site margins. In areas of the embankment and west riverbank where residential midden and domestic features are concentrated, 33 radiocarbon dates cluster between a.d. 650 and 780, what is generally regarded as the late Baytown to early Coles Creek transition (Lee et al. 2011:48). Although most of the decorated ceramics from Troyville are Marksville types, the majority of residential refuse, as well as associated construction and use of earthworks, date to just before or during the first century of the Coles Creek period. If the upper levels of the Great Mound were completed much later, then accompanying domestic activities are poorly represented in only three pits and ceramics from the riverbank. Construction of the Great Mound, begun in the mid-seventh century a.d., may have rapidly concluded in a singular commemorative event following a.d. 780 or soon thereafter. Begun with purification and renewal in sacred fire, this momentous event had ramifications that appear to have altered the subsequent history of the LMV.

A Palimpsest of Events and Monumental History

Although much about the Troyville site remains unknown and enigmatic, a sequence of events involving domestic life, monumentality, and ritual performance points toward a transformation and rearticulation of power relations. Based on the recent investigations previously summarized, it is possible to begin filling in the spaces and chart an alternative history. Seemingly

ordinary, momentary occurrences can be clearly discerned. Post setting and house construction, making and decorating ceramic containers, and burying or discarding the residues of a meal were isolated, intermittent incidents for which a surprising amount of material evidence has remained intact. Each of these ostensibly everyday events can in turn be understood in relation to underlying historical processes or the interplay of social structures and performance (Pauketat and Alt 2005). Major events of literally monumental proportions have also been identified and now more accurately dated at Troyville, formerly thought to have been expunged with the leveling of the mounds and embankment. A palimpsest of these and innumerable other events, including non-events for which few physical traces remain, constitute a new history of Troyville.

While much direct evidence for later monumental construction at Troyville has been erased, the culmination of these events and non-events materializes through historical accounts of the enigmatic Great Mound silhouette (e.g., Walker 1936:4–16). The completion of a steep, 10.7 m (35 ft) high conical mound on top of the second terrace would have been a truly unprecedented event (chapter 1, this volume). With its unusual layering and juxtaposition of conical and platform mounds, the Great Mound represents a syncretism of mortuary mound ritual, staging of feasts and community events, and preagricultural, sacred-fire ceremonialism. Moreover, the Great Mound was designed and built according to the same cosmology signified in the Troyville Glyph. The glyph might alternatively record and commemorate the Great Mound. Four ramps provided access to a quadrilateral platform, symbolizing the sacred fire and the four corners of the world. The lower platform contained at least one earlier “original mound” (Walker 1936:20–21). Chambers within mounds were associated with the underworld and considered by many Muskogee as the place of ancestral origin (Knight 2006:423, 425). The cranium discovered by Walker (1936:21–2) near the southeast ramp may have had ritual and even sacrificial connections to the mound precinct. Just as rectangular buildings on the summits of quadrilateral platforms prefigure the later square ground, the vertical axis of the conical mound on the second terrace may have represented a “stratified world symbol” on the mound of creation (Hall 199:274; Hudson 1976:220–221; Witthoff 1949:83). Deceased ancestors might have been literally or figuratively entombed both within and upon the edifice, an earth icon and place of world renewal (Knight 2006:424, 430).

Perhaps it was this spectacular sequence of events that signaled a turn away from corporate mortuary ritual and collective mound-top ceremonialism and toward the increased inequalities and exclusionary tactics of Coles Creek societies. Steponaitis (1986:386) ascribed the origins of Coles Creek

hierarchy to the symbolic appropriation of previously communal platforms (see also Kidder 1998:10, 2002:86–87, 2004:554): “By placing their residences atop similar platforms, the Coles Creek elites effectively co-opted this symbol to help sanctify—and thereby legitimate—their political and religious authority” (Steponaitis 1986:386). The political-ritual and residential uses of platform mounds by early Coles Creek elite have accordingly been described as “emergent Mississippian” (Kidder 2004:555) yet they lack comparable evidence for maize agriculture. Appropriation of platform mound summits and the shift away from communally focused or “integrative” ceremonialism (Knight 2001:31; Lindauer and Blitz 1997:191–194) long associated with the emergence or evolution of Coles Creek polities, may have actually happened earlier at Troyville. Whether such events can be credibly identified, it begs the question of how a communal platform and earth icon could be so easily usurped and reinterpreted by one group or segment of society. In short, how did communal space become an elite space and domicile?

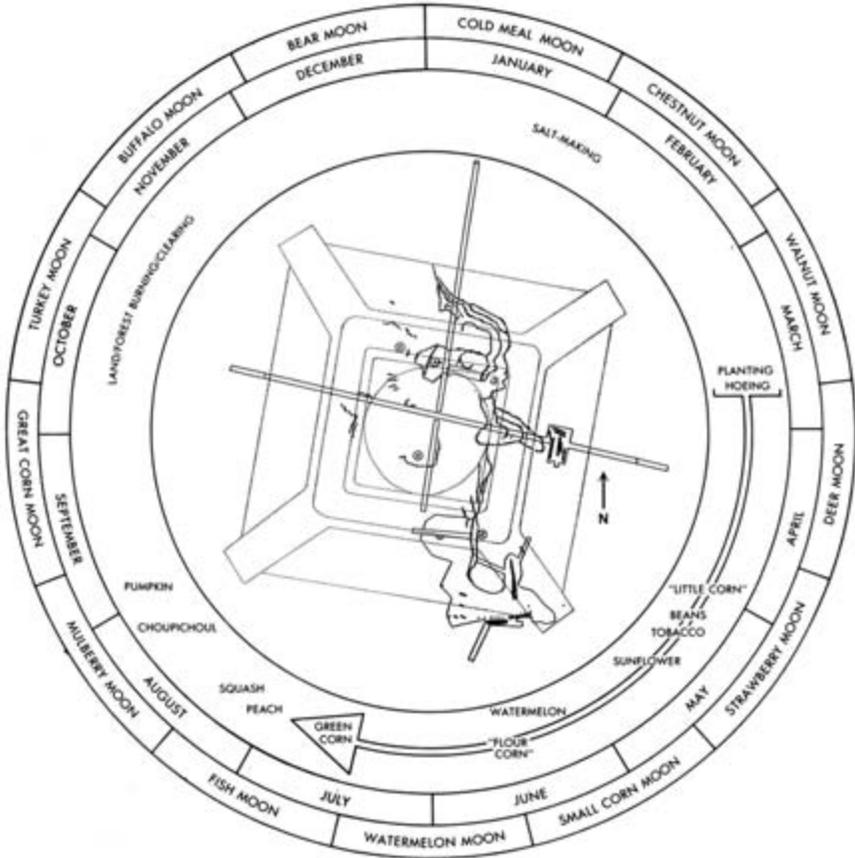
The elevation of an ancestral burial mound on a formerly communal platform would have been spectacular political-religious theater and might have conspicuously accomplished this feat. Further, it would have entailed construction events and ritual performances rooted in social convention, with a pretext of continuity and tradition (Knight 2001, 2006). Tactical power relations focused on cosmological themes at Troyville may have reshaped social conventions through a sequence of experiential, transformative events, with inadvertent outcomes that may not have been entirely intended or foreseen. Mound construction and the appropriation of space were not causal events but historical processes through which power relations unfolded and can be substantively discerned.

By a.d. 650 the ceremonial enclosure of what otherwise might have been a mortuary precinct, a place of the deceased and venerated ancestors, instead had become a place for the living. The dualism of the dead and the living (the incorporeal and the corporeal) having been breached, other symbolic forms and meanings could be similarly rearticulated through inversion of the structural dichotomy of upper and lower worlds (Emerson 1997a:20; Lankford 2004:211–215; Reilly 2004:127–128). By around a.d. 780, an earthen platform that formerly might have been entombed or made accessible as communal space, had instead been constructed over one or more earlier conical mounds and partitioned. A second-tier platform in the position of the middle world became the raised foundation for yet another, much higher conical mound. Emerging from the center of the inner mound regarded by many southeastern tribes as the “earth mother” and “navel of the earth” (Knight 2006:422–425), *some of the ancestors* were lifted into the upper world and took as their dwell-

ing place a towering mound on the summit. Corporate groups so manifestly ranked in the afterlife would convincingly bestow similar statuses among their living descendants. Monumentality correspondingly promoted transubstantiation and punctuated his torical transformation (Urban 2006:67–79). The stratified realignment and inversion of an ancient earth icon and the juxtaposition of quadrilateral platforms and conical mounds in the likeness of the sacred fire alludes to a vertical redistribution of structural power. Descent groups may have held a potential for hierarchy and centralization (Knight 1990b), but such transformations could only have been achieved through astute actions and singular, historic events.

Troyvillians who managed to control access to screened precincts on mound summits would have been personally connected with annual rites of purification and renewal. The Great Mound and Troyville Glyph symbolize and commemorate a primordial, sacred fire of world renewal, rekindled a millennium later among southeastern tribes. The Great Mound not only incorporates the sacred fire in the purification and renewal of its interior surfaces but the layout of the four equidistantly spaced ramps also signifies the sacred fire and four corners of the world. While the quadrilateral platform simulates the cardinal directions, the four corner ramps point elsewhere. At this latitude, the northeast and southwest ramps are aligned with the sunrise and sunset of the summer solstice (Figure 8.12). The summer solstice marks the season of the “first fruits,” leading up to the Green Corn Ceremony but beginning with the “little corn” and including *Chenopodium*, Amaranth, and preagricultural plants of earlier ecological and ceremonial significance. Hunting, fishing, and animal symbolism were commonly incorporated in ritual feasts of the first fruits (Kniffen et al. 1987:86–195; Witthoff 1949:71,84). Solar alignments, particularly at the solstices, appear to have been significant referents in the construction of monumental and domestic architecture throughout the Mississippian Southeast (Pauketat 2013:90–93, 114–118).

That the southeast ramp of the Great Mound is aligned with the interval of the first fruits in the annual cycle may be calendrical and political rather than coincidental. At the time of the Green Corn Ceremony, gender distinctions and the need for bodily purification become pronounced. Among the Creek, four young men assisted an older male the “fire maker,” in creating the new sacred fire in the presence of warriors, while women and children were generally excluded from the square ground. The sacred fire and upper world were associated with maintenance of social order and stability, through the purification of society (Hudson 1976: 127–128, 365–375; Witthoff 1949:53–57). Male warriors and senior men at Troyville may have designed and organized monumental construction and ritual performances in accordance with the



8.12. Ritual-ecological cycle and plan of the lower platform of the Great Mound. (From Kniffen et al. 1987:87 Fig. 23; Walker 1986:Fig. 6.)

annual cycle of fishing, hunting, and gathering, scheduling and thereby appropriating sources of power. The Great Mound is aligned with this ritual-ecological cycle and may have served as a monumental, earthen calendar.

Although precise meanings remain unclear, provocative similarities between the design of the Great Mound, Troyville Glyph, cross-and-circle motif, and sacred-fire symbolism suggest connections with yet another source of power. Among the Natchez, the perpetual fire in the temple was associated with the Sun deity and Great Sun (Swanton 191:98, 171, 1928c:206–207). If the Great Mound was an inverted earth icon and stratified world symbol fashioned in the shape of the eternal fire, perhaps it was also a monumental political-religious calendar. The sequence of events involved in its construc-

tion may have culminated in a rearticulation of structural power through an act of transubstantiation, inadvertently instituting a new social order. At each summer solstice, the sunrise over the northeast ramp would have marked the kindling of a new sacred fire. In so doing, it may also have recorded the birth of another sacred fire—an incarnation of the Sun.

Summary and Conclusion

The narrative just presented is admittedly imprecise and preliminary, based on a wealth of new data from the Troyville site but restricted by erasures and lack of additional information. It is noteworthy simply to acknowledge that much remains to be learned about Troyville, a place long thought to have been obliterated, and that well-positioned investigations of still-intact deposits may even now contribute to a new understanding of the site, as well as of the Late Woodland period in the LMV. The potential for additional findings is greatly strengthened by the recognition that such materiality, transfigured and partially expunged, represents an archaeologically accessible palimpsest. The perspective offered here assumes the centrality and materiality of events, which are not merely isolated incidents or a chain of occurrences but a temporal-spatial fabric on which pivotal actions and turning points are inscribed, erased, and reinscribed (Bailey 2007). Monumentality and associated ritual events are particularly effusive and provide the backdrop for examining historical interventions and transformations. As a result, Troyville can no longer be regarded as a place in absentia. There is no transitional site, no unitary period, and no static culture, but instead, there are discontinuities in materiality, signifying experiential events, historical interventions and conjunctures, and power relations. From this vantage point, communally focused Middle Woodland burial-mound ceremonialism did not collapse or decline, only to be replaced centuries later by Coles Creek or emergent Mississippian polities (chapter 5, this volume). Arbitrary temporal subdivisions have fostered a misapprehension of continuity and disjuncture and have distracted archaeologists from identifying consequential events, momentous places, and the actual historical agents—people making history.

Since the time of Ford's pioneering efforts (e.g., 195a, 1936, 1951), it has been widely appreciated that key figures and events in southeastern archaeology inform current knowledge of indigenous pasts. The relegation of Native American events to triviality or unknowable, non-events in favor of overarching cultural structures has inhibited research on the actual places and events of cultural production and transformation. Earlier arguments over continuity and discontinuity largely based on ceramics overlook this central

point: the interpenetration and synchronicity of structures and events constitute historical process. As the reticence to scrutinize history and events recedes, archaeologists will nonetheless be inclined to develop theoretical models and taxonomies that tend to keep history at bay instead of confronting the contingencies, indeterminacies, and inscrutabilities of historical events. Future archaeological events and non-events, including whether still-intact deposits at Troyville will ever be systematically investigated, will surely affect descriptions and explanations of LMV culture history. A focus on past events requires seeking out and reexamining those unique places where historically significant incidents transpired. Rumors of Troyville's archaeological demise were greatly exaggerated—fueled by the infamous leveling of its great earthworks—but its ultimate silencing and virtual omission from LMV culture history is the result of conceptual barriers introduced by archaeologists.

A vastly improved chronology for Troyville provides an opening glimpse at sequences of events involving embankment and mound construction, domesticity, ritual feasting, and renewal ceremonies. Innumerable other events and non-events undoubtedly transpired and collectively comprise a pattern of everyday incidents and transformative, singular occurrences. The available archaeological evidence provides sufficient strands from this fabric to begin weaving a new history of Troyville. Embankment construction began as early as a.d. 540, and these embankments had been well established as domestic space by a.d. 630. With additional residences along the riverbank, Troyville was certainly no vacant ceremonial center and may have been a growing town (Gibson 1985b:33–35, 196:59). The construction, modification, and use of platform mounds, at least Mounds 4 and 5, as facilities for organizing ritual feasts, appears to have become increasingly exclusive from a.d. 650 to a.d. 780. This precedes and may be comparable to increased exclusivity in the design and use of later Coles Creek mound-and-plaza complexes in the LMV (Kidder 1998:137). It also corresponds to a broader shift in the Southeast around a.d. 800 in the uses of platform mounds, from the earlier communal staging of ritual performances to the partitioning of political-ritual space and construction of mound-summit mortuaries and residences—activities distinguished in terms of social integration and differentiation (Lindauer and Blitz 1997:11–15, 191–194).

Around a.d. 780 or soon after, a singular commemorative event initiated with the purification and renewal of ceremonial space culminated in the rapid completion of the Great Mound. The deliberate remodeling and inversion of an earth icon as a stratified world symbol fashioned in the likeness of the sacred fire, as seen in the Troyville Glyph, suggests a historical conjuncture and rearticulation of power relations. Monumentality and associated ritual

performances were instrumental in these punctuated changes. The people most intimately engaged in this historical transformation were likely those involved in scheduling the ritual-ecological cycle, especially the feast of the first fruits around the time of the summer solstice. Just as the historically known Green Corn Ceremony and sacred fire have much earlier, preagricultural antecedents, the Troyville fire makers may have been the political-ritual and ideological antecedents of the Great Sun. Although the lower platform was leveled 80 years ago, the Great Mound appears to have foretold and recorded these events as a monumental, earthen calendar.

While the precise timing and sequence of events outlined here are still far from certain, the punctuated tempo and chronological placement around a.d. 650 to 780 will require a reexamination of earlier and subsequent culture history of the LMV. The transformative events that unfolded at Troyville may have had far-reaching, structural impacts on the historical trajectories of other Late Woodland societies. Monumental events did not transpire uniformly at Troyville throughout the Baytown period but accelerated in the mid-seventh century and reached a crescendo at the inception of the Coles Creek or early Coles Creek period. The synchronicity of events at Troyville and development or evolution of Coles Creek raises a host of new questions regarding historical connections and variations, social complexity, and power relations. The sequence of events outlined here was formerly perceived as the arrival of foreign peoples and “religious ideas” differentiating the Burial Mound II and Temple Mound I stages (e.g., Ford and Willey 1941:34). Did transformative events at Troyville somehow serve as the precedent for Coles Creek monumentality and sociality? If so, other historical trajectories from the Middle Woodland to Mississippi periods, categorized as tribal societies and chiefdoms, must also have entailed seminal events at specific times and places. The old divisions of history *versus* evolution and events *versus* process will not serve well in providing answers.

While the ceramic assemblages from Troyville exhibit continuities with Marksville, discontinuities in ceremonial and domestic space, monumentality, and ritual performance suggest a significant historical conjuncture. That transformative events resulted in a realignment of ritual-ecological and ideological sources of power may partially explain the dearth of material correlates that has long vexed archaeologists: the lack of agricultural intensification and prestigious items among Coles Creek polities. Further investigation of Troyville and contemporaneous, related sites may even hold a key to understanding the proliferation of Coles Creek mound sites throughout the LMV, in contrast to the relatively fewer Marksville and Baytown period mound sites (Gibson 1986:23–25; Kidder 2004:554; Lee 2010:19–143; McGimsey 2010:

121–127). The syncopated rhythm of punctuated spatial-monumental-ceremonial changes and long-term ceramic continuity at Troyville may signal a divergence of macroscale political ritual from the sphere of domestic, everyday events. As the historical trajectory appears to lead in the direction of intensified social differentiation and competition, the agents of change may have been those original fire makers who tapped into the ritual-ecological cycle, coordinated construction of a stratified world symbol and monumental, earthen calendar, and harnessed the power of the Sun.

Acknowledgments

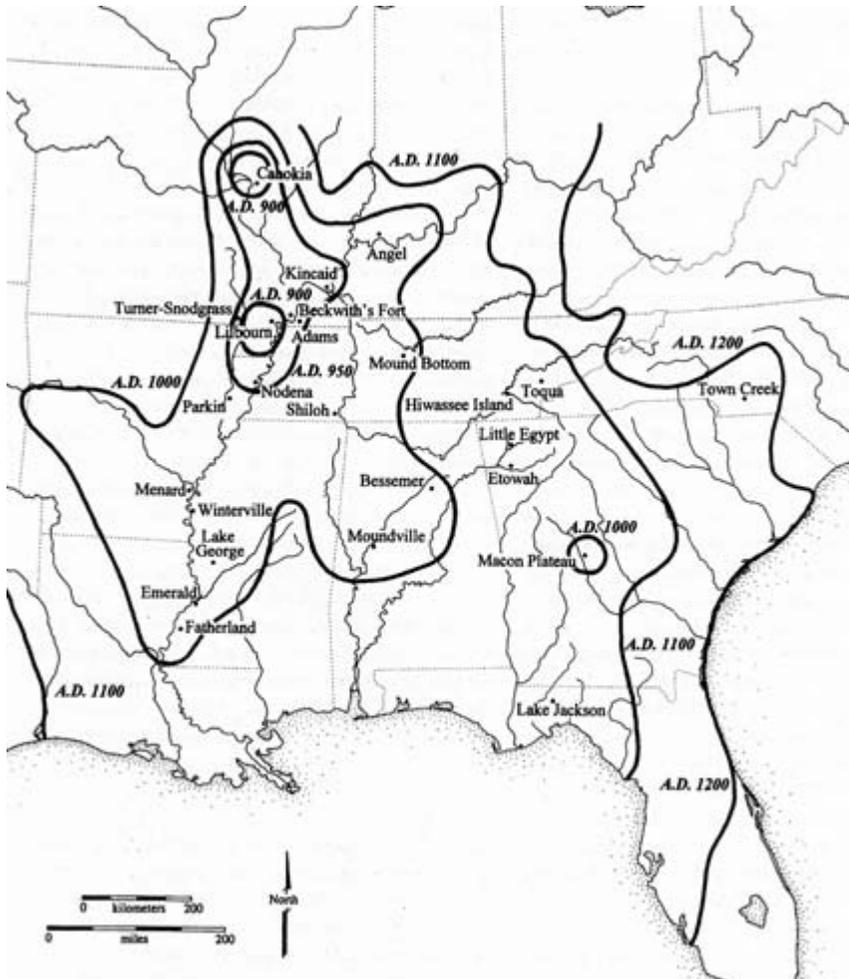
The authors would like to thank all the ESI staff and personnel who contributed to the multiyear Troyville investigation, particularly those who participated in fieldwork, analysis, and completion of the final report. Data recovery and monitoring was supported by the Louisiana Department of Transportation and Development. C. Ray Brassieur provided insight on Green Corn ceremonialism, the ritual-ecological cycle, and the possible calendrical significance of the Great Mound.

Mississippian Microhistories and Submound Moments

Charles Cobb

A number of archaeologists have borrowed from social theorists such as William Sewell, Michel-Rolph Trouillot, and Pierre Bourdieu to argue that broad changes at the beginning of and during the Mississippian period constituted major transformative events (e.g., Beck et al. 2007; Cobb and King 2005; Pauketat 2007). These episodes involved relatively rapid and dramatic moments when corporate groups discarded previous dispositions of habitus and adopted new or altered ones. Although such transformations can be so far reaching as to be structural in scope, their precipitousness at the very same time suggests a type of shift that is eventful in its inception. This framework would seem to generally apply to the emergence of the Mississippian phenomenon in the eleventh century a.d. in what is now the southeastern United States—a volatile era marked by the rapid emergence of sizable towns with monumental architecture, social stratification, long-distance exchange systems, reliance on maize agriculture, and endemic warfare (Blitz 2010; Cobb 2003).

Archaeologists traditionally have fallen into two camps over the mechanisms for the dispersal of these traits (“Mississippianization”)—what Bruce Smith (1990) has referred to as homology versus analogy perspectives. The homology model posits a common home for the appearance of the Mississippian complex, usually in the Central Mississippi Valley, whose influence was rapidly disseminated throughout the Southeast beginning in the eleventh century a.d. Alternatively, the analogy model proposes that a large, regional network of interacting communities reached some kind of threshold point, where new innovations were rapidly integrated with local traditions within the span of a century or so. These models are not mutually exclusive, however, and it now appears that some intriguing synergy of homology and analogy may have been occurring variably across the Southeast. David Anderson’s (1999) compilation of early Mississippian radiocarbon dates supports the idea that the Mississippi River Valley may have been an early locus of Mississippianization, with related traits radiating outward relatively rapidly (Figure 9.1).



9.1. Chronological dispersal of the Mississippian phenomenon. (Courtesy of David G. Anderson.)

This schema broadly corresponds with Timothy Pauketat's (2007) notion of a Big Bang in the American Bottom ca. a.d. 1050, involving a very rapid transformation of somewhat modest Woodland villages into a mound center behemoth at Cahokia. Yet, few, if any, archaeologists believe that peoples from somewhere in the Central Mississippi Valley were having a direct impact on societies everywhere in the Southeast. Instead, there seems to have been a mix of colonization, emulation, and interaction, such that Mississippian life-ways arrived or developed in many different ways across the region.

It is not my goal to resolve the grand question of what factors underlay the florescence of Mississippian hallmarks across such a large geographic expanse. Instead, I am interested in the rapid adoption of a single widespread practice: the initial capping of important public buildings with earthen mantles, which in turn became the foundations of successive episodes of alternating layers of structures and soil that culminated in the major earthworks we associate with the Mississippian period. I believe this architectural behavior is an important inflection point in the early development of what we recognize as Mississippian ritual behaviors. Restricting the scope of analysis to a single type of widespread architectural transition provides a more nuanced perspective on specific events that constituted the larger Mississippianization transformation. Further, variation and commonalities surrounding the transition from the submound to the mound built environment can potentially provide important insights into the cultural construction of local practices and the mediation of external influences, helping to move us farther away from an essentialist view of the Mississippian phenomenon.

Of Microevents and Microhistories

What is an event? Is it a discrete episode that happens extremely rapidly within the span of a few days or even month or so, or can it be on the order of generations, which would seem to be the case of Mississippianization? To some extent we are all at the mercy of the scale of our data. Given the degree of our chronological resolution, at least in a relative sense Mississippianization involved a profound transformation that occurred more rapidly than was the norm for cultural change in the Southeast (although one can certainly point to other fast-paced changes as far back as the spread of the Clovis phenomenon in the late Pleistocene). Emphasizing the marked nature of this change, however, does raise the question of whether an archaeological event becomes more interesting by virtue of its scale and drama.

Indeed, Robin Beck et al. (2007) have been criticized for their emphasis on events in the Mississippian Southeast and elsewhere as times of disjuncture, which, it has been argued, diminishes the importance of the everyday in favor of what are actually quite rare events, that is, the transformation of structure (Gillespie 2007; Joyce 2007). Yet no one would deny that adherents of practice theory, at least, have devoted considerable attention to quotidian events and practices. So one can hardly deny that the commonplace or routine have not received their due in the archaeology literature (e.g. Hodder and Cessford 2004; Pauketat and Alt 2005). Moreover, the counterargument

can be made that adherents of practice approaches have not satisfactorily addressed broad, societal transformations (Calhoun 1998:72; Post 1996:102). The appearance of Mississippian in a sense elides this debate because we already know it involved a dramatic reordering of the Southeast. To explore this phenomenon does not deny the importance of other forms of events; it merely recognizes that large-scale changes are an important focus of archaeological study.

Nevertheless, the larger an event, the more difficult it is to delimit spatial and temporal boundaries around it. Cahokia's ascent is an exemplar of this challenge. Beck and colleagues (2007) have argued that, *contra* Pauketat (1997, 2007), Cahokia's rise was not a Big Bang. Instead, they maintain it involved a series of smaller, temporally sequential events that may have occurred rapidly, yet were not synchronous. For example, they point out that the development of the central town plan preceded the elaboration of ceramic forms that are another characteristic of Mississippianization. It is not clear to me that Pauketat intended for his Big Bang model to imply that all the practices we associate with the Mississippian period evolved in lockstep in the American Bottom region. But the debate does emphasize that events are nested phenomena. To take a well-known episode from American history: Gettysburg was a critical battle that may have helped to turn the course of the American Civil War, but it was composed of pivotal smaller events, such as Pickett's charge, that dictated the outcome of the battle (Stewart 199). Given that every event is really a spectrum of events, where one places one's focus for an event-based study should be shaped by one's research question.

Gavin Lucas (2008:9) has cautioned that we need to "be careful to distinguish scale as a mode of analysis from scale as a property of the historical phenomena under investigation." As Mississippianization, the Big Bang—and Gettysburg—all demonstrate, it is not always so easy to discriminate between the two. A researcher may select a certain level of analysis simply because an intriguing empirical pattern has surfaced at some scale. And so it is for Mississippianization. Although I am interested in what I believe was a profound and eventful constellation of practices and beliefs across a very large expanse in the 1000s and 1100s a.d., I also believe there may have been some slight temporal disparities in their relative appearance. An examination of smaller events, such as architectural transitions, that composed the larger event may provide novel insights into how different communities variably participated in—and contributed to—Mississippianization.

The general perspective that I adopt derives from several historical traditions that have focused on the importance of very small-scale histories. I

am particularly attracted to the notion of “microhistory,” an approach that is commonly attributed to the Italian historian Carlo Ginzburg but is part of a much broader movement in Europe in the 1970s (see Revel 1995; Walton et al. 2008). The ambition of microhistory is quite simple: a high-resolution portrait of a case study on a small scale, based on the idea that local histories may illuminate larger patterns in which they are enmeshed.

So what, you might ask? We conduct detailed cultural-historical renderings of archaeological sequences all the time. However, the purpose of a microhistory is not merely the creation of a descriptive diorama. It is an important vantage point for focusing on lived experience as a basis for building a total history from the ground up (Revel 1995). A microhistory must eventually return to the big picture, to understand why a given arena of events might be both a constraining and an enabling aspect of some kind of larger structure (Walton et al. 2008:4–5). In this sense, microhistorians are very close cousins of those in the *Annales* school, who have advocated for a focus on the event but who also view historicity as a nested process—a perspective likewise adopted by many archaeologists who advocate multiscale approaches (e.g., Anderson 1999; Lock and Molyneux 2006; Marquardt 1992; Wilkie and Farnsworth 1999). However, *Annales* historians never successfully developed a satisfying theoretical framework for reconciling regional and temporal scales (Bintliff 1991:4; Fletcher 1992:38–9). Adherents of time perspectivism suggest that this obstacle can potentially be attributed to the idea that different scales may embody distinct ontological frameworks such that it may be difficult to explain, for example, the experiential time of our daily routines in the same way that we address geological time—although this view is debated in archaeology (cf. Bailey 1983, 1987; Harding 2005; Murray 1999).

One possible route around this difficulty is to, in Lucas’s (2008:9) words, “flatten” time by attempting to keep all elements of a model on the same temporal plane. In this study, I will adopt this approach by assembling a series of archaeological snapshots to develop a framework that is simultaneously both a miniaturized history and a regional history of the eventful transition from pre-mound to mound architecture across the Southeast. It is a flattened perspective in the sense that both single events (architectural changes at specific sites) and regional clusters of these events are considered at the same time, and they are assumed to be synchronous at least within the span of a century or so. As a result, this is a comparative study in aggregate microhistories rather than the more traditional microhistorical effort of creating in painstaking detail the event or events surrounding a single, circumscribed case study (see Emigh 2008).

One axis of variability in the process of Mississippianization involved changing notions of the sacred and its manifestation in the built environment (Beck et al. 2007; Lewis and Stout 1998). A fundamental dimension of “being” Mississippian seems to have involved the repetitive emplacement and replacement of sacred locations in the landscape, localities that were denoted by both public buildings and by earthworks. In this sense, an event is defined not only by its temporal connotation but also by the fact that it marks shifting configurations of meaning and behavior (Duke 1992:101). We can bear witness to the beginning moments of these shifting configurations in the Mississippian Southeast through an intimate scrutiny of preeminent architecture.

The Data: Caveats and Structure

The methodology that I followed was fairly straightforward, if qualitative, and it involved perusing every Mississippian study I could readily lay my hands on that described submound architecture in any detail (I did not include Caddoan sites). Despite this simple aim, anyone who has conducted a comparative study via archaeological literature will recognize a swarm of red flags. Accordingly, this should be viewed as a pilot study that, for the moment, is unable to dispense with all the vexing issues involving regional bias, chronology, the selection of mounds, multiple structures under mounds, and so forth. In short, my grab-bag sample consisted of sites where the construction of mounds appears to have occurred relatively early in the Mississippian sequence, as inferred from radiocarbon dates or ceramic types. Within those sites, I focused on the sizable primary mounds, assuming these were loci of particular importance and presumably linked to the town’s establishment. These most often, but not always, were the platform mounds that served as a foundation for chiefly structures or compounds.

This strategy admittedly has drawbacks for large, multiple-mound sites where earthworks may have varying histories. At Cemochechobee (Georgia), for instance, Mound B is the largest pyramid at the site, but Mound A represents the beginning of earthwork construction (Schnell et al. 1981:66). For some sites the chronology could be unraveled, but barring the excavation and dating of all the earthworks (which is almost unheard of) we can never be absolutely certain of the first submound to mound architectural transition at larger towns. Further, on many sites the primary mounds are so large that at best they have been cored or perhaps trenched. So there is something of a paradox in this analysis in that sites like Moundville and Cahokia do not get their due attention (Figure 9.2). We may never know what lies under



9.2. Location of sites in sample.

Monk's Mound, at least until some form of futuristic remote sensing largely removes the need to excavate by hand. Thus, on certain sites I relied on secondary mounds for my analysis.

The structures that lie under significant Mississippian mounds most commonly fall into five categories: rectangular wall-trench structures, rectangular single-post buildings, circular buildings, earth lodges, and paired structures. Structures built on mound stages are typically larger than domestic houses (Hammerstedt 2005:20–21). Their location and size are typically viewed as evidence that they represent some kind of ritual, ceremonial, or public building, an inference supported by the ethnohistorical record (Hammerstedt 2005:19). Likewise, submound structures tend to be relatively large and often have unusual features or architectural elements. Thus, the initiation of mound building usually took place on a location that was already imbued with some kind of sacred character; earthworks likely continued as well as transformed that meaning in some way.

There are also other, distinctive submound features throughout the Southeast, such as large posts, but for this study I limit myself to architecture. There is a cruciform structure under the Murdock Mound at Cahokia that I do not address because it appears to be unique in a submound context (Smith 1977). As a side note, only two of the sites I have examined so far, Bessemer (Alabama) and Toqua (Tennessee), have lacked structures or other noteworthy features beneath their major platform mounds (Polhemus 1987; Welch 1994:10).

Finally, in some cases I had to make some inferences about the nature of buildings and stratigraphy that were either not spelled out in site reports or may contradict some of the interpretations made in those reports. As one example, for the Irene site in Georgia, the basal structure is at one point described as “on a mound” (Caldwell and McCann 1941:9) and elsewhere as “placed directly upon the old ground surface” (p. 8). Because structures occurred on successive stages of the main, platform mound at Irene, the authors seemed to believe that the original structure was somehow part of the original mound construction, when in fact it appears to have preceded it. The report also describes early stages of the mound as having a depression in the middle, perhaps related to the structure. This appearance has led some to interpret the first structure as an earth lodge (a type described in greater detail below), presumably based on the idea that the first structure was first surrounded by banked earth (Thompson 2009). However, I do not believe the original report allows one to make this conclusion with complete confidence (although Anderson, chapter 11, would disagree), so I have placed the Irene site into the category of sites with wall-trench structures under a primary mound.

By no means has every town with submound structures been tabulated in my sample. However, I was able to mine enough sites to elicit patterns that appear to have some geographical and temporal consistency. These will be presented in the form of the various structure types found under mounds (Table 9.1). In some instances, multiple structure types were found beneath mounds, most commonly as a single-post to wall-trench transition. These examples are represented in multiple categories in Table 9.1.

Rectangular Wall-Trench Structures

For those of us who have worked largely in the Middle Mississippian tradition, wall-trench structures are a *sine qua non* of Mississippian culture (Figure 9.3). The practice of placing posts in exterior house wall trenches does have a lengthy history in the Southeast, but it is a very sporadic one. Only after a.d. 1000 do we see a widespread adoption of this trait in the form of rectangular structures, with typical domestic residences averaging about 4–6 m in length and 3–4 m in width. Pauketat (2007:104–106) has compiled

Table 9.1. Structure Types by Location (State)

Structure type	Site	State	Citation
Wall-trench	Lubbub Creek	* Alabama	Blitz (1993)
	Bessemer	Alabama	Welch (1994)
	Rudder	Alabama	Webb and Wilder (1951)
	Snodgrass	Alabama	Webb and Wilder (1951)
	Cemochechobee	* Georgia	Schnell et al. (1991)
	Etowah	Georgia	King (2003)
	Irene	Georgia	Caldwell and McCann (1941)
	Singer-Moye	Georgia	Blitz and Lorenz (2006)
	Cool Branch	* Georgia	Blitz and Lorenz (2006)
	Cahokia	Illinois	Sullian and Pauketat (2007)
	Wickliffe	Kentucky	Wesler (2001)
	Hiwasee Island	Tennessee	Lewis and Kneberg (1993)
	Harris Farm	Tennessee	Webb (1938)
	Bowman Farm	Tennessee	Webb (1938)
	McCarty Farm Mds	Tennessee	Webb (1938)
	Irvin Village	Tennessee	Webb (1938)
	Richardson Farm	Tennessee	Webb (1938)
	Leuty	Tennessee	Schroedl (1978)
	Hixon	* Tennessee	Lewis et al. (1995)
	Obion	* Tennessee	Garland (1992)
Rectangular Single-post	Estatoe	* Georgia	Kelly (1960)
	Cool Branch	Georgia	Blitz and Lorenz (2006)
	Cahokia	Illinois	Sullian and Pauketat (2007)
	Annis	Kentucky	Hammerstedt (2005)
	Ausmus	Tennessee	Webb (1938)
	Bowman Farm	Tennessee	Webb (1938)
	Hill Farm	Tennessee	Webb (1938)
	Lea Village & Mds	Tennessee	Webb (1938)
	Cox	Tennessee	Webb (1938)
	Sale Creek	Tennessee	Webb (1938)
	Martin Farm	Tennessee	Schroedl et al. (1985)
	Obion	* Tennessee	Garland (1992)
	Circular	Snodgrass	Alabama
Cherry Valley Mds.		Arkansas	Perino (1967)
Cemochechobee		* Georgia	Schnell et al. (1981)
East St. Louis		Illinois	Kelly (1997)
Medora		Louisiana	Quimby (1951)
Hiwasee Island		Tennessee	Lewis and Kneberg (1993)

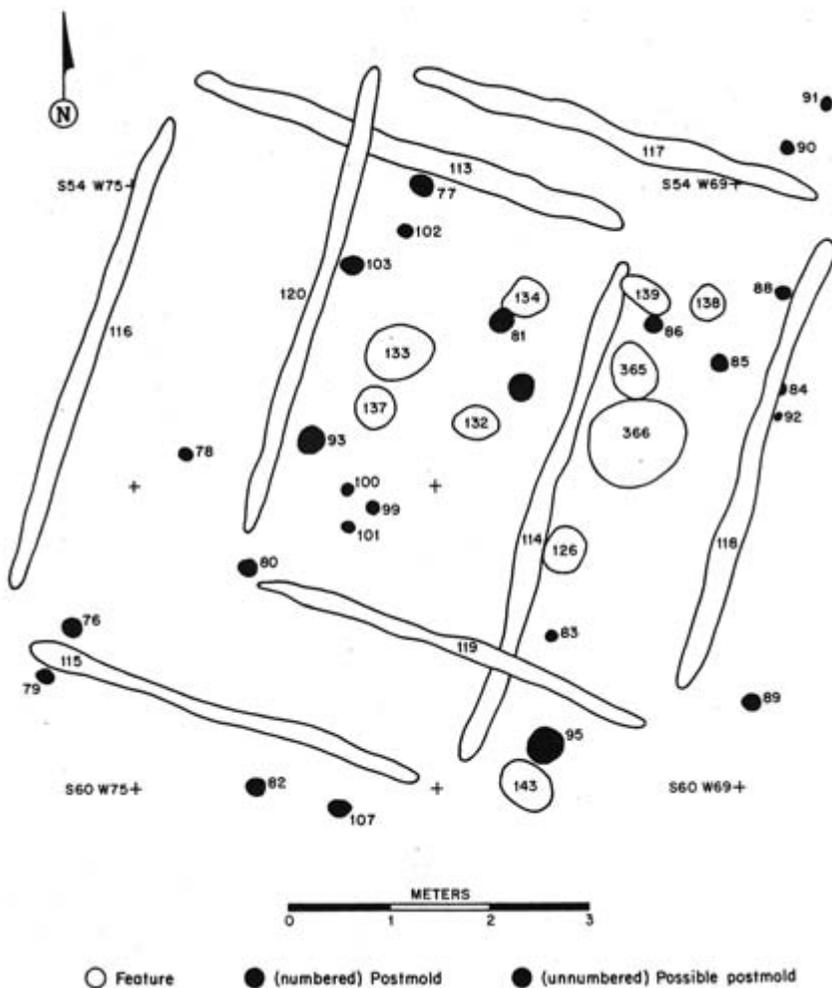
Table 9.1. *Continued*

Structure type	Site	State	Citation
	Hixon	* Tennessee	Sullivan and Koerner (2010)
	Toqua	Tennessee	Pohlemus (1987)
Earth lodge	Garden Creek	* North Carolina	Dickens (1976)
	Town Creek	North Carolina	Coe (1995)
	Peachtree Mound	North Carolina	Seltzer and Jennings (1941)
	Wilbanks	Georgia	Sears (1958)
	Beaverdam Creek	Georgia	Rudolph and Hally (1985)
	Bell Field Mound	Georgia	Kelly (1972)
	Tugalo	Georgia	Williams and Branch (1978)
	Dallas	Tennessee	Lewis et al. (1995)
Paired	Garden Creek	* North Carolina	Dickens (1976)
	Lubbub Creek	* Alabama	Blitz (1993)
	Cool Branch	* Georgia	Blitz and Lorenz (2006)
	Cemochechobee	* Alabama	Schnell et al. (1981)
	Hixon	* Tennessee	Lewis et al. (1995)

* multiple structures under the same mound

a chronology of this architectural style that suggests it likely originated in the American Bottom about a.d. 1050 and radiated outward (Figure 9.4). In areas such as the Southern Appalachian region, wall-trench houses occur early in the Mississippian period and then are later discarded in favor of other architectural styles, whereas in the Middle Mississippian region they are maintained through most of the late prehistoric sequence.

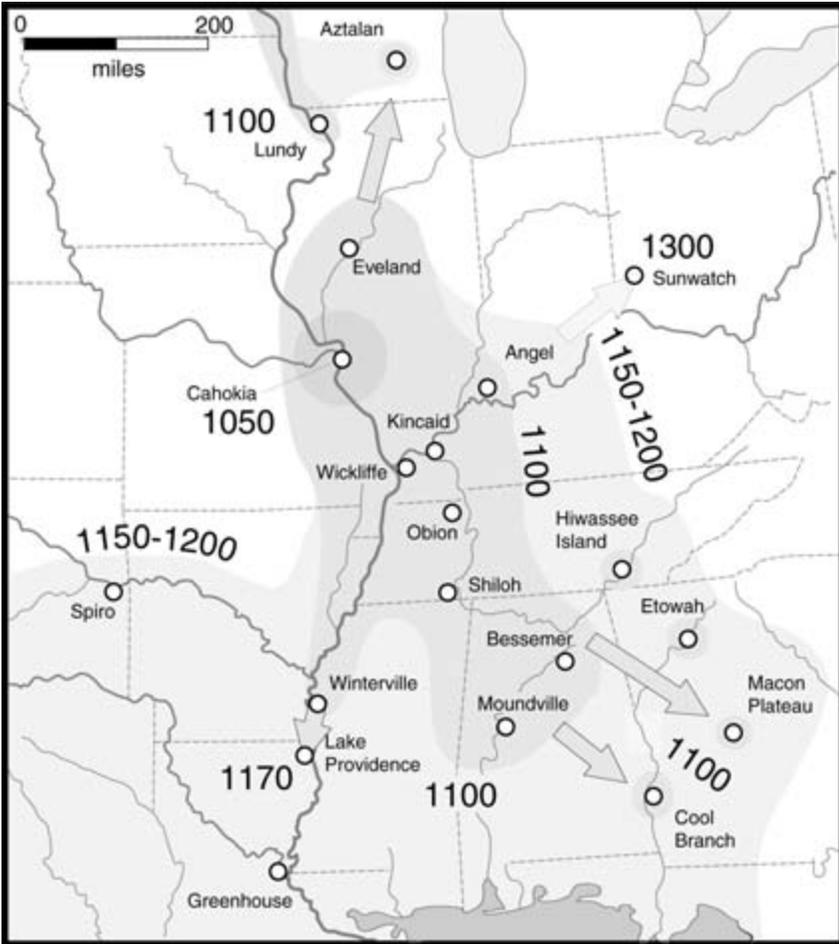
Given the presumed origin of wall-trench structures in the Central Mississippi Valley, and perhaps the American Bottom, it is not surprising that we find early submound examples in the region. Mound 31, a sizable truncated pyramid on the main plaza at Cahokia, was underlain by a series of wall-trench structures preceded by two single-post buildings (Sullivan and Pauketat 2007). Although there are no radiocarbon dates from these structures, Sullivan and Pauketat (2007:26) argue that the seriation of ceramic types indicates that mound building was initiated during the Lohmann phase, around a.d. 1050. This example is intriguing for two reasons. First, it represents a very early appearance of wall trenches. Second, it also provides an evolutionary sequence of sacred architecture, where important locations were marked first by single-post buildings before the later transition to wall trenches.



9.3. Overlapping wall-trench residential structures at the Bridges site, Illinois (Hargrave et al. 1983:Figure 38. Courtesy of the Center for Archaeological Investigations, Southern Illinois University Carbondale.)

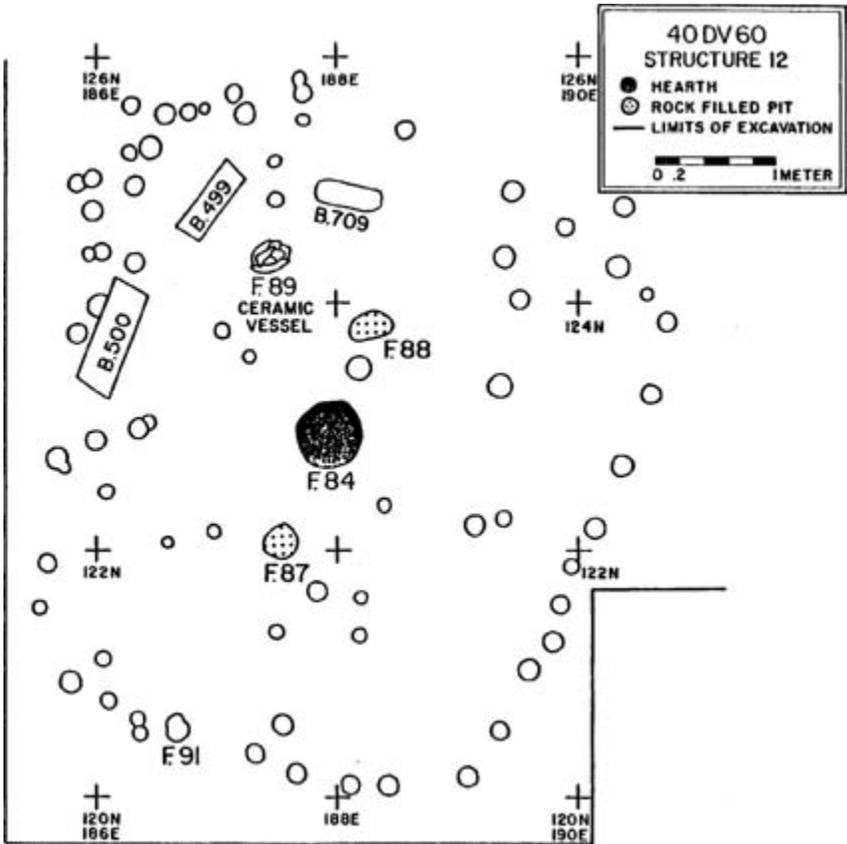
There are also instances where only wall-trench structures precede mound building. This is true for Mound B, the earliest earthwork at Wickliffe, a town near the confluence of the Mississippi and Ohio rivers in Kentucky (Wesler 2001:38,147). Likewise, the Leuty site in eastern Tennessee has an early wall-trench submound building directly dated to a.d. 1100, further evidence of the early spread of this style (Schroedl 1978).

Although wall-trench houses are a distinctive enough style to argue for a



9.4. Time-transgressive radiation of wall-trench-style architecture from the American Bottom region. (Courtesy of Timothy R. Pauketat.)

common origin, they do display regional variation. For example, in contrast to those in the Central Mississippi Valley, buildings in the Norris Basin in Tennessee are typically distinguished by the placement of a horizontal pole along the base of the wall trench (Webb 1938). These inserts presumably served as a stabilizing wedge for the vertical posts. Also, Norris Basin structures are characterized by clay seats or steps along one wall, a feature not seen in the Middle Mississippian tradition. This distinctive regional pattern suggests that the introduction of the idea of wall-trench houses in some areas may have been indirect, and that local dictates immediately transformed external influences.



9.5. Single-post residential structure from the Averbuch site, Tennessee. (Reed and Klippel 1984:Fig. 4.16. Courtesy of the Archaeological Research Laboratory, University of Tennessee, Knoxville.)

Rectangular Single-Post Buildings

Rectangular single-post buildings occur beneath mounds widely throughout the Southeast (Figure 9.5). Although, as just discussed, they do precede wall-trench structures in some submound building sequences, they can also occur immediately before the inception of earthworks in the absence of wall trenches. These include sites in the mid-South, such as Annis, Kentucky (Hammerstedt 2005), and Obion, Tennessee (Garland 1992). They are also found below mounds well to the east, such as at the Estatoe and Cool Branch sites in Georgia (Blitz and Lorenz 2006; Kelly 1960).

There is evidence from some parts of the Southeast that capping both

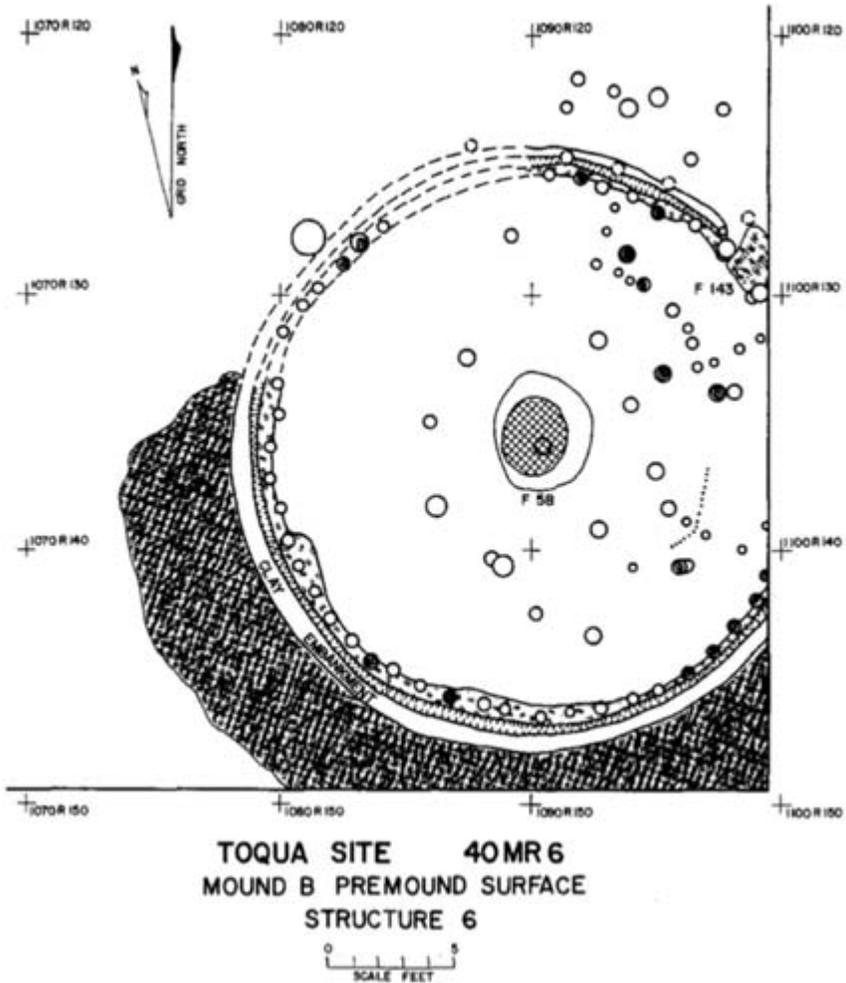
wall-trench and single-post community buildings was an early practice shared within the same locality. In the Norris Basin one can find both styles throughout the region, where major mounds at some sites have only single-post structures, yet other sites have only wall-trench, submound buildings (Webb 1988). Submound, single-post structures in the Southeast display considerable variability in size, placement of major support posts, and interior features. Overall, they are larger than domestic houses, often (but not always) reaching 10 m or more on the long axis. There are also cases, such as the Cool Branch site in the lower Chattahoochee (Blitz and Lorenz 2006:209) and Lubbub Creek in western Alabama (Blitz 1993b:75–82), where wall-trench and single-post structures may occur next to one another under single mounds—although it is possible that one form preceded another, just not stacked on top of one another as seen at other sites.

Nonetheless, there does seem to be some chronological precedence to the large, single-post buildings. We not only have the stratigraphic evolution from single-post to wall-trench seen at locations such as Mound 31 at Cahokia, there is also chronometric evidence from other sites. One of the earliest examples of a single-post structure under a platform mound, likely dating to before a.d. 1000, is at Martin Farm in eastern Tennessee (Schroedl et al. 1985). At Lubbub Creek, a pit within the submound post structure has been dated to a.d. 970 ± 90. If Pauketat's wall-trench migration model is accurate, then these early single-post examples suggest that the more general practice of erecting earthworks over large, special-use buildings may precede the dissemination of the more specific wall-trench style.

Circular Structures

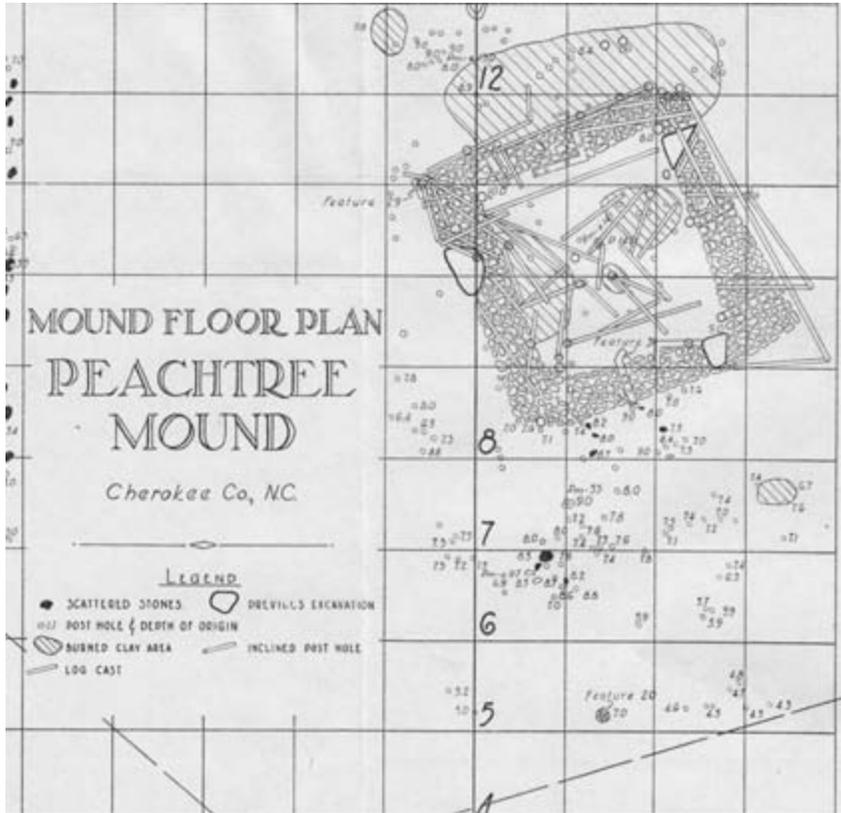
Submound circular structures (Figure 9.6) are uncommon but widely dispersed. The examples in my sample range from the American Bottom (East St. Louis) to eastern Tennessee (Toqua) to the Lower Mississippi Valley (Medora). At some of the sites (East St. Louis, Medora) these buildings have wall trenches. Some researchers have observed that these are novel forms of architecture for their particular setting. Gregory Perino described the one beneath the main mound at the Cherry Valley site in Arkansas as “unusual” for the region (Perino 1967:17), and Richard Polhemus observed that the two examples under Mound B at Toqua were the only ones found at the site (Polhemus 1987:313). As Lynne Sullivan and Shannon Koerner (2010) have shown, however, there are examples of circular Late Woodland structures elsewhere in eastern Tennessee, and they believe that Mississippian examples in the same region may be a continuation of that style.

The varying diameters of the submound circular forms may suggest dif-



9.6. Premound circular structure at Toqua site, Tennessee. (Adapted from Pohlemus 1987:Figure 5.B. Courtesy of the Archaeological Research Laboratory, University of Tennessee, Knoxville.)

ferent functions as traditionally interpreted by archaeologists. For example, the two under Mound B at Toqua are small to modest in size (2.6 m and 7 m diameters), which perhaps indicates that they were sweat lodges. Larger buildings, such as the 15-m-diameter example at East St. Louis, seem to conform more to a rotunda or council house. Except for interior hearths, circular buildings typically lack other internal features that would assist in defining their more precise functions.



9.7. Earth lodge below mound at Peachtree Mound site, North Carolina. Note cobble bench lining the interior. (Adapted from Seltzer and Jennings 1941:Figure 7).

Earth lodges

Earth lodges are distinctive buildings found in the South Appalachian region (Rudolph and Hally 1985) (Figure 9.7). Despite the nomenclature, several researchers have questioned whether they were completely covered by sod as seen in the Plains tradition (Larson 1994; Rudolph and Hally 1985:75). Nevertheless, excavation records indicate that these structures were at least partially covered by sod or clay embankments and represent an unusual building style in the Southeast. Most of the earth lodges have distinctive features that provide some of the best evidence in my sample of structures serving as ceremonially charged embodiments of the cosmos and ritual world. Perhaps the best known is the one at Ocmulgee with its unique raptor effigy altar (Kelly 1988). At Singer-Moye, the earthlodge denoted a horizontal, alternating color

symbolism with a red clay floor, outer wall exteriors daubed with white clay, and a red clay embankment surrounding it (Blitz and Lorenz 2006:162–165). Yet neither Ocmulgee nor Singer-Moye (nor many of the documented earth lodges) represents buildings under a major mound. Instead, they were eventually covered over to create a small tumulus. These examples were excluded from my sample.

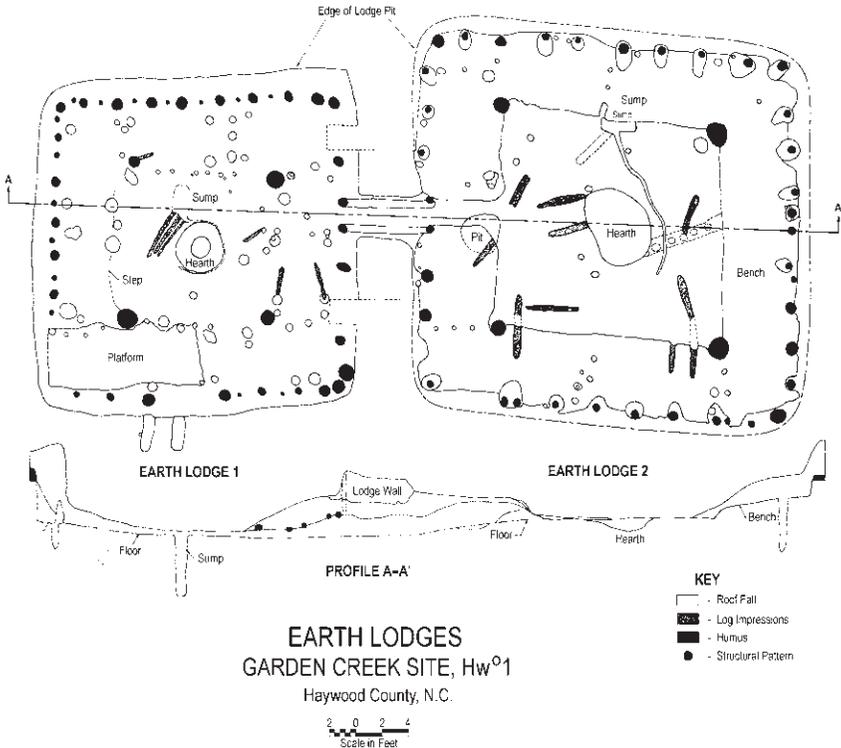
Nevertheless, a number of earth lodges do occur prior to the initiation of pyramids. Many of these also have unusual features. They commonly contain a raised clay bench aligning the walls and an elevated hearth in the middle of the floor. However, there is enough variation to suggest that earth lodges are a broadly shared concept highly subject to local tastes. The ones at Tugalo, Georgia, and Peachtree Mound, North Carolina, are unusual by virtue of having interior benches with laid stones (Seltzer and Jennings 194; Williams and Branch 1978). The one at Garden Creek is distinctive in that it is composed of paired structures (Dickens 1976:83,86), which is the next category I will discuss.

Paired Structures

Paired structures are another form of building style distinctive to the South Appalachian region (Figure 9.8). The long history of paired structures on the succession of summits at the main mound at Hiwassee Island is well-known (Lewis and Kneberg 1998), but overall there are only a handful of submound specimens throughout the South. Yet they do occur over a fairly wide area, ranging from the Garden Creek site in North Carolina (Dickens 1976) to Lubbock Creek in Alabama (Blitz 1998b). The idea of tandem houses is not so novel in and of itself since the winter/summer house dyad is well known. However, the submound pairings exhibit other attributes that reflect a tradition of ritual purpose as well as style that may have been widely shared. For instance, they are dimorphic, where one structure is significantly larger than the other. Further, the different size of the structures may suggest complementary functions. At the Cool Branch (Georgia) and Cemochechobee (Alabama) sites, for instance, there appears to be a dyad of a larger ceremonial structure and a smaller charnel structure (Blitz and Lorenz 2006:209; Schnell et al. 1981:383–77). The pairings at Cool Branch and Cemochechobee are unusual in that they contain both wall-trench and single-post styles, evidence that these styles of architecture could be contemporaneous.

Submound Ruminations

What do all of these data, trends, and patterns mean in the context of micro-histories and regional traditions? I will tackle the question from two perspec-



9.8. Paired structures at the Garden Creek site, North Carolina. (Courtesy of the Research Laboratories of Archaeology, University of North Carolina-Chapel Hill.)

tives in an attempt to conjoin the large with the small. First, I will consider the macro-scale event, that is, what these patterns may say about Mississippianization as a relatively rapid structural transformation occurring over the duration of a century or so. Second, I will break down this aggregate history to consider smaller-scale events surrounding the architectural biographies of sites. As will hopefully be clear, one cannot really decipher patterns at one scale without continual reference to the other.

Mississippianization: The Grand "Event"

A somewhat obvious conclusion from the panoramic scale is that the erection of mounds over sacred structures and places is a pan-Southeastern occurrence that corresponds with the genesis of the Mississippian phenomenon. Further, this pattern is characterized by both a wave-of-advance model and a local adoption of external traits model. The wave-of-advance idea, where actual peoples may be migrating with new practices, is especially compelling

in a few cases. This is true for the Lower Chattahoochee Rood phase, where there seems to be a relatively distinct fault line characterized by sites with attributes such as wall-trench houses, shell-tempered ceramics, and palisades abutting a zone of distinctive Fort Walton settlements to the south (Blitz and Lorenz 2002, 2006; Schnell et al. 1981). In contrast, the restriction of earth lodges to the southern Appalachians suggests a very different pattern of Mississippianization than does the architectural ripple effect of wall trenches. This locality seems to have developed and retained an endemic building style that was eventually erased in many locations by the erection of mounds. Likewise, the encompassing ceramic traditions seem to reflect more continuity with regional traditions than is seen with the abrupt intrusion of shell-tempering in the lower Chattahoochee.

There are yet other possible regional variations of the widespread adoption of Mississippian sacred architecture transitions. The wall-trench structure below the mound at Lubbub Creek is a unique instance on the site of this architectural style, which is surrounded by single-post buildings (John Blitz, personal communication). In this example, do we see, rather than the large-scale migration suggested by the Rood phase, the appearance of a small group of notable persons (ritual specialists?) from elsewhere, who are influential for a brief, shining moment? Certainly, similar arguments have been made for the occasional appearance of wall-trench structures at Fort Ancient sites in the Ohio Valley, even if they do not occur under mounds (Cook and Fargher 2008).

It would seem that the nature of Mississippian town formation could determine what kinds of building styles were more likely to occur as submound architecture. For instance, Mississippian towns built more or less from scratch—on locations with at most only light Late Woodland occupations—may have been more likely to have primary mounds preceded by wall-trench structures (e.g., Wickliffe, Leuty). Those with significant Late Woodland occupations were more likely to have single-post (circular or square) sacred buildings that were supplanted by wall-trench forms. This pattern may be manifested in two ways. First, there may be a vertical series of single-post to wall-trench buildings in the same spot. We see this in Cahokia's Mound 31 and in more distant communities such as Lubbub Creek. There, the platform mound has six superimposed structures underneath, beginning with an early single-post structure followed by wall-trench houses (Blitz 1993b:75–82). Second, at multiple mound sites the single-post to wall-trench transition may be expressed horizontally. This pattern can be seen at Obion (Tennessee) where the main platform mound is underlain by a single-post structure whereas outlying mounds have wall-trench structures underneath (Garland 1992).

The architectural biographies of specific mound centers underscore how local communities continually engaged in a process of putting their own stamp on borrowed traditions. If we move down to the scale to specific microhistories and short-term events, several interesting patterns emerge. For example, the pervasive belief that the inception of an earthwork must involve the extinction of a standing building speaks to the very widespread adoption of some kind of world renewal ceremonies. This is a topic that has been explored thoroughly by southeastern archaeologists, notably James Knight (Knight 1981, 1989). Although his studies have emphasized renewal practices with the continued accretion of mound stages and replacement of buildings, the sample in this study emphasizes that this process marked the very beginnings of mound construction as well.

Importantly, however, the layering of earth over important buildings was not only about initiation or renewal; this practice appeared to require locally appropriate ways of conducting erasures of past traditions. As one general observation in this regard, the burning of structures before their burial was a commonplace way of closing out a cycle of architecture before they were mounded over. But this was by no means a uniform tradition, for there are many instances of buildings being buried “cold.” Overall, there are no clear bounded spatial or temporal traditions relating to burning or nonburning of structures immediately prior to mound construction that I could discern.

Nevertheless, there do seem to be some unusual points of erasure that do have a regional coherence. One of these is the layering of boulders or river cobbles as a liminal event that closes out a ceremonial building and initiates the process of mound building. This practice occurred at Wilbanks, Chauga,¹ and Estatoe in Georgia, Peachtree Mounds and Garden Creek in North Carolina (Kelly 1960; Kelly and Neitzel 1951:12; Sears 1958:42; Seltzer and Jennings 1941), and Henry Island in Alabama (Webb and Wilder 1951:64). A radio-carbon date of A.D. 1070 ± 10 from the basal mound fill at Chauga suggests that pre-mound cobble pavements are an early tradition in the South Appalachian region (Kelly and Neitzel 1951:64). It is difficult to ascertain what this practice may mean. There are Cherokee accounts whereby a layer of rocks is a prelude to mound construction, but they lack a reference to covering earlier buildings (Mooney 1900:244–245).

An interesting observation regarding the circular structures under Mound B at Cemochechobee² may speak to long-term connections embodied in yet other, idiosyncratic erasure events (Schnell et al. 1981). The construction of this mound did not completely obliterate the structures, covering about three-

fourths of the original circular footprints. The authors hypothesized that perhaps complete erasure and renewal were applied to some kinds of ceremonial architecture but not to others (Schnell et al. 1981:8). Interestingly, the same pattern is seen at the Cherry Valley Mounds site in Arkansas, where the initial erection of the largest mound at the site only partially covered over a circular single-post building (Perino 1967). This similarity is particularly intriguing given that the Cemochechobee authors suggested that the origins of this site and the surrounding Rood phase may have been linked to migrations from the Central Mississippi Valley (Schnell et al. 1981:24).

Aside from erasure events, if one expands temporal horizons to examine the cumulative microhistories of renewed structures with each new mantle of layer of earth in a mound, then another interesting trend emerges that James Knight (1981) first called attention to in his research at Cemochechobee. There, he discovered what he referred to as an “anti-historical” stance where there seemed to be a purposeful disposal of preceding architectural styles with the addition of a new mantle and building—a pattern that he referred to provocatively as a “disdain” for the past (Knight 1981:80). An identical tradition has been identified at mound sites in western Kentucky (Stout and Lewis 1997:18). In the Tennessee Valley, building style alternation between mound stages at sites such as Hiwassee Island and Davis led Sullivan and Koerner (2010:45) to conclude: “The switching back and forth between circular and rectangular buildings in these contexts is no less confounding than the gradual change between small pole and large log architecture known for the region (Schroedl 1998; Webb 1988).”

As my own site sample of pre-mound architecture began to accumulate, I was struck by how common architectural oscillation was throughout the Southeast. There are examples (e.g., Snodgrass, Singer-Moye, Richardson Farm, Leuty) where wall-trench structures occur below mounds only to be replaced by single-post structures on later mantles, earth lodges are replaced by single-post structures (Town Creek) and circular buildings (Beaver Dam Creek), and so on. The pervasiveness of these shifting architectural events suggests that world renewal in many regions demanded not merely a fresh start but a fresh start founded on an obliteration of the architectural memory of the recent past. Adam King and I (2005) have suggested that several major instances of community remodeling at Etowah may have been a way of using architecture to reinscribe new notions of identity and relations of power. Histories of submound and above-mound architecture suggest that these represent similar, smaller-scale histories of extirpating the past.

I say “extirpation” because there are some compelling instances of the revival of architectural styles not only on the same site but also between mound

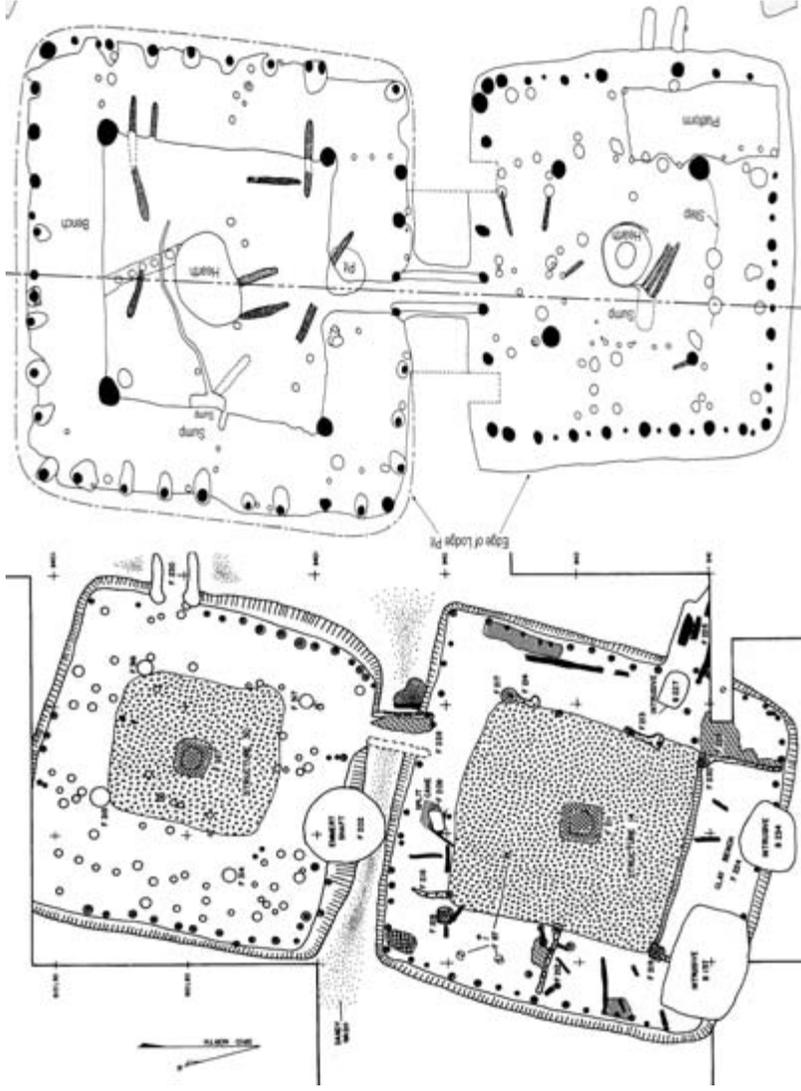
centers. The most intriguing in the latter vein were the paired structures at Toqua and at Garden Creek, which are almost mirror images of one another (Figure 9.9). The set at Garden Creek occurred immediately beneath the mound, whereas the pairing at Toqua occurred on the Mound E summit, now dated to the a.d. 1300s (Koerner et al. 2011:42) and presumably several centuries after the one at Garden Creek. Apparently, one of the practices that continued to bind distant Mississippian regions and centers was the continual borrowing and exchange of building styles in a progression of reinventing the wheel at pivotal events in the life of a mound and in the community.

As a final observation, what has not been addressed in the preceding discussion is the idea of architecture as three-dimensional, lived space. Although I consider this perspective to be essential to a well-rounded microhistory of architectural events, here I will only make some preliminary notations. Perhaps the most important general conclusion that can be drawn is that, if we accept that pre-mound architecture did represent important ritual and/or public space, then the variation we see around the Southeast points to considerable diversity in the performative and semiotic (see Gillespie 2007; Inomata and Coben 2006) dimensions of the activities carried out inside those buildings. I would submit that the space inside an earth lodge mediated qualitatively differently experiences than, say, a circular rotunda. Thus, we have to remember that the grand Mississippian architectural event considered here—the mounding over of sacred architecture—must be balanced by a consideration of diverse phenomenologies of space throughout the Southeast.

Since very different forms of architecture could occur on successive stages of the same mound, it may be that Mississippian peoples placed great emphasis on the flip side of erasure; that is, they continually transformed the nature of their ritual experiences through the alteration of their architectural microhistories. In the future, we need additional studies of performance in the Mississippian world to more thoroughly address the experiential dimensions of eventful changes in the ritual architecture of the Southeast (see, for example, Thompson 2009).

Conclusion

Mississippianization has long presented an explanatory hurdle because it appears to embody a broad-scale and multidimensional event that was put into place in many different ways from one region to another, and sometimes even within the same region. Although archaeologists have attempted to move toward processual, or historical-processual, understandings of this phenomenon, it has been difficult to divorce ourselves from relying on trait-



9.9. Comparison of paired structures on one of the platform mound surfaces at Toqua (left) with those below the mound at Garden Creek. (Toqua courtesy of the Archaeological Research Laboratory, University of Tennessee, Knoxville; Garden Creek courtesy of the Research Laboratories of Archaeology, University of North Carolina-Chapel Hill.)

based attributes such as wall trenches or shell-tempered ceramics to comprehend its rapid dispersal. Conceptualizing Mississippianization as the spread of nested events has the advantage of allowing us to emphasize the actual practices that were adopted or altered as part of this transformation. Beck et al. (2007) argued that structural transformations created novel opportunities for reshaping space. One can, however, look at their argument in a slightly different way, and say that the reshaping of space from submound to mound architecture was an integral component in the structural event we understand as the genesis of Mississippian.

A key advantage of the microscale in this understanding is that it allows us to step back and think about the importance of structures and institutions while keeping in mind that people and communities are not somehow ephemeral to the larger canvas. A consideration of the diversity of submound transitional events can lead us to appreciate that people may be profoundly influenced by processes with distant origins yet still continue to play a major role in the constitution of their own histories and subjectivities. For groups in the process of becoming what we recognize as Mississippian, the initiation of mound building spawned a dramatically and dialectically unfolding series of events involving the destruction and creation of architectural and ritual traditions.

Acknowledgments

For quite some time I had ill-formed ideas revolving around submound architecture that I could never quite distill. I am deeply appreciative to the editors for providing the opportunity to work this through and to achieve an understanding that, at the least, is less ill-formed than it used to be. Thanks to my colleague Chester DePratter for reading through an earlier draft and, as usual, filling in important gaps in my knowledge.

Notes

1. Although (and perhaps because) Chauga had a profusion of posts in the submound fill below the cobbles, the investigators were unable to securely detect a house shape (Kelly and Neitzel 1961:10).

2. Mound B is the largest but not the earliest earthwork on the site.

III.

COMMENTARY

Event and Structure

Culture Change and Continuity in the Ancient Southeast

David G. Anderson

The effectiveness of theory can be evaluated by how well it helps us explore and understand the archaeological record. The editors of this volume, Zackary Gilmore and Jason O'Donoghue, and the various other contributors have demonstrated through repeated example how eventful analysis can be used to understand how and why the reproduction and transformation of culture, or structure, occurred in the past. The approach is explicitly multiscale, a tool for examining practice and structure at multiple temporal and geographical scales, based on the examination of both transformative events, also called happenings or occurrences, as well as more mundane or routinized activities or practices. How events create structure can be likened to ripples radiating out from a rock thrown in a pond: some have minimal transformative effect and are quickly damped out, while others have great amplitude and bring about widespread and long-lasting change.

The larger the impact on practice and structure, the more likely an event will be apparent archaeologically. As the editors of this volume demonstrate in their introduction, however, using the example of global climate change, sometimes major changes can be occurring around us and yet be imperceptible, at least as reflected in our attitudes and behavior, until a memorable and catastrophic event brings conditions sharply into focus. Hurricane Sandy in late 2012 impacted public perception and narrative about climate change and, besides the obvious devastation, arguably affected the outcome of that year's presidential election. It has been said that every generation of archaeologists reinvents and reinterprets the archaeological record at least in part as a reflection of the times in which they live. Theory provides the framework and some of the basic tools by which this interpretation occurs. Big changes are occurring in our own world, and how the individual responds to them has perhaps never been as important. It is thus perhaps not surprising that scholars, members of the general public, and policymakers are looking to the past for an understanding of how they can shape the future.

The approach offered in this volume—consideration of the event in the generation of structure—is worthy of emulation and adoption. What is meant by the archaeological study of the event is thoroughly explained by the editors in the introduction, and how it is put to practice is accomplished through a series of case studies in the remaining chapters. This is not a novel approach but one adopted by a number of recent scholars in the Southeast and beyond interested in understanding the linkages between action and structure (e.g., Beck 2013; Beck et al. 2007; Bolander 2010; Gillespie 2007; Sahlins 1991; Sassaman 2007, 2010; Sassaman and Holley 2011; Sewell 2005; Wallis and Randall 2014; Wright and Henry 2013). If there is a take-home lesson for southeastern archaeologists in the research and thinking demonstrated in this volume it is that we are no longer focusing on typologies of artifacts, sites, and societies but on understanding how culture and identity are made, maintained, and transformed. This is a very real change, a new way of looking at the archaeological record, and not simply the adoption of new terminology on top of traditional analytical approaches. The origins and operation of Mississippian societies, for example, are examined herein by Cobb, Pluckhahn, and Sassaman and O'Donoghue in ways that have very little to do with traditional definitions like dependence on maize agriculture, the recognition of power structures and settlement hierarchies, or trait lists of feature or artifact types. Likewise, Archaic lifeways are examined by Arco et al., Blessing, Gilmore, Moore, and O'Donoghue in ways that have very little to do with typologies of projectile points or features, lists of subsistence remains, kneejerk responses to changes in climate or biota, or the results of reproductive imperatives. Instead, traditional archaeological remains, features, and artifacts like households, pits, vessel forms, and stone tools are emphasized, but not in ways that essentialize them and, in so doing, constrain consideration of the variability within them and how they served to create structure. We are indeed working with the same archaeological record earlier generations excavated, but we are doing so using different approaches and considering different kinds of questions than those contemplated 10, 20, or more years ago. We are getting new insights into southeastern prehistory as a result, and I find the examples in this volume to be highly satisfying, in large part because they are human-centered and interesting, that is to say, anthropological in scope.

Kenneth E. Sassaman and Jason M. O'Donoghue (chapter 1) examine how short- and long-term fluctuations in climate, and particularly unusual or unlikely events, could have brought about changes in prehistoric Woodland through Mississippian societies in the American Southeast. Their research is directed not only to understanding change in the past but also to offering guidance to our own society and civilization, lessons that will increasingly be

needed given the rate at which climate change is occurring. Archaeology has much to contribute on the subject, as many recent papers and volumes have demonstrated, and I have no doubt that research on relationships between climate and culture change in the past and how it can help us prepare for the future will continue to grow tremendously in years to come (e.g., Anderson 2001; Anderson et al. 2007a, 2013a; Crumley 2000, 2006, 2007, 2013; Hornborg and Crumley 2007; Kidder 2006, 2010a; McIntosh et al. 2000; Rosen 2007; Sandweiss and Quilter 2008; Sassaman 2012a, 2012b; Sheets and Cooper 2012, to cite a few examples).

Drawing on how human societies react to short- and long-term changes in rainfall regimes based on dendroclimatological research in the American Southwest (Dean 2000), Sassaman and O'Donoghue make use of bald cypress reconstructions of spring rainfall in the vicinity of South Carolina to examine similar questions, notably how, as they put it, "the structure of variation" in climate shaped experience and expectation, that is, social memory and response. Importantly, they argue that it isn't the extent of drought or excess rainfall that is critical, but how often it occurs and whether or not appropriate and adequate responses are encoded in social memory. Unusual but frequent climate change, such as fluctuations in spring rainfall that influence crop productivity, can be dealt with far more easily, because they are known, than can unusual events that occur so rarely societal responses are not known or remembered. Extreme weather events are thus less calamitous when people experience them regularly and have developed means for dealing with them. The incidence of unlikely weather events per generation was much higher in the Late Woodland and Late Mississippian periods than during the Middle Woodland and Early and Middle Mississippian in their study sample. These are also periods of an apparent greater or lesser incidence of warfare in Eastern North America, pointing, perhaps not surprisingly, to a possible linkage between the incidence and amplitude of climate extremes and the intensity of conflict (Anderson and Sassaman 2012:16–164; Dye 2009:153–154; Milner 1999:125) While societies may have been able to respond to an increasing incidence of extreme weather events, their response (i.e., increased conflict) was not always ideal from the perspective of those participating. Tying the need to remember such events and come up with adequate responses to an increased respect for elders and ancestor veneration is one possibility; another, of course, is encoding appropriate responses to rare, widely spaced events in myth and ritual (Minc 1986; Minc and Smith 1988).

An increasing body of literature implicates drought as an important but by no means the only factor promoting subregional-scale population shifts in the Southeast, which are sometimes described as abandonments, displace-

ments, or relocations (Anderson 1994,1996; Benson et al. 2009; Cook et al. 2007; Meeks and Anderson 2013). Sassaman and O'Donoghue argue that developing effective responses to changes in rainfall regimes may take generations, resulting in changes in how the past is remembered or revered and, in some cases, widespread population reorganization or relocation. These are lessons from the past that our own civilization will need to pay careful attention to, given the anticipated changes in precipitation and freshwater availability in the coming century, as well as a markedly increased incidence in extreme weather events (IPCC 2012,2013,2014a,2014b). That is, it is not enough to survive or react to individual episodes of daily, seasonal, or even annual weather events; people and societies must learn to deal with much longer and more varied conditions, that is, with the certainty of uncertainty.

Jason M. O'Donoghue (chapter 2) examines the archaeological and geological records in the St. Johns River valley to evaluate Miller's (1992,1998) hypothesis that shell mounding by the Mount Taylor culture some 7,000 years ago was triggered by the appearance of artesian springs, creating an environment favorable to shellfish and hence for the human populations that quickly learned to rely on them. O'Donoghue's elegant GIS-based analysis of the location of springs in the Floridian aquifer demonstrates that, since their elevation varied, the onset of spring flow could not have been the same everywhere. Thus, what appears to be a major event to us—water suddenly bubbling out of the ground—was likely a non-event to the people of the time, at least initially, since only gradually and after occurring in many places did this spring flow result in significant changes in regional hydrology and biomass, and only after some unspecified but presumably fairly lengthy interval, perhaps several millennia, did shell use and mounding by local populations begin. O'Donoghue's analysis thus offers an important cautionary tale when using paleoenvironmental data, namely, that consideration of the source and applicability of these data are critically important, as well as having excellent spatial and temporal control over it. That is, we have to be careful when using models of sea-level change, or oxygen isotope paleotemperature records, or even pollen or sediment cores in the reconstruction of past environments, at least until we have a good idea how these conditions played out locally. Changes in resource structure, climate, and biota do not occur uniformly but are shaped by many factors, such as physiography, ocean currents, atmospheric circulation, underlying geology, and so on. Focused, localized studies of environmental conditions and change, and human responses to them, are critical; this is the kind of analysis O'Donoghue is offering, and through example demonstrates we need to conduct more often.

Human response to dramatic, global-scale changes in climate, for example,

did not play out the same way in different parts of the world, as evidenced by the varied archaeological records from the Younger Dryas, a millennium-long return to colder conditions that began about 12,900 years ago, interrupting the post-glacial warming trend that had been occurring, albeit with some fits and starts, for the previous 2,000 years. The onset of the modern or Holocene epoch, in fact, only begins from a climatic perspective with the ending of the Younger Dryas some 11,650 years ago, although the arbitrary figure of 10,000 radiocarbon years ago, or 11,450 calendar years ago, is the date sometimes used. In some parts of the world, including within the Southeast, major changes in culture are evident during the Younger Dryas, while in others, little or no change is evident (e.g., Anderson 2001; Eren 2012; Meeks and Anderson 2012; Straus and Goebel 2011). Of course, the Younger Dryas was itself a lengthy period, with highly varied conditions, making generalizations risky even within relatively small regions. Linking eventful human history to broader global patterns of change, as well as more focused local patterns of change, should be our goal. But as O'Donoghue argues, while climate change may be an ecological founding event underwriting a cultural transformation, it is the human response to such moments that renders them consequential or not.

Christopher R. Moore (chapter 3) places the examination of microscale events at the Chiggerville shell midden in the context of past work on these classic Shell Mound Archaic sites, situating this work within a long history of research. He effectively demonstrates that just because a site was dug 75 years ago, as Chiggerville was during the New Deal era (Webb and Haag 1999), and is assumed to be well understood, doesn't mean that we can't learn important new things from the curated records and artifacts. Moore does this by hammering home the point that shell midden sites are not, as he puts it, "hopelessly mixed archaeological palimpsests," but places where real events with meaning and history to the people who created them occurred, that can be recovered through careful excavation and analysis. Studying and documenting a past culture archaeologically, he argues, must entail proceeding event by event, taking into account formation and post-depositional processes, and not by the lumping together of disparate activities and behaviors to create idealized and homogenized "assemblages" or "components," concepts archaeologists use ubiquitously and yet that are in need of serious untangling. His call for thick description (*sensu* Geertz 1973) in our archaeological excavation, analysis, and reporting—not just a description of behavior or events but of their meaning and context—is an effective way to do this. As Moore's chapter and others in this volume demonstrate, and as Tim Pauketat (2001:87) has noted, "answers to important 'why' questions will be found

only through the cumulative, painstaking, data-rich, multiscale studies of proximate causation,” that is, through archaeology as thick description that reflects humanistic interpretation.

Moore makes a number of important points in his chapter, including that the archaeological investigation of shell middens needs to proceed by assuming that appreciable intrasite variation exists and should be documented and explained. Furthermore, research at these sites needs to focus on more than areas where shellfish remains occur, since significant “shell free” midden areas have been found at several sites, including Carlston Annis, by the SMAP or Shell Mound Archaic Project work recently superbly documented in a summary monograph by Marquardt and Watson (2005d). Since people are unlikely to have lived directly atop piles of shell, unless it was covered or reduced/crushed in some way, adjoining or intervening areas should be examined for the presence of structures or other features (e.g., Mathis 1993). Major pit features, for example, have been found in the centers of shell rings on St. Catherines Island, and while their function remains unknown, it is clear that substantial effort went into their construction (Sanger and Thomas 2010). It is important to remember, furthermore, that many shell middens accumulated over lengthy intervals of time and rarely represent short-term or single events; they instead are accretional deposits, “persistent places” on the landscape (Thompson 2010, after Schlanger [1992]). Nor are shell middens uniform in size, deposition, function, or content. Across the Midsouth, in fact, shell middens have been constructed for thousands of years, at least as far back as ca. 8000 cal yr b.p., and many locations were occupied or used for long periods of time, at least intermittently (Anderson et al. 2007b; Bissett 2014; Claassen 2010; Crothers 1999; Dye 1996; Russo 1996a, 1996b, 2004; Sassaman 2010a; Thompson 2010).

As Moore argues, events can become inscribed upon a landscape, and in so doing, shape and transform structure. As an example, he notes that initial events in a location, such as the placement of burials, the holding of feasts, or the construction of buildings, when remembered, can shape much of what follows in that location (see also Moore and Thompson 2012). At Chiggerville, key founding events, notably the placement of the first burial or burials, and in some cases apparently marking them—a sandstone rock cairn was placed near two individuals over a charcoal lens from an apparent burning episode—changed the location from just another spot on the landscape to one imbued with meaning, where people returned again and again to add burials, in the process making the location an important and “persistent” place (see also Claassen 2010; Thompson 2010). But the more common and mundane daily events occurring at the location, such as food preparation and cooking,

also gave it meaning as a place where the lives of the living and the dead intersected. Memorable events, such as unusual burials, together with evidence for the practices of daily life, can be used to create what Moore calls interpretive microhistories, an eventful archaeology that tells about real people in an interesting way. I fully concur with his conclusion that narratives like these—far more than the standard product of our fieldwork, monographs replete with detail and description, yet often lacking much sense of the people who created the record being reported—are indeed “the most effective form of public archaeology.” We need to document what we do effectively, so that future generations of scholars like Moore can make use of what was found, but that doesn’t mean we can’t think about and interpret it as well.

The title of Meggan E. Blessing’s chapter, “Pits for the Ancestors,” is, of course, a verbal pun on Roy Rappaport’s (1968) classic study of the New Guinea Tsembaga Maring, *Pigs for the Ancestors, Ritual in the Ecology of a New Guinea People*. I suspect Rappaport, with whom I was privileged to take classes, would be intrigued by Blessing’s chapter, and indeed by all the chapters in this volume, fascinated as he was by the relationships between culture, religion, and environment or landscape, especially the linkages between ritual and culture. Both Blessing (chapter 4) as well as Moore and Gilmore (chapters 3,6) show how pit features, a common but clearly incompletely considered aspect of the archaeological record on many sites—save perhaps for their role in storage and subsistence—played a significant role in the creation of culture and community in the Savannah River valley. They also show how Native Americans’ digging of pit features sometimes led them to encounter artifacts from earlier peoples, that is, evidence for earlier histories written on the landscape, and how they—the first southeastern archaeologists, as it were—reacted to it. As Zackary I. Gilmore (chapter 6) notes, this was about more than the recovery of artifacts. Pits often were dug into and exposed the profiles of earlier pits revealing any layering that may have been employed in their infilling, which in some cases was purposeful and carefully planned.

Blessing’s documentation of the construction, use, and contents, or lack thereof, of pit features at Stallings Island and related sites shows how these features can be used to differentiate Mill Branch/Parris Island and Stallings phase occupations. Her research on pit features is a continuation of the great story of Stallings Island culture and its relation with other groups locally and in the greater Southeast that has been woven down through the years by many researchers, most recently Kenneth Sassaman (2006, 2010b; Sassaman et al. 2006). Blessing’s chapter provides a concise overview of this narrative, one that I find increasingly compelling, although I also have no doubt that, like any such reconstruction, its evaluation and refinement will keep genera-

tions of archaeologists and physical anthropologists busy. As Moore (chapter 3) notes, most members of the public are far less concerned than archaeologists with knowing the details and trust us as far as the supporting evidence is concerned. The Savannah River valley during the Late Archaic was a dynamic social landscape, a continually reforming web of relationships between peoples living within the basin, and with ties, or in some cases origins, far beyond it. When we compare the current narratives with earlier interpretations of Late Archaic settlement locally—of foraging groups whose sites, annual ranges, and items of material culture may have differed to varying degrees but were otherwise implicitly or explicitly assumed to be essentially identical in terms of settlement patterning and subsistence pursuits (e.g., Anderson and Joseph 1988:14–20; DePratter 1973, 1980; Sassaman et al. 1990; Stoltman 1974)—it is clear we have come a long way in making the local archaeological record about people and not things.

Thomas J. Pluckhahn's examination of the role of households in historical change (chapter 5) offers a coherent and powerful reinterpretation of a set of answers to a major question of interest to Eastern Woodlands archaeologists, specifically what happened in the Late Woodland and how does it relate to what came before and after, as exemplified in Hopewell and its decline and the emergence of Mississippian? He explores this subject using a wide range of readily determinable archaeological data, including ceramic vessel decoration and form, hunting/projectile point technology, the size, use, and occurrence of storage features, and the size and spacing of households. His chapter is informed by a broad understanding of the anthropology of households and argues that the development of small, presumably nuclear family groups in the American Bottom facilitated the emergence of Mississippian there, as well as its appearance and spread across the region, since change is apparently more readily accepted in nuclear as opposed to extended family settings. The underlying explanation for this, he argues, referencing work by Mary Hartman (2004:105), is that innovation and flexibility is more constrained in households where younger individuals and married couples are dominated by members of older generations.²

In exploring trends over the course of the Late Woodland, Pluckhahn notes relationships between variables such as household size, spacing, and mobility; the location and extent of storage facilities; public versus familial vessel forms; and aspects of stone tool technology, specifically when and where the bow and arrow appears. His wide-ranging yet integrative thinking links many aspects of life, as when he observes, paraphrasing his argument slightly, that increases in the size of household storage facilities were linked to a decline in the occurrence of mound building, as the social relationships expressed and

reinforced “in public ceremony gave way to less formal relationships” between individual households. As household autonomy increased and communal integration decreased, other major changes occurred, including in subsistence pursuits, with more individual bow hunting and family-based cropping, in the size and location of household-specific storage facilities, and in the form, decoration, and sizes of ceramics used for food processing and serving. Pluckhahn’s chapter is focused on big-picture-type questions, complementing some of the more site- or activity-specific studies in this volume. That said, all the chapters demonstrate that a bottom-up, event-oriented approach can be used to explore important questions such as the development of social complexity, the consequences of adopting new technologies and forms of subsistence, and changes in interaction at local and larger scales. Indeed, conditions at all levels of society, as well as changes in them, he argues, can be explored through the study of households.

Importantly, Pluckhahn notes that observed changes in house size and storage features at Kolomoki appear to be unrelated to environmental change, at least locally. Climate change, like population pressure, has long been invoked as an explanation for some of the developments in Eastern North America during the Middle and Late Woodland periods (e.g., Anderson 2001:14–165; Griffin 1960, 1961:72–73). According to this view, deteriorating climate led to a decline in Hopewellian agriculture, which contributed to the end of the Middle Woodland cultural florescence that had transpired during the more favorable Roman Warm Period. Pluckhahn uses zooarchaeological, pollen, phytolith, and macrobotanical evidence to examine environmental conditions and resource use in his study of households at Kolomoki and demonstrates that little change in exploited subsistence resources occurred over this interval, which remained directed predominantly to wild plants and animals, with small amounts of cultigens. Other environmental factors that have been variously advanced by scholars in the region, Pluckhahn observes, such as changes in precipitation, sea level, or flooding regimes likewise do not appear to have affected local biota and subsistence, although they may have elsewhere. The point, however, is that human agency operating at the household level, and not solely or predominantly exogenous factors, were important in bringing about the changes observed.

Pluckhahn also argues that the minimal role played by maize agriculture and higher settlement mobility in the Weeden Island area, compared to the increasing importance of both agriculture and sedentism further north, is closely linked to population growth and the emergence of much larger Mississippian-era societies in that part of the region, such as the one at Cahokia. The decrease in household size, Pluckhahn argues, based on observations by Hart-

man (2004), Peregrine (1992), and Wilk and Rathje (1982) results in increased competition and greater flexibility regarding the adoption of innovation. These characteristics are tied, in part, to the increasing importance of individualized hunting brought about by the appearance and eventual adoption of the bow and arrow, as well as the apparent ability of smaller family groups to produce increased, or at least sufficient, food for themselves through maize agriculture. Pluckhahn's arguments from a household perspective about how the Mississippian emerged in the American Bottom as well as elsewhere in the region thus complement and add additional explanatory detail to existing theories about how the Big Bang at Cahokia (Pauketat 1997:31–3, 2009) operated, and how, why, and the directions and rates at which the resulting Mississippian culture construct spread. In part, according to this view, in areas with or receptive to smaller households, Mississippian culture tended to spread, while it was hindered in areas where larger, extended family households were present. Of course, many other factors were also involved, but the argument highlights the importance of changes that occurred at the level of everyday life, in the households of ordinary people, and not just among the elites.

Zackary Gilmore's argument in chapter 6 from the Late Archaic record of Florida about history being written and culture and identity being constructed through the excavation and use of pit features in Locus B at the Silver Glen Run site, an unusual form of place making, is both fascinating and compelling. As he puts it, "universal functionalist explanations are giving way to localized, context-specific ones . . . the stuff of everyday experience." Practices, such as pit digging, use, and infilling, are not merely indicative or reflective of events, but are events themselves that create and transform structure. I appreciate his clear, logical exposition, especially his rationale for focusing on features, since they offer, as he says, a means to focus on "individual practices . . . at a resolution commensurate with actual human experience." Like Chris Moore (chapter 4), he recognizes that thinking about archaeological deposits as complex uninterpretable palimpsests is self-defeating and indeed unnecessary to an event-oriented archaeology. Gilmore, Moore, and Blessing, the latter in her chapter on Stallings Island, show how we can use a specific and long-examined aspect of the archaeological record—in this case, pit features—to document eventful behavior and, indeed, new behaviors.

Gilmore argues that pit construction associated with feasting in Locus B at Silver Glen Run reflects the overall history of the center written on and under the landscape. He makes this argument by demonstrating that filling episodes grew more complex over time, perhaps in part because people knew they would encounter the pits later on. Gilmore's chapter offers important guidelines for interpreting pit features, such as how the feature was originally

used, as well as paying careful attention to the content and deposition of the final fills. Many of the pits at Locus B had layered final fills that lacked many of the artifact categories found in general midden deposits, suggesting careful selection. At least some of the Locus B pits, those with layered final fills, were infilled rapidly, and were, as Gilmore (chapter 6) puts it, “inverted, subterranean shell mounds, homologous to the countless above-ground monuments that marked and structured the Late Archaic landscape.” This interpretation flies in the face of traditional perspectives that regard pit fill as the result as post-abandonment infilling, perhaps with trash or through erosion, and with any layering observed the result of separate cooking/depositional episodes. The idea that pit contents could be carefully selected, creating buried monuments, deserves further consideration. Ritual initiation as well as termination episodes marked by the deposition of specific layers of shell, sand, colored sediments, or other materials has a long history in the Southeast, dating back to the earliest monuments in places like the St. Johns and continuing up to the Mississippian era, as documented at many sites, particularly recently in some detail at Poverty Point and Shiloh (Anderson 2012a; Anderson et al. 2013b; Kidder 2010a, 2011; Kidder et al. 2009; Pursell 2004; Sherwood and Kidder 2011; chapter 7, this volume). If careful layering reflects a bundled historical narrative, then pit construction and infilling may reflect similar eventful behavior.

Gilmore’s idea of pits as inverted shell middens highlights the fact that our thinking about common archaeological features and assemblages needs to be carefully examined and novel ideas considered. After reading the chapters by Blessing, Gilmore, and Moore, it is impossible to think about Archaic pit features as anything other than remarkable examples of purposeful behavior, whose margins and fills should be carefully examined; nor should these features be thought about one at a time wherever multiple examples are present. Similar reasoning, in fact, should be brought to bear wherever pit features are found, from any time period or archaeological culture.

S. Margaret Spivey, Tristram R. Kidder, Anthony L. Ortmann, and Lee J. Arco (chapter 7) likewise bring new ways of thinking to southeastern archaeology in general, and to the classic Late Archaic Jaketown and Poverty Point sites in particular. In terms of deep history, the origins of Poverty Point culture are currently unknown, but likely in some way tied to the earlier period of, and then apparent hiatus in, mound building in the Lower Mississippi Valley, the latter in the interval from ca. 4750 to 3700, right before Poverty Point culture takes off (Saunders 2010). This historical connection is especially likely if, as has been suggested, similar measurement and design elements are shared between the earlier mound groups and Poverty Point itself

(e.g., Clark 2004; Sassaman and Heckenberger 2004; Sassaman 2005). It is also apparently at Jaketown where the immediate precursor and inspiration for the Poverty Point center may have been located; if so, we must consider why the cultural center shifted to the type site across the Mississippi sometime around ca. 3600 to 3400 b.p. (Arco and Ortmann 2010; Ortmann 2010). The reasons may be linked, in part, to geological or climatic factors, such as shifts in the Mississippi main channel, rainfall regimes, or the appearance of massive freshwater swamps and lakes below Macon Ridge, allowing for the provisioning of large numbers of people (e.g., Kidder 2006, 2010a, 2011; see also Clark et al. 2010, Gibson 2010). Spivey et al.'s argument centers on the importance of pilgrimages in making Poverty Point (and perhaps before it, Jaketown) what it was, and the same was likely true for subsequent attractors such as Marksville, Troyville, the Scioto Valley, and Cahokia.

Spivey et al. make a number of important points about how pilgrimages operate, emphasizing, for example, that egalitarian relations are probable among the pilgrims visiting a center, given that there are likely to be few indicators, beyond portable items connoting wealth and status, of their individual standings in their own communities. The relationships and behaviors exhibited by the travelers thrown together in Chaucer's *Canterbury Tales* come to mind; people of varied status and abilities participated in the pilgrimage, sharing their travel and telling their stories. The pilgrimage celebrated by Chaucer was to the shrine to St. Thomas Beckett at Canterbury Cathedral, where many things sacred and secular happened over hundreds of years following the founding of a church at this location in a.d. 597, not just the murder of a meddling priest by his former friend and patron Henry II in a.d. 1170. This most famous of examples can indicate how seemingly small events can have great consequences, triggering widespread visitation, albeit in this case to a long-established and continually renovated monument. Pilgrimages are, however, above all a means of binding disparate peoples; how this process played out over the Eastern Woodlands at various periods will be a subject worth exploring in years to come. The author's concept of a "participant catchment," namely, the area over which people came to a particular center, is useful, since it is clear these catchments varied over time and from center to center in the region.

Pilgrimage, the authors demonstrate, is extremely complex behavior, involving many different people, phenomena, and events. Moreover, hosting pilgrims is a very different activity from being a pilgrim. The reasons for visitation may themselves be varied, making pilgrimages not uniform events but the result of the actions of many different kinds of peoples, each with their

own expectations. Were places like Poverty Point or Cahokia open for visitation all the time, or were they open only during certain times of the year, determined and made manifest through the reckoning of solar or lunar alignments, as has been suggested for both Hopewellian and Mississippian sites (e.g., Hively and Horn 2006; Pauketat 2012)? Or do pilgrimages occur, as the authors suggest, during periods of destruction, decline, and rapid social change, while monument building occurs during periods of benign climate and intersocietal relations? Were people coming to see what was happening, or what had already happened? Whether or not it constitutes a pilgrimage, many hunter-gatherers did travel long distances, and not just to seek game or mates (e.g., Speth et al. 2013). As Spivey et al. note, hunter-gatherers lived in richly constituted worlds filled with myth and ritual, much as agricultural populations did, and these symbolic landscapes were likely as determinative of behavior as the economic and physical aspects of these landscapes archaeologists have traditionally tended to focus on. Many approaches can yield important information and insight about hunter-gatherer lifeways, something being recognized more and more in southeastern archaeology (e.g., Anderson and Sassaman 2012; Sassaman and Holley 2011; Pauketat 2007, 2012; Thomas 2008; Thomas and Sanger 2010; Wallis and Randall 2014). That Poverty Point and Jaketown may have been complexly organized, symbolically rich pilgrimage centers is thus not surprising or probably all that unusual in human history. Many such sites no doubt existed, for hunter-gatherers just as they do for agriculturally based societies, perhaps extending as far back as the Upper Paleolithic, at places like Altamira or Lascaux in Europe (Conkey 1980), and perhaps in the Paleoindian period in Eastern North America at places like Bull Brook in Massachusetts or any of a number of Dalton sites in the Central Mississippi Valley (e.g., Robinson et al. 2009; Walthall and Koldehoff 1998). Determining what happened at those locations, through exploration of the symbolic and ideational worlds of hunter-gatherers, is an area that I expect will receive considerable research attention from eastern archaeologists in the future (e.g., Sassaman 2010, 2011; Simek et al. 2013).³

Spivey et al.'s discussion of pilgrimage behavior among Australian hunter-gatherers also has useful parallels for the eastern archaeological record. The extensive range mobility that is assumed to be characteristic of the Paleoindian era may not have been purely functional, driven by a need for food, information, and mates, but may well have included a heavy element of ritualized behavior (Speth et al. 2013). As in the Australian Dreamtime, early peoples were familiarizing themselves with a vast landscape by visiting key sacred points on it, and in the process fulfilling very real needs for mating

network maintenance and information exchange. Paleoindian scholars have long paid attention to regional physiography in the shaping of movement and the occurrence of sites at prominent points on the landscape, and the concept that Spivey et al. call “mnemonic anchor points” has been variously noted, albeit not always in those words (e.g., Anderson 1990, 1995, 2013; Gillespie 2007; Meltzer 2002, 2004, 2009:230-233; Rockman and Steele 2003). How native peoples navigated the landscape throughout prehistory in the Eastern Woodlands is a subject in need of much research; least-cost-pathway analysis, weighted to include specific sites and locations that could have influenced movement, offers one means of exploring this subject (e.g., Anderson 2012b; Anderson and Gillam 2000; White and Surface-Evans 2012).

Did Poverty Point pilgrimages, if they occurred, involve large numbers of people coming together at one time of the year, like the Muslim hajj, or were they more intermittent visits, occurring by small groups over the course of the year? The evidence detailed by Spivey and her colleagues for the rapid construction of portions of Mound A supports the former (Kidder et al. 2009; Kidder 2010a, 2011). If so, there will likely be other forms of evidence at the site, perhaps pits filled with large-scale feasting debris like that found at Cahokia (Pauketat et al. 2002), temporary residential compounds (perhaps on the concentric ridges?), and plazas where large numbers of people could participate collectively (e.g., the open area east of the ridges, where circular public buildings or possible w oodhenges may have been present). Modern pilgrimages like the hajj demonstrate that the logistics involved in pilgrimages can be complex, involving travel to and from the center, often through the use of intermediate waypoints, and that the events at the center took a lot of time, organization, resources, and effort to pull off successfully. Poverty Point must thus be thought of as an emergent process rather than as a site or finished monument.

As I have argued elsewhere, when places like Poverty Point or Cahokia decline, the reason they do not reconstitute immediately is because it takes time to develop the networks of relationships between people and groups that make them places of pilgrimage:

Once a dominant center like Poverty Point or Cahokia collapsed, it could not be easily or readily replaced. When such a center went down, what made it work went down with it: the kin, marriage and alliance networks, trading partnerships and expeditions, scheduled and impromptu pilgrimages, missionary parties and activities, collective labor arrangements, and all the other things that made it a center. Such relationships are unlikely to easily reconstitute themselves,

especially if they must be formed by new peoples at new locations [Anderson 2010:286].

Obviously, the connections between peoples and the collective action were what was important, because the monumental architecture remained for thousands of years after Poverty Point was abandoned. People need reasons to pilgrimage, and these may include the presence of dramatic features on the landscape, but they also may include symbolic messages of great interest and importance, the opportunity for safe passage over long distances, feasts or other forms of entertainment at the end, and the chance to obtain or display material tokens of the event, reinforcing the prestige likely associated with making such an effort.

If Poverty Point was indeed the “great attractor” of the terminal Archaic, dominating and in some events superseding earlier exchange networks, as the authors suggest in their conclusion, then the ending of Poverty Point would have had dramatic effects on cultures across the region. The end of the Late Archaic has been a subject of considerable recent research interest, particularly given the apparent turmoil involved and the stark contrast between the cultures of the terminal Late Archaic and the initial Early Woodland period that followed (e.g., Thomas and Sanger 2010; see also Fiedel 2001). While climate change has been implicated in the end of the Archaic in the Southeast (e.g., arguments summarized in Anderson 2001:14–165, 2010:282–284; Kidder 2006, 2010b:25–3; Sassaman 2010), it is the nature of the cultural response that is of interest. The end of the region-wide focus, in pilgrimage and ceremony, on Poverty Point may have been one very compelling reason for the changes observed.

A final lesson from this chapter of great importance for southeastern archaeologists is that just because a feature or artifact category is considered mundane—like the pit features discussed in several of the chapters herein—doesn’t mean it wasn’t imbued with special meaning to the people who used it. The tokens or keepsakes taken from Poverty Point thus appear to have included not only elaborately carved and aesthetically pleasing red jasper beads but also, as Spivey et al. note, based on the results of recent sourcing studies, baked clay objects (Hays et al. 2011). The example reinforces the archaeological truism that we must be careful when imposing our ideas and values on the past.

Mark Rees and Aubra Lee (chapter 8) provide an excellent summary of work conducted at Troyville, demonstrating that much may remain and can be learned even when a site has been horribly butchered in the name of development, as this one was by the state of Louisiana in the early 1980s when

mound fill was used for bridge construction. We should be thankful to all who have worked at the site—beginning with Winslow Walker (1936) in the 1930s and Aubra Lee (2010; Lee et al. 2011) and many others in more recent years—that so much has been learned from the remnants. Besides providing excellent archaeological description, Rees and Lee make the case that the transformation of platform-mound-summit ceremonialism from communal and open to more restricted and eventually elite focused may well have begun in the Troyville-Baytown period and not, as sometimes thought, in the later Coles Creek period, at least in this portion of the Lower Mississippi Valley. Furthermore, if the original shape of the primary mound was as described—if it, associated burning episodes, and the Troyville Glyph motif indeed represent sacred-fire imagery—then the ceremonialism and iconography associated with subsequent Mississippian and Contact period southeastern societies may well have been shaped, at least in part, by events at this center.

Important cautionary lessons come from the events, ancient and modern, that occurred at Troyville. As the authors note, less attention has been paid to the Troyville site than might have otherwise occurred because the foremost archaeologist of the time working in this area, James A. Ford, was in Alaska when the excavations occurred. The directions archaeology takes in a given area, the authors note, are thus shaped by events, notably the presence and research interests of local scholars. Accidents of preservation or discovery are also important in shaping archaeological thinking. As the authors report, “alternating layers of clay, wooden boards, logs, and river cane, with some masses of cane measuring more than 1m (3ft) thick and secured with stakes and logs” were found at the base of the primary mound, indicating an unusual degree of preservation facilitated by the clay-rich mound fills subsequently placed down. While perhaps debris from buildings knocked down and used for fill, the cane may also have been a form of temporary erosion control used during mound construction to help stabilize the deposits and keep them from washing away. How common such behavior might have been is unknown, since eventful accidents of preservation like that found at Troyville are rare in the region’s archaeological literature. Cane masses were observed at Troyville, while logs were observed lining the sides of the Mississippian period Tugalo Mound site on the upper Savannah River (Anderson 1994:86), but these are decidedly uncommon discoveries. Mound fills and surfaces would have been vulnerable to immediate deterioration if left exposed by their builders, unless water-resistant clay caps were used, so such coverings may have helped stabilize surfaces, during construction or after (e.g., Sherwood and Kidder 2011). Finally, the presence of structures on embankments like those found at Troyville is not something we expect to see, or even look for, at least not at

sites dating to after the Late Archaic period, where they are inferred to have been present on the swales at Jaketown and on the concentric ridges at Poverty Point (Arco et al. 2010; chapter 8).

The Troyville site was clearly an important center in its time. Its role in southeastern prehistory has, as Rees and Lee effectively document, been largely overlooked or denigrated for a variety of reasons, which highlights the importance of events—the areas receiving research attention, the sites that are excavated, and the discoveries made at them—in profoundly shaping our understanding of the past. Fortunately, Troyville’s importance is now becoming better understood, as well as placed in a larger cultural context through their chapter herein, by Lee (2010), in Rees’s new edited book, *Archaeology of Louisiana*, which I recommend highly. Archaeological syntheses, particularly of sites, states, drainages, or regions, are themselves important events, particularly in their ability to shape future research.⁴

Charles Cobb’s (chapter 9) overview of submound structural variability in the Southeast is directed to exploring how the Mississippian emergence occurred through the careful examination of one category of evidence: the initiation of mound building, which appears to have commonly if not almost invariably occurred over surface buildings that were removed and capped. His sample, 53 structures from 40 sites, some of which had multiple buildings under the mounds, encompassed five structure types: rectangular wall trench (n = 20), rectangular single post (n = 12), circular (n = 8), paired structures (n = 5), and earth lodges (n = 8). Importantly, Cobb provides the primary data, which means the structural classifications and conclusions that he based on this data can be evaluated. While some may quibble with individual cases—whether, for example, the structure under the primary mound at Irene was an earth lodge (cf. Anderson 1994:175; Caldwell and McCann 1941:8–9; Rudolph 1984), or whether all the structures below a given mound were recognized, given the difficulty in teasing them out from masses of postmolds (e.g., Wright 2013)—the sample sizes Cobb employs make his results compelling.

The fact that buildings were found in areas where mounds were subsequently erected at almost every site Cobb examined indicates that Mississippianization, or at least mound building likely occurred among existing populations. Or if it was initiated by intrusive peoples, then there was apparently some settling-in time before the mound building could begin. Regardless, an important part of being Mississippian involved the deliberate construction of mounds over former structures, communal or otherwise, that were removed and capped. As Cobb puts it, “the erection of mounds over sacred structures and places is a pan-Southeastern phenomenon that corresponds with the

genesis of the Mississippian p phenomenon.” Mississippian mound building thus involved, first, termination and, then, initiation activities, which was characteristic of all subsequent stages as well, save for the last, when following deliberate termination or abandonment, no new construction occurred.

Cobb’s research also demonstrates that, at least in some parts of the region, some aspects of Mississippian spread before others, such as mound building before wall-trench architecture. In some cases more of the complete Mississippian cultural package, like that present in the American Bottom, appeared (i.e., wall-trench architecture, shell-tempered pottery, mound construction, aspects of iconography, etc.), suggesting direct population movement. In other areas, particularly in the South Appalachian region, it appears that local populations were adopting only some aspects of Mississippian culture, and in the case he gives of unusual wall-trench construction in Norris Basin sites in eastern Tennessee, not always accurately.

The substantial and continual effort directed to renewal, as reflected in successive mound stage construction, and the removal of buildings and their replacement, in some cases, with different forms (what Cobb calls “architectural oscillation”) tells us something about what Mississippian was, at a large scale. The adoption of Mississippian monumentality thus involved very real changes in worldview, as reflected in new forms of leadership, ceremony, ideology, and cosmology. It has been sometimes suggested that ritual termination and renewal episodes reflect a desire to eliminate references to earlier leaders, with stage construction the material realization of the replacement or succession of one chiefly leader by another, just as in historical periods the names of earlier leaders are sometimes effaced or their statues toppled. Cobb’s analysis indicates this may be an overly simplistic perspective, given the varied nature of these changes, which in some cases are described using terms like “extirpation” and “extinction.” Mississippian and particularly historic southeastern ceremony emphasized world renewal, but that came about through the closing off and symbolic effacing of the past, most dramatically when buildings or possessions were torn down or destroyed, plazas were swept clean, and the sacred fires were put out before being rekindled (Hudson 1976:365–375). Aspects of Mississippian religion and ceremony associated with site and mound stage and plaza abandonment or renewal, I believe, deserve much greater attention in our archaeological investigations.

While appreciable variability characterizes the structures below mounds, what is significant is that mound building was widely adopted across the Southeast, indeed was perhaps the most widely adopted Mississippian activity. This, I suggest, may be because mound building was the oldest and most deeply instilled tradition in the region, dating back to the Mid-Holocene, and

hence was perhaps the most readily understandable, and therefore acceptable, part of the package.

As a final note, the Mississippian emergence, when viewed close up in the American Bottom where it is assumed to have crystallized, could not have been an instantaneous Big Bang even there, as some have noted, but a process involving years or more likely decades of eventful happenings (e.g., Pauketat 1997, 2004, 2012; Beck et al. 2007). But while the construction of the grand plaza, or the initial stages in Monks Mound, or the successive burial episodes in Mound 72 were apparently accomplished over a period of several decades (e.g., Fowler et al. 1999; Schilling 2010, 2012), when viewed from elsewhere in the region over which the impact or idea of Cahokia spread, the emergence of something new and profound likely appeared to be very rapid and event-like.

Some 20-odd years ago the late Robert Dunnell (1990) suggested that the Southeast, which was dominant during the period of culture history but less so during the heyday of processual or “new archaeology,” would rise again, as he colorfully put it. He was confident that, given the vast amount of work occurring in the region, it would inevitably regain its place as a major source for the advancement and use of archaeological theory. This volume helps prove that this has indeed happened.

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Notes

1. Marshall Sahlins (1991) and William H. Sewell (2005) inspired much current thinking by archaeologists on the subject of event and structure and the relationship between them and the built environment. Rob Beck was a discussant in the session that resulted in this volume, although he published his commentary in a special session on archaeological theory in southeastern archaeology (Beck

2014). His 2007 paper with Bolender, Brown, and Earle, “Eventful Archaeology: The Place of Space in Structural Transformation” is one that southeastern archaeologists should read, together with the comments and reply at the end by Susan Gillespie and Ken Sassaman.

2. I would suggest, only partially tongue in cheek, that the same applies to the way new approaches are adopted within archaeology, often by the young, but in many cases only when they are out from under the guidance of their elders. A good example of this can be seen in the chapters in this volume, most of which are written by advanced graduate students or relatively newly minted PhDs.

3. California archaeology and ethnography offers important lessons about what complex hunter-gatherers can be like to archaeologists working in the Eastern Woodlands (Anderson 2005).

4. Of course, I write such syntheses, and with my colleague Ken Sassaman have discussed their importance in setting agendas in some detail (Anderson and Sassaman 2012:33–35). I consider syntheses to be, following Sahlins (1985:xiv), important happenings that constitute—together with detailed monographs on our fieldwork and analyses—the most eventful products of our profession.

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