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Article

Animism and Green River persistent places: A dwelling perspective of the Shell Mound Archaic

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Abstract

A nuanced understanding of the western Kentucky Green River Archaic requires reconciling the region's rich archaeological record with the growing literature pertaining to how hunter-gatherers perceive their worlds. A dwelling perspective of the Green River Archaic involves interpreting the region's large middens as components of animated lifeworlds saturated with meaning and composed of numerous constantly maintained relationships among people and between people and various other beings. This article explores how Green River Archaic hunter-gatherers constructed the middens through daily practices and periodic emotionally charged mortuary rites, thereby giving them meaning as persistent places and contributing to an ever-evolving, historically constituted landscape.

Keywords

dwelling perspective, hunter-gatherers, North American Archaic, palimpsests, persistent places, relational epistemology, shell middens, social relations

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The middle Green River region of western Kentucky played a key role in the early development of eastern North American culture history and continues to inform major regional syntheses (e.g. Caldwell, 1958; Dragoo, 1976; Ford and Willey, 1941; Smith, 1986). Recent books by Claassen (2010), Jefferies (2008a), and Sassaman (2010) provide divergent but reconcilable approaches to the interpretation of the region's large shell and dirt/rock middens. Common to each of these publications is an emphasis on landscapes and the degree to which ritual and identity structured the use and meaning of these places. This article continues this discussion by exploring the (pre)history of the Green River middens, employing concepts of scale and the theoretical construct of the persistent place.

Another commonality found in these books and in many recent publications pertaining to the eastern Archaic is a move away from strictly materialist or environmentalist explanations and toward development of more nuanced, historical and contextual interpretations of growing bodies of data. We perceive this as a beneficial integration of 'proximate' and 'ultimate' explanations operating at different temporal scales to provide a more holistic understanding of eastern North American native peoples. By moving among different scales of analysis and being willing to entertain explanations and interpretations at each of these scales, a new generation of researchers is populating the past with human and non-human agents with real lived experiences (e.g. Moore and Dekle, 2010) without sacrificing the explanatory power of processes that operate at the continental scale or over the *longue durée* (e.g. Thompson, 2010).

Our intention in this article is to illustrate the utility of such a multiscale approach by using the persistent place concept to enrich our understanding of the Archaic and to reconcile aspects of conflicting interpretations surrounding the large Green River sites. Specifically, we employ a dwelling perspective and explore the ways in which Archaic peoples probably perceived their environments as animate to address the shell middens as habitations versus shell middens as ritualized monuments debate (Claassen, 1992, 1996, 2010; Hensley, 1991; Jefferies, 2008a; Marquardt, 2010; Milner and Jefferies, 1998; Morey and Crothers, 1998). We argue that dwelling along the Green River involved creating and maintaining a variety of relations among people and other social beings and that this process, enacted through daily rituals and practices, imbued the middens with meaning such that they acted both as habitations and as persistent places with ritual significance.

History and tradition in archaeology

The conflict between differing scales of analysis is perhaps best illustrated by Bailey's (2007, 2008) notion of time perspectivism. According to Bailey (2007: 200), time perspectivism 'is the belief that differing timescales bring into focus different features of behaviour, requiring different sorts of explanatory principles'.

The 'substantive definition' of time perspectivism states that scale influences our understanding of events and processes such that:

... changes in the time scale at which we make observations change what we see and that varying time scales bring into focus different variables and processes that are not visible, or easily visible, at other time scales, thus requiring different sorts of concepts and explanatory principles. (Bailey, 2008: 13)

Our interpretation of these definitions is that a holistic approach to the past requires multiple kinds of analyses at varying scales. Following this line of thought, we advocate a study of the past characterized by theoretical pluralism, which takes into account various proximate explanations of particular historical events and how macroscale phenomena occurring over long periods of time across regions structure those events. Thus, the goal is not to find the 'best way' to study the past but to integrate multiple theoretical perspectives and promote a multivocal archaeology.

For Bailey (2007, 2008), the degree to which this kind of multiscale analysis can be implemented is constrained by the resolution of the archaeological record. Palimpsests 'are a universal phenomenon that we can never escape... there are no such phenomena as isolated events or moments in time, or none that is knowable from the archaeological record' (Bailey, 2008: 16). So, while a holistic approach requires differing kinds of analyses at differing scales, the resolution of the archaeological record makes specific interpretations of personal agency, interpersonal interaction, and perception in the deep past difficult. While Bailey (2008) does not argue that investigations of these phenomena should not be attempted, he does insist that they should not replace approaches that deal with longer temporal scales.

In defense of microscale approaches to interpretation, Pauketat (2001b) advocates a historical-processual approach rooted in practice theory. Rather than focusing on the 'ultimate' causes that were the locus of explanation for traditional processualist archaeologies, historical-processualism emphasizes the negotiated nature of process and locates explanations in the domain of proximate causes rooted in a particular, constantly negotiated historical tradition. In Pauketat's (2001b) view, practice is process and situated negotiations in practice are causal. This leads to a new definition of tradition as 'some practice brought from the past into the present' and history as the 'process of tradition building' or constructing culture through practice (Pauketat, 2001a: 2–4).

Reconciling Pauketat's and Bailey's views is the 'recognition that cultural production may involve alternative forms of traditions that vary greatly in their spatial and temporal scales' and that a multiscale approach to the study of archaeological traditions is necessary to fully evaluate the intersections of these various traditions across regions and through time (Lightfoot, 2001: 243). Emphasizing proximate or ultimate explanations or a specific scale of analysis limits the contextual richness of resulting interpretations. A holistic perspective weaves strands of data from

multiple sources, navigating among different scales of analysis to arrive at the best, holistic explanations of the past (see Fogelin, 2007).

The American Bottom of Illinois is one region where a multiscale approach to history and tradition has been employed. Here, large-scale excavations at numerous Archaic and Woodland sites have resulted in the identification of multiple contemporaneous traditions of practice, referred to by Emerson and McElrath (2001) as 'ethnic cores'. According to Emerson and McElrath (2001: 202; see also McElrath et al., 2009: 357), the Late Archaic to Early Woodland period in the American Bottom 'involved multiple and diverse groups, most often categorized in politicosocial terms as bands or, possibly, tribes. It is a time filled with socially and politically heterogeneous contemporaneous societies – societies we believe are most appropriately modeled as ethnic groups.' Differences in material culture, facilities, and settlement suggest that these groups were historically unrelated, while a large radiocarbon database indicates that many occupied the American Bottom region at roughly the same time (Emerson and McElrath, 2001; Fortier, 2001; McElrath et al., 2009).

At the larger scale of the entire macroregion, Sassaman (2010, 2011) has 'historicized' the eastern Archaic by populating the landscape with diverse groups of interacting and interconnected peoples, each with differing goals, needs, and desires. Although some of the assertions Sassaman makes are speculative due to the coarse-grained nature of his data, which results from Bailey's coarse resolution and the palimpsest effect, they are nonetheless compelling in that they represent a (pre)history of ancient North Americans rather than the naturalized abstract peoples of most archaeological discourse. Invoking long-term, large-scale migrations as a potential explanation for variations in material culture and the locations of major sites, Sassaman posits the existence of two very distinct cultural/historical/linguistic groups during the late Middle and Late Archaic – an earlier Ancestry I consisting of the descendants of local notched point producing groups and an intrusive Ancestry II that comprised the Shell Mound Archaic. Like Emerson and McElrath (2001), Sassaman relies on in-depth studies of material culture and economic practices to support his dual ancestry hypothesis.

Both Sassaman (2010) and Emerson and McElrath (2001) utilize detailed analyses of material culture and the structure of the archaeological record to provide thick (pre)histories of their particular regions of study. Before adopting this approach to provide a similar multiscale interpretation of the Green River Archaic, we need to introduce an additional theoretical construct that can help inform these kinds of analyses – the persistent place.

Persistent places

As originally defined by Schlager (1992: 92), a persistent place is 'a place that is used repeatedly during the long-term occupation of a region'. Such places might consist of larger stretches of particularly useful land like marshes, bottomlands, or particular stands of timber, or they can be more localized springs, vantage points,

or rockshelters. Additionally, persistent places may consist of a built environment that, intentionally or unintentionally, structures reoccupations. Summarized by Thompson (2010: 218), persistent places: 1) consist of physical locations characterized by concentrations of resources that make them particularly suitable for use; 2) have natural or cultural features that structure reuse; and 3) are created through practice over an extended period of time.

Schlanger (1992) utilizes this concept in her analysis of the use of a portion of southwestern Colorado by the Anasazi. The recovery of projectile points at small upland locations at a time when lowland habitations were not occupied indicates to Schlanger that the region was never truly abandoned, but continued to function as a destination for short-term activities like hunting. Schlanger's (1992) use of the persistent place concept allowed her to interpret isolated projectile points in relation to the longer term use history of the region and indicated that its persistent use as hunting grounds provided a cultural link to the landscape even during periods of 'abandonment'.

Littleton and Allen (2007) extend the persistent place concept to interpret Australian Aboriginal burial practices in the Murray River valley of southeastern Australia. Past mortuary studies in the region interpret clustered burials as evidence of cemeteries denoting corporate territorial claims. However, ethnohistoric records indicate that burials were highly visible when exposed by erosion, and archaeology confirms that burial locations were avoided as campsites. The visibility of burials through time structured a location's reuse as a mortuary area and, importantly, led to its avoidance as a campsite or habitation. Rather than functioning as corporate burial areas used to assert territorial claims, these mortuary locations were utilized over long periods of time, perhaps by different groups. Thus, Murray River burial sites were not cemeteries that were intentionally created to give meaning to a place by groups asserting control, but were persistent places given meaning by their use and accumulation over time (Littleton and Allen, 2007).

Thompson (2010) further explores the ways in which different temporal rhythms of creation and use structure hunter-gatherer landscapes by examining differences in Middle and Late Archaic sites in the middle Green River region, lower Mississippi River valley, and Georgia Bight. While the Green River sites were occupied over a long period of time, the temporal rhythms of the lower Mississippi earthen mounds and Georgia Bight shell rings indicate much shorter periods of construction and use. That is to say, the short-term events like shellfish collection, plant food processing, and burial of individuals at the Green River sites are confounded by the use and reuse of these locations for hundreds, and perhaps thousands, of years. Construction and depositional processes evident at coastal shell rings and lower Mississippi earthen mounds, on the other hand, indicate that these features were built in no more than a few generations (Thompson, 2010: 221; see also Thompson and Andrus, 2011). The differing scales of their use preclude grouping these sites as a single cultural phenomenon.

Before expanding on Thompson's (2010) initial discussion of Green River persistent places, it is important to examine the ways in which physical environments

become (cultural) persistent places through practice. One way of accomplishing this is by adopting Ingold's (2000: 153) dwelling perspective, which is 'a perspective that treats the immersion of the organism-person in an environment or lifeworld as an inescapable condition of existence'. That is to say, humans do not inhabit natural and cultural worlds that are pre-existent and independent of them; the world is created by the process of dwelling within it and in the interactions between organism-persons.

What this means for archaeological interpretation is that the archaeological record is best understood not as a series of discrete archaeological 'sites' that combined to form a pattern of habitations overlaying a natural landscape. Rather, the landscape is 'the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them' (Ingold, 2000: 193). Lifeworlds are always in the process of formation, continuously being created through interactions among humans, animals, and plants and reified in practice through the performance of everyday tasks, which act recursively to create and recreate the social relations that characterize the lifeworld (Ingold, 2000). A dwelling perspective, therefore, is a relational perspective that critiques the Cartesian mind-body distinction by emphasizing how identities are constituted by engagement with others (whether those others are people, objects, or other organism-persons).

Importantly, Ingold's (2000) notion of the taskscape also provides dwelling with an explicitly spatial dimension (Gosden, 1999). If tasks are 'any practical operation, carried out by a skilled agent in an environment, as part of his or her normal business of life' (Ingold, 2000: 195), then persistent places can be conceived as locations that structure the performance of tasks and, thus, structure the formation of organism-persons as subjects. The concept of the taskscape invokes the inter-relationships among or 'interlocking' of tasks and, therefore, the interlocking of persistent places.

Thus, persistent places are more than just redundantly utilized locations; they are places where relationships are created and, as a result, identities are formed. Dwelling creates memory and affection to persistent places, rendering them 'deepened by time and qualified by memory' (Cloke and Jones, 2001: 651). This emphasis on time and temporality, invoked by the performative nature of taskscapes, is one of the strengths of a dwelling perspective. It also highlights the importance of a multiscalar approach to the archaeological record in that taskscapes are temporally unbounded and cannot be easily partitioned into simple analytical units like time periods (Moore and Dekle, 2010).

Bailey's (2007, 2008) palimpsests, and the lack of resolution they imply, are the material product of tasks performed by human and non-human agents in the process of dwelling. Dwelling occurs in real time and is composed of an abundance of tasks and the taskscapes of which they are a part. The archaeological record consists not of a series of discrete events, but of temporally unbounded practices that both create and are created by beings-in-the-world. A dwelling perspective, then, justifies micro-scalar interpretations of macroscale phenomena (i.e. archaeological sites)

by redefining palimpsests as the predicted material outcomes of dwelling in an ever-evolving lifeworld co-inhabited by numerous other individuals (Bird-David, 1999; Strathern, 1988) rather than as distortions of ‘partially preserved activities’ performed by multiple independently situated individuals (Bailey, 2007: 203). This perspective conforms well to Bailey’s observation that material objects are palimpsests. They ‘have duration, a duration that extends from at least as early as the time when they were first created to the current moment of observation or discussion, and indeed will most likely extend far into the future’ (2007: 209). As archaeologists we contribute to these palimpsests by entering into relationships with objects and their creators – relationships that are unbounded by time and geography.

Archaeology of the middle Green River region

Although the middle Green River sites (Figure 1) are typically discussed with reference to their significant late Middle and Late Archaic components, the recovery of Paleoindian points at several sites, albeit in small numbers, indicates that occupation of these locations can be traced to the region’s first inhabitants (Moore, 2009). Utilization of the Green River midden locations intensified into the Early Archaic period, as indicated by the recovery of high frequencies of corner notched points at several sites (Jefferies et al., 2005; Rolinson, 1967) and dates on human bone from two burials at Ward and Kirkland (Jefferies, 2008b). Foremost among these Early Archaic components is the Butterfield site, a large Early and Middle

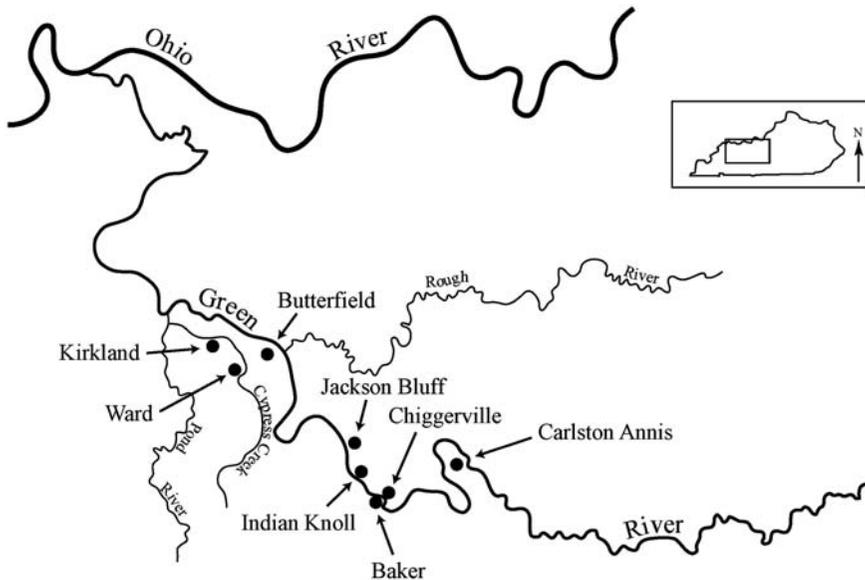


Figure 1. Map of the Green River showing locations of major sites discussed in the text.

Archaic shell midden that yielded a total of 153 human burials (Jefferies et al., 2005; Webb and Haag, 1947).

At least two of the middle Green River region's dirt/rock and shell midden sites date predominately to the middle portions of the Middle Archaic. Both Jackson Bluff and Baker are upland sites consisting of dirt/rock midden habitation areas located on high, level ground adjacent to slopes covered in shell midden. The majority of the diagnostic projectile points recovered by the Works Progress Administration (WPA) at Jackson Bluff and Baker are side-notched Middle Archaic Godar points. Small numbers of human and dog burials were identified at both sites. Interestingly, in both cases the arrangement of burials suggests intentional patterning. This is most evident at Jackson Bluff, where seven human burials were found in a single row on the river side of the midden. These burials were surrounded by a semi-circular pattern of 10 dog burials located downslope from the row of humans (Moore, 2011).

The most intensive use of the Green River middens is during the late Middle and Late Archaic periods. Unfortunately, temporal resolution for the late Middle Archaic is poor, but radiocarbon dates and high frequencies of diagnostic Matanzas and Brewerton projectile points at Carlston Annis and Indian Knoll indicate utilization during this time. However, Saratoga and related Late Archaic stemmed points make up the majority of diagnostic artifacts at these and most of the other large Green River sites (Jefferies, 2008a, 2008b; Rolingson, 1967). Excavations at several of these sites indicate that they were intensively utilized for several months out of the year over long periods of time (Marquardt and Watson, 2005). Faunal and botanical data indicate a diet consisting largely of freshwater shellfish, white-tailed deer, small mammals, fish, turtles, and hickory nuts, sometimes supplemented by turkey, seeds, and eastern squashes (Crawford, 2005; Crothers, 2005). Large frequencies of stone pestles, mortars, and other plant food processing tools and facilities indicate that hickory nuts, and probably shellfish, were processed in bulk at these sites, perhaps for use during social gatherings and for winter storage (Moore and Dekle, 2010). Large quantities of hickory nuts may indicate that late Middle and Late Archaic people were managing nut tree stands and practicing a kind of hickory silviculture (Gardner, 1997). Plant food processing tools, bifaces, and chert raw materials were sometimes cached at these sites, presumably for later recovery and use (Watson, 2005: 518–519).

The most notable feature of the late Middle and Late Archaic utilizations of dirt/rock and shell midden locations is the frequency of human and dog burials. Several of the WPA-excavated sites yielded well over 100 burials; the WPA excavated 880 at Indian Knoll alone (Webb, 1974). Included among this number are many burials whose pits were excavated through existing interments, indicating use and reuse of these locations over time. The recovery of numerous marine shell, chert, and other objects with many burials suggests a variety of identity roles are represented at these sites (e.g. leaders, ritual specialists, and traveler-diplomats) (Moore, 2010, 2011). Some individuals exhibit missing limbs, cutmarks, and other evidence of interpersonal violence (Mensforth, 2001).

Although occupation intensity declines into the Terminal Archaic period, the recovery of low frequencies of Terminal Archaic Barbed and Riverton points at some sites indicates that the middle Green River region was never abandoned. Woodland utilization of the large Archaic middens is poorly documented, but the recovery of small numbers of Dickson, Snyders, and Lowe cluster points at Chiggerville indicates infrequent visitations by Woodland individuals. Late Prehistoric utilization of the site is indicated by four triangular projectile points, one Late Prehistoric antler projectile point, and 274 shell-tempered pottery sherds (Moore, 2011).

Kentucky state site files records indicate that 92.6 percent of the identified Archaic sites in the middle Green River region are open habitations, including the large dirt/rock and shell middens. Another 16 sites are rockshelters. Unfortunately, the published site files data do not differentiate among types of open habitations and their physical locations (Jefferies, 2008b). Furthermore, these distributional data are biased by a lack of systematic survey.

One area where systematic survey has been conducted is along Cypress Creek, a tributary of the Green River. Here, Jefferies et al. (2005) surveyed 611 ha distributed across four environmental zones (river edge, bottomland wetlands, bottomland-uplands interface, and uplands). Standardizing sites by sites per 1000 years, Jefferies et al. (2005) found that the river edge (including the area's large shell middens) and wetlands zones were important throughout the Archaic, but increased in use over time relative to the uplands. This same pattern is evident when distributions are plotted by numbers of projectile points per 1000 years.

Combined, these regional survey data indicate that Archaic use of the middle Green River region was consistent through time, emphasizing high resource zones along major streams and wetlands. Large middens located in these zones are good candidates for persistent places, as are upland rockshelters. Pre-impoundment maps of portions of the Green River indicate that many of the large middens are located adjacent to bedrock faults that created local shallows (Morey and Crothers, 1998; Morey et al., 2002). As ideal locations for the development of freshwater shellfish beds and river crossings, it is no surprise that these shallows became focal points for human activities. The degree to which upland vantage points, springs, and concentrations of resources served as persistent places cannot be evaluated with the existing data.

The Chiggerville site

To further elaborate on the utility of the persistent place concept in interpreting the Green River Archaic, we now focus on one well-studied Late Archaic shell midden site. Chiggerville is a Late Archaic shell midden located north of the Green River within a broad, flat river bottom. In 1938 the WPA excavated about 825 m² of the site in one large block and a series of trenches (Rolingson, 1967; Webb and Haag, 1939). Recent excavations yielded radiocarbon dates that indicate the midden dates

to approximately 3300 cal BC, an age consistent with analyses of the site's diagnostic points (Moore, 2011).

Examination of the WPA profiles and excavations in 2009 indicates that Chiggerville is typical of freshwater shell middens, consisting of multiple strata of earth and shell of varying thicknesses. In some parts of the midden, strata containing very little shell are adjacent to more concentrated shell deposits. In one portion of the site, the shell strata dip abruptly, indicating that the site bordered a slough, stream, or part of the river bank. Human burials and Late Archaic artifacts were distributed throughout all midden strata and across the entire site (Moore, 2011).

Of the 114 human burials containing 117 individuals recovered by the WPA at Chiggerville, 42 had burial associations. Most of these were beaded necklaces, bracelets, pendants, and other objects of imported marine shell. Other categories of grave associations include items embroidered with ground freshwater *Leptoxis* beads, parts of atlatls, turtle carapaces, projectile points and other chipped stone tools, bone pointed implements, dogs, and red ochre. Consistent with other Green River sites, most of these items were interred with infants and sub-adults.

The 52 features other than burials at Chiggerville indicate a variety of tasks. Of these, 44 consist of scattered bone, shell, fire-cracked rock and charcoal. Called 'fireplaces' by the WPA, these features vary in size and represent a variety of cooking and food processing activities. Other features identified at Chiggerville include a small hearth with evidence of in situ burning, a deposit of discarded gastropod shells, a large pile of sandstone atop a charcoal lens and placed between two human burials, a smaller pile of rocks and fire-cracked rock associated with burned shell and several fragments of human bone, two caches of chipped stone objects in early stages of reduction, an activity area consisting of a mortar and pestle, and a refuse pit. Most of these features were likely used in a variety of routine food processing activities, but some of the larger refuse scatters may have been associated with bulk processing of shellfish or nuts and the two piles of rock may have been associated with ritual activities.

Of the 1455 chipped stone tools recovered by the WPA at Chiggerville, 537 were diagnostic hafted bifaces. Of these, 86 percent could be assigned to a variety of Late Archaic stemmed point types or clusters, with most of the hafted bifaces ($n = 277$) belonging to the Late Archaic Saratoga cluster. Chipped stone tools other than hafted points, scrapers, and drills include unhafted scrapers and drills, adzes, cores, a drawknife, engraving tools, bifaces, spokeshaves, pièce esquillées, and a variety of flake tools and unifaces. Ground and pecked stone tools include over 200 pestles, axes, mano/hammerstones, pitted stones, and a single rimsherd of a small sandstone vessel. Bone and antler tools include a large variety of implements used for a range of tasks including perforation, weaving/matting, and stone tool production. Other objects include fishhooks and manufacturing debitage, atlatl hooks, antler and bone projectile points, a variety of spatulate tools, flensing tools, bone tubes, one flute/whistle, and several perforated white-tailed deer scapula glenoids of unknown function (Moore, 2011).

Interpretation of the lived experiences of the Chiggerville site inhabitants requires description of the immediate environs. Chiggerville is located within the concave section of a small bend of the Green River adjacent to stable shoals known historically as Nun's Ripple (Morey et al., 2002). Just upstream on the south side of the river are bottomlands adjacent to Andrew's Run, a small tributary of the Green River. Just downstream are a second set of stable shoals (also called Andrew's Run) located adjacent to a sandstone cliff line and below the Middle Archaic Baker shell midden.

Crossing the river to the south of the Chiggerville midden one moves into an upland zone. Baker sits atop these uplands about 400 meters west of Chiggerville. That the Late Archaic inhabitants were aware of the Baker site is confirmed by the recovery of seven stemmed points from the Baker midden, two of which were Saratoga cluster hafted bifaces. Considering that 211 diagnostic hafted bifaces were recovered from Baker, of which 178 are Middle Archaic Godar points, it would appear that Chiggerville's inhabitants rarely visited this earlier midden (Moore, 2011).

Immediately north of Chiggerville is a wide bottomland consisting of somewhat poorly drained soils. Prior to the construction of modern drainage ditches, these soils would have been wet for significant parts of the year and would have provided the site's inhabitants access to a variety of wetland and aquatic resources. To the north of these wetlands is an upland zone consisting of sedimentary rocks that correlate to similar outcrops on the south side of the river. Within the Pleistocene alluvial deposits that make up the Green River bottoms and the transition into the uplands are rounded gravel cherts, observed in the debitage and small flake tool assemblages at both Baker and Chiggerville.

Chiggerville as persistent place

Nearly 100 years of investigations in the middle Green River provide a wealth of knowledge regarding the area's inhabitants. These data indicate that a full understanding of (pre)historical developments requires interpretations at multiple temporal and geographic scales. In what follows, we synthesize these data by drawing on the persistent place concept to provide a narrative of how Chiggerville was created in practice by numerous individuals over a period of thousands of years.

The recovery of Paleoindian and Early Archaic points at Chiggerville indicates that, prior to 3300 BC, individuals utilized the area around Nun's Ripple for brief periods. Whether any of these people exploited freshwater mussels from the nearby shoals is unknown, but the presence of a shallow river crossing that would have attracted white-tailed deer, and wetland and upland zones rich in aquatic turtles, small mammals, and nut-yielding trees made the bottoms an attractive location for periodic use by these highly mobile hunter-gatherer bands. It is likely that these groups ranged widely during this time, spending much of the year in the uplands, but periodically venturing to the wetter bottomlands to hunt and fish, perhaps using the Green River as an easy source of water and transportation.

The environs around Chiggerville first became a focus of activity during the Middle Archaic, but it is not the bottomlands on the north side that attracted the most attention but the uplands to the south and west. Here, Middle Archaic inhabitants of the Baker site exploited freshwater mussels available in the adjacent shoals and likely fished in the Green River. Low frequencies of side-notched points at Chiggerville indicate that the Baker site inhabitants sometimes exploited the Nun's Ripple shoals to the east, and they may have fished and collected aquatic resources from the Chiggerville bottoms. They hunted in the adjacent uplands and relied on a variety of local and non-local cherts, including the locally available chert from gravel deposits both in and adjacent to the river.

That the shoals adjacent to the Baker site were a focus of Middle Archaic activities is evident in the large quantities of shell that were collected from these shoals and discarded as refuse across the slope running to the east of the Baker dirt/rock midden. The Baker site itself, however, appears either not to have been a persistent place, or was just becoming one when the site's Middle Archaic inhabitants left the region. Unlike many other dirt/rock and shell middens in the area, only a small number of human burials were interred at Baker ($n=4$), and these were arranged in a single row adjacent to the bluff edge. Such a patterned burial placement suggests a short-term use of the site as a burial facility rather than long-term recurring use.

By the time Late Archaic inhabitants of Chiggerville began accumulating a shell midden along the north bank of the Green River around 3300 BC, the area around the Nun's Ripple and Andrew's Run shoals already had a long history of use that invested the region's landforms and pathways with meaning. It is within this context of inherited meaning that one must interpret the lived experiences of Chiggerville's inhabitants. We do not know whether the Middle Archaic peoples of the Baker site were biologically or culturally related to the later people who lived at Chiggerville, but even so we can assert that these earlier groups left a record of their use of the landscape that informed the daily practices of their geographic descendants. Furthermore, Chiggerville's inhabitants were involved in and influenced by goings-on in the greater middle Green River region and beyond.

Animic ontologies

Sometime prior to 3300 BC, Late Archaic groups began intensively exploiting the shellfish at Nun's Ripple and discarding their shells in overlapping piles in the nearby bottoms. Like many hunter-gatherers, the lifeworlds of these individuals were likely informed by what Ingold (2006) refers to as an animic ontology (see Claassen, 2010: 169–193 for abundant examples of possible evidence for animistic practices at shell-bearing sites). Unlike western ontology, which conceives of movement across the world, an animic ontology conceives of movement through the world. An animic lifeworld is not divided into surfaces that are traversed by beings confined to bodies. Rather, beings are better conceptualized as a ramifying web of

paths, with the environment defined as the entanglement of those paths (Ingold, 2006). We argue that persistent places are nodes within these webs.

Bird-David (1999) elaborates on the animic lifeworlds of hunter-gatherers, drawing on work among the Nayaka of South India. According to Bird-David, animism is a relational epistemology – a way of knowing the world and those in the world by relating to them. Knowledge, in a relational sense, is about awareness of the environment and about developing and maintaining relationships with others (both people and objects). To better elaborate this, Bird-David uses Strathern's (1988) concept of the *dividual*, or the person as composed of relationships. This is opposed to the individual, or a bounded, single entity. Knowledge for the Nayaka, and other animistic hunter-gatherers, is about *dividuating* the environment. This relational epistemology was widespread among native peoples of North America (e.g. Ingold, 2000, 2006; Losey, 2010) and can be found in limited contexts within modern western society (Hornborg, 2006).

Dwelling

We argue that the Late Archaic hunter-gatherers of the Chiggerville area probably perceived their landscape as saturated with social relations, not just relations among humans but also between people and animals, people and objects, and people and places. Dwelling within such a lifeworld meant regularly invoking, nurturing, and maintaining numerous social relations. When the first Late Archaic shellfishers approached Nun's Ripple with their gathering baskets and shellfish rakes, they were not just visiting a persistent place, but renewing and intensifying relationships with that place and the organism-beings who dwelled therein.

Moore and Dekle (2010) invoke changes in human-animal-plant relationships to provide a dwelling perspective on the development of early horticultural economies in eastern North America. According to this interpretation, the increased use of nuts, seeds, and shellfish evident in the faunal and botanical records of the Middle Archaic is reflective of changes in attitude toward immobile resources (e.g. Crawford, 2005; Simon, 2009; Styles and Klippel, 1996). This shift was not simply a process of discovery of resources or economic intensification as a consequence of increasing stresses, although these macroscale explanations likely contribute to the overall explanation. At the local level of people's lived experiences, this change:

... reflected a *perceptual* shift from mobile animals as organisms/food to both mobile and immobile plants and animals as organisms/food. That is to say, immobile plants and animals like nuts and shellfish ceased being opportunistically acquired dietary supplements or starvation foods and, instead, came to be seen as desirable dietary staples. (Moore and Dekle, 2010: 601)

Drawing on Bird-David's (1999) and Ingold's (2006) understanding of hunter-gatherer perceptions of the world, the addition of immobile resources to the Middle

and Late Archaic diet meant the formation of new social relations with these immobile resources (while continuing to maintain relations with mobile resources like deer). Such a shift not only meant that these resources were now desired parts of the diet, but also that shellfish, shoals, nutting trees, and stands of trees ceased to be inanimate places and things and had now become animate organism-persons and persistent places. Using and managing these locations and resources was a means of creating social relations with these new beings. Late Archaic peoples hunting deer and harvesting nuts were not just obtaining food; they also were investing in social relations. Activities stemming from maintaining these relations would not be considered rational in a western sense and could not be explained with purely economic models.

The material record

Understanding the Late Archaic lifeworld as saturated with social relations helps explain some 'non-economizing' practices evident in the middle Green River archaeological record. For instance, maintaining relations with nearby hickory tree stands may have justified the initial labor invested in forest clearance and land management through burning or thinning upland forests (e.g. Crawford, 2005; Gardner, 1997; Ison and Sharp, 2004). Viewed from a dwelling perspective, land management was both an economic and a social practice. Clearing trees and opening up tree stands both increased yields and created social bonds between humans and organism-persons. This social and economic investment likely justified the increased investment of labor evident in the hundreds of stone pestles and axes present at Chiggerville and other sites.

Social relations also may have been maintained between humans and trees used to build structures or canoes. These structures then housed families and the canoes transported individuals long distances to visit, trade, and participate in ceremonies with other groups, meaning that human-animal-plant social engagements were implicated in social relations developed among disparate peoples. The expansion of these long-distance networks of exchange and interaction among human groups was well under way by the Middle Archaic and evident in the material record of bone pin, atlatl weight, and fishhook decorative and technological styles (Burdin, 2004; Jefferies, 1997, 2004; Moore, 2010).

The perceptual shift that led to new social relations among people, shellfish, fish, deer, and trees also led to the advent of a new technology – bulk processing (Moore and Dekle, 2010). However, these ideas and this technology were not just a characteristic of Chiggerville's inhabitants, but were widespread among hunter-gatherers in eastern North America. As Schiffer (2005) points out, innovations in technologies (and new ideas) often spread rapidly among integrated and interconnected societies like those of the Middle and Late Archaic.

The expanded trade networks evident in the distribution of marine shell and other objects throughout the Midcontinent brought with them an expansion of kinship networks as traveler-diplomats, peripatetic healers and shamans, and

others intermarried throughout this vast region. Inter marriages and social alliance creation were facilitated by periodic aggregations at persistent places like Chiggerville, Carlston Annis, and Indian Knoll to process shellfish, nuts, and deer meat for winter storage, perform mortuary and other kinds of ceremonies, hold feasts, or all of the above. Such events might explain the layers of thicker shell present at Chiggerville, clusters of paired shellfish valves evident in profiles, groups of processed gastropods, and large cooking facilities and refuse dumps (Moore, 2011; see also Claassen, 2010).

When Chiggerville's Late Archaic inhabitants first occupied the area adjacent to Nun's Ripple, the shoals were already a persistent place. However, the possible management of hickory stands in the nearby uplands and aggregation events resulting from access to locally abundant resources transformed what became the shell midden site itself into a focus of activity, a persistent place. The meanings ascribed to this place were created in practice and reified by the burial of the first dead there. Feasting and other ritual activities probably accompanied these burial events (e.g. cairn construction and the ritual destruction of atlatls and other socially significant objects), and, in some cases, special consecration ceremonies involving the ritual disposal of victims of violence or special offerings may have taken place (Claassen, 2010: 123–124). Eventually, more individuals were buried at this location, then more. The heightened emotions associated with these activities contributed to the bonds among people and between groups, and also created a permanent bond between those groups and the site itself.

Although rituals like mortuary feasting and burial rites were not everyday occurrences at Chiggerville, an animic ontology implies that everyday practices were always imbued with meaning. Daily practice was ritualized in that normal hunting, fishing, or nut collecting trips meant moving through a world rich with meaning and inhabited by a variety of animated beings. Normal hunting and sandstone procurement trips to the south may have meant a trip to the Baker site to visit the ancestors. Forays to obtain cherts from nearby gravel deposits may have meant a visit to an animated tree or Nun's Ripple – an animated riffle-run. Such visits acted to confirm one's relationship to these organism-beings. They also acted to constitute the world (and persistent places) by one's movement through it.

Moving beyond the local, analysis of the chipped stone tools from Chiggerville indicates that most are manufactured from Ste Genevieve chert that likely originated in the upper reaches of the Green, Rough, and Barren Rivers (Gatus, 2005). Chipped stone debitage recovered during the 2009 excavations consists mostly of late stage biface reduction and resharpening flakes. Combined, the chipped stone tools suggest that special logistical forays were made to the east where flint knappers procured Ste Genevieve chert and reduced it to bifaces and cores before returning west (Moore, 2011). These logistical trips probably meant passing through rarely traversed areas and invoking alliances with other groups and other organism-beings to do so.

Objects from burials suggest that some travelers ventured far beyond local rivers. Small amounts of copper and bones of pine marten, fisher, and possibly

Canada lynx recovered at a few of the Green River middens indicate that some individuals traded or traveled to the north (Marquardt and Watson, 2005; Watson, 2005). Ritual specialists may have obtained some of these objects traveling in search of esoteric knowledge or power (Carr, 2005). If this is correct, then it can be expected that these objects held special value, thus explaining their placement in burials (Watson, 2005).

More sustained movements to the south by traveler-diplomats are evident in the higher frequency of marine shell objects recovered from burial contexts at Chiggerville and the other Green River middens. These objects, originating from so far away and almost always disposed of with the dead, could have held any number of meanings (Claassen, 2010). Shell beads were often placed with children, perhaps as symbols of grief (MacDonald, 2001). Other valuable marine shell objects like perforated gorget/masks, composite shell atlatl weights, and shell pendants, whether buried with children or adults, may have acted as inalienable possessions, signaling prestige and/or acting as material evidence of group cohesion (Mills, 2004; Weiner, 1992).

The process of dwelling at persistent places like Nun's Ripple and Chiggerville had consequences for the creation and maintenance of social relations with people (near and far) and other organism-beings. Daily life, feasts, bulk processing activities, communication, laughter, burial of the dead, and exchanges of goods and services created Chiggerville and gave meaning to this place through repetition. New relations with organisms and people increased the intensity of this relationship to place. And the relationship did not end with the end of the Late Archaic, for others continued to visit the midden long after 3300 BC, periodically leaving behind the occasional projectile point or broken pot.

Conclusion

A dwelling perspective and an understanding of the Green River middens as persistent places better contextualizes and enlivens the past. Such a perspective is important as it allows us a way to privilege historical contingency in our explanations of hunter-gatherers and break away from ecologically driven models (see Sassaman and Holly, 2011, for a call for this approach). It also helps resolve long-standing debates in the archaeology of the region. According to Claassen (1992, 1996, 2010), shell middens are intentionally constructed mortuary facilities built for the disposal of the dead. Hensley (1991), Milner and Jefferies (1998), and Marquardt (2010), on the other hand, interpret these sites as habitations that also contained burials. A dwelling perspective confirms that they were both. An animic ontology would not have differentiated between sacred and profane in the same way that western ontology does. Further, such a perspective from the viewpoint of the archaeologist forces us to make a methodological shift from thinking about the function of places to focusing on the relationships and interactions that people had with such locales (see Haber, 2009, for a discussion). Thus, the act of creation of the mound through daily rituals and practices, by dwelling in a lifeworld saturated

with meaning, was an intentional act of creating, renewing, and maintaining relationships with people and animate organism-beings in a way that would qualify as 'ritual' in traditional anthropological analysis (Bell, 1997). From this perspective, Green River dirt/rock and shell middens were intentionally created as facilities for the dead, who were also living.

The interpretations provided herein are necessarily speculative, but are anchored by a rich literature on hunter-gatherer and Native American perspectives on the world. The 'proof' lies in the multiple scales of use of these sites (i.e. persistent places) and the concentration of burials. The failure of a purely materialistic perspective to explain the material record of the middle Green River region illustrates the need for alternative ways of thinking. The scenario outlined herein provides a plausible series of proximate causes for much of that record. These proximate causes can be clarified and better contextualized by 'ultimate' causes stemming from environmental or other factors (e.g. Thompson, 2010), but they cannot replace them. A holistic anthropology of the past requires both perspectives – interpretations and explanations derived from various theoretical perspectives and operating at differing scales of analysis – to provide a rich (pre)history of a region, macroregion, and the world.

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