Eventful Archaeology

The Place of Space in Structural Transformation

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Unexpected ruptures in material culture patterning present interpretive challenges for archaeological narratives of social change. The concept of the event, as proposed by William Sewell Jr., offers a robust theoretical vocabulary for understanding the sudden appearance of novel patterning. Sewell defines historical events as sequences of happenings or occurrences that transform social structures by creating durable ruptures between material resources and their associated virtual schemas. Thus conceived, events occur in three phases: (1) a sequence of contingent happenings produces (2) ruptures in the articulation of resources and schemas, creating (3) an opportunity for rearticulation within new frames of reference. This perspective has much to recommend it for archaeology because it explicitly and uniquely grounds the concepts of structure, structural change, and agency in materiality. The implications of this approach are apparent in the cases of Iceland's conversion to Christianity (AD 1000–1050), barrow construction during Denmark's Bronze Age (1700–1500 BC), platform construction at Formative Chiripa, Bolivia (450–400 BC), and the planning and layout of Mississippian Cahokia, Illinois (AD 1050–1100).

The concept of the event may seem stony ground for comparative, cross-cultural analysis. Events are specific, contingent, and contextual—singular moments embedded in circumstance—and with few notable exceptions (Sahlins 1981, 1995; Sewell 1992, 1996*a*, 1996*b*, 2005) the social sciences have rarely examined them for insights that reach past the experience of the particular. Instead, they have usually been left to the interrogation of historians, little appreciated for their potential contributions to a theoretically robust understanding of culture change and transformation. Building on the work of Anthony Giddens and Marshall Sahlins but significantly reshaping and often expanding that work, William Sewell Jr. (2005, 100) proposes an "eventful sociology" in which the event is defined as a happening or encounter that transforms the articulation of social structures. Sewell's insight is to conceive of historical events as the catalysts for durable, structural change, bridging the disciplinary divide between narrative history and social theory. While his project is an explicit invitation to historians, cultural anthropologists, and

sociologists for sweeping interdisciplinary dialogue, we believe that archaeology has a unique contribution to offer this analytical engagement.

Many possible routes may lead to an eventful archaeology, but here we direct our attention to one in particular: the role of space—and specifically the built environment—in structural transformation. Our attention to the built environment facilitates a comparative approach to eventful analysis and sets this approach within a broadly applicable material framework, one that permits us to consider structural change at different scales and across a range of archaeological contexts. Sewell (2005, 259) observes that historical events are as profoundly spatial as they are temporal. Given advances in dating technology and data recovery techniques and a more sophisticated understanding of the cultural context of built environments, archaeology is unusually well-suited to a consideration of the way events propel the transformation of structures, particularly through the vast sweep of human experience that lies outside the domain of the text. If, as Sewell suggests, histories acquire shape and texture during transformative but unpredictable events, then to reject eventful analysis in the absence of text is to deny history to this most substantial part of our collective past (e.g., Wolf 1982, 18–19). The question, we believe, is not whether this theory of the event is relevant to archaeology but how to situate it within an explicitly archaeological framework. We describe Sewell's approach in the following section and then present four case

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studies that demonstrate how an eventful archaeology may contribute to richer cross-cultural understandings of social change.

Structures and Events

When we consider events, we tend to think of them as momentary occurrences, happenings that take place in a particular instant of time; we do not often think of them as processual phenomena. *The Oxford English Dictionary* defines *event* as "the . . . fact of anything happening; the occurrence *of*" but also indicates that, in modern usage, the term is "chiefly restricted to occurrences of some importance" (second edition, 1986). The iconic example is that of the great battle: Hastings, Normandy, or the Little Big Horn. Informally, then, an event is where the immediate action is—a new queen crowned, a treaty signed, an assassin foiled. The term may also reference important moments in our personal lives—a prom, a wedding, the birth of a child—and need not allude exclusively to the upheavals or affairs of state that constitute history. But in all of these examples of informal usage the event is something that transpires quickly (or relatively so) and then passes, perhaps changing the course of history (the assassin's bullet finds its mark) or else simply becoming an act or a day that we remember. Fortunately, this is not what Sewell means by event, for such a colloquial conception offers little for archaeology but to fill in the missing details of the occurrence and offers little insight into the nature of social change.

At the heart of Sewell's theory of the event is the concept of structure, a term that enjoys greater familiarity—if not necessarily precision or clarity of meaning—in the social sciences. Sewell's perspective can be traced to Anthony Giddens's (1979, 1984) theory of structuration, particularly in its notions of structure's duality and its treatment of structure as process. Giddens represents structure as "rules and resources, recursively implicated in the reproduction of social systems. Structure exists only as memory traces, the organic basis of human knowledgeability, and as instantiated in action" (1984, 377). Giddens sees structure as made up of "virtual" rules and resources (1984, 17) that are enacted (or instantiated) only in social practice. As Sewell (2005, 134) observes, however, this conception is problematic: if there is little objection to virtual rules, are resources also virtual? If not, then how can structures be simultaneously constituted of rules and resources?

Giddens (1984, 33) identifies two general types of resources: allocative (those that enable or generate command over things) and authoritative (those that generate command over people). The term "resource" denotes not things or people but the capacity to command them. It is unclear how resources, thus conceived, are significantly different from rules. Sewell, however, suggests that rules and resources add distinct qualities to structure. His schemas, like Giddens's rules, are "generalizable procedures applied in the enactment/repro-

duction of social life" (Sewell 2005, 131). Schemas are not context-dependent (i.e., they are generalizable) and can be transposed to cultural contexts beyond those for which they were originally learned. The transposability of schemas makes them virtual, since "they can be actualized in a potentially broad and unpredetermined range of situations" (p. 131). Resources, in contrast, are actual (i.e., material) in that any opportunity to mobilize or invoke them in social action is fixed to specificities of place, time, and quantity (p. 133). Resources implicate, as they are recursively implicated by, their associated schemas (p. 136):

> A factory is not an inert pile of bricks, wood, and metal. It incorporates or actualizes schemas, and this means that the schemas can be inferred from the material form of the factory. The factory gate, the punching-in station, the design of the assembly line: all of these features of the factory teach and validate the rules of the capitalist contract.

In Sewell's more robust and satisfying theory, the concept of duality refers not only to the recursive qualities of structure and practice but to the constitution of the structures themselves—they are dual in that they simultaneously articulate virtual schemas and material resources, each of which validates and actualizes the other. If this is so, then how do we explain structural change? Or, to put it another way, what keeps resources and schemas from reproducing one another perpetually?

Sewell's theory considers five "axioms" that address the inevitability of structural change: (1) structures are multiple and (2) intersecting, (3) schemas are transposable, and (4) resources are polysemic and (5) unpredictable (2005, 140–43). First, social agents inhabit and enact a multiplicity of structures, each of which may be derived from different arrays of resources and schemas. Since agents enact a multiplicity of structures, these structures intersect and overlap. The intersection of structures means that resources claimed by one faction may overlap those claimed by another or that a single person may claim the same resources differently, depending on the structures that he or she is enacting in a particular context. Schemas also intersect, as when the rules, procedures, and metaphors that confer meaning on one structural complex simultaneously validate another. The reproduction of structures is always effected by the range and kinds of knowledge that social agents bring to any context of interpretation and action. The broader the range of intersecting schemas and resources that people draw upon for social action, the greater the risk to their existing structures and the greater the potential for structural change.

Schemas intersect and overlap because they are transposable. Bourdieu argues that this transposability of schemas (or dispositions) is limited, useful only for "the solution of similarly shaped problems" (1977, 83). Sewell counters this approach, noting that "the real test of knowing a rule is to be able to apply it successfully in *unfamiliar* cases" (p. 141). The transposability of schemas implies that resources may carry

a multiplicity of social meanings. Also, resource accumulation is unpredictable: crops may fail or yield unexpected bounty; surpluses may be gathered but then lost to rot; the keeper of specialized knowledge may die before an apprentice is ready. Such contingency in the accumulation of resources means that schemas are always subject to change. Sewell uses this relationship to explain agency as the "capacity to reinterpret and mobilize an array of resources in terms of cultural schemas other than those that initially constituted the array" (pp. 142–43). Not only is structural change the outcome of human agency but agency is the capacity to effect structural change.

How, then, do we link this theory of structures and structural change to a concept of the event, and how do these lay the foundations for an eventful archaeology? Marshall Sahlins (e.g., 1981, 1985, 1991, 1995) has explored the concepts of structure and event in his Polynesian research since the 1980s. Through most of this work, Sahlins has viewed structure as a singular and unified phenomenon. Particular historical events may reshape a culture's all-encompassing structure, while structure simultaneously orders these events (Sahlins 1981, 8). Although his recursive approach informs much of Sewell's subsequent work, Sewell—as noted—sees structures as multiple and intersecting. He defines events as "sequences of occurrences that result in transformations of structures" (2005, 227). More specifically, an event reaches across multiple, interconnected structural domains to create durable ruptures in the articulation of resources and schemas, potentially undermining the existing structural network. However, just as not all occurrences produce ruptures, not all ruptures produce events (p. 228):

> A single, isolated rupture rarely has the effect of transforming structures because standard procedures and sanctions can usually repair the torn fabric of social practice. Ruptures spiral into transformative historical events when a sequence of interrelated ruptures disarticulates the previous structural network, makes repair difficult, and makes a novel rearticulation possible.

Structural disjunction means that the schemas once used to mobilize and interpret an array of resources collapse beneath the burden of exceptional circumstances; they lose their capacity, that is, to make sense of things. Disjunction cannot be socially tolerated for long, and therefore a creative but acceptable solution to the crisis—a method for restoring resources to schemas—may secure acceptance quickly, even had it seemed unthinkable just prior to the rupture(s). Sewell (2005, 248–57) suggests that events, these episodes of cultural dislocation and creative rearticulation, are marked by a heightening of emotion and an improvisation of ritual. Heightened emotions contribute to the instability of events and explain in part the unpredictable quality of their unfoldings. Such emotions may also impel people to embrace radically new ideals during the re-creation of structural order (or rearticulation). New ritual practices, in turn, may be invoked to sanction and formalize this emerging order.

Events thus occur in three stages: (1) a sequence of context-dependent happenings produces (2) multiple ruptures in the articulation of resources and schemas, creating (3) the opportunity for creative rearticulation within novel frames of reference. The greater the diversity of interconnected structures disjointed by any particular occurrence(s), the more profound the event. This is not, however, to reject the significance of gradual, long-term processes in social change. Indeed, such processes—population growth (or decline), class formation, urbanization—both shape and strain the social contexts in which happenings or occurrences become transformative: a change in the context alters the "eventfulness" of the occurrence. But the direction of the event, the precise path of its unfolding, cannot be predicted solely on the basis of context, however enabling that context may seem (Sewell 2005, 227). Events, thus conceived, do not *change* the course of histories, driven forward by process; rather, events *make* the course of histories, which follow no intrinsic pathway but the contingencies of occurrence, disjunction, and rearticulation.

If schemas implicate the material form of their respective resources (and this is a key premise of Sewell's theory [2005, 136]), then eventful analysis is not limited to texts, and archaeology can extend the study of events to a broader mosaic of human experience. This approach to history and event renders the term *prehistoric* meaningless, for although the human mosaic is replete with social settings lacking text, none has ever lacked or preexisted the eventful course of history that Sewell describes. This is not to suggest that all schemas are equally accessible to archaeologists or to deny the significance of texts for penetrating the complex webs of meaning that bind resources and schemas. But we need not know the exact meanings of structures to observe the consequences of their disjunctions and rearticulations—to undertake eventful analysis.

The Archaeology of Events: Four Cases

Sewell observes that historical events are profoundly spatial processes in that the actions that transform social structures are inextricably bound to the specificities of place (2005, 259–60; see also Giddens 1979, 206 on the concept of locale). As Henri Lefebvre aptly states: "Itself the outcome of past actions, social space is what permits fresh actions to occur, while suggesting others and prohibiting yet others" (1999 [1974], 73). Even so, Sewell limits his consideration of spatial context to the fact that events *occur in* spaces; of more significance for archaeology is the fact that events *transform* spaces. Space is not simply where structural transformations happen. Instead, structural transformations create novel opportunities for making, inhabiting, and reshaping space. The specific expression of the spatial environment that we focus on here—the built environment—has proven particularly useful in archaeological thought and practice (e.g., Alcock 2002: Ashmore 2002; Bradley 1998; DeMarrais, Castillo, and Earle et al. 1996; Earle 2004; Hodder 1990; Ingold 1993;

Moore 1996; Smith 2003; Steadman 1996; Trigger 1990; Ucko and Layton 1999). In a seminal review of the topic, Lawrence and Low identify the built environment as "any physical alteration of the natural environment, from hearths to cities, through construction by humans" (1990, 454). While historical analyses emphasize the temporality of the event, which is contingent and therefore unique, archaeological regard for the eventfulness of the built environment may better foreground a comparative approach to structural change.

To undertake eventful analysis, the observer must be able to distinguish eventful occurrences (those that are marked by structural ruptures and rearticulations) from those that merely reproduce existing structures. This may seem an easier task for historians or sociologists, but the broader material context of the built environment offers a powerful means for making such distinctions—for recognizing transformative events. Not all changes in the built environment constitute changes in social structures. Adding a new mantle of earth to a platform mound, for example, reproduces those structures associated with mound construction and use, such as schemas about destruction and rebirth. Events, in contrast, transform a network of interconnected structures and should always be manifested in multiple resource arrays. Eventful transformations of the built environment will thus be accompanied by coterminous changes in multiple kinds of material resources or in similar kinds of resources at different locales.

Here, we present four case studies in which eventful analysis can improve our understanding of specific moments of social change. In each of these cases, the close of an event (i.e., its structural rearticulation) is marked by dramatic transformations of the built environment and other kinds of structural resources. First, we describe the context and the consequences of Iceland's conversion to Christianity near the onset of the second millennium AD. This example is the only one that draws from both the material and the textual mode of eventful analysis. For our second example, we move to the case of Thy, Denmark, where for a brief period starting just after 1700 BC Early Bronze Age warrior chieftains constructed thousands of barrows over the tombs of their dead. Our third case, set in Bolivia's Titicaca Basin, illustrates how a dramatic ecological episode ruptured structural networks among Formative villages about 450 BC. For our final case, we turn to the iconic Mississippian town of Cahokia, outside modern St. Louis, where the near-simultaneous construction of both its Monks Mound and its Grand Plaza took place in a burst of ritual action at approximately AD 1050.

Langholt, Iceland (AD 1000–1050)

By the end of the tenth century AD, the growth of Iceland's Christian community was causing ruptures in the island's social fabric as the different legal and social traditions of Christian and pagan communities threatened to split society along sharply drawn sectarian lines. The situation reached a crisis in AD 1000, when these rival groups converged for the General Assembly, an annual meeting in which laws were made and legal cases heard. Open conflict appeared to be inevitable, as each side declared that it would not be bound to the other's legal system. To prevent the breakdown of Icelandic society, leaders from the Christian and pagan groups elected to arbitrate their differences. They asked þorgeir þorkelsson, the head of the General Assembly and recognized as one of the wisest men in Iceland, to determine which of these laws would prevail and agreed that they and their followers would abide by his decision. According to the story, þorgeir withdrew to his tent, covered himself with a cloak, and spent the rest of the day and night thinking. The next morning, he addressed the assembled factions (þorgilsson 1930, 66):

> It seems advisable to me that we do not let their will prevail who are most strongly opposed to one another, but so compromise between them that each side may win part of its case, and let us all have one law and one faith. It will prove true that if we sunder the law we will also sunder the peace.

He decided that all should accept Christianity. Farmers in attendance at the meeting were baptized, and Christianity was rapidly adopted throughout the country.

Recounted in the twelfth-century *Book of the Icelanders* (þorgilsson 1930), this story is a classic example of a historical event: a social rupture that promotes a transformation of structures through timely, contingent interventions by social agents. The conversion to Christianity had a profound impact on Icelandic society; the first Icelandic bishopric was established in 1056, the second in 1106, and a tithe was established in 1097 to finance the church—the first such institution in the Scandinavian world. Through the incorporation of Christian practices and institutions, the church became a fundamental feature of Icelandic politics and a major center of wealth and power in its own right.

How are the structural transformations associated with these new practices visible in the archaeological record? The moment of conversion during the General Assembly is not archaeologically visible, but the subsequent and widespread adoption of Christian practices is. Structural changes associated with Iceland's conversion to Christianity were manifested in the built environment. The first Christian churches were constructed in the eleventh century, as pagan mortuary practices were replaced by burial in Christian cemeteries (Vésteinsson 1998). Previously, pagan burials had been associated with farm boundaries and with old roads that were located some distance from domestic buildings (Friðriksson 2004). Household churches and cemeteries were located much closer to the heart of the farmstead. There were also changes in burial treatment. Pagan burials, for example, which were biased toward adult males (Eldjárn and Friðriksson 2000), gave way to more inclusive practices (e.g., Byock et al. 2005; Zoëga 2004). These changes in ritual practice suggest that the incorporation of Christian cultural schemas was associated with transformations in household land and identity. The historical narrative of Christian conversion and institutionalization,

however, offers only limited insights into the context and significance of transformations in those structures.

There are indications that productive land was under increased pressure at the end of the tenth century. Iceland was first colonized during the late ninth century, and its initial settlers were able to claim extensive lands while establishing dispersed farmsteads. The *Book of the Icelanders* states that the land was "fully settled" by AD 930, after which time there was little immigration (þorgilsson 1930, 62). The initial settlement was a disorganized process accomplished by individual expeditions (e.g., Pálsson and Edwards 1972), and it resulted in a particular set of householding and landholding structures. The initial settlers imported social institutions, including hierarchy and private property, but with abundant land they had little direct control over land and labor not immediately tied to the household. While households were highly stratified internally, including landowning family members and their servants and slaves who had no land and limited rights (Karras 1988), there was little institutionalized inequality among landowning families. The result was a society of relatively independent households, each with its own farmstead property.

As populations increased, existing land claims were divided into new, smaller farm properties as later generations established new households. Land pressure was also exacerbated by environmental degradation. Overgrazing soon began to cause erosion in the fragile highlands (Amorosi et al. 1997; McGovern et al. 1988). The loss of highland pasture put pressure on farmstead productivity, contributing to the abandonment of highland areas (Sveinbjarnardóttir 1992; Vésteinsson 2003). This combination of demographic growth and ecological degradation contributed to a crisis when the available productive lands could no longer sustain the division of farmland into new, independent households. A novel pattern of division developed in the eleventh century, one in which small farmsteads were bound to large farmsteads and their concomitant landlord-tenant relationships.

The transformation of landholding practices is evident in the changing settlement patterns of the Langholt area of northern Iceland, where the Skagafjörður Archaeological Settlement Survey has been studying this region's history of settlement and land division (Bolender 2006; Steinberg 2004; Steinberg and Bolender 2005). The temporal sequence in Langholt exhibits distinct phases in the social practices of land division and farmstead establishment, shedding light on the transformation from a largely independent landscape to a hierarchically ordered political landscape. The Christian institutions introduced after conversion played a significant role in that transformation.

Two farms, located at the north and south ends of the study area (fig. 1), have been dated to the settlement itself (ca. AD 870–950) and suggest that initial settlement was highly dispersed. Additional farmsteads were founded in the second half of the tenth century; these shared many features with independent farmsteads of the initial settlement period,

suggesting a process of land division that generated new, independent farmsteads and that may represent the breakup of the initial land claims among multiple heirs (Bolender 2006). The system of land division into independent farmsteads seems to have been unsustainable, and the eleventh century saw a radical transformation in the pattern of new farmstead establishment. The new farmsteads were all smaller than and closer to existing farms. It is unlikely that these smaller farmsteads were independent of the larger farms on whose land they were established, and later documents identify many of them as tenant properties that belonged to the larger, previously existing farms. This new pattern of farm establishment represents the permanent transformation of Icelandic land division structures. Additional farmsteads were established after AD 1100 in Langholt, but they were all small dependent properties belonging to earlier farmsteads. The creation of new independent farmsteads did not occur again until the second half of the twentieth century.

This process of land division and subdivision in the Langholt region indicates one solution to the land crisis, with social structures based upon the independent farmstead being replaced by novel structures of interhousehold hierarchy ordered through landlord-tenant relationships (Bolender, Steinberg, and Durrenberger n.d.). It is against this background of land division that we must assess the introduction of Christianity and the transformation of the ritual landscape. In the period after conversion the Icelandic church was only weakly integrated. Churches were erected and maintained by individual landowners upon their own farmlands. In the survey region, many of the independent farmsteads became church farms, but there is no record of churches at small farms. Farm churches served as the ritual centers for local communities (Vésteinsson 2000), providing new social schemas that supported interhousehold inequality.

Historical and archaeological data from Iceland offer complementary views on the crises that resulted in the adoption of Christianity near the end of the first millennium. While the actual, transformative moment of conversion at the General Assembly left no physical trace in the archaeological record, the introduction of Christian religious schemas is clear, as are their new roles in the transformation of household and landholding structures. The key issue is not whether this introduction of Christianity and its hierarchical schemas was necessary for the structural transformations that produced and maintained interhousehold inequalities. Hierarchical institutions already existed, and Icelanders had to look no farther than Scandinavia and Britain for models of political hierarchy. Given the diminishing availability of land, it is possible that the development of institutional inequality among households was inevitable (Durrenberger 1991, 1992, 1998), and other paths to interhousehold inequality are easily conceivable. But the adoption of Christianity was linked both to existing structural strains in Icelandic society near the close of the tenth century and to their resolution in the new structural relations of the eleventh.
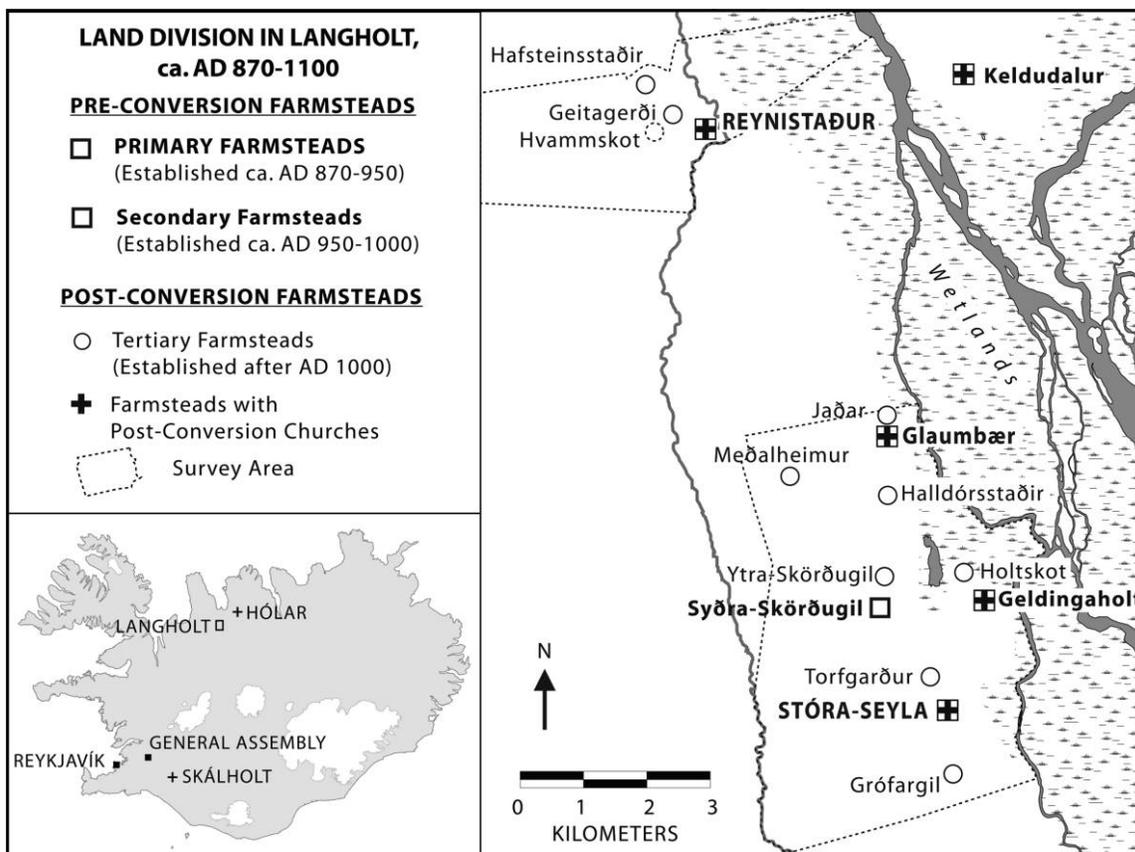
Figure 1. Land division in Langholt, Iceland, ca. AD 870–1100.

Thy, Denmark (1700–1500 BC)

At the beginning of the Early Bronze Age, about 1700 BC, people in Thy, on the North Sea in the extreme northeast corner of Jutland, Denmark, and throughout Scandinavia began to transform the landscape massively. In just a few generations, they built thousands of barrows—each a mound of turf covering a central individual entombed within a stone cist (Kristiansen 1998). If a chieftain or a warrior, he was accoutered with his bronze sword and other weapons and finery; if a woman, she was adorned with elegant bronze jewelry. Upon each hill, ridge, or rise, barrows stood visible against the horizon for many kilometers. Often, there is evidence that Bronze Age people rebuilt and reused these monuments, sometimes placing them in long lines that suggest genealogies. Some barrows were quite low (perhaps only 1–2 m high), while others were substantially larger, rising to more than 4 m in height. These largest barrows were spaced fairly regularly, at 10–15 km, on high points that made them intervisible, and the highest density of barrows occurred around them. Mirroring this hierarchy of mortuary monuments was a hierarchy of wood-frame farmhouses. Most were about 18 m long, with about 100 m² of roofed space, but the chiefly

halls were much larger (34 m with 200 m² of roofed space) and better constructed. The Early Bronze Age landscape exhibits a rapid rebuilding—a pulse that substantially restructured the organization of Thy society (fig. 2). How can we explain this radical transformation?

The preceding Neolithic Age represents a sequence of long-term social processes (Jensen 1982; Price, Gebauer, and Keeley 1995). During the Neolithic, gradual population growth and changes in the subsistence economy were associated with anthropogenic changes in plant communities. Pollen diagrams document these environmental changes and illustrate how they were related to human settlement and subsistence (Andersen 1993; Steinberg 1997; Earle 2002). During the fifth millennium BC, a mixed alder and oak forest covered most of Thy. Particularly along the Limfjord (in the east of Thy), the local Ertebølle culture is known from a string of shell middens, and its subsistence economy was based on fishing, gathering, and some hunting. Coastal camps were home bases from which groups moved seasonally to find naturally available foods. Through the fourth to the early third millennium BC, the primary forests of Thy were partly cleared to create agricultural fields. Polished axes, for example, which were
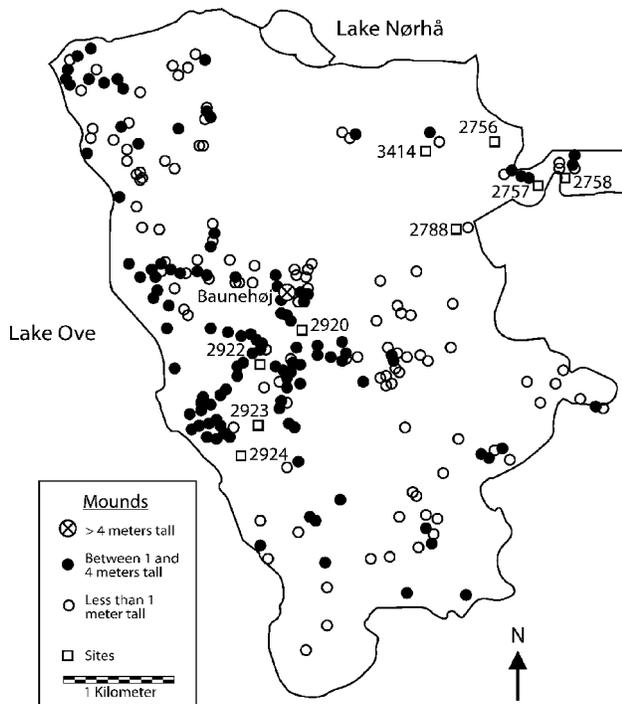
Figure 2. Barrow construction in Thy, Denmark, ca. 1700–1500 BC.

used in agricultural clearance, are widespread throughout the area. The number of settlements increased significantly, though most of these were small and fairly impermanent. The subsistence economy during this time depended upon cereal crops and a mixture of domestic animals.

At about 2700 BC, the forests of Thy were rapidly cleared to create considerable open grasslands. While there are limited data from settlement excavations, it is presumed that the subsistence economy was now more focused on animal husbandry. Judging from the distribution of diagnostic artifacts (especially battle axes), populations were quite broadly distributed; few settlements have been identified, however, suggesting a relatively mobile lifestyle. After about 2400 BC, the percentage of forest cover appears to have remained stable, but secondary forest species replaced primary stands. The increasing quantity and distribution of settlements and diagnostic artifacts (especially flint daggers) indicates both that the local populations were growing significantly and that there was probably more emphasis on intensified farming.

The built environment during Thy's Neolithic Age was tied to its social order, and three physical changes were particularly dramatic (Earle 2004). First was the progressive opening of the landscape: fields and grassland replaced perhaps half of the forest as Thy's population grew and its subsistence economy intensified. Second was the construction of burial monuments that permanently planted a group's ancestors in place and thus defined the rights of people to their land. During

the Early and Middle Neolithic, the local people organized themselves in communities materialized by such burial monuments. For more than a millennium, they erected dolmens, long barrows, and megalithic chambered tombs across Thy. In the late middle Neolithic, the preferred form of monument shifted to small clusters of low barrows, and these were often situated close to the older monuments. For over 500 years at the end of the Neolithic, however, very few new monuments were built, though the earlier record of monumental construction would have remained highly visible and likely offered a basic structure to community land. Third was the changing pattern of settlement. Through most of the Early and Middle Neolithic, settlements were dispersed, impermanent, and unsubstantial. Then, as mound building stopped in the Late Neolithic, substantial wood-frame houses were built near fields, and we believe that these represent the creation of farms as landholding units. At the close of the Neolithic, Thy's landscape was open, with older burial monuments associated with community lands and permanent farms associated with individual families. And then came the Bronze Age.

The ubiquity of Early Bronze Age monuments and the speed of their construction offer powerful evidence of transformative change. During a brief period after 1700 BC, Bronze Age people built more than 2,000 new barrows across the open landscape of Thy's rolling grassland. There were, however, strong elements of continuity with the preceding Neolithic. The construction of mortuary monuments enjoyed a long tradition in Thy, and the construction of these new ones made a clear reference to the past. But in the terms of this paper and of Sewell's analysis, the material transformation of Thy's landscape would seem to have been an event that ruptured long-standing relations between people and their productive facilities, rearticulating structural schemas and resources through the built environment of mortuary monuments.

Most important for this new structural articulation were the radically transformed property relations that girded an emergent political economy through land ownership. In the Early Bronze Age, the political economy was based on prestige-goods exchanges that moved bronze long distances for local manufacture into weapons and decorative property (e.g., Friedman and Rowlands 1978). In Thy, located on the outer fringe of these prestige-goods exchanges, access to metal wealth must have depended on the ability to control the production of exports, which could then be exchanged for metal. The most likely exports from Thy were cattle and their hides. We know that during this period animal husbandry was dominated by cattle herding (86% of domestic fauna) and that stone tools were most commonly used to work hides (40%) (Aperlo 1994; Bech 1997; Earle 2002). To control cattle export, however, would have required ownership of the area's rolling pastures, and the rapid construction of barrows in Thy probably reflects this eventful transformation of property relations.

The rapid and eventful construction of barrows during the Early Bronze Age was an enclosure movement (Earle 2004).

The landscape of open pastures had long been held in common, with rights to land asserted through mortuary monuments and communal ceremonies that bound the living with their ancestors. In the Early Bronze Age, however, a new ruling segment built individual mortuary monuments that expressed the lineages of warriors and chiefs. This new form of monument construction would thus have effectively circumvented community schemas regarding access to pastures and thus to cattle, asserting individual ownership of these key structural resources. Chiefs came to power asserting novel schemas regarding productive rights to pasture, ones that permitted them to monopolize cattle exports traded for bronze, which in turn became weapons and other symbols of their authority. These schemas for hierarchy, prestige, and privilege transformed social structures and the economy on which they were based.

Chiripa, Bolivia (450–400 BC)

At approximately 400 BC, villagers at the archaeological site of Chiripa, located on the southern shore of Bolivia's Lake Titicaca, began to expand an earthen platform that visually dominated their settlement. Atop this platform they built a compound of 14 interconnected stone-and-adobe chambers arranged around a central sunken court (fig. 3). Andean archaeologists have long recognized this facility—known as the Upper House complex—as a seminal architectural development (e.g., Bandy 2001, 2004; Bennett 1936; Browman 1978,

1998; Chávez 1988; Hastorf 1999, 2003, 2005; Kidder 1956; Portugal Ortiz 1992; Stanish 2003). Interpretations of the complex, however, have either incorporated it within a gradualist, evolutionary framework, associating it with the emergence of "social and political ranking" (Stanish 2003, 132), or used its form and contents to provide a synchronic snapshot of social relations in the Middle Formative period (Bandy 2001, 128–33; Hastorf 2003, 322–27; 2005, 78–82). Both of these modes of temporal analysis are essential to archaeological explanation, but neither problematizes the construction of the Upper House complex in an *eventful* way, as constituting a historical episode of structural rearticulation.

Chiripa is located on the Taraco Peninsula, a 20-km-long spit of land that reaches into Lake Wiñaymarka, the small, southern part of Lake Titicaca. This area is part of the altiplano, a high, flat, nearly treeless plateau surrounding Lake Titicaca at elevations that exceed 3,800 m a.s.l. The peninsula itself was first occupied about 1500 BC, and by 800 BC it was packed with as many as nine villages; Chiripa, at 7.5 ha, was one of the largest of these (Bandy 2001, 118). Most of these farming villages, small and large, were marked by a novel style of public ritual architecture, in which multiple stone-and-adobe chambers were placed atop an earthen platform situated so that it commanded the visual geography of the settlement. Both at Chiripa and at the neighboring site of Alto Pukara, such ritual facilities, which Beck (2004) has referred

Platform Complex at Alto Pukara
(ca. 750-450 B.C.)

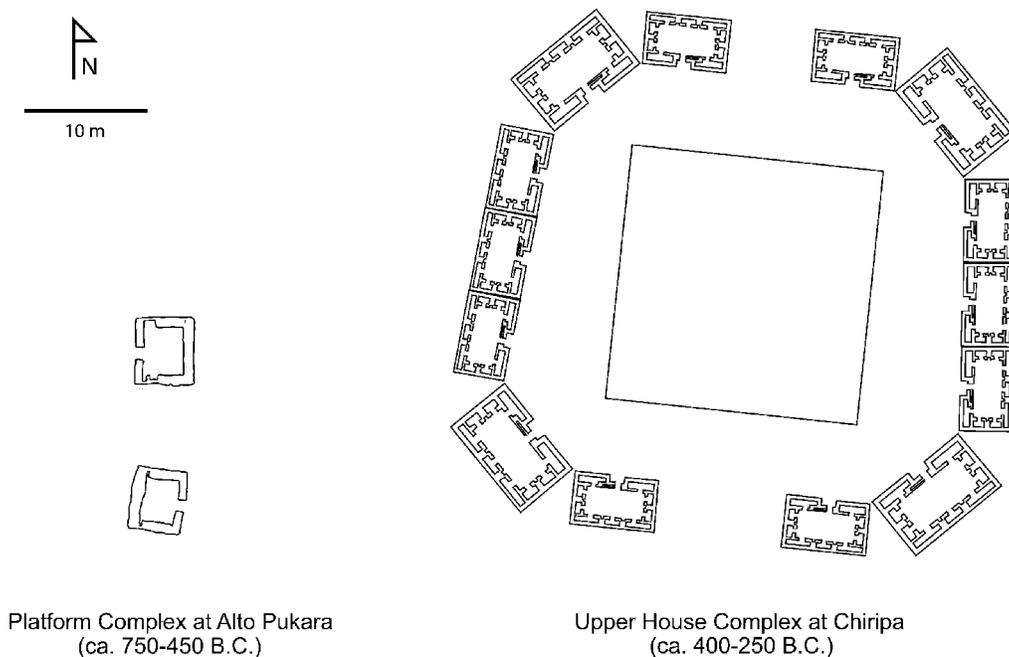Upper House Complex at Chiripa
(ca. 400-250 B.C.)

Figure 3. Reconstruction of the Upper House complex at Chiripa (ca. 400–250 BC), with Alto Pukara complex (ca. 750–450 BC) for comparison; Upper House reconstruction modified from Bandy (2001, fig. 6.6).

to as platform-chamber complexes, were in use by 750 BC (Beck 2004, 336; Hastorf et al. 1997, 61) and served—among other things—as places to keep the bones of the dead (Beck 2004; Hastorf 2003). The construction of these complexes just as the peninsula came to be densely packed with settlements was likely associated with scale-related conflict and stress, especially with conflict over use-rights to the lakeshore's finite resources (Bandy 2004; Beck n.d.). By raising a platform complex and planting the dead within it, a village proclaimed cosmological rights to its place on the Taraco Peninsula (Beck n.d.; Hastorf 2003).

Village autonomy (political, economic, and ritual) appears to have been relatively stable until approximately 400 BC, when an ecological episode precipitated dramatic structural transformation along the peninsula and beyond. Limnological analysis of cores from lake-bottom sediments (Abbott et al. 1997) indicates that Lake Wiñaymarka's water level dropped 10–12 m below its overflow level (16–18 m below the modern lake level) during a 200-year period beginning about 450 BC. This episode, likely due to prolonged drought (Bandy 2001, 137), had a profound impact on the Taraco Peninsula. Wiñaymarka is relatively shallow—most parts are less than 20 m deep—and therefore was nearly dry from 450 to 250 BC. Bandy suggests that "in its place was an immense grassy plain, crossed by small, meandering rivers and dotted with marshes" (p. 137). Shortly after the onset of this episode, within the brief span of two or three generations, a correspondingly dramatic change took place in the monumental landscape. The earlier platform complex at Chiripa was razed and then entombed beneath the larger, more elaborate Upper Houses. At about the same time, complexes at some nearby sites, including Alto Pukara, were carefully and ritually sealed, never to be used again.

The reduction of Lake Wiñaymarka triggered what Sewell (2005, 228) might refer to as a "cascade" of ruptures that durably transformed structural networks across the Lake Titicaca Basin. Existing land tenure and property schemas, for example, would no longer mobilize the resources available in agricultural and lacustrine zones, while schemas about water, fertility, and cosmological sanction—as mediated through the ancestral dead—could not accommodate the fact of the lakeshore's retreat. In short order, as disjunctions at one structural locus created ruptures across a vast range of others, schemas such as these were separated from material experience. Modern parallels to this event are illustrative. Drawing on his discussions with informants in the northern Titicaca Basin, Erickson (1999, 637) observes:

> During the long droughts of the 1860s and the 1940s, enormous areas of lake bed became dry land. These areas have deep, organic-rich soil that is highly prized by local farming communities. . . . My informants in Huatta [near Juliaca, Peru] eloquently spoke both of the horrors of long-term drought and the joy of farming these new lands. They described piles of threshed quinoa and potatoes as large as

houses. Huattefios also told of how the communities who control lakeshore territories managed to become "rich" during the droughts by selling the abundant surplus produced on newly exposed lake bed and renting those lands to those less fortunate.

Such a situation may have confronted Formative villages on the Taraco Peninsula in the aftermath of Wiñaymarka's drying. The relatively rapid loss of lakeshore resources would have stimulated agricultural productivity, probably within the span of a generation, as newly exposed lands came under cultivation. It should not be surprising, then, that the importation of olivine basalt hoes into the southern basin reached an unprecedented level during this time (Bandy 2001, 146). Demand for basalt hoes derived from the opportunity seized upon by some corporate groups to increase their holdings and their social leverage through intensified farming. The drying episode opened more areas for cultivation, some of which would have been of better quality than others, with better soils and better access to water. Villages with more and better land would have had more success attracting new members than villages with poor land or with less good land available. Also, well-situated villages may have created new schemas for renting land—but if not for money, as in Erickson's ethnographic example, then for what?

This brings us back to the construction of the Upper House complex. The Upper Houses constitute, in part, a spatial rearticulation of structures transformed in a cascading series of occurrences. But rearticulation here is also constituted in the ceremonial closing of an earlier complex at Alto Pukara; the moment of rearticulation entailed both an act of appropriation—as materialized in Chiripa's Upper House complex—and an act of acquiescence—as materialized in Alto Pukara's loss. The closing of Alto Pulkara's facility seems to have been not an act of violence but a careful and deliberate performance that was likely enacted by the very people who used it (Beck 2004, 341). They submitted, that is, to the loss of their own complex just as the Upper House expansion at Chiripa was getting under way. Moreover, given the considerable scalar disparities between earlier complexes and the monumental Upper Houses, Chiripa's expansion may actually have demanded the labor and tribute of nearby villages such as Alto Pukara.

The rearticulation of structural networks along the Taraco Peninsula thus invoked a novel reinterpretation of schemas for labor, property, political authority, and ceremonial sanction—all of which, in turn, mobilized the resource arrays transformed in the course of Wiñaymarka's drying. By appropriating sanction to maintain a platform complex, Chiripa proclaimed far more than exclusive rights to a style of architecture, for a platform and its associated chambers sustained a rich symbolic load (e.g., Beck n.d.). A platform communicated its people's claims about the primordial past, about their place upon the land, about their common identity, their community, and about the relationships that situated their

social lives. To close one's own platform and to bend to another's appropriation of its ideology would have been to transform—to subsume or break, perhaps irrevocably—the charters inscribed therein. This novel rearticulation, as manifested by the Upper House complex, was a fundamental episode in the social history of the southern Titicaca Basin. In this event, ritual and political authority reached beyond the autonomous village, sanctioning for the first time a regional institution.

Cahokia, Illinois (AD 1050–1100)

At approximately AD 1050, the site of Cahokia, in the American Bottom of the Mississippi River valley, rapidly grew in size and scale to become a leading center of the Mississippian cultural expression (Alt 2006; Beck 2006; Dalan et al. 2003; Emerson and Pauketat 2002; Hall 2007; Kelly 2002; Milner 2006; Pauketat 1997, 1998, 2004; Saitta 1994; Schroeder 2004). In 50 years, its mound and plaza arrangement (marked by truncated, pyramidal mounds), shell-tempered pottery, and wall trench house construction—to list several important material features of this broader culture pattern—became recognizable as a cultural entity across the American Southeast. Many of these Mississippian features (e.g., truncated mounds and shell-tempered pottery) had earlier histories in other areas but were combined in a unique manner to stabilize as a novel set of social structures only after Cahokia's AD 1050 event (Brown 2004). Researchers widely acknowledge that dramatic changes occurred during this time but hold divergent positions on their significance. Sewell offers a productive perspective on how to cast these changes as another instance of a cascading series of events.

Cahokia went abruptly from a linearly spaced series of dwellings clustered around scattered, small-scale plaza courtyards to a planned settlement of enormous scale. Before the AD 1050 event, the Cahokia settlement was strung along the silt and sand ridges that rose above the floodplain of Cahokia Creek. At around AD 1050, an architectural focus was superimposed on this sprawling settlement. This focus took the form of a massive 10-m-high earthwork raised in a single, quickly implemented effort. Over time the platform was raised incrementally to a final height of 30 m, and by AD 1200 it had lengthened and spread to cover an area of 7 ha. For a century this central earthwork, now known as Monks Mound, remained a simple geometric pyramid—the conceptual hub of Cahokia's newly conceived ritual universe. Radiating in four directions were large open plazas that organized public performance according to a predetermined cosmological plan. Its integrative importance is indicated by the engineering of a flat ground surface that extended fully 1 km south of it where ridge and swale landforms had existed previously. This southern and largest plaza, known as the Grand Plaza, is the best-defined archaeologically. Small mounds and specialized buildings of varying size flanked each of the plazas (Kelly 1997), accentuating scalar disparities with the central mound (fig. 4).

On its north, Cahokia reached across the intervening waterway of Cahokia Creek to integrate another community within its extended settlement plan. This unification was implemented by an intermound geometry along regular, measured distances. A base line set through Monks Mound was oriented to a sightline with the equinoctial sunrise (Dalan et al. 2003, 74; Sherrod and Rolingson 1987). The resulting town plan assumed the form of a diamond-shaped zone of interlinked, smaller-scaled communities that measured 4.5 by 3 km (Dalan et al. 2003, 125). At least 100 mounds stood inside this precisely defined settlement configuration. What makes this an episode of regional significance is the near-contemporaneous emergence of other mound centers in the American Bottom (Kelly 2002), though none of these others displayed Cahokia's prominent central mound and cruciform plaza arrangement.

Cahokia was built to attract people. The archaeological signatures of these social aggregations are the substantial accumulations of feasting-related materials deposited in borrow pits. Feasting alongside these pits is indicated by deer bones, ceramic finewares, cedar bows, and other ritually significant plant remains, tobacco seeds, and marine shells (L. Kelly 2001; Pauketat et al. 2002); the wing bones of rare birds were identified in one sample (L. Kelly 2001). Dalan et al. (2003, 74) note:

> During the Lohmann phase [AD 1050–1100], we see the by-products of the center's shift from profane to sacred. New communities were established in widespread patches throughout the area that we identify as the Cahokia site. . . . Cahokia was no longer a compact village and was clearly on its way to becoming a dominant regional center.

Although there was no simple, evolutionary sequence of plans to the mound and plaza arrangement at Cahokia, certain elements were present beforehand. Pre–AD 1050 settlements such as the George Reeves phase village at the Range site, located 20 km south of Cahokia, consisted of a rapidly evolving sequence of large communities of houses and courtyards arranged at the outset around a pair of small, rectangular plazas. This double plaza arrangement appears to foreshadow the two-part division of Cahokia's Grand Plaza (Dalan et al. 2003). Each of these early communities had a central, communal pole with four sacred pits positioned around it in the cardinal directions (Kelly 1996, 2002). These elements, symmetrically organized in the village courtyards and plazas, became symbolic resources for subsequent elaboration during the Mississippian period.

Subsistence change obviously fueled the AD 1050 event but did not determine either its precise timing or the form that it took. For two millennia, the American Bottom had been occupied by communities practicing a mixture of farming, fishing, and foraging. After AD 700, this farming increasingly included the cultivation of maize (e.g., Delcourt and Delcourt 2004; Schroeder 2004). The subsistence shift to maize production was therefore well under way years before the AD 1050 event and continued afterwards, to stabilize only about
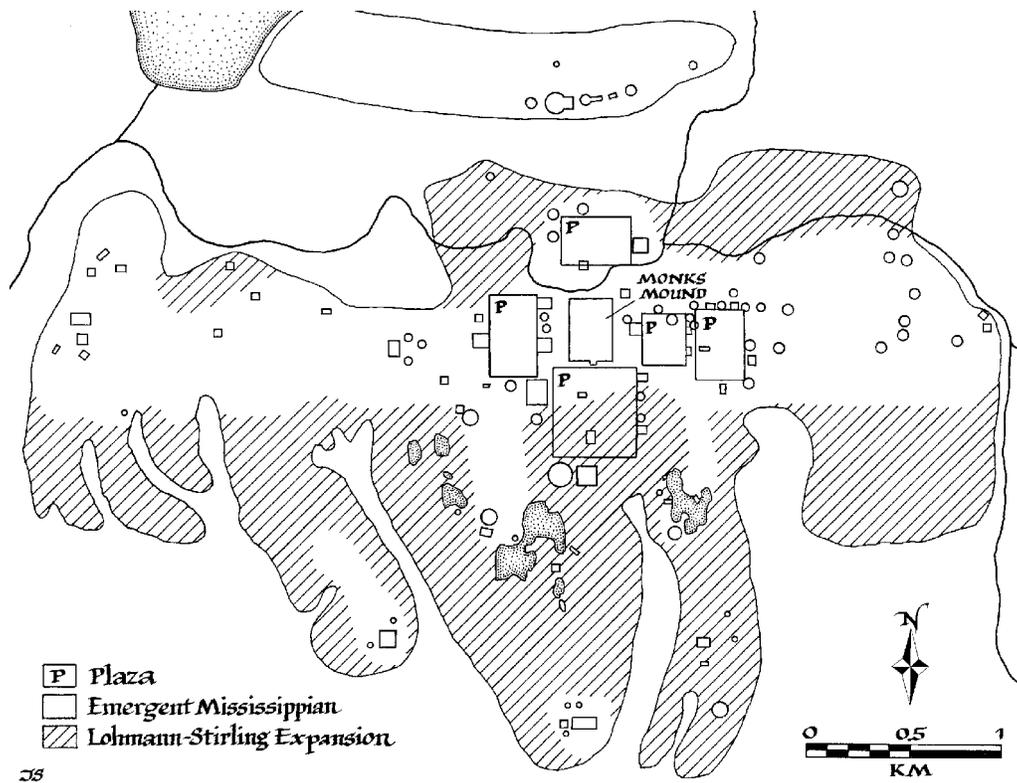
Figure 4. Expansion of Cahokia, showing major mounds and plazas in relation to the pre–AD 1050 settlement (Emergent Mississippian) and the post–AD 1050 settlement (Lohmann-Stirling phase); modified from Dalan et al. (2003, fig. 20).

AD 1200. A corresponding increase in population has been detected by Milner (1984, 1986), only to be followed by decline after AD 1100. Given that subsistence practices were transformed over a period that spanned several centuries, the timing of the event took place neither at the inception of subsistence change nor at its culmination.

Trends set in motion during these preceding centuries increased the size of the valley's population, creating a density that was critical to the unfolding of the event. The settlement distribution by overall size and by the number of houses per component offers a measure of the population influx that accompanied this transformation. The population size implied by the number of houses at Cahokia cannot be accounted for by any natural increase; rather, as valleywide populations came to be concentrated at Cahokia and other American Bottom centers, valleys secondary to the Mississippi and Illinois were stripped of residential populations (Kerber 1986).

The aforementioned architectural layout of the Range site offers the first evidence of social ranking in the American Bottom, along with an initial—if localized—attempt at political consolidation (Kelly 2000, 169, 172). But such early steps toward the material representation of ranking appear to have been isolated, with no visible, physical evidence for broad-scale integration. Given the increases in population and settlement size, a lack of intersettlement integration must have been a source of stress. Thus the AD 1050 event can be interpreted as the consequence of an increasingly burdensome way of doing things that was a source of corrosive conflict. However, the true flashpoint had not arrived, as there is no evidence that defensive works were a part of the material landscape between AD 900 and the late twelfth century (Kelly 200, 167).

We can propose that as maize and other cultivated plants began to occupy more of the subsistence effort, the labor to clear, till, and protect the crop assumed an increasingly greater claim on the subsistence budget. These structural resources can thus be visualized as promoting the interests of family over those of extended kin and those of extended kin over community. This promotion of household interests over those of the community placed stress on the prevailing collective schemas essential for continued small-scale community survival—stress that ultimately promoted the disjunction of Late Woodland resources and schemas. Community survival relied upon extensive social networks that reached outside the family

to ensure access to food and shelter during times of want and access to defense during times of need. Population increase and a greater dependence on maize fields thus created a crisis for existing schemas of intergroup reciprocity and hospitality. Structural rearticulation, in this case, involved not a surrendering of local economic interests but the reconfiguration of preexisting schemas that assigned the locus of community-wide social obligations to a novel realm. As a part of this rearticulation, the Cahokia community was organized around these recognized spatial modes of intergroup relations.

The creation of these elements, however, appears to have belonged not to a single occurrence (what Pauketat [1997] dubbed the "Big Bang") but rather to temporally distinct if related parts of Cahokia's eventful transformation. Sewell notes that any event is bounded at the analyst's discretion: "deciding how to bound an event is necessarily a matter of judgment. One may state as a rule of thumb that how an analyst should delimit an event will depend on the structural transformation to be explained" (Sewell 2005, 261). The inception of the centralized town plan at Cahokia may have taken place just before the emergence of the remodeled ceramic inventory that conventionally marks the start of the Mississippian period about AD 1050 (Kelly 2006); the initial appearance of wall trench building foundations also dates to this time. The implied temporal lag with which these material markers make their appearance at Cahokia undercuts the conceptual unity of the Big Bang and reinforces the idea that the AD 1050 event was, upon closer inspection, a sequence of creative solutions to structural disjunctions. The novel uses of shell tempering and wall trench construction can therefore be modeled as contingent upon the successive remodeling of the mound and plaza architecture. The latter may be conceived as inventions that furnished novel rituals and their related schemas, the former as an organized way of managing the labor required to erect housing on a much larger scale. They are historically linked elements of an event that forged the cultural complex we identify as Mississippian.

Conclusions

Historical events effect the durable transformation of structures both by disjoining the points of articulation among resources and schemas and by offering new opportunities for their creative rearticulation through human agency. Here we have presented four case studies that emphasize the materiality of events, particularly their spatial consequences in the built environment. In so doing, we distinguish between material and textual modes of eventful analysis. Each of the cases—medieval Iceland, Bronze Age Denmark, Formative Chiripa, and Mississippian Cahokia—rests either primarily or entirely upon archaeological data, and we believe that, as a group, these cases highlight the potential contribution of an eventful archaeology toward the comparative study of social change.

Textual and material modes of eventful analysis should be seen not as elucidating different kinds of events but rather as

offering different approaches to the transformation of structures. In ideal circumstances, eventful analyses would grant equal weight to both modes, drawing freely from techniques developed in history and the social sciences, but the kinds of evidence available to historians and archaeologists are usually different. For example, textual accounts may reveal little about everyday practices or the transformation of cultural landscapes. Alternatively, temporal resolution and the difficulties involved in identifying and assigning meaning to specific features of the material record may limit an archaeologist's ability to describe the sequence of occurrences that constitute disjunctures between one structural articulation and the next. In the archaeological record, events may appear as no more than a replacement of one pattern in the built environment with that of another. The result is that textual and archaeological (material) analyses of any particular event retain quite different modes of epistemology and description. However, we suggest that while events always realize some material form through the transformation of structural resources, the recording of such events in the form of text is but a recent and relatively uncommon phenomenon during the *longue durée* of human history. An explicitly archaeological perspective such as the one we have outlined may thus lead eventful analysis to encompass a far greater breadth of the human experience than text alone.

Among the more intractable interpretive problems for archaeologists is the sudden appearance of novel patterns in material culture. Interpretations often rely upon concepts such as the emergence of class or status hierarchies, the development or intensification of subsistence regimes, urbanization, migration, colonialism, and state formation, to list but a few. These have become standard theoretical devices in archaeological thought, and we recognize that they and their like have offered a wealth of insight for interpretive understanding of archaeological remains. But these concepts have more than a passing resemblance to the proverbial black box in that they can also mask the agency of past actors engaged in the transformation of social structures. The understandings gained through theoretical devices such as these help archaeologists to set the analytical stage on which transformative events take place. They do not, however, explain events in terms of human agency—virtual schemas and material resources, unexpected disjunctions and creative, unpredictable rearticulations. Sewell's theory of the event thus offers a new and rich vocabulary for opening these conceptual black boxes and disentangling the particular sequences of action that we infer from the material remains of the past. We may begin to distinguish event from nonevent and, using the event itself as a temporal datum, to illuminate and demystify the volatility of pre- and postevent conditions.

Finally, we would like to revisit briefly the problem of agency. Recognizing that archaeological perspectives on agency are legion (for recent discussions of this diversity see, e.g., Dobres and Robb 2000, 2005; Hegmon 2003, 219–22; Joyce and Lopiparo 2005), we resist the temptation to pre-

sume that ours will offer the best fit for all occasions. But it does have much to recommend it, not least of which is that by asserting what agency is, it also asserts what agency is not. Sewell defines agency as a "capacity to reinterpret and mobilize an array of resources in terms of cultural schemas *other* than those that initially constituted the array" (2005, 142–43, italics added). We suggest that the corollary is also true: agency is not the capacity to interpret and mobilize an array of resources in terms of those cultural schemas that *initially* constituted the array. Thus, our conception of agency is not reducible to social action (Dobres and Robb 2000, 8). Agency invokes the potential to transform—rather than merely to reproduce—the prevailing structural networks, and it is during historical events that creative manifestations of agency realize their capacity for reshaping social structures. In so doing, and as illustrated by our case studies, they also reshape the material substance of the built environment.

Acknowledgments

Comments

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Do the case studies in "Eventful Archaeology" constitute historical explanations or just-so-stories? This is a crucial question, because the article represents an important attempt to integrate built environments, agency, and history.

Historical explanations involve structural resistance or impetus, on the one hand, and processual drive and direction, on the other. Beck et al. rely heavily on Sewell's (2005) notion of the "event" as a means of historical explanation; in other words, they use his formulation as a theory of history. Callinicos (1995, 98–103) argues that a theory of history should have three components: a theory of structure (e.g., modes of production), a theory of transformation (ranging from a universal mechanism to individual mechanisms for each type of structure), and a theory of directionality (progress, regress, or cyclical). Similarly, nineteenth-century models of paleontology were seen by Gould (1997, 1–3) to have consisted of

alternative responses to three questions involving the mode of change (internal/external [environmental]), the tempo of change (gradual/punctuational), and the direction of change (steady state/directional). These formulations are very similar (and others could be cited). Structure is implicit in the paleontological case, referring to the biological structure of organisms, and the mode and tempo of change relate to the nature of the transformation. In Gould's terminology, "steady state" can refer to "cyclical" and "progress" and "regress" are subsumed under "directional."

Structure cannot be readily characterized by a formal definition (Sewell 2005, 125–26). The term's use in the social sciences is rather metonymic or metaphoric in ways that make structure generally understood but correspondingly imprecise. For Sewell, structure applies to (reproducing) patterns of relations among people. Structures are constituted of the dual implication of virtual schemas and actual resources. As Beck et al. note, structural transformation, the rearticulation of schemas and resources, results from the fact that "(1) structures are multiple and (2) intersecting, (3) schemas are transposable, and (4) resources are polysemic and (5) unpredictable." Sewell is interested in what he terms "events," which occur in the three stages: a sequence of happenings results in multiple ruptures in structural articulations of schemas and resources, producing the conditions under which agents create novel rearticulations (structures). In terms of directionality, there may be gradual, long-term processes at work (e.g., climate change, increasing complexity), but these define the contexts of events. History is not embodied in these trends (contexts); rather, "events *make* the course of histories" and the direction of events is contingent.

Callinicos's (1995, 103–4) commitment to process (and specifically the structured nature of change implicit in historical materialism) suggests that he would reject Sewell's formulation as an incomplete theory of history, since for Sewell there is no inherent directionality. Gould's take on Darwinian evolution (e.g., 1989), moving beyond nineteenth-century conceptions, readily allows for the contingency of history. Advances in evolutionary development, however, call into question the true randomness and contingency of biological evolution, pointing instead to very deep structural (genetic) constraints and canalization (Carroll 2005). Beck et al.'s attempt to develop a theory to account for the appearance of novel patterning in the material record is undermined by Sewell's playing down of structure.

In the formula for structural transformation noted above, schemas can be transposed, but the manner in which they might be modified is never addressed. Consequently, change (in material culture in this case) can appear through use of a schema in different contexts or different schemas in a given context, but there is no transformation of schemas themselves—agency is restricted in scope. Truly novel situations can arise only in relation to the unpredictability of resources (at least from the point of view of the agents). Directionality can be imparted to history via external but not internal fac-

tors. In the case studies presented by Beck et al., agency (problematically defined only in terms of the capacity to transform [e.g., Joyce and Lopiparo 2005]) is apparent in the occurrence of the material transformations, but impetus for the changes lies in the "context": population increase (or imbalance in the Bolivian example) is a factor in all four cases, and novel external events—the introduction of Christianity, bronze, and maize, the drought in Bolivia—are also important. Each of the historical narratives provided represents a persuasive history (within the realm of archaeological precision), but Sewell's concept of event contributes only to our understanding of (some of) the mechanisms of change. Structures can impart directionality and pattern to historical change, and subsuming historical explanation under the concept of event fails to address this aspect of history. Beck et al. provide narratives that explicate the relationship between changes in the built environment and a given event, but their approach fails to elicit a more encompassing historical explanation. Nevertheless, this article is a step in the right direction.

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History is about structures, sequences, and events, and some events are outstanding and transformative. By framing archaeological discussion in these terms, Beck et al. have taken processual archaeology into the logics of history and vice versa, and this move should be welcome. They have chosen to focus on what I could call "Sewellian events," on the materiality of spatial transformations and their role in historical change. I agree with them that as archaeologists we have privileged access to the past *through* and *because* of its materiality. Although the archaeological record is frequently the result of processes, it is also a combination of occurrences that can be woven into historical conjunctures. It is this triple and almost Braudelian condition of the archaeological record that may give archaeologists a panoptic perspective on time and space. But in order to recognize Sewellian events we require a detailed knowledge of structures and temporalities.

One cannot overlook the importance of structures. Beck et al. know this, for they have selected four exemplary cases of the role of canonical *contradictions* in structural change—"disjunctions of structural principles" (Giddens 1979, 141), a term unexpectedly absent considering its underlying role in the argument. Social change took place under the structural conditions detailed by their narratives of conjunctures, and the material forms that these different cases took are, as they show, concretions of historical significance. Of course, some overdetermination occasionally runs against their perception of events as *making* rather than *shaping* the course of histories (as in the Icelandic case, where formal inequality was most likely "inevitable"). Nevertheless, these four cases perfectly represent

both the creation of a brand-new materiality through agency and the weight of inherited circumstances in the way it was finally shaped. As the introduction of Christianity in Iceland, the construction of Cahokia, the enclosure movement in Thy, and the rise of the Upper House complex at Chiripa show, it is especially during *revolutionary* periods—radical structural transformations—that human beings use and transform their traditions to "present the new scene of world history in this time-honoured disguise" (Marx 1977, 301).

Yet it seems to me that Beck et al.'s narratives would better match what the *Annales* termed "conjunctures" than the *événementielle*. This is probably because they are keen on overcoming the intrinsic limitations of the archaeological record when analyzing the three steps in which events are believed to take place: contingent happenings, ruptures, and rearticulations. They wisely take advantage of the critical disadvantages of absolute chronology. As we can only exceptionally control the sequence with detailed precision, certain processes can—or perhaps should—be analyzed in terms of events. Nevertheless, the historical significance and history of all their case studies in spatial transformation will vary depending on factors such as their tempo and the number of underlying organizational principles. One would then have to determine why and when an eventful narrative would be more enlightening than a processual one. The challenging relation between events and processes does not seem to me resolved by Sewell's fractal characterization of the temporality of events: something "not self-evident but rather . . . constructed theoretically in relation to the time-scale of the processes being studied" (2005, 121–22). Where he pushes the argument to the limit, arguing that when we increase our scale of observation (and thus blur the details) what we may think of as "gradual processes or trends begin to look like events" (p. 121), Beck et al. seem to be more cautious. Although they do not reject "the significance of gradual, long-term processes in social change," the connection between events and processes in their theoretical argument is somewhat vague and would benefit from clarification.

I wholly endorse Beck et al.'s call for a more historical way of thinking about our archaeological record. The flexibility of late processualism has allowed American archaeologists to flirt for some time now with history without really engaging in historicist arguments. For such a venture, a dialectical way of thinking about structures, conjunctures, and events seems to me essential.

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Beginning in the 1980s archaeology experienced the same "historic turn" (McDonald 1996) that other human sciences did, taking various paths (e.g., Hodder 1987; Kirch 1992; Knapp 1992; McGlade 1999; Pauketat 2001). This article

should be considered in that context. The chief issues at hand are how well the authors have engaged Sewell's theorizing and what has been gained by bringing together disparate archaeological examples of historical events.

In a series of essays, some of them appearing in a 2005 anthology, William Sewell thoughtfully detailed the theoretical concepts and methods for conjoining structure and eventful temporality, integrating signification and materiality. He reworked, to great effect, Giddens's (1984) theory of structuration and Sahlins's (1981, 1985, 1991) anthropology of history, producing modifications of it that could advance archaeological interpretations. Giving credit where it is due, this is *Sahlins*'s theory of the event, as Sewell (2005) states. Not starting with Sahlins means that his singular conceptualization—resulting in an "*indispensable* theory of history" (Sewell 2005, 224)—has been played down in these analyses.

"Event," long opposed to "structure," was treated in dialectical fashion by Sahlins (1985, xiv, 153; 1991, 45, 82) as a "relation" between a happening and a structure or structures. This "structure of the conjuncture" is key to explaining the dialectical relationship between structures as schemas and as material and other resources (the "world") (Sahlins 1985, xiv, 138). Events must be interpreted by human agents and typically instantiate structures, which are otherwise only potential (p. 153). For historians, however, events are disruptions to reproductive order (Sahlins 1991, 45; Sewell 2005, 100). Thus, it is important to distinguish "historical events" that transform structures as a rare subclass of all events (Sahlins 1991, 45; Sewell 2005, chap. 8).

At the heart of Sahlins's theory of the event, endorsed by Sewell (2005), is an interpretivist paradigm. Sewell's schemas are semiotic codes (2005, 167–68), and "symbolic interpretation is part and parcel of the historical event" (p. 245), necessary to explain *how* structures become disarticulated and rearticulated as played out in the world. Absent a "thick" synchronic understanding of pre-transformation and post-transformation structures, there can be no convincing demonstration of a historical event (p. 185). This interpretive approach linking semiotic practices and the "built environment"—the latter treated by Sewell (2005, 362) as an epistemic metaphor for the entire material social fabric—is not developed by Beck et al., and therefore Sahlins's/Sewell's eventful history is not sufficiently engaged.

In these case studies, notable relatively rapid changes in settlement or architectural patterns are treated as "the close of an event" whose beginning is then searched for. However, the structural transformations are more asserted than demonstrated; how structures were rearticulated through novel interpretations of happenings in the world is not explained. As a result, the explanations look mechanistic, which is what Sewell (2005, 369) was trying to avoid. In contrast, Barrett's (1999) study of structural changes in early Britain is a more satisfying example of the dialectic between semiotic schemas and continually reshaped landscapes, although he drew his inspiration from Giddens.

The four cases demonstrate the difficulties recognized by Sahlins (1991, 86) and Sewell (2005, 121–22, 211, 228, 260) in distinguishing historical events. Rapidity of change is not a necessary criterion, for historical events may endure for centuries, nor is the scale of the structures whose transformation results from such events (Sewell 2005, 121, 211). Beck et al. do not always make explicit which event in a long sequence of changes is the point of rupture, a "novel conjuncture of structures" (Sewell 2005, 223) that resulted in their transformation. Only Brown mentions that singling out one such event is a judgment call (Sewell 2005, 211, 260). He seems to suggest that structural ruptures began with the growing reliance on maize agriculture, the establishment of Cahokia's town plan being one of its "cascading" ramifications—a contingent event with its own transformations.

Sewell (2005, 111) introduced his eventful temporality to conjoin sociologists' concerns for comparison and causal regularities with historians' emphasis on unique, contingent events. An important contribution of Sahlins's cross-cultural investigations (e.g., Dirks 1996, 23) is recognizing that different cultures have different modes of historical production (Sahlins 1985, x, 34, 53). However, here the opportunity for cross-cultural comparison has been missed, as there is no synthesis or basis for comparison.

Finally, 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 historical event. Everyday events that reproduce structures are "the practical realization" of structures in specific contexts "expressed in the interested action of historic agents" (Sahlins 1985, xiv). Agency is critical; "reproduction is never automatic" (Sewell 2005, 143). Indeed, archaeology can also contribute to the human sciences by paying attention to processes neglected by historians—namely, the reproduction of structures, especially over long periods of time, even during episodes of historical transformation (e.g., Sewell 2005, 271). This would require taking more seriously Sahlins's (1991) articulation of higher- and lower-order structures (see Sewell 2005, 209–10), akin to Shore's (1996, 53) "foundational schemas" that structure multiple specific cultural models.

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The stakes of Beck, Bolender, Brown, and Earle's "eventful archeology" became clear to me with their third case study. Here they specify that eventful archeology represents a third mode of temporal analysis, contrasted with a gradualist, evolutionary approach, on the one hand, and a synchronic snapshot of the archeological record, on the other. When it comes to theorizing change, they suggest, neither of these two approaches "problematizes" the site "in an *eventful* way, as con-

stituting a historical episode of structural rearticulation." Sewell's writings on the event offer them a way to see change in more agentive terms.

By that measure I find the article convincing and important. The authors accomplish what they set out to do, namely, "situate [Sewell's] theory within an explicitly archeological framework." Yet I am intrigued by the road not taken here. Beck et al. write that they do not question whether Sewell's theory of the event is relevant to archeology. But it seems to me that Sewell's formulation (as they read it) unnecessarily limits their project. Though he takes pains not to reduce culture to a single structural totality, Sewell nevertheless defines the event as an isolable point. Following him, Beck et al. write that "episodes of disjunction" are marked by "a heightening of emotion and an improvisation of ritual," conditions which "cannot be socially tolerated for long." What comes before and what comes after such upheaval must therefore be a period of stability, if not stasis, characterized by the reproduction of structural frames.

I am curious whether Beck et al. can envision an eventful archeology that does not require such a static, structural reading of culture and change. Must an event be defined solely in opposition to stability, continuity, and repetition? Is there a way to theorize events without recourse to the language of "heightened emotions" and the unsustainability of creativity and experimentation? Obviously some events are more transformative than others, but must a theory of the event rest on a view of history as stasis punctuated by disruption? This is not to argue for a developmentalist or teleological view of history. I concur with Beck et al.'s desire to foreground the unpredictability of events and the importance of agency and experimentation. But I wonder if what they are moving toward is not a more poststructural reading than Sewell's processual and schematic form of structuralism.

There is a useful analogue here to debates in the cultural anthropology of modern war. Contemporary violence, one argument goes, is the breakdown of the social order. It is the unsustainable state of exception. With peace, the "event" of war is ended, the social order reconstituted. Here Beck et al.'s Sewell-inspired theory of the event and the rearticulation of structures finds a parallel. The event is marked by its contrast to its more stable conceptual opposite. But another approach in the anthropology of modern war argues that it is an event precisely because it is *not* exceptional. Its dynamics are not qualitatively different or easily disentangled from those of periods of peace. War is not the unstable negative term, the shadow process to the normally functioning repetition of the social order. What marks war's "event-ness" is the particular productive forms which experimentation, rearticulation, and repetition take during that period—not the absence of these conjoined forces in peacetime. The upshot is a theory of the event that foregrounds processes of both change and continuity without recourse to the language of structure and stasis.

This latter approach to the event of war also draws attention to the arbitrariness of the term. It suggests that the discursive formulation of some occurrences as "events" worthy of the name is not a given. This leads to my second concern about adhering too closely to Sewell's framework. Beck et al. acknowledge that an event is always "bounded at the analyst's discretion." Yet they also write that distinguishing structural rearticulation from structural repetition is integral to their (and Sewell's) task. I am not sure that these two assertions live so easily together. One acknowledges the analyst's role in defining some occurrences as eventful; the other presumably does not. A poststructuralist approach need not reduce the object of inquiry to pure discourse but would allow the analyst to locate agency in the events of history while acknowledging that framing the archive differently would locate agency elsewhere.

In short, a theory of significant, transformative events that did not depend on a contrast with static structural repetition would avoid finding agency in some parts of the archive by evacuating it from others. One can, I would suggest, argue for the exceptionalism of certain dynamics without suggesting that only at these moments do human beings undertake the creative labor of "making, inhabiting, and reshaping space."

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Beck et al. have written an important and compelling article. They are correct, I think, to see potential benefit for archaeology in adopting Sewell's thinking on the "event." As related in this article, Sewell's understanding offers some important refinements on the work of Giddens and is an advance in theoretical work on structure and agency in general. His reformulation of concepts of the event is one that archaeologists should take heed of. In particular, his redefinition of "resources" is particularly pertinent to archaeologists' efforts to understand materiality, for example, the materiality of the built environment.

While agreeing, then, with the thrust of the paper, I would like to comment on three points.

First, I am not sure that I fully understand the relationship of Sewell's conception of the event to our understanding of long-term process. Beck et al. write, "Events, thus conceived, do not *change* the course of histories, driven forward by process; rather, events *make* the course of histories, which follow no intrinsic pathway but the contingencies of occurrence, disjunction, and rearticulation." I am not sure that this is completely satisfactory; it is at the very least a little abbreviated. I would welcome a response more fully setting out this distinction between changing and making. Of course, the difficulty of relating event to process alluded to here is not a new one. It is an arguable weakness of Giddens's structuration

theory that he fails to specify why, in this or that context, structural transformation rather than structural stability should occur. It is also a well-rehearsed issue in the application of agency theory to archaeology that long-term structures and processes do exist, and the approximation of these to an agent-centred approach is not always an obvious one (Kristiansen 2004 discusses this point).

Second, it would be interesting to hear more on the relationship between the concepts proposed here, largely derived from sociology and social theory, and more traditional archaeological and anthropological terminology. The much older terminology of pattern, horizon, and tradition casts a long shadow over archaeological discussions of material change, whether or not it is overtly acknowledged. Similarly, whether we like it or not, the idea of cultural process remains central to much of what we do as archaeologists; ideas of process and the long-term cast a long shadow over what the material patterns of horizon and tradition mean in anthropological terms. I think that this older terminology is relevant and provides an implicit context within which more recent thinking should be understood, even if Beck et al. leave it largely unreferenced and undiscussed. I am not criticizing their argument but rather requesting a more explicit connection with (or distancing from) more traditional concepts.

Third, while I am in agreement with the thrust of Bolender's argument on medieval Iceland, I think there are other dimensions to the adoption of Christianity that would fill out and deepen what is necessarily a very brief outline. In particular, when considered comparatively across different contexts across early medieval Europe, the introduction of Christianity can be understood in part as the deployment (whether voluntarily or by force) of a new set of resources, in particular linking to legitimation through cultural memory. In the early Middle Ages, one of the attractions of Christian conversion was the access it offered to a set of symbolic and material resources stretching literally across the continent—most obviously, to the symbolic resource that was Romanitas, the memory of ancient Rome, repeatedly and obsessively referred to by early medieval elites. Christianity, then, not only legitimized internal inequalities but also tied Iceland into networks and patterns of circulation across a world stretching from the North Atlantic to the eastern Mediterranean and beyond, with the Catholic Church headed by the bishop of Rome at its centre. Bolender's argument is quite localized in referring principally to the internal dynamic of resources and inequality; there is this external, international story to be told as well. One might see his account as the central element in a wider, Sahlins-style argument about the intersection of local and global forces in a colonial world, though it has to be admitted that whether one can apply concepts of the "colonial" to the periphery of the medieval world is a debate for another day.

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In this ambitious article, "unexpected ruptures" are presented as challenges to archaeological interpretation. Implicitly, this suggests that continual reproduction of societies is normal, and, in the final section of the paper, agency is redefined so that human actors "merely" reproducing structures are said not to exercise agency. The social labor needed for the continual reproduction of society should not be so easily taken for granted. Orlando Patterson (2007), reviewing Sewell's *Logics of History*, draws attention precisely to the problematic emphasis on change and relative inattention to continuity in Sewell's concept of the event. As Patterson (2007, 1288) notes, Sewell's requirement that an event result in structural change would call into question the status of many sequences of historical occurrences recognized as significant—Patterson's example being Nat Turner's slave rebellion—that resulted in reinforcing existing structural relations. So, from the outset, I find myself wondering whether archaeology will really benefit from adopting a social theory based on considering only those moments when structures tear apart and only those actions that change structure.

Sewell's emphasis on "events" may appeal to archaeologists because often the coarse grain of archaeological deposits makes it seem as if things did "appear suddenly." But this is an outcome of our methodologies and, in particular, of the way we think about site formation processes. Archaeologists cannot treat our post-facto recognition of structural change in long-term perspective as evidence of the event, since, as Sewell defines it, an event requires recognition by contemporaries. Patterson (2007, 1288) notes that, despite this requirement, "major transformations in society are often the consequences of quite adventitious events that went unrecognized by contemporaries or are the sudden threshold transformations resulting from the accretions of minor, unnoticed events over time." It is worth emphasizing that Patterson's counterexample here is the introduction of a technological change, the invention of the QWERTY keyboard. Many technological innovations whose histories archaeologists document were likely never seen as "events" by the populations in which they developed. I have argued that even moments of change materially obvious from our post-facto position may have been unintended consequences of actions by knowledgeable agents who were not trying to change structures, although change was one of the outcomes (Joyce 2004).

Patterson (2007) suggests that Sewell's reworking of Giddens is part of the problem, with an emphasis on structures rather than on structuration. Structures—including material conditions—are simultaneously, not sequentially, the medium and the product of practice. Beck et al. follow Sewell in citing

Giddens's definition of structure as composed of rules and resources. A more useful way to approach Giddens's work is by emphasizing structuration, not structure—the process, not any abstraction we might make by considering its products. This point is made by, among other writers, Sewell (1992, 4; cf. Patterson 2007, 1289). Archaeologically, we need ways to think about structuration—a process in time—from its material traces (Joyce and Lopiparo 2005).

It is questionable whether Sewell's analysis helps foreground materiality as active in structuration. In an illuminating discussion of buildings as materially structuring action, Thomas Gieryn (2002, 38) has noted that "Sewell's otherwise useful emendations of Giddens's theory of social structure nevertheless sustain [Giddens's] view that buildings are what people do with them. . . . For Sewell, buildings *reveal*: their role in structuration is to bring into the actual world of material resources otherwise merely virtual cultural schemas." Buildings and, by implication, other materialities that are the literal stuff of archaeology become texts to be read rather than media of action (see Sewell 1992, 9). This leads to Sewell's division between rules or schemas as virtual and resources as material, a distinction that reproduces a dualism that undermines the duality of structure and deprives materiality of any active role. When Giddens (1979, 55) talks about structuration as the ongoing flow of human action, we come closer to a way to avoid the dualism that is evident when Beck et al. write that from Sewell's perspective structures "are dual in that they simultaneously articulate virtual schemas and material resources, each of which validates and actualizes the other."

One alternative to the problematic division of action and product of action that is particularly helpful in thinking about place is to follow the lead provided by geographer Allan Pred (1984) and view places as "historically contingent process" in a constant state of becoming. We might also work through the difficulties of the proposals of Bruno Latour (1999) and arrive at ways of thinking through archaeological deposits as traces of the endless motion of humans and nonhumans in the past. Freezing the ongoing flow of human action analytically with the concept of "event" simply allows us to make discontinuities we see in archaeological deposits match social concepts. We might rather change the way we describe and think about depositional histories so as to represent them as they are, as products of continual, ongoing action by humans and nonhuman forces alike.

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Beck and colleagues make an interesting contribution to the retrofitting of sociological theory to the study of long-term materiality. Literal applications of agency or practice theory are not possible in archaeological practice because social theorists, Sewell among them, did not derive abstracted knowledge from or gear their theories toward the material conditions of archaeological observation. Adapting such knowledge to historical records that are nonliterary and coarse-grained is a challenge indeed. What Beck et al. have done here is draw on a distinction Sewell makes between virtual and material realms of human experience to mobilize the concept of the event in explaining structural transformation. The comparative approach of this study is noteworthy for its potential to elicit the sort of generalizable knowledge expected of scientific inquiry. The approach here is also ambitious, provocative, and ultimately engaging in its method of historical narrative structured by the premises, assertions, and metaphors of Sewell's brand of agency/practice theory.

Many points of discussion arise from this paper, but given the space constraints I address only a few. One has to do with the relationship between virtual and material realities as manifested in the built environment. Having embraced Sewell's distinction between schema and material resources, Beck and colleagues examine four cases of structural change marked by durable ruptures between the ideal and the real. Understated in the case material is the commonality of constructed ritual places. Each case involves the materialization of idealized culture in its most potent guise. The resulting built places are essentially structure or schema set in earth and stone. Whether we ascribe agency to such resources or situate their power in the ritualized actions of human agents, ritual places themselves are virtual in the sense that the cultural rules used to construct and give them meaning are carried in the mind. Insofar as the mind is transposable (migration, interaction), so too are the symbolic resources that occasionally get materialized in monumental ritual acts. I therefore suggest that Sewell's distinction between schema and material resources is not so useful for explaining durable ruptures if it denies virtual (context-free) status to material representations as a means of transposing (reinventing) schemas. Analyses at increasing scales in archaeology show that ruptures have spatiality beyond the specific material resources of a particular people.

A second point of intersection in all the case studies that is played down by Beck et al. is the influx of foreigners. The contingent happenings of their case studies all include encounters between people of distinct cultural dispositions. This is familiar terrain for historical anthropologists and archaeologists of colonial history. The sorts of ruptures that ensued from global-scale contacts have been thoroughly described by Sahlins, among many others, and the process of "novel rearticulation" is stock material in the literature on hybridization, syncretism, creolization, and ethnogenesis. Like those of colonial histories, the eventful processes of the case studies involve convergences of different streams of history. Convergences such as these have characterized the human condition since the Middle Paleolithic, if not earlier, contributing to our monospecific condition, as well as periodic structural change. I don't know whether Beck et al. would agree with any of

this, because they play down if not deny the existence of "foreigners" in places as cosmopolitan as Cahokia. I have no personal purchase on Mississippian-period archaeology, but I tend to be swayed by the multifaceted evidence for cultural plurality assembled by Pauketat, Alt, Emerson, and others. Archaeologists working in various contexts around the globe are drawing similar conclusions—that major structural changes like those discussed herein often take shape in the coming together of people who would have identified themselves as different. It would therefore appear that the effective events of major structural change in most cases are those of encounter. It follows that archaeologists might benefit from more serious attention to the material dimensions of asserting, reproducing, and transforming cultural constructions of the "other."

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Beck et al. provide a thoughtful and engaging exploration of Sewell's concept of the event and the productive result of imbedding it in an archaeological framework. The article offers numerous avenues for critical discussion, but I will identify three.

First, relationships of cause and effect and agency are not clearly articulated in the case studies. In their conclusion, the authors indicate that they are concerned to theorize change in archaeological evidence in such a way as to avoid "black box" theories and therefore use Sewell's theory to put agency back into the picture. However, what seem to be nonagentive causes appear in the case studies, and their relationship to agentive change is difficult to discern. For example, in the Icelandic case study, the occupation of arable land is an indispensable cause of the changes in social relationships and landholding. This seems a different sort of cause from the conversion to Christianity, in which new schemas are adopted at the behest of a few members of the society. Both are necessary to the changes in the built environment, but does Sewell's theory provide a way to describe how these might operate together? The confusion here may result from the terminology, in which multiple terms are used for overlapping categories of change and occurrence. Some changes are transformative and result in altered schemas and structures, while some appear to be merely change. Likewise, some happenings are events, but some appear as blips on the radar. The terminological blending of the static and the temporal (structure as process and event as transformation) may, in the end, obfuscate the answer to one underlying question: why did these changes happen? Lurking within this is the scholar's authority: it seems that one does not know if something is an event until after it has finished happening or until a scholar says so.

Second is the place of agency, which is important to the cause-and-effect relationships that Beck et al. seek to problematize. They note that they follow Sewell's definition of agency—a "capacity to reinterpret and mobilize an array of resources in terms of cultural schemas other than those that initially constituted the array." As they note, agency is defined in terms of structural change; so then, if one uncovers a new patterning that the scholar identifies as an event, do we extrapolate that some human agency must have been at work? Perhaps this is merely a problem that could be cleared up if the discussion of agency were given more space in all the case studies so that different factors influencing a happening (or event) could be assessed.

Third, in the medieval Icelandic case study, the issue of human agency is harder to discern because of the complexity of occurrences, agency, and event. Two major happenings seem to be in play: the conversion and the change in a hierarchically ordered political landscape. The conversion "plays a significant role" in the change in landscape, but this tells us little about what that role was. Also, it is difficult to see, given the information provided, how Sewell's theory would explain the conversion event. What caused some Icelanders to advocate one religion over another, and where did those different Icelanders stand in the changing social arena? This is not to say that the textual evidence would be better in this case. It would not. In fact, it is a bit troubling to see Ari þorgilsson's *Íslendingabók* used as a relatively transparent historical source. As a conversion account, it presents some very particular problems for its reliability, and as a textual historian familiar with this case I would have liked to know more about what the material evidence tells us about what changed when the Icelanders became Christian. The historical account is redacted around 120 years after the event by a Christian who was fostered to one of the families depicted heroically in his narrative and who dedicated that narrative to Iceland's two bishops. Unsurprisingly, then, it tells us much more about what twelfth-century Icelanders said happened in 999 than about "what really happened." I would like to know more about what the archaeological evidence tells us about the conversion and what structures changed as a consequence or, perhaps, shifted a particular way because alternatives were offered by Christianity. In short, a fuller analysis of this event based on the archaeological evidence would be more than welcome. This would no doubt shed light on the theoretical issues of agency, event, and transformation that Beck et al. rightly identify as important for this case study and others.

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It is gratifying, but at the same time somewhat disorienting, to see one's theoretical ideas applied in a discipline different from those for which they were initially developed. In my

case, the theory was aimed primarily at history, sociology, political science, and sociocultural anthropology—all disciplines based fundamentally on verbal evidence in written or spoken form. I would like to commend Beck, Bolender, Brown, and Earle for their concise, accurate, and respectful précis of my theory and for their creative and stimulating application of it to archeological problems.

My theory defines events as happenings that transform structures by disarticulating and rearticulating the schemas and resources of which structures are composed. In my analysis of the taking of the Bastille in Paris on July 14, 1789, the primary case I used to elaborate my theory, I emphasized the novel articulation between existing ideological schemas concerning "the people" as a source of abstract political legitimacy and existing schemas for urban uprisings as defenses against abuses of power. The resulting novel combination of these schemas created the new and potent political concept "revolution," according to which an uprising of "the people" can become the legitimate founding act of a new political regime. Resources were involved in this story in various ways, including the disastrous harvests of 1788 that had driven up bread prices and raised the general level of anxiety in the Parisian population and the seizure of guns and ammunition by the rebels that enabled them to hold Paris in the aftermath of the taking of the Bastille. The main transformation in the built environment that it effected was the rapid razing of the Bastille, a huge and supposedly impregnable royal fortress on the eastern edge of Paris, in the days immediately following July 14—an action that I, significantly in the current context, failed to mention in my account. The rapid dismantling of the fortress was both an important ritual statement of the triumph of the people over royal power and a significant military-strategic loss for the royal forces. My story of the taking of the Bastille and the theory of events on which it is based pivot, instead, on acts of linguistic transposition carried out primarily in the newly empowered National Assembly, in constant dialogue with events in the streets (Sewell 1996*a*, 2005). It is also true that most applications of my theory that I know of emphasize the transposition of schemas, sometimes to the exclusion of the resignification and remobilization of resources that I also insist upon in my theoretical writings about events (2005, 142–43, 213–18).

As archaeologists, Beck et al. necessarily come at the question of events (that is, rapid transformations of structure) from a very different angle. With the exception of the case of the conversion of Icelanders to Christianity, they must infer events from resulting transformations in resource arrays, particularly transformations of the built environment. They recognize that texts (or, I would add, oral statements or ritual performances) are crucial "for penetrating the complex webs of meanings that bind resources and schemas." But they are right to insist that "we need not know the exact meanings of structures to observe the consequences of their disjunctions and rearticulations—to undertake eventful analysis." Others can comment more knowledgeably than I about the impor-

tance of this move for the discipline of archeology, but I can comment on the value of this article for the theory and methodology of eventful analysis. The inaccessibility of the schemas underlying most events studied by archaeologists forces Beck et al. to concentrate their analysis on changes in the built environment, changes that historians (or sociologists or anthropologists working on the contemporary world) tend to ignore or marginalize (as in the case of the razing of the Bastille). I am convinced that historical or sociological analyses of events could be significantly strengthened by paying closer attention to the dynamics of the built environment. I find particularly valuable the suggestion, at the end of the article, that rapid changes in "the material substance of the built environment" might be used as a kind of tracer or assay for events. It might be argued that such transformations in the built environment are crucially important for locking into place the cultural changes initiated by events.

Beck and colleagues have creatively transposed theoretical schemas developed for dealing with textual accounts onto a new material object: the built environment. The consequence, as my theory of change in structures would predict, is a transformation—in this case a valuable enlargement—of the theory and practice of eventful analysis itself.

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Beck et al. have brought an important body of theory to our attention. They highlight Sewell's formulation of events as significant occurrences that transform structures. This view relates events to what Sewell calls "schemas" (Giddens's "rules") and ultimately to the resources agents employ to advance their agendas. Though inspired by Giddens, Sewell faults him for seeing rules and resources as "virtual." He thus appears to be grounding his concepts in materiality.

The materiality of resources *is* explicit in Giddens. His distinction between allocative and authoritative resources (1984, 258) stresses the connection of tangible assets derived from exploiting the material environment and the means by which people define their relations to each other and their temporal-spatial settings. When Sewell (2005, 135) notes, "The resources gained by peasants from the land they use will be determined by the convention of land tenure, the exigencies of customary law, the sets of obligations owed to kinsmen, and the agricultural techniques employed," he combines allocative and authoritative resources but leaves out such basic material features as soil fertility and rainfall. "Nonhuman resources have a material existence," but it is not as crucial as it should be.

What Sewell is not credited with is returning our attention to "cultural schemas," which I see, essentially, as "culture." Here his valuable work must be supplemented by Marshall Sahlins's formulation (esp. 2005). Sahilins shows that one of

the central problems of history is that culture is absent and therefore it lacks a major component of a truly explanatory framework. In contrasting the Peloponnesian Wars with the Polynesian Wars, he demonstrates that the differences between them, both between sea-based and land-based polities, cannot be fully grasped without understanding such cultural differences as the presence of the uterine nephew in Polynesia and its absence in ancient Greece.

To illustrate the significance of both Sewell and Sahlins, I would like to present an example from the Naco Valley of Honduras. This 100-km^2 basin was characterized by a gradually evolving structure beginning in the Preclassic (ca. 1200 BC [Urban and Schortman 2002]). The area's Late Classic rulers successfully challenged valley-wide canons of dispersed power and settlement when, from AD 600–800, they concentrated about one-third of the regional population within a 1-km radius of their capital (Urban and Schortman 2004). Their strategy combined allocative and authoritative resources in the form of acquisition and distribution of foreign goods (pottery, obsidian), monopolies over craft production and distribution, and access to high-prestige concepts and alliances expressed through foreign symbols they alone commissioned and possessed. This unprecedented attempt at political centralization was rejected by valley residents, led, I believe, by the artisans concentrated at La Sierra.

The Late Classic is the culmination of a long series of small changes in structure, what Sahlins would call the structure of the conjuncture. "This sort of structural compression is a hallmark of evenemential history: the working out of a long history in a short time and of macro-relationships in micro-acts" (2005, 132). The macro-relationships—dispersed power and settlement, widespread craft working, for example—had existed for centuries; the micro-acts were the introductions of symbols and the attempted consolidation of power: "attempted," for the state did not succeed. Evidence for this lies in the decommissioning of La Sierra's core, its buildings stripped of cut blocks used in later buildings and their cores capped with rocks and earth. This triumph of (at least part of) the commons can be seen in the huge kiln built at La Sierra after AD 800 (Urban, Wells, and Ausec 1997), much larger than needed to fire even substantial quantities of pots (Carter 2002 and unpublished field notes, 1996–97). Located at the top of a staircase made of recycled cut stones robbed from the core and incorporating blocks in itself, it was one of the most impressive constructions at La Sierra.

After the state failed, the valley returned to a dispersed network, with larger nodes housing local-level elites (Urban and Schortman 2004). To the Naco Valley's residents, it may have appeared that the valley had returned to traditional forms; in fact, the structure had been ruptured and reconstituted on the basis of previous conditions but irreparably different.

As Sahlins (2005, 128) remarks, developmental history is evolutionary; in the Naco Valley, this is seen in its continuous development from at least 1250 BC to the Late Classic. Sahlins

also notes that sometimes history is revolutionary or evenemential. Sewell makes similar points in different language. Beck et al. show how large-scale events visible in changing settlement patterns can be understood using the ideas of Sewell and Giddens and, I believe, Sahlins. Even smaller-scale prehistoric events, involving small groups and individuals, can be grasped using the ideas of structure and event, agency, and the structure of the conjuncture. In doing so, I hope that we will be able to return to that much-maligned core concept of our field: culture.

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While the thoughtful paper by Beck, Bolender, Brown, and Earle is very welcome, since it draws attention again to the short-term and specifically a notion of the event, engages with a series of case studies, and relates to ongoing debate about the relationship between agency and structure, it leaves much still to be discussed. We offer three preliminary comments.

First, we are concerned about the definition of "event." We are attracted, as are the authors, by the notion of being able to investigate change with far greater temporal focus, but their "event" (following Sewell) transcends the everyday sense of the immediacy of the event. There appears in fact to be a blurring of the short-term and process taking place over a slightly longer time scale (though still much shorter than *la longue durée*: a conflation of *l'histoire événementielle* and *la moyenne durée*). This amalgamation also goes back to Sewell's book (e.g., 2005, 210). In Sewell's terms (in turn discussing Sahlins), how do we distinguish between a happening that is to be regarded as an event and an incident that merely reproduces a structure? The argument appears circular. An event is the trigger for structural transformation, whereas other happenings or incidents (and Sewell also uses the term "episode") that are not perceived to produce dramatic structural transformation cannot by definition be truly classed as events.

The four case studies discussed show this tendency to conflate time scales. In the Icelandic case, as we understand the argument, the situation revolves the great meeting, the General Assembly, of AD 1000 and the collective decision to convert to Christianity. In the case of Cahokia, Beck et al. themselves appear to end by qualifying the notion of a single "Big Bang," relating changes to ongoing processes. Is this not what is going on in the case of Iceland as well? It is striking that on their account the first bishoprics were not established until a couple of generations later, in 1056; we are told only that the first churches are eleventh-century. Was this a Sewellian event after all, or an ongoing process that unfolded over the middle-term, say, across a couple of lifetimes, encompassing both the tensions that led up to the General Assembly and the institutional and other changes that gradually ensued?

Secondly, the spatial dimensions of the four case studies

are rather varied. In the case of Chiripa, the concern is with building in a single locale, albeit one in a strategic position. We are told very little about the spatial aftermath of the Icelandic conversion. Were the first churches geographically clustered, for example? How quickly did they spread? For the early Bronze Age of Denmark, the focus is on the pensinsula tip of Thy, but, as Beck et al. note at the start, the whole of Scandinavia can be seen to be involved in the same processes of change, to which one can also add significant swaths of western and central Europe. Thy might be seen as the end point or near the end point of a set of complex spatial relationships. Cahokia, by contrast and by common agreement, is very much at the center of an expanding network.

This all, thirdly, introduces a worry about dating. Sewell (2005, chaps. 8 and 9) does offer two closely worked case studies (in contrast, say, to Giddens), one of the French Revolution and the other of the dockworkers of nineteenth-century Marseille. The chronologies are hardly in question. Likewise, the account of Iceland is presumably founded on historically given chronologies and on tephrochronology. We are not told how the chronology for Chiripa is constructed, the expansion of the earthen platform being put at "approximately" 400 BC. The beginnings of barrow construction in Thy are likewise assigned to "about" 1700 BC; this may be based on a mixture of radiocarbon dating and typological studies. Finally, it is constantly asserted in the recent literature we have seen that Cahokia was founded about AD 1050, but again the basis for this is not presented.

This matters. It matters because it can be shown that mere visual inspection of radiocarbon results is no longer sufficient. This normally fails to account for "scatter," with the result that a given phenomenon will appear to have started earlier, gone on for longer, and ended later than was the case in reality (Bayliss et al. 2007). Furthermore, failure to use short-life samples may result in exaggeration of the age or starting date of a phenomenon. On a time scale of generations or lifetimes, it is possible to discriminate, within a Bayesian framework, between the date estimates for constructions and depositions that would previously have been lumped together (e.g., Healy 2004; Bayliss and Whittle 2007). In archaeology it is often difficult to get to the precision of the event in its common sense, but the means to get at a history of human action over generations and life spans is now routinely available for all archaeologies. We worry that the accounts here of Chiripa, Thy, and Cahokia, despite the many merits of this thoughtful paper, are still rooted in older and unreliable chronological methodology.

Reply

We are gratified by the thoughtful responses of our commentators and appreciate their close, careful reading of our paper. Their comments, while sometimes critical, offer us a welcome opportunity to address several important topics that may help to clarify and strengthen our arguments. Given spatial constraints, we will focus our reply on the broad theoretical issues raised rather than on the details of our particular archaeological cases. We would especially like to turn our attention to three far-reaching topics that emerge from this group of comments: (1) the nature of structural change, (2) the concept of agency, and (3) the relationship between process and event.

Before launching into specifics, we would like to reiterate the key thesis of our article. Sewell's theories of structure and event bring two important features to bear on archaeologists' efforts to understand unexpected disruptions in material-culture patterning. First, Sewell undertakes a reformulation of social structure that gives material resources the same consideration as schemas. Second (after Sahlins) he defines historical events as sequences of happenings that durably transform structures by disrupting the relations among resources and schemas. His emphasis on the materiality of resources and their equal role in the constitution of structures opens an eventful conception of history to archaeological interrogation. The structural disjunctions and rearticulations that mark the course of an event imply novel constellations of material resources—the kind of patterned changes that should be accessible through the archaeological record. Sewell's concept of the event promises nothing less than a historical perspective on structural change that sets the archaeological record on an equal footing with text.

Joyce reminds us that the reproduction of structures is never automatic and cannot be taken for granted. We agree, but our aim here is to understand a different problem: the abrupt undoing of structural networks and their subsequent rearticulations though human agency. She argues that archaeological recognition of sudden changes in material culture is only illusory, "an outcome of our methodologies" as archaeologists, and, what is more, that any archaeologist's "post-facto recognition of structural change" is insufficient for identifying events in Sewell's terms because these require acknowledgment by contemporaries. We are confident, however, that contemporary people would have recognized the occurrences that we describe in our archaeological cases as transformative—Cahokia's Monks Mound and Grand Plaza were built in a rapid burst, as were Chiripa's Upper House complex and Thy's first Bronze Age barrows. Offering instead, as Joyce does, that such locales were "in a constant state of becoming" misses our point: prior to these sudden bursts of activity and their associated ruptures of the structural fabric, the particular places that we describe simply *did not exist as such*. Phrases such as Joyce's may help us to understand the ways in which people used and conceived existing places through time, but they offer little guidance about those moments when people performed radical transformations of place, and this is precisely why we believe that Sewell's theory holds such promise.

Joyce refers favorably to Patterson's (2007) review of Sewell's *Logics of History*, citing two of the examples he offers in refutation of Sewell's theory of the event: Nat Turner's slave rebellion and the invention of the QWERTY keyboard. These are two specific cases that Patterson believes clearly merit acknowledgment as events but that for different reasons he asserts are excluded from Sewell's formulation. Patterson argues that Turner's rebellion, which unfolded in Southampton County, Virginia, in 1831, fails to meet Sewell's criteria for an event because its outcome was but the "*reinforcement of the Virginia slave system*" (2007, 1288, italics added). This argument, though, asserts a stasis for the structures of antebellum racism and slavery. Many scholars recognize instead that Turner's revolt significantly transformed—rather than merely reinforced—these racial and slaveholding structures. The program passed by Virginia's state legislature in 1831–32 made it illegal to teach slaves to read and write; it curtailed slaves' freedom of movement and denied both slaves and free blacks the right to conduct religious exercises; it curtailed the rights of freedmen, with the ultimate aim of forcing all free blacks to leave the state: it banned the dissemination of abolitionist literature and censored antislavery activities and debates (Cromwell 1920; Roper and Brockington 1984; Tang 1997). Measures similar to these passed rapidly in other Southern states, rearticulating slaveholding and racial structures disjointed in the aftermath of the insurrection. Although Turner could not have anticipated this tragic outcome, unintended consequences are essential to Sewell's concept of the event.

We concur with Joyce and Patterson that the invention of the QWERTY keyboard does not meet Sewell's criteria for an event, but we suggest that this is less a shortcoming of the theory than an indication that it should not be used to explain all modes of change and innovation. An event, according to Sewell, is a cascade of occurrences that disarticulates an existing structural network, offering new opportunities for creative rearticulation. It is difficult to conceive how the appearance of the QWERTY keyboard caused such ruptures in the social fabric, as Turner's rebellion clearly did. Our point is not that this innovation lacks historical significance but rather that Sewell's theory was never intended to address this particular kind of technological change. Not all change is eventful: most occurrences do not produce ruptures, and most ruptures do not produce events. Patterson (2007, 1288) and Joyce fault Sewell's position that events are unusual occurrences, but the occurrences that Sewell seeks to explain are unusual, sudden, and noteworthy. As useful as his theory is for understanding historical events, it should not be adopted as the explanatory solution for each and every mode of social change.

Charles's commentary tacks insightfully between Callinicos's philosophy of history and evolutionary theory in biology and in so doing provides an interesting perspective on the concept of structure. We agree that Sewell plays down the notion of a totalizing or all-encompassing social structure, but we view this as a strength of his approach. Instead, he explicitly emphasizes the multitude of historically contingent intersecting structures. Far from undermining our attempts to understand and explain novel patterning in the material record, this offers a necessary articulation of agency and structural change that engages and incorporates this record while at the same time considering how prior structural networks constrain later innovations. We maintain that the semblance of historical directionality is best perceived as an artifact of these structural constraints.

We agree wholeheartedly with Sassaman's suggestion that immigration often has a catalytic role in structural change, although its precise role in the creation of Cahokia is a matter of some debate. We also agree that constructed ritual places are among the most socially potent settings for studying structural transformation, as is clearly reflected in the four examples we selected. His suggestion, however, that ritual places must be conceived as simultaneously virtual and material—as both schema and resource—allows us to clarify a significant point. He notes that "ritual places are themselves virtual in the sense that the cultural rules used to construct and give them meaning are carried in the mind." We offer that it is these cultural rules or schemas that are virtual, not the places themselves; it is the memories of such places and the schemas they incorporate that people carry away in their minds. Sewell's theory *does* deny virtual status to resources such as physical places. The physical places themselves, without their accompanying rules or schemas, are structurally inert. Material representations are never context-free because they are inextricably bound to time, space, and quantity. But the schemas that accompany these representations—their symbolic content—are context-free and can therefore be transposed.

Whittle et al. question Sewell's treatment of the event as a flawed "blurring of the short-term and process taking place over a slightly longer time scale"—in Braudel's terms, "a conflation of *l'histoire événementielle* and *la moyenne durée*." But classificatory tools such as those defined in Braudel's well-known writings should not be confused with Sewell's perspective, for what the latter describes is no less than a theoretical relationship between agency and the historical events that transform an existing structural network. In these terms, some of our commentators are misguided in believing that the issue is one of proper classification. We believe rather that the key issue is one of analytical utility. The advantage of Sewell's approach is that eventful analysis leads one to ask of any particular example whether an event has actually taken place; indeed, close investigation may show that this perspective is inapplicable in a given case or, as Diaz-del-Rio comments, perhaps less enlightening than a more familiar processual narrative. Greater emphasis on in-depth analysis demands closer radiometric dating, new materials, or old materials not otherwise deemed relevant. But we will not arrive at a realization of relevance without first making such inquiries and following through with goal-oriented analyses. The actual sequence of occurrences is critical to this challenge,

since different analytical outcomes might result if the sequence were scrambled. We agree with Whittle et al. that the tighter the chronological control, the more convincing the application of Sewell's theory.

This leads us to the crucial question of when an eventful explanation of structural change is appropriate. The answer lies not solely in the identification of a sudden change or rupture in material-culture patterning. As Gillespie points out, "absent a 'thick' synchronic understanding of pretransformation and posttransformation structures, there can be no convincing demonstration of a historical event." Our comparative turn in the case studies was intended to show the broad applicability of Sewell's perspective to the archaeological record. A full eventful analysis requires an accounting of the particular structural articulations transformed in the course of the event. Such analysis avoids the pitfalls of inquiring "which . . . in a long sequence of changes is the point of rupture." We should not, that is, reduce eventful analysis to a simplified search for cause and effect. An event durably transforms the articulation of resources and schemas; it refers to the broad cascade of occurrences, to the disjoining of structures, and to their eventual rearticulation—it does not refer to a singular catalytic moment within this sequence. It is precisely this construction of the event that makes Sewell's perspective so compatible with the archaeological record, where we will never enjoy a full accounting of the individual acts or happenings that constitute the event.

Several of our commentators take issue with our conception of agency and its role in structural change. For Hoffman, our emphasis on the event renders "a static, structural reading of culture and change"—"finding agency in some parts of the archive by evacuating it from others." Gillespie suggests that we make a questionable trade-off by giving history back to "prehistoric" people "only to take away their agency except in rare moments of a historical event." Nowhere, however, do we assert that agency occurs only during eventful transformations. Sewell defines agency as a capacity to mobilize an array of resources in terms of schemas different from those that initially constituted the array; it does not follow either that this capacity is manifested only during historical events or that all manifestations of agency precipitate events. Rather, agency is constantly actualized in our daily lives when we as social agents apply novel cultural schemas to existing resource arrays or apply existing schemas to novel arrays. Agency as Sewell defines it necessarily results in structural changes, but in most instances these are localized and absorbed by the existing structural network without producing an event. Sewell's approach leaves us with more than a philosophically sterile either/or choice between stasis and event. It illustrates instead that agency and change are aspects of daily life but that there are episodes—albeit infrequent—when a cascading sequence of changes unbinds a structural network. It is this mode of transformation that constitutes an event in Sewell's terms. Each event is thus the product of agency, but not all manifestations of agency produce events.

Self appears to fault our case studies for drawing upon "nonagentive causes" and argues that "their relationship to agentive change is difficult to discern." We suggest that part of the problem may lie with the cause-and-effect terminology that Self has employed to make her point. Rather than framing his perspective in terms of cause and effect, Sewell writes of occurrences that alter the context within which people change or reproduce their existing social structures. Since such occurrences may derive from human or nonhuman sources, asking whether the occurrence is agentive or not seems to confuse the issue. For example, a prolonged drought may precipitate a cascade of ruptures as easily as might the crowning of a new queen, or perhaps the two kinds of occurrence unfold in tandem: the new queen is crowned just as the drought takes hold (or suddenly breaks). The issue is not the role of agency in occurrences themselves but the role of agency in the way an event unwinds within its particular historical sequence.

We appreciate the insightful comments of Johnson and Diaz-del-Rio, and although they open numerous points of possible discourse, we will limit our discussion to a subject that both reference—the relationship between process and event. Johnson rightly observes that our explication of this important topic is "at the very least a little abbreviated," but, as he also states, our challenge in clearly relating these concepts is not a new one. One way of thinking about the problem is to ask what happens before and after an event, before the occurrences that disjoin a structural network and after its rearticulation. We propose that this mode of temporality is marked by the accumulation of the occurrences absorbed by the existing structural network—which may be derived from agentive acts or structural reproduction or from nonhuman sources altogether. We are referring not to stasis, then, but to noneventful change. Such change is hardly passive, for these accumulations produce contradictions in the existing structural network, create contexts within which subsequent occurrences become eventful, and place constraints on the way events unfold. Perhaps it was a rhetorical overstatement on our part to imply that events can "make the course of history" apart from this accumulated noneventful change. Our point was that events do not break or disrupt this path of history but are integral to its shape and texture. Of course, so too are noneventful occurrences. What, then, is process? Is it the temporality between events, or is it the sweep of accumulated and eventful change? And, if the latter, does this not imply that process is history? These are more than just rhetorical questions, and although we can do little more than pose them here, we do agree with the commentators that this is a feature of Sewell's approach that requires further thought and explication.

Finally, we thank Sewell for his generous comments on our article. We stated at its outset our belief that archaeology can make a unique contribution to eventful analysis, and it is gratifying to see that he agrees. Eventful analysis provides a theoretical framework within which archaeology can extend

history beyond text. Perhaps the distinction between process and history has too often turned on the presence of text: people with text have history, and those without text have process. If so, then Sewell's theoretical perspective suggests a rapprochement between these concepts as well as between the practices of archaeology, sociology, and history. We look forward to continuing the interdisciplinary dialogue that he has initiated.

—Robin A. Beck Jr., Douglas J. Bolender,
James A. Brown, and Timothy K. Earle

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