

Local and "Global" Perspectives on the Middle Woodland Southeast

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Abstract During the Middle Woodland period, from 200 BC to AD 600, southeastern societies erected monuments, interacted widely, and produced some of the most striking material culture of the pre-Columbian era, but these developments are often overshadowed by the contemporaneous florescence of Hopewell culture in Ohio. I argue that the demonstrable material links between the Middle Woodland Southeast and Midwest demand that we cease to analyze these regional archaeological records in isolation and adopt multiscalar perspectives on the social fields that emerged from and impacted local Middle Woodland societies. In synthesizing recent research on Middle Woodland settlement, monumentality, interaction, and social organization, I make explicit comparisons between the Middle Woodland Southeast and Ohio Hopewell, revealing both commonalities and contrasts. New methodological approaches in the Southeast, including geophysical survey techniques, Bayesian chronological modeling, and high-resolution provenance analyses, promise to further elucidate site-specific histories and intersite connectivity. By implementing theoretical frameworks that simultaneously consider these local and global dimensions of Middle Woodland sociality, we may establish the southeastern Middle Woodland period as an archaeological context capable of elucidating the deep history of the Eastern Woodlands as well as long-standing issues surrounding middle-range societies.

Keywords Southeastern United States · Middle Woodland · Hopewell · Monumentality · Interaction

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Introduction

According to the canonical culture histories of eastern North America, the Middle Woodland period in the southeastern United States is fundamentally defined by its contemporaneity with the Hopewell florescence of the Ohio Valley (e.g., Griffin 1952, 1967; Willey and Phillips 1958). However, the vast majority of southeastern sites dating to this period (ca. 200 BC-AD 600) do not yield evidence of intense involvement with Hopewell ceremonialism or exchange. Even where diagnostic Hopewellian material culture has been recovered, the density and diversity of these assemblages pale in comparison to their Ohio Valley counterparts. As a result, the Southeast as a whole tends to be viewed as a cultural backwater during the Middle Woodland period; its residents are regarded as "passive hinterland recipients of traits flowing in from the north" (Knight 2011, p. 217), peripheral to the explosion of ritual and social activity taking place in the Hopewell core. As Brown (2013, p. 237) recently put it, "in the Southeast... the long hand of Ohio Hopewell exercises a strong grip over the imagination... It is not an overstatement to say that for southeastern archaeologists, Hopewell stands in the position of the 'elephant in the living room' of the Woodland period."

In fact, the Middle Woodland Southeast witnessed a number of remarkable transformations of its own, including the widespread appearance of the region's earliest villages and earthen enclosures, the elaboration of platform mound ceremonialism and burial programs, and expanded participation in multiple extralocal interaction networks as indicated by widely shared material culture. Although some of these developments do appear to relate to the Hopewell Interaction Sphere (perhaps even more closely than previous scholars have suggested), single-minded preoccupation with Hopewell precludes an examination of the Middle Woodland Southeast on its own terms. We are left with a decontextualized record of extraregional contact and associated ritual activity that falls far short of a comprehensive account of Middle Woodland lifeways in the Southeast.

In the last decade or so, southeastern archaeologists have undertaken research that demonstrates the richness of the region's Middle Woodland record. I aim to synthesize this scholarship, much of which focuses on individual sites or subregional study areas, and to place the societies of the Middle Woodland Southeast on more equal interpretive footing with their contemporaries across the Eastern Woodlands. It is not my intention, however, to suggest that the Middle Woodland archaeological record of the Southeast is somehow divisible from that of the Midwest. Reinforced by state lines and the boundaries of regional archaeological organizations, the persistence of traditional culture area concepts (sensu Kroeber 1939) limit our ability to fully comprehend Middle Woodland cultural developments. Lesser's decades-old concept of "social field" offers an alternative approach (1961; see also Kohl 2008). Emphasizing "the universality of human contact and influence [sic] as a fundamental feature of socio-historical process," Lesser (1961, p. 42) argued that "we think of any social aggregate not as isolated,

separated by some kind of wall, from others, but as inextricably involved with other aggregates, near and far, in weblike, netlike connections."

For the Middle Woodland period, then, it is not enough to track local historical trajectories in Ohio, the Southeast, or one of the latter's many subregions; rather, we must tack back and forth between local, regional, and "global" scales of analysis. Following Cobb (2005) and Jennings (2011), I believe that there is much to be gained by building conceptual bridges across the perceived divide between the modern and premodern worlds. Though the Hopewell Interaction Sphere may not exhibit all of the hallmarks of ancient globalization (Jennings 2011), I think it is fair to say that Hopewell was a "global" phenomenon for Middle Woodland peoples, linking, to varying degrees, individuals and groups across much of their known world (see Cobb 2005 for a similar argument about the Mississippian phenomenon). By examining ways in which these global dynamics reverberated at socially and geographically smaller scales-from individual communities to intraregional interaction spheres (e.g., Swift Creek)-we may gain important, broadly applicable insights about the transformative potential of far-reaching social fields. In turn, careful study of the emergent properties of a social field like Hopewell should demonstrate how practice and agency at the local level structured this and other global phenomena.

To facilitate this multiscalar analysis, the following topical summaries include explicit comparisons between the archaeological records of the Middle Woodland Southeast and the Ohio Hopewell heartland. Because the latter has been more explicitly theorized than the former, models of Ohio Hopewell subsistence, settlement, ceremonialism, and social organization provide a firm jumping-off point for interpreting southeastern Middle Woodland data. Of course, this being an article on the Middle Woodland Southeast, my review of the Ohio Hopewell literature is far from exhaustive (for that, see Abrams 2009; Case and Carr 2008). I have further constrained the scope of this review in three ways. First, I limit the geographic area under consideration to a fairly narrow definition of the American Southeast, inclusive of the lower Mississippi River and Tennessee River drainages and the South Atlantic-Gulf basins (Fig. 1). Research at the margins of the Southeast (e.g., the American Bottom, the lower Illinois River Valley, Kentucky, western Virginia) stands to make important contributions to the field as well, and I have included relevant publications on those areas in the bibliography of recent literature. Second, I tend to discuss the Middle Woodland period as a singular chronological unit, ca. 200 BC-AD 600. While this approach risks obscuring diachronic patterns, intraregional variation in the dates of early, middle, and late Middle Woodland subperiods would be at odds with the macroscalar review attempted here. Finally, because they are not universally accessible, I have not included unpublished survey and excavation reports that address the Middle Woodland period. Where available, I do cite the published results of cultural resource management projects to highlight the potential of such studies to flesh out our picture of the Middle Woodland Southeast.

Following a brief history of archaeological research on Middle Woodland societies in the Southeast, I examine regionwide evidence for Middle Woodland foodways, habitation, ritual and interaction, and sociopolitical organization. These

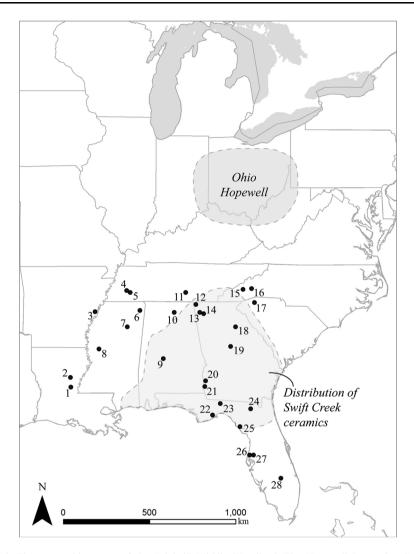


Fig. 1 The geographic extent of the "global" Middle Woodland. The Hopewell Interaction Sphere extended across most of the area shown (excluding the coastal Mid-Atlantic). For the purposes of this article, the Southeast includes Florida, Georgia, North and South Carolina, Tennessee, Alabama, Mississispipi, and those portions of eastern Louisiana and Arkansas in the lower Mississippi Valley. Shaded areas depict the extent of the Ohio Hopewell core and the intraregional interaction sphere represented by the distribution of Swift Creek ceramics (after Williams and Elliot 1998, fig. 1-1). Major sites are 1, Marksville; 2, Crooks; 3, Helena Crossing; 4, Pinson; 5, Johnston; 6, Pharr; 7, Bynum; 8, Little Spanish Fort; 9, Armory; 10, Walling; 11, Old Stone Fort; 12, Tunacunnhee; 13, Hardin Bridge; 14, Leake; 15, Garden Creek; 16, Biltmore; 17, Pumpkin; 18, Cold Springs; 19, Swift Creek; 20, Mandeville; 21, Kolomoki; 22, Bird Hammock; 23, Block-Sterns; 24, McKeithen; 25, Garden Patch; 26, Roberts Island; 27, Crystal River; and 28, Fort Center

topics, however, are fundamentally interrelated, and separating them for analytic clarity glosses over the connections between ritual and domestic activities at local, regional, and global scales. Readers should note that research programs at several

important Middle Woodland sites (e.g., Crystal River, Kolomoki, Garden Creek, Pinson, etc.) have generated data relevant to each of these topics, and site-specific publications that integrate such interpretations are included in the reference list. Next, I shift focus from particular research topics to emerging research strategies in an effort to chart the impact of recent methodological innovations on Middle Woodland research in the Southeast. Specifically, I highlight how archaeological geophysics, Bayesian chronological modeling, and various provenance studies are revising many long-held views about Middle Woodland occupation and interaction. Building on this discussion, I conclude with a few proposals for future research on the Middle Woodland Southeast, which promises to reveal its potential as a laboratory for exploring the structure and impact of social fields in pre-Columbian North America.

History of Middle Woodland Research in the Southeast

Although the term "Middle Woodland" was not widely adopted until the mid-1900s, archaeological research on Middle Woodland sites began nearly a century earlier (albeit, a few decades after the first systematic investigations of their Ohio Valley contemporaries; i.e., Squier and Davis 1848). By the late 19th century, information about certain Middle Woodland sites existed in multiple state-specific compendia (Jones 1873; Thruston 1890; Wyman 1875) as well as the reports of the Smithsonian's Mound Division (Holmes 1903; Thomas 1894). Around the same time, Moore was maneuvering his steamboat, the *Gopher*, along the coasts and major rivers of the Southeast, carrying out a staggering number of excavations along the way. His efforts in northern Florida and the Tennessee River Valley are especially salient to Middle Woodland research today, particularly because his published reports, maps, and field notes—all of which were fairly detailed considering their historical context—represent the only record of many mound sites in those areas (Moore 1999a, b, c, 2002).

Beginning in the Great Depression, several major excavations commenced in the Southeast under the umbrella of New Deal archaeology (Lyon 1996). The earliest New Deal project was carried out at the Middle Woodland Marksville site in Louisiana (Setzler 1934). Slightly later, what began as relief era surveys and excavations by the Tennessee Valley Authority became central to the development of Middle Woodland archaeology in the Southeast, producing well-documented regional studies of Middle Woodland settlement, subsistence, and interaction (e.g., Chapman 1985; Faulkner 2002). Contemporary projects also were carried out at several major Middle Woodland mound sites, including Kolomoki, Mandeville, Swift Creek, and Tunacunnhee in Georgia (Jefferies 1976; Kellar et al. 1962; Marsh 1998; Sears 1956); Crystal River in Florida (Bullen 1951, 1953; Pluckhahn et al. 2010; Weisman 1995); Bynum and Pharr in Mississippi (Bohannon 1972; Cotter and Corbett 1951); and several Copena burial mounds in northern Alabama (Walthall 1979, 1980).

These and other mid-20th century projects were fundamentally concerned with defining culture histories, resulting in a proliferation of named ceramic types, varieties, and series that, in turn, were used to build local chronologies and to track interregional interactions (Dunnell 1990; Gibson 1993; Watson 1990). However, at scale of the Eastern Woodlands as a whole, archaeological culture histories privileged the apparent cultural climax of Ohio Hopewell, leading to trait lists for the Middle Woodland period that southeastern assemblages could rarely match. This fact was made abundantly clear at the 1979 conference on Hopewell archaeology in Chillicothe, Ohio, where one response to the eight southeastern papers was, "in a strict sense, there was no Hopewell in the Southeast" (Brose and Greber 1979, p. 209). Thus, relegated to the "kids table" of Eastern Woodlands prehistory, Middle Woodland research in the Southeast fell by the wayside through much of the 1980s and 1990s (with a few important exceptions, e.g., Anderson 1985; Jefferies 1994; Knight 1990; Mainfort 1988b; Williams and Elliott 1998a). At the same time, Ohio Hopewell archaeology shifted focus, turning away from broad-scale interactions (e.g., Caldwell 1964; Struever and Houart 1972) and toward local cultural dynamics (e.g., Pacheco 1996a).

In the 21st century, the Middle Woodland period remains one of the less frequently studied eras of southeastern prehistory (Knight 2011, p. 217; Wright and Henry 2013b, p. 1). A search for the term "Middle Woodland" in the abstracts of articles published in Southeastern Archaeology between 2005 and 2015 produces nine results; a similar search for "Mississippian" yields 66 results. However, coinciding with some renewed attention to interregional Hopewell among Ohio researchers (e.g., Carr 2006a), the Middle Woodland Southeast is attracting a new wave of scholarship that combines cutting-edge field methods and laboratory techniques with creative theoretical perspectives (e.g., chapters in Charles and Buikstra 2006; Wright and Henry 2013). Arguably, this resurgence relates at least in part to recent theoretical trends in southeastern archaeology that emphasize grand historical narratives (Pauketat 2001; Pauketat and Loren 2005; Sassaman 2010). If Caldwell's interpretation of Hopewell as a "great tradition" linking regional "small traditions" holds (Caldwell 1964), then broad-scale, historical processual (Pauketat 2001) or syncretic processual (Thompson and Pluckhahn 2010, p. 37) approaches to Middle Woodland archaeology are warranted in and beyond the American Southeast, and are broadly compatible with the "social field" framework mentioned above.

Because this renaissance of Middle Woodland research has occurred only lately, the following topical syntheses draw heavily on studies conducted from the 1970s onward. The subsequent discussions about the application of new field and analytic methods highlight how the last 10–15 years of research are forcing us to refine and revise our ideas about the Middle Woodland Southeast. In particular, these new approaches promise to weigh in on, if not resolve, several longstanding debates within Woodland period archaeology: the extent to which Middle Woodland people were foragers or farmers, the nature of their settlement pattern, the motivations for and mechanisms of long distance interaction and monument construction, and shape of their sociopolitical systems.

Middle Woodland Subsistence: Foraging or Farming?

Once considered one of the defining hallmarks of the Woodland period as a whole, the relative importance of cultivated plants in Middle Woodland foodways remains a perennial topic of investigation in both the American Midwest and Southeast. The crops of most interest in these debates comprise the Eastern Agricultural Complex: goosefoot (Chenopodium berlandieri), maygrass (Phalaris caroliniana), knotweed (Polygonum erectum), little barley (Hordeum pusillum), marshelder (Iva annua), and sunflower (Helianthus annuus) (Fritz 1993). By AD 100, seeds from these plants appear with notable frequency in assemblages from both open air and rockshelter sites across eastern North America (Fritz 1990, 1993; Yarnell and Black 1985), although our inability to identify morphologically distinctive domesticated forms of some species makes it difficult to distinguish between wild and purposefully propagated plants (Fritz 1990, pp. 390-391). At a minimum, paleobotanical assemblages from the Ozarks and the greater Southern Appalachians (including the Cumberland Plateau) indicate that goosefoot, marsh elder, and sunflower, not to mention squash (Curcurbita pepo) and bottle gourd (Lagenaria sieeraria), were domesticated by the Middle Woodland period (e.g., Brewer 1973; Cowan 1985; Fritz 1986; Gardner 1987).

There has been a historical tendency among Eastern Woodlands archaeologists to downplay the role of these crops in Middle Woodland subsistence and their impact on Middle Woodland lives (Yarnell 1993). Many studies of Middle Woodland subsistence and settlement emphasize the importance of diverse and widely distributed wild resources and paint a picture of Middle Woodland foragers rather than horticulturalists or farmers. Several scholars (Fritz 1993; Gremillion 2002; Knight 2001) link these interpretations to the endurance of Caldwell's concept of primary forest efficiency. According to this hypothesis, rich natural environments like that of the Eastern Woodlands may have been sufficient to support processes that have most often been associated with the emergence of agriculture, such as sedentism and population increase (Caldwell 1958). An abundance of wild plant resources would have rendered plant cultivation not strictly necessary for survival; rather, it would have supplemented the calories and nutrients retrieved from wild plant resources.

Macroscalar discussions of Middle Woodland subsistence actually demand the sort of definitional hedging apparent in phrases like "hunter-gatherer-gardener" or, along the southern coastlines or major rivers, "forager-farmer-fisher" (Smith 2001). Only by zooming into particular subregions is it sometimes possible to detect a commitment to foraging or farming, and even then different interpretations are sometimes offered for the same area. Ohio Hopewell peoples, for instance, have been emphatically labeled farmers (Smith 1992) and hunter-gatherers (Yerkes 2002, 2003) on account of their settlement pattern and tool assemblages. Other paleobotanical studies in the Ohio River Valley (Wymer 1993) indicate that Middle Woodland groups practiced a blended subsistence strategy, in which horticultural and foraging activities yielded a rich diet of cultivated crops and wild plant resources.

Some paleobotanical assemblages in the Southeast suggest likewise versatile adaptations. For example, in the interior Southeast, Middle Woodland assemblages include only modest amounts of native crop seeds, suggesting "subsistence practices [that] might best be described as foraging-gardening, with an emphasis on the foraging" (Scarry 2003, p. 88; see also Chapman and Shea 1981; Crites 1978; Kline et al. 1982; Yarnell and Black 1985). A similar case may be made for a few sites in the lower Southeast, such as the Hardin Bridge site in northwest Georgia (Branch-Raymer and Bonhage-Freund 2011) and the Pumpkin site in northwest South Carolina (Charles 2001). Scarry (2008) has recently outlined what this sort of strategy would have involved in practice, including different methods of seed sowing, harvesting, and scheduling. In contrast, cultigens appear to have played little if any role in the subsistence strategies of Middle Woodland groups of the lower Mississippi Valley (Fritz 1995, 1998, 2008; Kidder and Fritz 1993; McGimsey 2010).

Drawing from datasets from across the Eastern Woodlands, Gremillion (2002) has delineated broad zones in which the Eastern Agricultural Complex played greater and lesser roles in Woodland period subsistence economies. She posits that communities in the lower Southeast may have relied less on indigenous crops than those in the Midwest and Midsouth because the relatively warmer climate they enjoyed would not have required a reliance on stored cultigens over winter. She further proposes that the higher incidence of cultigens in assemblages from sites within drainages that feed the Mississippi River and its tributaries may reflect "the dynamics of exchange of goods and information along natural travel routes," including "the spread of plants and cultural knowledge about them" (2002, p. 500; see also Mueller 2013). While either of these hypotheses is plausible, this regional pattern also may be the result of preservation bias, insofar as the acidic soils of the Piedmont and Coastal Plain rarely yield substantive organic assemblages (Branch-Raymer and Bonhage-Freund 2011, p. 130). Along the same lines, the ways that seeds were processed or stored in the lower Southeast may have contributed to their absence in the archaeological record (Fritz 1990, p. 418).

Although they were not mainstays of the Middle Woodland diet, two other domesticated plants appear to have played a special role in Middle Woodland societies: maize (Zea maize) and tobacco (Nicotiana rustica). Small quantities of the former have been recovered from a few Middle Woodland sites in the Eastern Woodlands (Chapman and Crites 1987; Riley et al. 1994; Smith 1992), but there is no evidence for intensive maize farming in the Southeast until the Late Woodland/ Mississippian transition ca. AD 950 (VanDerwarker et al. 2016, p. 142). The predominant models for the adoption of maize in the Southeast postulate that it was a prestige food used in competitive feasts that gradually became a common staple for Mississippian peoples (Johannessen 1993; Scarry 1993; Vanderwarker et al. 2013). However, several recent studies indicate that the adoption of maize as a staple followed quite rapidly on the heels of its relatively late introduction in the region (Simon 2014; Thompson and Pluckhahn 2014; Thompson et al. 2013a), calling into question our understanding of the mechanisms underlying maize intensification. How these findings will affect interpretations of the role of maize in Middle Woodland contexts remains to be seen. As for tobacco, archaeologists are in

general agreement that this plant was exclusively used in ritual contexts during the Woodland period in the Southeast and Midwest (Brown 2006; Rafferty 2016; Winter 2000). Nicotine detected in pipe residues using gas chromatography/mass spectroscopy analysis (Carmody et al. 2011; S. Rafferty 2002) corroborate evidence in the form of actual tobacco seeds (Asch and Asch 1985) that this plant was used in particular contexts during the Middle (and perhaps Early) Woodland period.

Compared to evidence for plant cultivation, faunal remains from southeastern Middle Woodland sites rarely (if ever) have been the focus of debate. Like the rest of the Holocene record for the interior Southeast, the most ubiquitous species in Middle Woodland faunal assemblages include rabbit, raccoon, squirrel, turkey, and overwhelmingly deer (Jackson and Scott 2002). Not surprisingly, contemporaneous coastal sites attest to a reliance on fish and shellfish (Byrd 1997; Mikell 2012; Reitz and Quitmyer 1988); some interior sites also indicate the exploitation of shellfish and riverine fish during the Middle Woodland (e.g., Jackson and Scott 2002; McGimsey 2010; Peacock 2002). That said, we must not dismiss the possibility that changes in plant based subsistence strategies may have affected hunting activities and given rise to scheduling conflicts or gender-based divisions of labor (Jackson and Scott 2002).

Middle Woodland Settlement: Homesteads and Villages

Archaeologists have hotly debated the nature of Middle Woodland settlement in Ohio for decades. Early 20th century expectations that agricultural village communities were responsible for Hopewell earthworks have proven insupportable on the basis of archaeological evidence. Rather, Hopewell forager-farmers appear to have lived in small homesteads, in groups of one to a few households (sensu Ashmore and Wilk 1988; Blanton 1994; Pluckhahn 2010c). As an aside, Dancey and Pacheco (1997a, p. 12) prefer the term "hamlet" to describe these fundamental residential units, arguing that it encompasses not only single component/single household sites, but also sites with a sequence of multiple households. Because "hamlet" carries a slightly different meaning in the Southeast (see Espenshade 2008, p. 165), I prefer the term homestead, attributing to it Fuller's (1981, p. 30) definition of hamlet: "a contiguous contemporaneous domestic deposit of artifacts which cannot be spatially subdivided into redundant functional units."

According to the "dispersed sedentary community model" (Dancey and Pacheco 1997a; Pacheco 1996b; Prufer 1965), the most prominent extant vision of Ohio Hopewell settlement, the residents of multiple individual homesteads formed a "residential community" (sensu Ruby et al. 2006; see also Yaeger and Canuto 2000, p. 5) responsible for the construction and maintenance of a nearby earthwork. However, the apparent "mismatch of scales" (Greber 1997, p. 209) between these dispersed populations and Hopewell monumentality have called into question the one-to-one relationship between a local residential community and a singular earthwork site (Abrams 2009, p. 177). Resulting revisions to our definitions of Hopewell communities have important implications for our understandings of social organization and multiscalar interaction in and beyond Middle Woodland Ohio.

Some archaeologists disagree with this model's characterization of Middle Woodland homesteads as sedentary. While paleobotanical assemblages from some Ohio Valley sites support year-round habitation (Kozarek 1997; Pacheco 2010; Pacheco et al. 2009), other lines of evidence suggest temporary settlement, higher mobility, and a greater reliance on wild resources than cultivated plants (Abrams and Freter 2005; Cowan 2006; Yerkes 1994, 2002, 2006). Abrams (2009, p. 177) has recently and cogently pointed out that "this dichotomy is false, with instead various options available to and practiced by local Hopewell communities"; some groups in resource-rich areas may have been sedentary year-round, while those in less naturally abundant areas may have moved seasonally.

Many Middle Woodland habitation sites in the Southeast appear to comprise individual homesteads like those observed in Ohio (Espenshade 2008, p. 119). Excavations of Middle Woodland homesteads are not common, but available data indicate that they consisted of modest clusters of single post structures; pits for food storage and processing; posthole patterns representing drying racks, windbreaks, etc.; shallow midden deposits; and occasionally human burials (Smith 1992, p. 213). Smith first identified this regionwide pattern in his synthesis of Middle Woodland settlement sites in the Duck River drainage in Tennessee, the lower Illinois River Valley, and the American Bottom (1992; see also Faulkner 2002; Kelly 2002). Although described in general terms, small, undifferentiated habitation sites appear to characterize Middle Woodland settlement in the lower Mississippi Valley, the Gulf Coastal Plain of Mississippi, and coastal North Carolina as well (Herbert 2002, p. 303; Jackson et al. 2002, p. 245; Kidder 2002, p. 75; McGimsey 2010; Morse 1989). More recently, Applegate (2013) identified numerous sites fitting this description in her exhaustive summary of Early and Middle Woodland domestic sites in Kentucky. Though it falls outside the Middle Woodland Southeast as defined in this article, her remarkable synthesis of gray literature datasets should inspire similar efforts farther south. The results of individual CRM investigations stand to make important contributions to our understanding of Middle Woodland homesteads and settlement patterns, as exemplified in the published reports on the Hardin Bridge site (Branch-Raymer and Bonhage-Freund 2011; Espenshade 2008; Windham 2011) and the Cartersville occupation of the Brasstown Valley (Cable 2000), both in northern Georgia.

Like Ohio Hopewell homesteads, those of the Middle Woodland Southeast included both permanent (i.e., year-round) and seasonal occupation (e.g., Bacon and Merryman 1973; Branch-Raymer and Bonhage-Freund 2011; Faulkner 1977, 2002; Shelby 2011), presumably reflecting the flexible subsistence strategies described above and the "distributional availability of natural resources and the presence of productive ecotonal niches" (Windham et al. 2011, p. 113; see Pluckhahn and Thompson 2013 for a similar argument for larger Middle Woodland settlements). For example, the distribution of Woodland period sites across numerous environmental settings in northeast Mississippi points to a strategy in which settlement location maximized access to diverse natural resources (Johnson 1989). Meanwhile, in particularly resource rich areas such as the upper and middle Tennessee River Valley (Chapman 1973, 1985; Cridlebaugh 1981; Davis 1990), archaeologists have identified large clusters of several homesteads; apparently occupied on a seasonal

basis, these are best understood as semipermanent residential base camps (Wetmore 2002, p. 261). Even some rockshelters, often characterized as special-purpose locales, appear to have supported long-term residence during the Woodland period, perhaps thanks to their accessibility to diverse subsistence and lithic resources (Applegate 2013; Franklin et al. 2013).

Although homestead sites appear to typify Middle Woodland settlement across the southeastern landscape, more formal settlements are far from absent (contra Cobb and Nassaney 2002). In a significant departure from continuity with the Ohio Middle Woodland record (however, see Clay 2009; Lazazzera 2004), some Middle Woodland settlements in the Southeast appear to represent true villages ["a contiguous domestic deposit of artifacts which can be spatially subdivided into contemporaneous redundant functional units" (Fuller 1981, p. 30)]. Importantly, many (though not all; see Benyshek and Webb 2012; Charles 2001; Espenshade 2008; J. Rafferty 1994, 2002) of these early villages co-occur with Middle Woodland platform mounds, burial tumuli, plazas, and/or earthen embankments (e.g., Jefferies 2006; Jones et al. 1998; Keel 1976; Knight 1990; Pluckhahn 2003). This, too, contrasts with Ohio Hopewell, where mound and earthwork sites are characterized as vacant ceremonial centers (Dancey and Pacheco 1997b; Prufer 1965) given their demonstrable lack of permanent on-site domestic occupations dating to the Middle Woodland period (Burks and Pederson 2006; Burks and Walter 2009; Lynott 2015). Interestingly, Middle Woodland mounds and earthworks in Ohio and the Southeast have historically been interpreted as integrative facilities, respectively, bringing together scattered households or newly coresident villagers in a single meaningful community (e.g., Carr 2006b, c; Knight 2001; Lindauer and Blitz 1997; Ruby et al. 2006; though see Pluckhahn 2010b for an important critique). Thus, Middle Woodland villagers-numbering several dozen to a few hundred individuals, based on the number of houses present, midden size, or rates of sherd deposition (Knight 2001, pp. 325–326)—are thought to have engaged not only in everyday social and economic pursuits but also in communal ceremonial activities associated with nearby monuments (e.g., White 2010).

Compared to other parts of the world, research in the Middle Woodland Southeast has failed to link the emergence of villages to population circumscription, warfare, or a wholesale commitment to agriculture. In a series of recent publications, Pluckhahn has argued that "ritual and ceremony may have been the centripetal forces that brought people together into larger communities" (2010b, p. 104). Wallis and colleagues (2015) have made a similar argument based on their findings at the Garden Patch site in Florida, where the layout of ceremonial monuments relative to the domestic occupation was established early in the site's history. Because "sacred" and "secular" domains of activity often appear to have been spatially segregated (Pluckhahn 2010b; but see Russo et al. 2014), the present discussion is limited to evidence for domestic activities, even if the village component is adjacent to monumental architecture.

On the whole, investigations of ceremonialism and monumentality at Middle Woodland villages far outnumber studies of everyday life. In the last 25 years, on the basis of surface collections, shovel tests, geophysical survey, and horizontal excavations, village occupations have been inferred at Cold Springs, Kolomoki, Leake, and Tunacunhee in Georgia (Fish and Jefferies 1986; Jefferies 1994, 2006; Keith 2011, 2013; Pluckhahn 2000, 2003); Garden Creek and Biltmore in North Carolina (Keel 1976; Kimball et al. 2010, 2013; Wright 2014a, b); Walling and Armory in Alabama (Eubanks 2013; Knight 1990); and Crystal River, Fort Center, McKeithen, and several other sites in northern Florida (Milanich et al. 1997; Pluckhahn and Thompson 2013; Russo et al. 2006; Stephenson et al. 2002). Only some of these villages, however, have undergone extensive excavation, and even fewer have received attention in the published literature. For example, although 5000 m² of off-mound habitation area were excavated at Cold Springs, to date, the published discussion of these findings is limited to a single paragraph (Jefferies 1994).

The major exception is Pluckhahn's investigations of the habitation area at Kolomoki. Located in the Chattahoochee Valley of southwestern Georgia and sufficiently large to have once been labeled a Mississippian site (Knight and Schnell 2004), Kolomoki is now known to date to the late Middle Woodland/early Late Woodland period (ca. AD 350–750) and is one of the most thoroughly documented sites in the Southeast. It comprises at least eight mounds, a plaza area largely devoid of artifacts, a possible an earthen enclosure, and a substantial U-shaped village area (Pluckhahn 2003; Pluckhahn and Thompson 2013). Small block excavations in different portions of the site have revealed occupation areas of varying intensity, including a semisubterranean pithouse with a dense assemblage of ceramic and lithic artifacts and faunal and botanical remains (Pluckhahn 2003). Combined with the results of an extensive shovel-test survey and both radiocarbon and ceramic chronological determinations (Pluckhahn 2000, 2003), these data have provided the basis for novel interpretations of late Middle Woodland and early Late Woodland social organization and complexity. For example, Pluckhahn identified multiple scales of social integration at Kolomoki, such as household-level feasting (Pluckhahn et al. 2006) and village-level ceremonialism associated with platform mounds, plazas, and burials (Pluckhahn 2007, 2010b).

At other Middle Woodland village sites where fewer domestic data are available, archaeologists have estimated the size of the resident population (i.e., number of houses or number of villagers), or, on the basis of gross spatial relationships and artifact distributions (Russo 2004), proposed models of egalitarian social organization in these communities. To my knowledge, there are no published studies from the last 20 years, which provide the kind of data necessary to elaborate or critique these theories, such as multiple extensively excavated contexts from a single Middle Woodland settlement (Chapter 4 of Milanich et al. 1997, originally published in 1984, is an earlier exception). In the absence of such data, it is difficult to make robust intravillage comparisons of domestic architecture and material culture and, in turn, to offer compelling interpretations of daily life in a Middle Woodland village. I return to this point below in a call for future research, but now turn to the muchbetter-documented aspects of these sites: their monuments and associated evidence for communal ritual.

Materializing Middle Woodland Religion: Monumentality, Ritual, and Interaction

The Middle Woodland period was neither the first nor last time that the pre-Columbian Eastern Woodlands witnessed a veritable explosion of grand-scale religious activity. Beginning in the Middle Archaic, groups in the lower Mississippi Valley were erecting carefully laid out earthwork complexes (Saunders 2004; Saunders et al. 2005), culminating in the construction of the unprecedented ridges and mounds of Poverty Point during the Late Archaic (Gibson 2001; Kidder 2011; Sassaman 2005). More than two millennia later, Mississippian townspeople at Cahokia, Moundville, and dozens of other sites across the Southeast raised enormous platforms of earth, which were subsequently occupied by sacred temples and the residences of a ruling elite (Dalan et al. 2003; Knight 2010). Some of these monumental episodes were accompanied by intensified interregional movement of certain types of artifacts and raw materials, many of which appear to have been deployed in ceremonial contexts (Muller 1997; Rosenswig and Burger 2012; Sassaman 2005; Spielmann and Livingood 2005; Trubitt 2000). The Middle Woodland/Hopewell phenomenon similarly involved both monumentality and extensively trafficked material culture, and research in and beyond the Hopewell core has provided views of these processes at multiple scales that have yet to be examined for earlier and later periods.

In Ohio, Hopewell is best known for three overlapping realms of ceremonial activity: the construction of earthen mounds and geometric earthworks; the elaborate burial of the dead in these monuments; and the assembly of massive quantities of diverse and artfully crafted exotic artifacts with these mortuary deposits. Lacking multiple lines of evidence indicative of hierarchical social organization, these three dimensions of Hopewell have been interpreted in broad terms as strategies for the integration of communities or other social groups (e.g., sodalities) at multiple scales (Byers 2011; Carr 2006b; Greber 1996; Lynott 2015; Ruby et al. 2006). Adopting an emic perspective, archaeologists also have linked Hopewell monumentality to world renewal rituals and lunar cycles, and have proposed that Hopewell sacred objects were used in a variety of shamanic ceremonial contexts (Brown 2006; Carr and Case 2006a; Hall 1997; Mainfort and Sullivan 1998; Romain 2009, 2015).

Historically, the inferred linkages between the Southeast and the Ohio Valley during the Middle Woodland period have derived from the identification of particular raw materials in ritual assemblages in the Hopewell heartland. Marine shell, shark teeth, galena, quartz, mica, and possibly copper are all sacred Hopewell exotica that originated in the Southeast or along its margins (Bernardini and Carr 2006; Blankenship 2013; Chapman and Keel 1979; Ehrhardt 2009; Goad 1976; Ruhl 2006; Seeman 1979a; Trubitt 2003; Walthall 1981; Wright and Loveland 2015). However, the overwhelming concentration of these raw materials at Ohio Hopewell earthworks relative to contemporaneous sites elsewhere in eastern North America has proved to be a persistent challenge to attempts to model Hopewell exchange in general, and Hopewell activities at the so called periphery in particular (Carr

2006a). Evidence of Hopewell ceremonialism in the Southeast is commonly described as a "thin veneer," overlying but minimally impacting the social, religious, or political dynamics of local communities (Anderson and Mainfort 2002a, p. 9; Chapman and Keel 1979, p. 161). With some important exceptions, Hopewellian material culture at southeastern sites is often limited to small quantities of artifacts made of exotic raw materials—e.g., Flint Ridge chalcedony bladelets at Garden Creek (Keel 1976) or single copper ear spool at Armory (Eubanks 2013)— or varying amounts of Hopewell-style ceramics (e.g., Stoltman 1999; Toth 1988). Furthermore, the prevailing view of Hopewellian craft production is that it occurred in the Ohio Hopewell core at the hands of Hopewell ritual specialists, even when the raw materials for these crafts originated far from this area (Spielmann 2008, 2009; but see Greber 2009; Wright and Loveland 2015).

While there is no question that the Hopewell assemblages of southern Ohio are the largest and most diverse of those known from the Eastern Woodlands ca. AD 1–500, it is equally incontrovertible that novel ceremonial practices were emerging across the Southeast at that time. Some of these activities appear to relate to broader networks of Hopewell religion and interaction; others are uniquely southeastern phenomena. By affording the southeastern Middle Woodland record of interaction and ceremonialism as much attention as that of Ohio Hopewell, we stand to generate a better understanding of these processes as they unfolded across eastern North America.

Mounds and Earthworks

As mentioned above, there is a deep history of mound building in the American Southeast. By the Middle Woodland period, this tradition had evolved to include not only conical burial mounds but also platform mounds (Lindauer and Blitz 1997, pp. 172-173). These Middle Woodland monuments are smaller and less common than better-known Late Woodland and Mississippian platform mounds and appear to have served a different purpose as well. While post-AD 800 platform mounds regularly supported important buildings (Lindauer and Blitz 1997, p. 173), Middle Woodland platform mounds usually lack evidence for permanent summit structures. Several dozen Middle Woodland platform mounds have been identified throughout the Southeast; among these, Knight has identified a subset of sites that he labels the "Kolomoki pattern" (1990, 2001). Kolomoki pattern sites combine evidence of permanent or semipermanent habitation and platform mound architecture. These mounds, for their part, share a number of characteristics (Knight 1990, pp. 170-171): irregular scatters of postholes (attributable to scaffolding behavior; see Knight 2001, p. 319) and pits; a lack of clear summit structures; extraordinarily large postholes, some with insertion and/or extraction ramps; burned areas and hearths on mound summits; multistage construction using multicolored fills; and the presence of exotic artifacts and special ceramics, which sometimes implicate Hopewell connections. From these remains, Knight and others (e.g., Jefferies 1994; Lindauer and Blitz 1997) have argued that these sites and their monuments were loci of intra- and intercommunity integration revolving around feasts, gift giving, and world renewal ceremonies. Some scholars also have suggested that Middle

Woodland platform mounds were charnel structures used in concert with burial facilities in nearby mounds (Milanich et al. 1997), although direct evidence for mortuary activity (i.e., human bones or cremains) is rare (Knight 2001, p. 323).

Monumental architecture in the Middle Woodland Southeast is not limited to mounds; it also includes earthen embankments and ditches-glossed here as earthworks (Mainfort and Sullivan 1998). Monumental geometric earthworks are well-documented components of the Ohio Hopewell landscape. In recent years, Hopewell archaeologists have considered the energetic requirements necessary for their construction (e.g., Bernardini 2004), the symbolism of selected building materials (e.g., Dempsey 2010; Lynott 2015), their spatial arrangement relative to important terrestrial landmarks and celestial bodies (e.g., Hively and Horn 2010; Romain 2015), and their possible relationships with social groups of varying scales (e.g., Byers 2004, 2011; Carr 2006c). In comparison, southeastern earthworks have received much less attention of late, beyond their identification and dating. Most known Middle Woodland earthworks in the Southeast are not precise geometric forms like their Ohio counterparts (but see Wright 2014b), but rather roughly circular features that partially or completely surround clusters of contemporary mounds and activity areas. The best documented of these enclosures are concentrated in the lower Mississippi Valley, including Marksville (Jones and Kuttruff 1998; McGimsey et al. 1999), Little Spanish Fort (Jackson 1998), and Pinson (Thunen 1998).

Much of our extant data on Middle Woodland mounds and earthworks was generated in the 1960s–1980s (e.g., Brose 1979; Dickens 1975; Fish and Jefferies 1986; Jenkins 1979; Keel 1976; Kellar et al. 1962; Knight 1990; Milanich et al. 1997; Rafferty 1990; Sears 1956; Walling et al. 1991). Today, archaeologists continue to refine our understanding of the architecture and settings of Middle Woodland monuments through collections based and field research. For example, McGimsey and colleagues have assembled excavation data collected at the Marksville site in Louisiana from the 1930s through the 1990s and have undertaken more recent fieldwork to better characterize its material culture, spatial organization, and chronology (McGimsey 2003, 2010; McGimsey et al. 1999; see also Jones and Kuttruff 1998). Similarly, I have examined the submound architecture at Garden Creek, North Carolina, by reanalyzing maps and field notes from the 1960s (Wright 2013). As discussed further below, non-invasive geophysical surveys and topographic mapping programs also are producing unprecedented views of several important Middle Woodland mounds.

Over the last three decades, Mainfort's research at Pinson has tackled several of these dimensions of Middle Woodland monumentality (Kwas and Mainfort 1986; Mainfort 1986, 1988a, b, 2013; Mainfort and McNutt 2004; Mainfort and Walling 1992; Mainfort et al. 1997, 2011). Following more than a century of antiquarian interest (Kwas 1996, 2013), systematic fieldwork at the site began in the 1960s and continued through the 1980s (Broster and Schneider 1976; Fischer and McNutt 1962; Morse 1986; Thunen 1998). The monumental architecture at Pinson is exceptionally varied, particularly compared to contemporaneous southeastern sites. Monuments of several different shapes and sizes (e.g., Sauls Mound, the second tallest earthen monument in the present day United States; the conjoined Twin

Mounds; the massive platform labeled Ozier Mound) have, when excavated, produced evidence of equally diverse activities. Features and artifact assemblages from the summit of Ozier Mound, for instance, have been interpreted as the remains of ritual activities, though there is little evidence for feasting or post emplacement as observed at other Middle Woodland platform mounds (Knight 2001, p. 313; Mainfort 2013, pp. 94–95; Mainfort and Walling 1992). Twin Mounds, in turn, exhibited a unique sequence of construction episodes, possibly including a primary platform punctured by wooden stakes (Mainfort 2013, pp. 110-112) that overlay six submound burial facilities that housed multiple individuals and varying assemblages of grave goods. The most extensive single monument at the site is the Eastern Citadel embankment, which averages 2 m tall and surrounds nearly 7 ha (Mainfort 2013, p. 173). McNutt (2005) has argued that some of these major mounds and earthworks constitute an astronomical observatory (but see also Kwas and Mainfort 2007; McNutt 2007). Considered together, this diverse record of monumentality hints at a similarly diverse program of ritual activities, the likes of which Hopewell scholars presume to have occurred at different individual earthwork sites (Carr 2006b).

Feasting and Mortuary Ritual

The archaeological record at sites like Pinson highlights the association between Middle Woodland monumental architecture and particular ritual activities. In both the Southeast and in Ohio, the types of activities that have received the most attention from Middle Woodland specialists are feasting and human burial. In fact, several Ohio Hopewell studies explicitly link feasting and mortuary ritual (e.g., Carr 2006b; DeBoer 1997; Seeman 1979b), whereas southeasternists have tended to tackle the subjects separately (but see Milanich et al. 1997).

Knight's seminal statement on the association of feasting with early platform mounds (2001; see also Knight 1990) underlies many recent discussions about this form of commensalism in the Middle Woodland Southeast. Drawing on data from several Kolomoki pattern mound sites, Knight (1990, pp. 160-161) argues that multiple lines of evidence, including food production and consumption debris, scaffolding features, and exotic artifacts, "agree with a broader picture of giftgiving and gift receiving in the context of feasting as a primary social mechanism in Hopewellian exchange." Depending on the scale of the feasts in question, they may have brought together kin groups within a single community or members of different communities (i.e., different villages, multiple homesteads) (Knight 2001, p. 327). In addition to assembling and integrating these groups, feasts also would have permitted the accumulation of prestige by the individual, group, or sodality hosting the event (Clay 1992; Knight 2001, p. 327; Lindauer and Blitz 1997; Pluckhahn 2010a, b). This sort of commensality (sensu Kerner et al. 2015) appears to characterize many "middle range" or "transegalitarian" societies including Ohio Hopewell (Spielmann 2002; Yerkes 2005), and Middle Woodland research stands to elucidate how communalism and competition mutually structured these events (e.g., Pluckhahn 2012).

Several recent studies have provided evidence that supports Knight's model, though it is worth noting that the material correlates of feasting (e.g., Dietler and Hayden 2001) are not always straightforwardly discernable at Middle Woodland sites. For example, remarkably well-preserved remains of a Middle Woodland feast were recently recovered at the Biltmore Mound in western North Carolina; consisting of elements from diverse animal species and exotic artifacts, this assemblage has been interpreted as evidence for Hopewellian ceremonialism in the Appalachian Summit (Kimball et al. 2010, 2013). The construction of Mound A at Roberts Island, Florida, also may relate to communal feasting activities, insofar as the oyster shells in mound fills appear to have been collected and processed over a shorter period of time-perhaps corresponding with a feasting event-than those from midden deposits (Sampson 2015). Though a much larger site, Kolomoki has produced a more modest record of feasting that appears to have been directed toward household-level solidarity (Pluckhahn et al. 2006). The apparent differences in the scale and intended audience of these events underscore the diversity of Middle Woodland feasting practices, even as they raise additional questions. How were these feasts financed? How were food surpluses mobilized? How were exotic or symbolically charged gifts circulated within and between communities?

Generally speaking, southeastern Middle Woodland mortuary practices have not been as rigorously examined as feasts in recent years (but see Bense 1998; Dekle 2013; Giles et al. 2010). As in Ohio, most excavations and analyses of human burials occurred in the early-mid 20th century; numerous burial mounds along the Florida Gulf Coast and the lower Mississippi Valley were reported during that time, including several at Marksville, Crooks, Helena Crossing, Bynum, Pharr, Tunacunnhee, and Bird Hammock (Bohannon 1972; Cotter and Corbett 1951; Ford 1963; Ford and Willey 1940; Fowke 1928; Jefferies 1976; Moore 1999c). The material record of mortuary activities varies considerably within and between these sites. Marksville alone featured interments of adults and children; singly or in groups; as inhumations, bundles, and cremations; in pits or mantles or on mound surfaces (Fowke 1928; Toth 1974). Artifact assemblages from these mounds are similarly diverse, including elaborately shaped and decorated ceramics in some cases (e.g., Crooks; Mainfort 2013) and Hopewellian exotica, such as copper earspools and panpipes, in others (e.g., Helena Crossing; Ford 1963). Mainfort (2013) recently synthesized several of these datasets and compared them to their midwestern Hopewell contemporaries. Even as certain similarities can be identified between Hopewell burial programs and those of the Middle Woodland lower Mississippi Valley (e.g., log-lined tombs, collective burial, possible charnel facilities), the scale of the former, particularly in the form of exotic and ritually crafted artifacts, far exceed that of the latter. That said, the number of burials identified at Crooks Mound A dwarfs that of even the largest Ohio Hopewell mounds.

In recent years, some Middle Woodland mortuary assemblages in the Southeast have been the subject of reexamination or reinterpretation, such as Dekle's relational approach to grave goods at Tunacunnhee, Georgia (2013), and Giles et al.'s (2010) bioarchaeological analysis of skeletal remains from Helena Crossing, Arkansas. Perhaps surprisingly, the Middle Woodland Copena record has not

received renewed attention in the 21st century (previous studies include Beck 1995; Goad 1980; Walthall and DeJarnette 1974; Walthall 1973). Contemporary research on off-mound deposits and features at several sites also has yielded evidence of ritual activities related to the processing or interment of the honored dead (e.g., Jefferies 2006; White 2010). In Kentucky, archaeologists have gone a step farther and have lately incorporated data from nonmonumental sites in their considerations of Adena/Hopewell mortuary ceremonialism (Clay 2013; Pollack and Schlarb 2013). To my knowledge, this approach has yet to be applied in the Middle Woodland Southeast, although its potential for expanding our views of rituals typically associated with monuments is high.

Multiscalar Interactions

Middle Woodland monument sites in the Southeast were loci for social gatherings, places where people came together to eat, exchange gifts, inter the dead, and erect mounds. Over the years, however, archaeological interpretations of the scale (i.e., size) and scope (i.e., geographic reach) of such gatherings have varied widely. At one end of the spectrum, Middle Woodland mound sites are considered the purview of a singular local community. Where Middle Woodland settlement consists of scattered households, this model closely resembles Dancey and Pacheco's vision of a dispersed sedentary community and its accompanying vacant ceremonial center (Dancey and Pacheco 1997a; Pacheco 1996b, 1997). Where a village is present, Middle Woodland monument sites are thought to constitute "corporately organized ritual spaces that served to reduce tensions" among villagers, even as they likely provided some means for limited aggrandizement (Pluckhahn 2010b, p. 102).

At the other extreme, the monuments of the Middle Woodland Southeast have been characterized as meeting places for local community members and for visitors from farther afield, including Ohio Hopewell peoples. Walthall envisioned Hopewell ceremonial encampments in the Southeast, where local groups would meet with Hopewell representatives-perhaps medicine persons or ritual specialists (Carr 2006a)—for exchange and ritual activity (1985; see also Williams and Harris 1998 for an alternative explanation for Middle Woodland mounds as shrines). Few sites have produced data that unambiguously support this particular scenario, but there is mounting evidence for impactful interpersonal interactions between southeastern and midwestern Middle Woodland communities. The identification of sizable nonlocal ceramic assemblages at the Leake site in Georgia and the Mann site in Indiana has suggested their possible function as gateway centers within the wider Hopewell Interaction Sphere (Keith 2010, 2011; Ruby and Shriner 2006). A recently discovered geometric earthwork and the residues of mica and crystal quartz craft production at the Garden Creek site have been attributed to the exchange of information and material achieved through pilgrimages by southern Appalachian individuals to Ohio Hopewell sites (Wright 2014a; Wright and Loveland 2015). Stoltman (2015, p. 6) has interpreted nonlocal utilitarian vessels he identified at Ohio sites though petrographic analysis as "travel gear used for food preparation by the travelers on their lengthy journeys to and from the Hopewell centers of the Ohio Valley region." In contrast to the early 20th century interpretations of the

Hopewellian Southeast, this recent work does not privilege Ohio Hopewell with regard to the directionality and agency of such interactions (mirroring recent research on Scioto and Havana Hopewell interaction, e.g., Bolnick et al. 2007; Keller and Carr 2006). Rather, it considers how local southeastern groups may have strategically involved themselves with Hopewell interaction networks for social or religious purposes (Wright 2014a).

Here again, the archaeological record from Pinson speaks to several of these issues (Mainfort 1986, 1988b, 2013). In contrast to Kolomoki but like Ohio Hopewell earthwork sites, extant evidence for habitation at Pinson is limited to the remains of short-term occupations presumably related to ceremonial gatherings. Excavations in the western ritual precinct revealed postholes, features, and several exotic artifacts indicative of Hopewell connections (Mainfort 2013, pp. 96–97). Nonlocal artifacts from other excavated contexts at Pinson complement these data. The site's ceramic assemblage, for example, includes not only nonlocal vessels from multiple places of origin, but also locally produced vessels with distinctively nonlocal decorations (Stoltman 2015; Stoltman and Mainfort 2002). Based on multiple lines of evidence-the scale of earthwork construction, the presence of exotic raw materials and nonlocal pottery, and the low intensity of on-site occupation-Mainfort (2013, p. 232) argues that Pinson was a Middle Woodland or Hopewellian pilgrimage center "that drew visitors from a large area [possibly including the southern Appalachians, the Tennessee River and Tombigbee river valleys, the Yazoo Basin, and southern Georgia] who wanted to access the powers manifested there." As he repeatedly states in his recent synthesis, however, much work remains to be done at this massive site to clarify our understanding not only of the Pinson Mounds but also of Middle Woodland connectivity across the Southeast and Midwest.

Having said all this, it is important to realize that Hopewell was not the only interaction network identifiable in Middle Woodland material culture in the Southeast; we must also consider how distinctive Swift Creek and early Weeden Island ceramics indexed intercommunity connectivity across of Georgia, northern Florida, and adjacent areas from AD 100 to 750 (Anderson 1998; Ashley 1992, 1998; Ashley and Wallis 2006; Elliott 1998; Snow and Stephenson 1998; Stephenson et al. 2002; Wallis 2011; Williams and Elliott 1998b). Complicated paddle-stamped Swift Creek pottery is uniquely suited to examining Middle Woodland interaction, insofar as "paddle matches" identified within and between ceramic assemblages can indicate the movement (or lack thereof) of pots, paddles, and/or potters. As Snow and Stephenson (1998, p. 103) explain, "Large numbers of sherds bearing a design from a number of different vessels would be expected on a site where the potter who owned that paddle resided. In contrast, only occasional sherds bearing the same design and often representing one vessel would be expected at sites that received the design on trade pottery." The potential of this approach has inspired numerous examinations and reconstructions of Swift Creek paddle designs (Ashley et al. 2007; Broyles 1968; Pluckhahn 2007; Smith and Knight 2012, 2014; Snow 1975; Wallis 2007; Wallis and O'Dell 2011). Smith and Knight (2012, 2014), for example, have developed a "task" model for the creation of Swift Creek paddle carvings that sheds light on the chaîne opératoire of Swift Creek artisans and

identifies new design attributes by which we can seriate Swift Creek assemblages. Increasingly, these art historical approaches to Swift Creek and other diagnostic pottery types (e.g., incised, punctated, cut-out, and/or red painted early Weeden Island ceramics) are being combined with high-resolution provenance research, producing increasingly sophisticated models of intraregional Middle Woodland interaction.

Social Complexity in the Middle Woodland Southeast

Assuming it is possible to overlook the term's evolutionary baggage, most archaeologists working in the Eastern Woodlands today would probably identify Middle Woodland groups in the Southeast and Midwest as tribes-"social systems that regularly exhibit some degree of institutionalized social integration beyond that of the extended family unit" (Parkinson 2002, p. 2; see also Anderson 2002; Braun 1986; Yerkes 2002). This has not always been the case. Throughout much of the 20th century, archaeologists postulated that Ohio Hopewell societies were hierarchically organized chiefdoms-how else to explain their impressive monuments, elaborate burials, and exotic artifact assemblages? However, evidence for other correlates of chiefly societies, such as a commitment to agriculture, economic redistribution, and full-time craft specialists, have not been identified in Hopewell contexts (although substantial evidence supports claims for smaller-scale ritualized craft production; see Spielmann 2002, 2008, 2009; Spielmann and Livingood 2005). Regardless of the degree to which Ohio Hopewell people relied on cultivated plants or how often they moved their settlements (both matters of debate), extant data show that, in their daily lives, they were dispersed across a wide landscape. Under these conditions, occasional activities at major earthwork sites-mound building, feasting, gift giving, finding spouses, visiting with relatives, burying the dead, etc.would have assembled otherwise far-flung individuals to renew their social relationships as they conducted rituals to renew the world in a cosmological sense (Hall 1997, p. 157; Yerkes 2002, 2003).

Still, "the scale of integration is not clear" (Yerkes 2002, p. 231). There are multiple hypotheses regarding the geographic origins and social membership of those individuals who gathered at earthwork sites in the Hopewell core area, including the vacant center/dispersed hamlet model (Dancey and Pacheco 1997b), described above; the cult sodality heterarchy model, in which earthwork construction and maintenance is attributed to sodality members spread across multiple communities (Byers 2011); and pilgrimage models, which may have entailed very long distance journeys and far-reaching affiliations (Carr 2006a; Lepper 2004; Stoltman 2015). Given the complexity and diversity of the Hopewell record and the inherent flexibility of tribal integration strategies, it seems unlikely that a single model can be applied with equal success to all Ohio earthwork communities (Carr 2006b; Ruby et al. 2006).

The relationship between residential communities and monumental sites in the Middle Woodland Southeast also has been viewed as evidence for tribal social organization (Anderson 2002). Here, however, mounds, earthworks, and the ritual

activities that took place in their vicinity would have integrated not only dispersed households but also members of newly established villages. Permanent coresidence in a sedentary village may have facilitated greater levels of intratribal social inequality (Hayden 1995; Kelly 1992), and moreover, those who lived among dispersed homesteads may have had a different social status than those who lived in the villages adjacent to mounds (Pluckhahn 2010b). Feasting and gift-giving events at these relatively higher status villages may have resembled the dynamics of a big man/big woman society (Anderson 2002; Bense 1994, 1998; Knight 2001; Smith 1986), in which prestige may be achieved through material expressions of generosity and the opportunity to create and solidify social bonds.

While a lack of evidence for ascribed status indicates that generally egalitarian political relationships were the norm during the Middle Woodland period, situational leadership roles characterized both Ohio Hopewell groups and their contemporaries in the Southeast. Based on extensive reviews and analyses of the Ohio Hopewell record, Carr and colleagues argue that Hopewell leadership was socioreligious in nature and that Hopewell leaders were shamans or shaman-like practitioners (Carr and Case 2006b; Turff and Carr 2006). These leaders may have been recruited from distinct clans (Thomas et al. 2006), although the likelihood that sodalities complemented clan-based organization in the ceremonial sphere precludes this model from fully accounting for Hopewell ritual leadership (Byers 2011). Analogous studies of Middle Woodland leadership and clans in the Southeast have focused on those datasets that best approximate the symbolic richness of Ohio Hopewell ritual assemblages, namely, Swift Creek complicated stamped pottery and early Weeden Island effigy vessels. For example, Wallis (2006) has proposed that Swift Creek paddle designs, many of which are thought to represent plants, animals, or cosmological concepts, may be totemic clan symbols. Pluckhahn (2010a), meanwhile, has hypothesized that human and animal Weeden Island effigy vessels portray ritual specialists and/or their associations with shamanic ritual, and that these individuals may have participated in communal ceremonies according to their clan, moiety, or sodality affiliations.

In light of these findings, it is clear that Middle Woodland social organization in the Southeast was complex, though perhaps not in the hierarchical sense of 20th century social evolutionary frameworks (Pluckhahn 2010a). To understand this complexity, it is necessary that we go beyond the mere identification of Middle Woodland societies as tribes to consider the cultural processes that shaped and were shaped by these dynamic social formations (Fowles 2002). Put another way, we should not ask "how complex are Middle Woodland societies" in relative terms (i.e., "more" or "less complex"), but rather "how are Middle Woodland societies complex" (sensu Cobb 2003). Along these lines, researchers in the Ohio Valley have recently begun to trace the implications of heterarchical forms of social organization on Adena-Hopewell settlement and ceremonialism (Henry 2013; Henry and Barrier 2016). Whether or not these models apply to all or (perhaps more likely) parts of the Middle Woodland Southeast awaits further analysis of the region's complex record of daily life and multiscalar interactions.

Methodological Advances in Middle Woodland Research

Thus far, this review has employed fairly broad-brush strokes to paint a picture of the Middle Woodland at a global scale through explicit comparisons between the southeastern and Ohio archaeological records. However, by tackling different topics (i.e., subsistence, settlement, monumentality, interaction, and social organization) one at a time, even in broad perspective, important linkages across these dimensions of culture are minimized. To remedy this, I shift focus to the more localized archaeological datasets that highlight the connections among Middle Woodland subsistence, settlement patterns, community structures, social identities, and ritual activities at a comparatively local level. Over the last decade, several field and laboratory projects in the Southeast have generated exactly this type of data through the application of relatively new methodological techniques: specifically, archaeological geophysics, Bayesian modeling of chronological sequences, and various provenance analyses. By providing high-resolution views on what was happening locally and intraregionally at this time, this research complements and promises to refine our current understanding of global Middle Woodland developments.

Mapping "Invisible" Architecture

Archaeologists working in the Eastern Woodlands have increasingly used noninvasive geophysical techniques to extensively map entire sites and intensively investigate complex stratigraphic deposits. Although ground truthing is required to fully comprehend the results of these geophysical surveys (Hargrave 2006), the scale and cost of such investigations are dramatically more feasible than total site excavation, and the results of geophysical survey and ground-truthing efforts are arguably more informative than traditional survey techniques (e.g., surface collection, shovel tests) and sampling strategies for block excavations (Johnson and Haley 2006; Kvamme 2003). By revealing a site's layout, geophysical surveys allow archaeologists to consider the full suite of activities that occurred there as well as their spatial relationships, which in turn can inform interpretations about social, political, economic, or religious organization (Horsley et al. 2014; Thompson et al. 2011).

In Ohio, recent geophysical surveys have revealed that remnants of Hopewell earthworks once thought to be largely destroyed by historic activities not only have survived to the present day but are more complex and varied than suggested by maps of early surveyors (Burks 2010; Burks and Cook 2011). Burks and colleagues (Burks 2014; Lynott 2015; Schneider et al. 2016) also have identified geophysical anomalies interspersed among the earthen monuments at Ohio Hopewell sites, such as large post circles and pit features. If these features are contemporaneous with the mounds and earthworks (a determination that requires ground truthing and the collection of datable material), then it is time that we revisit the vacant ceremonial center model for Ohio Hopewell sites.

Southeastern archaeologists also have undertaken extensive geophysical surveys of Middle Woodland sites to better understand their layout and to contextualize the monumental components of the archaeological record. Because many southeastern sites were never documented as thoroughly as their Ohio Valley counterparts, some surveys in the Southeast have yielded especially eye-opening results that have changed the way we think about local Middle Woodland developments and interregional connectivity. For example, magnetometer and ground-penetrating radar survey at the Garden Creek site in western North Carolina revealed two previously unidentified small geometric enclosures (Horsley et al. 2014; Wright 2014a). Although unique in the Southeast, these monuments are strikingly similar to several Adena-Hopewell enclosures in the Ohio Valley (e.g., Jefferies et al. 2013). Dating to the first century AD and associated with mica and crystal quartz craft production debris (Wright and Loveland 2015), these enclosures are most parsimoniously explained as a result of intensive ritual interaction between Ohio Hopewell and southern Appalachian communities.

Several sites in Florida have recently undergone extensive geophysical survey and subsequent reinterpretation as well. At Crystal River, resistance survey demonstrated the existence of a plaza whose offset orientation relative to the site's mounds suggests dynamic configurations of communal social relationships (Pluckhahn et al. 2010; Thompson and Pluckhahn 2010). The same technique revealed a new earthwork in association with the well-known Great Circle at Fort Center (Thompson and Pluckhahn 2012). In Tennessee, gradiometer survey at Pinson has clarified the spatial arrangement of mounds and earthworks recorded in the early 20th century (Mainfort et al. 2011), while multiple geophysical techniques have revealed anomalies suggestive of prehistoric activity within the enclosure at Old Stone Fort (Yerka 2010) and in off-mound areas at Johnston (Sherwood et al. 2015). In every one of these examples, geophysical surveys revealed architectural elements and activity areas that decades of traditional archaeological investigations had failed to identify. It stands to reason that the application of geophysical techniques at other Middle Woodland sites in the Southeast would be similarly revelatory, even (or especially) if they have been the subject of earlier study.

In addition to generating plan views of entire sites, certain geophysical methods are capable of producing data from which we can extrapolate stratigraphic relationships and the construction history of monuments made of earth, sand, and shell. Thompson and Pluckhahn's investigations of mounds at Crystal River exemplify this research strategy (Pluckhahn et al. 2010; Thompson and Pluckhahn 2010; Thompson et al. 2013b). Using ground-penetrating radar, they have tentatively identified features on buried mound summits and distinctive strata representative of multiple construction episodes. Importantly, they also have determined that, for at least one Crystal River's mounds, the earliest construction episodes are formally identical (albeit smaller) than later ones, suggesting a high degree of architectural planning. A combination of geophysical techniques has allowed for even more detailed interpretations of Middle Woodland mound and earthwork construction sequences in Illinois (Herrmann et al. 2014) and Kentucky (Henry 2011; Henry et al. 2014); there is every reason to think a similar approach would produce useful data at Middle Woodland sites in the Southeast.

Refining Site Histories

As archaeologists in and beyond the Southeast recognize the role of events in the evolutionary trajectories of societies (Beck et al. 2007; Bolender 2010; Gilmore and O'Donoughue 2015), our need for increasingly fine-grained chronological data increases. To that end, many southeasternists are turning to Bayesian chronological modeling as a means of plausibly narrowing the date ranges provided by various dating methods (Bayliss 2009, 2015; Ramsey 2009). This trend is not unique to research on the Middle Woodland period; Bayesian modeling of stratified dates from Poverty Point and Monks Mound have bolstered geoarchaeological arguments that these monuments were erected much more quickly than previous generations of researchers realized (Ortmann and Kidder 2013; Schilling 2013).

While both Ohio and Southeastern researchers are using geophysical techniques with regularity, at present, Middle Woodland researchers in Florida are the ones pioneering the use of Bayesian models to build high-resolution site chronologies (but see also Schilling 2015; Wright 2014a). For example, Wallis, McFadden, and colleagues have used this technique to model 23 AMS assays in an effort to better understand the pace of mound construction and village occupation at the Garden Patch site on the northern Gulf Coast (Wallis et al. 2015; see also McFadden 2016; Wallis and McFadden 2016). Their resulting four-phase model indicates that the site was founded and built quickly, following a carefully designated architectural plan—a pattern that characterizes other Middle Woodland mound and village sites like Kolomoki and McKeithen (Milanich et al. 1997; Pluckhahn 2003). In making these connections, Wallis et al. demonstrate how site-specific research contributes to our understanding of Middle Woodland cultural dynamics at the regional level, exemplifying the value of multiscalar interpretations.

The history of the Crystal River site (Bullen 1953), located south of Garden Patch in west-central Florida, also has been the subject of recent efforts to model precise site chronologies. Early 20th century excavations focusing on the site's burial complex produced shell, stone, and copper plummets, copper ear spools, panpipes, mica sheets, and incised and decorated pottery that were used to argue for a connection between Crystal River and Ohio Hopewell (Greenman 1938; Moore 1903, 1907, 1918; Weisman 1995). For decades, archaeologists have assumed that Crystal River was a central node for the production and exchange of marine shell artifacts for the wider Hopewell Interaction Sphere (Goad 1978; see also Wright and Gokee 2013), although little evidence for shell-based craft production has been found there (Blankenship 2013). Nevertheless, Crystal River's record of mortuary activity, exotic artifacts, and monumentality speaks to a complex history of Middle Woodland ceremonialism at the southern edge of the Hopewell Interaction Sphere.

Crystal River includes at least six mounds and an extensive, arcing shell deposit presently understood as a midden, which the Crystal River Early Village Archaeological Project has precisely mapped using total stations, LiDAR, and multiple geophysical techniques (Pluckhahn and Thompson 2009, 2014; Pluckhahn et al. 2015b; Thompson and Pluckhahn 2010; Thompson et al. 2011). Ground-truthing efforts have included extensive coring and selective excavation trenches placed across the site, producing diverse datable materials from multiple controlled

contexts—e.g., soil charcoal, bone, shell for radiocarbon dating (Cherkinsky et al. 2014) and quartz grains from mound fills for optically stimulated luminescence dating (Pluckhahn et al. 2015a). In addition, the shells that are a primary building material at Crystal River have allowed for an assessment of seasonal oyster procurement and processing and interpretations of intra-annual patterns of on-site occupation and feasting activities (Thompson et al. 2015).

More than 60 radiocarbon dates are available from Crystal River—though not all have been reported (Cherkinsky et al. 2014; Pluckhahn et al. 2010, 2015a, b)—ranging from 800 cal BC to cal AD 966. If they are not the result of contamination, early dates from Mounds G and C suggest that Crystal River was founded as a burial ground in the Early Woodland period (Pluckhahn et al. 2010, p. 174). Midden dates, in turn, conservatively place the domestic occupation of the site between 100 BC and AD 600 (Pluckhahn et al. 2010, p. 175), perhaps with a hiatus between 417 and 166 cal BC (Pluckhahn and Thompson 2013). These midden dates have been subjected to Bayesian chronological modeling (Pluckhahn et al. 2015b). By tracking the changes in the rate of midden accumulation and related variables over four broad occupation phases, Pluckhahn et al. (2015b, p. 34) identify "both in situ refuse disposal and apparently purposeful construction," contributing not only to our knowledge about Crystal River but also to broader debates about shell midden versus shell monument formation in the Southeast (e.g., Marquardt 2010).

Tracking Material Connections

As I have already pointed out, evidence for extralocal interaction in multiple forms is commonly noted in Middle Woodland research, justifying multiscalar investigations of the time period even though the mechanisms underlying those interactions remain poorly understood. Above, I discussed various hypotheses for global-scale Hopewell interaction (e.g., pilgrimage) and regional interaction in Ohio (e.g., community/sodality gathering). Based on circumstantial evidence, several southeastern studies have produced similar interpretations of Middle Woodland datasets. For instance, I have suggested that the earthworks and craft production debris at Garden Creek derived from pilgrimages from the Appalachian Summit to the Scioto Valley, during which travelers would have made offerings of cut mica and knapped quartz as they obtained the knowledge necessary for earthwork construction. This interpretation differs markedly from previous assessments of the linkages between Ohio Hopewell and southern Appalachian peoples during the Middle Woodland period (e.g., Chapman and Keel 1979). It underscores how southeastern groups actively contributed to the wider Hopewell phenomenon, even as Hopewellian interaction underwrote significant changes to their local societies.

The qualities of monumental architecture also have been cited as evidence for regional-scale interaction within the Southeast. Thompson and Pluckhahn (2010, p. 48) "believe that the scale and diversity of mound constructions at Crystal River argue for the social practice of multiple and varied groups," rather than a singular local community (contra Milanich et al. 1997). Comparisons to contemporaneous sites in the Deep South support the idea that individuals moved to and from Crystal River for episodic events. Specifically, architectural and situational similarities

among Crystal River, Kolomoki, and Fort Center would have "provided a familiar setting for outsiders coming to the site for ceremonies," while Crystal River's particular design elements would have "served to distinguish [it] from other regional centers and provide a unique experience for visitors to the site" (Thompson and Pluckhahn 2010, p. 48; see also Pluckhahn and Thompson 2013, 2014).

Swift Creek pottery from northern Florida and Georgia is a particularly rich dataset for further clarifying regional-scale Middle Woodland interaction. Recent provenance studies of Swift Creek ceramics complement interpretations based on paddle matches, producing an unparalleled view of intersite connectivity in the pre-Columbian Eastern Woodlands (Wallis et al. 2016). Based on the results of petrographic and neutron activation analyses, Wallis and colleagues observe that nonlocal Swift Creek ceramics are more common in burial mounds than at contemporaneous residential sites. As such, they likely represent gifts that served to reinforce extralocal social relationships in the context of mortuary ritual (Wallis 2011; Wallis et al. 2010). "Rather than mere detritus of people moving from place to place, many nonlocal vessels were used as tools of commemoration or assertion of alliances among descent groups geographically separated by more than 100 km" (Wallis and Cordell 2013, p. 141). In addition, paddle matches between Swift Creek assemblages at civic-ceremonial centers and outlying settlements indicated the transport of wooden paddles between these locales; well-documented excavations at Block-Sterns suggest that this pattern is probably related to ritual events attended by nonlocal visitors (Wallis et al. 2016). In keeping with assessments of interaction and gathering across the Hopewell Interaction Sphere, the Swift Creek data reveal that Middle Woodland connectivity in the Southeast varied in both scale and context.

Future Directions for Middle Woodland Research in the Southeast

From my vantage point, there has never been a better time to conduct Middle Woodland research in the Southeast. Geophysical techniques, chronological modeling, provenance studies, and other methodological advances are allowing archaeologists to glean more information from the archaeological record-both newly excavated and curated materials-than ever before. However, advancing Middle Woodland research requires more than new methods. To grasp the full scope of lived experiences in the Middle Woodland period, we must not only undertake investigations in the Southeast but also strive for a clearer understanding of processes unfolding across the Eastern Woodlands. Future research on the Middle Woodland Southeast cannot be limited to this region's traditional geographic boundaries but must extend into the Ohio Valley, the heartland of the Hopewell phenomenon that defines the Middle Woodland period (not to mention adjacent geographic areas characterized by their own Hopewell traditions, such as Havana). Moreover, we must strive to work across modern state lines to critically examine established culture historical artifact typologies and sequences and distinguish evidence for broadly shared cultural complexes (Knight 2011, p. 213; see also Windham et al. 2011). Given the long-acknowledged evidence for interregional connections as well as distinctive regional traditions, archaeologists must tackle the

Middle Woodland period at multiple scales, investigating how global and regional phenomena like Hopewell and Swift Creek reverberated at the local level and how local communities contributed to such larger processes. Perhaps more provocatively, we must blur the lines between local and global cultural dynamics and explore how multiscalar sociality constituted "glocal" Middle Woodland developments. As should be apparent from this review article, several threads of recent research on the Middle Woodland Southeast have begun this complex undertaking, but much work remains to be done.

Although the "thin veneer" metaphor is losing some ground, there is still a tendency among southeastern archaeologists to downplay the potential role(s) that interregional interactions played in Middle Woodland society. In part, this may be due to the apparently religious nature of such interactions and an enduring bias that religion is epiphenomenal relative to other dimensions of culture (for critiques of this view, see Bradley 2003; Renfrew 1994; Rowan 2011; Whitley 2008). Even in Ohio's Hopewell heartland, archaeological components are labeled "Hopewell" if they are thought to represent ritual activities, or "Middle Woodland" if there is evidence for secular activities (Van Gilder and Charles 2003). However, to the best of our present understanding, religion was central to Middle Woodland/Hopewell sociopolitical organization (e.g., Carr and Case 2006b; Case and Carr 2008; Mainfort 2013; Pluckhahn 2010a; Russo et al. 2014; Wright 2014a) and likely resonated throughout the lived experience of Middle Woodland/Hopewell peoples (sensu Fowles 2013). Future research in the Middle Woodland Southeast should thus interrogate the appropriateness of two related dichotomies: local/global, and sacred/secular. In other words, we should not equate religious activity solely with interregional, global connections or secular activity solely with local developments. Research on intraregional networks indexed by Swift Creek pottery shows "the sacred" is manifest at a comparatively more local scale, whereas models that link interregional Hopewellian exchange to the maintenance of subsistence practices and social ties (e.g., Braun 1986) allude to the secular dimensions of global connectivity.

The presence of secular habitation areas at sacred mound sites in the Middle Woodland Southeast (i.e., civic-ceremonial centers, Anderson and Sassaman 2012, p. 133) would seem to provide an avenue for exploring the intersections of local and global, secular and sacred. However, with a few notable exceptions (e.g., Kolomoki), the domestic sphere of Middle Woodland life has received little archaeological attention. Future research on the Middle Woodland Southeast should expand our focus beyond monuments to explore houses, homesteads, and villagesa task admittedly easier said than done, given the relative inconspicuousness of pre-Columbian domestic architecture on the modern landscape (see also Pluckhahn 2010c). In particular, horizontal excavations of multiple household contexts at a Middle Woodland village would dramatically enhance our ability to test different ideas about Middle Woodland social organization and assess how cooperation and competition mutually structured some of the earliest permanent villages in eastern North America. Over the last decade in my own study area (the Appalachian Summit), the best (and, to my knowledge, only) dataset that fulfills this criterion resulted from a large scale, as yet unpublished cultural resource management project (Benyshek and Webb 2012; Benyshek et al. 2010); collaboration between CRM professionals and academic researchers may therefore be one way to begin to tackle this issue.

As excavations and analyses of Middle Woodland sites in the Southeast continue, it is important to recognize that an archaeological grasp of the Middle Woodland period at both local and regional scales "cannot be fully realized if analysis of archaeological materials remains mired in the quagmire of culture history" (Anderson and Mainfort 2002b, p. 541). Indeed, gross variability in ceramic tempers, surface treatments, and decorations have proven useful for clarifying local cultural sequences, but these and other attributes also may productively elucidate patterns of interaction and exchange (as exemplified by Wallis's Swift Creek research; see also Stoltman 2015) and the organization of communities of practice (sensu Sassaman and Rudolphi 2001). That said, eschewing the systematics of local culture history frameworks and phase names, as I did in this review, certainly obscures subtler diachronic patterns within the larger Middle Woodland period. In other words, the interpretive gains of a broad geographic perspective come at the expense of temporal precision, a sacrifice that future subregional analyses may manage to avoid.

Relatedly, even as we strive to contextualize southeastern Middle Woodland research relative to global social fields, we also must situate our findings in time, a topic almost entirely side-stepped in this article for lack of space. As researchers in Ohio examine the beginning and end of the Hopewell phenomenon (e.g., Carr 2008; Spielmann 2013), we in the Southeast should investigate the origins, elaboration, or abatement of myriad Middle Woodland developments-multiscalar material interaction, diverse instantiations of monumentality, early village organization, etc.-during the Early and Late Woodland Periods. Furthermore, we should look to recent research on other time periods for methodological or theoretical inspiration. In a general sense, a consideration of local and global Middle Woodland developments resembles the "analogy-homology dilemma" in Mississippian studies (Smith 2007, pp. 2–3); the ways in which scholars have tackled this issue (e.g., Blitz and Lorenz 2006; Cobb 2015) in the final centuries before European contact may provide frameworks for future Middle Woodland research projects. Turning in the opposite chronological direction, we also have much to learn from our colleagues grappling with novel forms of social, political, and religious complexity in the Late Archaic period, such as pilgrimage at Poverty Point (Spivey et al. 2015).

Research in this vein requires southeastern archaeologists to branch out theoretically from our foundations in culture history and cultural ecology to consider "notions such as agency, power, historicity, materiality, landscape, and others" (Knight 2011, p. 214). The conceptual groundwork for these investigations appears in several recent edited volumes and journal articles on the Southeast (e.g., Beck 2014; Cobb 2014; Gilmore and O'Donoughue 2015; Kassabaum 2014; Levy 2014; Sullivan 2014; Thompson and Waggoner 2013; Thompson 2014; White 2014; Wright and Henry 2013a) and in cross-cultural studies of broadly analogous archaeological complexes, such as the Chaco phenomenon and the monumental traditions of the European Neolithic (see Chapman 2006 and Lekson 2016 for extant comparisons between the European Neolithic and Hopewell, and Chaco and Hopewell, respectively). It is now up to Middle Woodland researchers to run with

these ideas as they relate to specific archaeological datasets, and thus to contribute to worldwide discussions about the diverse historical trajectories of "middle range" societies, including the role of multiscalar social fields.

Fortunately, such datasets are ripe for the proverbial picking, both in situ and in museum collections and archaeological repositories (Anderson 2013). As several studies cited in this review demonstrate, curated assemblages from well-known sites have incredible potential for shedding new light on the Middle Woodland Southeast when approached with contemporary questions, theoretical perspectives, and analytic techniques. Moreover, remote sensing and increasingly sophisticated analytic methods are enabling a new wave of research at both classic and newly discovered Middle Woodland sites. The key in future years will be to contextualize our findings at multiple scales—from the local watershed, to the subregional settlement and ritual system, to the subcontinental interaction sphere—in order to truly grasp the Middle Woodland Southeast in broad-scale perspective.

Acknowledgments I greatly appreciate the editors' invitation to write this article, which encouraged me to dive deep into the literature on Middle Woodland/Hopewell. That said, I fully admit to the biases of a southeastern archaeologist and acknowledge there is much more to the Ohio Valley Middle Woodland than I have been able to tackle here. My specialization in southern Appalachian archaeology also certainly led me to overlook some studies in other parts of the Southeast. My ongoing efforts to understand the Middle Woodland period in local and global perspectives have benefited immensely from conversations and correspondence with Casey Barrier, Rob Beck, Stephen Carmody, Cameron Gokee, Ed Henry, Scot Keith, Larry Kimball, Brad Lepper, Tom Pluckhahn, Bret Ruby, Sarah Sherwood, and Victor Thompson. Meg Kassabaum, Maureen Meyers, Tom Pluckhahn, Victor Thompson, Nancy White, one anonymous reviewer, and the editors offered constructive critique that greatly improved the initial manuscript. Any shortcomings or errors that remain are my responsibility.

References Cited

- Abrams, E. M. (2009). Hopewell archaeology: A view from the northern woodlands. Journal of Archaeological Research 17: 169–204.
- Abrams, E. M., and Freter, A. C. (2005). *The Emergence of the Moundbuilders: The Archaeology of Tribal Societies in Southeastern Ohio*, Ohio University Press, Athens.
- Anderson, D. G. (1985). Middle Woodland societies on the lower south Atlantic slope: A view from Georgia and South Carolina. *Early Georgia* 13: 29–66.
- Anderson, D. G. (1998). Swift Creek in regional perspective. In Williams, M. W., and Elliott, D. T. (eds.), A World Engraved: Archaeology of the Swift Creek Culture, University of Alabama Press, Tuscaloosa, pp. 274–300.
- Anderson, D. G. (2002). The evolution of tribal societies in the southeastern United States. In Parkinson, W. A. (ed.), *The Archaeology of Tribes*, International Monographs in Prehistory, No. 15, Ann Arbor, MI, pp. 246–277.
- Anderson, D. G. (2013). Social landscapes of the Early and Middle Woodland Southeast. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 247–262.
- Anderson, D. G., and Mainfort, R. C., Jr. (2002a). An introduction to Woodland archaeology in the Southeast. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 1–19.
- Anderson, D. G., and Mainfort, R. C., Jr. (2002b). Epilogue: Future directions for Woodland archaeology in the Southeast. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 540–542.
- Anderson, D. G., and Sassaman, K. E. (2012). Recent Developments in Southeastern Archaeology From Colonization to Complexity, Society for American Archaeology Press, Washington, DC.

- Applegate, D. (2013). The Early-Middle Woodland domestic landscape in Kentucky. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 19–44.
- Asch, D. L., and Asch, N. B. (1985). Prehistoric plant cultivation in west-central Illinois. In Ford, R. I. (ed.), *Prehistoric Food Production in North America*, Anthropological Papers 75, Museum of Anthropology, University of Michigan, Ann Arbor, pp. 149–203.
- Ashley, K. H. (1992). Swift Creek manifestations along the lower St. Johns River. Florida Anthropologist 45: 127–138.
- Ashley, K. H. (1998). Swift Creek traits in northeastern Florida: Ceramics, mounds, and middens. In Williams, M. W., and Elliott, D. T. (eds.), A World Engraved: Archaeology of the Swift Creek Culture, University of Alabama Press, Tuscaloosa, pp. 197–221.
- Ashley, K. H., Stephenson, K., and Snow, F. (2007). Teardrops, ladders, and bull's eyes: Swift Creek on the Georgia coast. *Early Georgia* 35: 3–28.
- Ashley, K. H., and Wallis, N. J. (2006). Northeastern Florida Swift Creek: Overview and future directions. *Florida Anthropologist* 59: 5–18.
- Ashmore, W., and Wilk, R. R. (1988). Household and community in the Mesoamerican past. In Wilk, R. R., and Ashmore, W. (eds.), *Household and Community in the Mesoamerican Past*, University of New Mexico Press, Albuquerque, pp. 1–27.
- Bacon, W. S., and Merryman, H. L. (1973). Salvage Archaeology at 40FR47, Miscellaneous Paper 1, Tennessee Archaeological Society, Nashville.
- Bayliss, A. (2009). Rolling out revolution: Using radiocarbon dating in archaeology. Radiocarbon 51: 123–147.
- Bayliss, A. (2015). Quality in Bayesian chronological models in archaeology. World Archaeology 47: 677–700.
- Beck, L. A. (1995). Burial cults and ethnic boundaries in "southern Hopewell." In Beck, L. A. (ed.), *Regional Approaches to Mortuary Analysis*, Plenum Press, New York, pp. 167–187.
- Beck, R. A. (2014). What I believe: Structure and the problem of macrosociality. *Southeastern* Archaeology 33: 208–213.
- Beck, R. A., Bolender, D. J., Brown, J. A., and Earle, T. K. (2007). Eventful archaeology: The place of space in structural transformation. *Current Anthropology* 48: 833–860.
- Bense, J. A. (1994). Archaeology of the Southeastern United States: Paleoindian to World War II, Academic Press, Orlando, FL.
- Bense, J. A. (1998). Santa Rosa-Swift Creek in northwestern Florida. In Williams, M. W., and Elliott, D. T. (eds.), A World Engraved: Archaeology of the Swift Creek Culture, University of Alabama Press, Tuscaloosa, pp. 247–273.
- Benyshek, T., Steere, B. A., Webb, P., Jones, J., and Guidry, H. (2010). Finding, delineating, and recording structure patterns: Recent excavations in western North Carolina. Paper presented at the 67th annual meeting of the Southeastern Archaeological Conference, Lexington, KY.
- Benyshek, T., and Webb, P. A. (2012). Recent excavations at Iotla town. Paper presented at the 69th annual meeting of the Southeastern Archaeological Conference, Baton Rouge, LA.
- Bernardini, W. (2004). Hopewell geometric earthworks: A case study in the referential and experiential meaning of monuments. *Journal of Anthropological Archaeology* 23: 331–356.
- Bernardini, W., and Carr, C. (2006). Hopewellian copper celts from eastern North America: Their social and symbolic significance. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual,* and Ritual Interaction, Springer, New York, pp. 624–647.
- Blankenship, B. (2013). The Hopewellian influence at Crystal River, Florida: Testing the marine shell artifact production hypothesis. Master's thesis, Department of Anthropology, University of South Florida, Tampa.
- Blanton, R. E. (1994). Houses and Households: A Comparative Study, Plenum Press, New York.
- Blitz, J. H., and Lorenz, K. G. (2006). The Chattahoochee Chiefdoms, University of Alabama Press, Tuscaloosa.
- Bohannon, C. F. (1972). Excavations at the Pharr Mounds, Prentiss and Itawamba Counties, Mississippi and Excavations at the Bear Creek Site, Tishomingo County, Mississippi, US Department of the Interior, National Park Service, Washington, DC.
- Bolender, D. J. (2010). Eventful Archaeologies: New Approaches to Structural Transformation in the Archaeological Record, State University of New York Press, Albany.
- Bolnick, D. A., Smith, D. G., and Glenn, D. (2007). Migration and social structure among the Hopewell: Evidence from ancient DNA. American Antiquity 72: 627–644.

- Bradley, R. (2003). A life less ordinary: The ritualization of the domestic sphere in later prehistoric Europe. *Cambridge Archaeological Journal* 13: 5–23.
- Branch-Raymer, L. E., and Bonhage-Freund, M. T. (2011). Middle Woodland gardening in the Etowah River Valley, northwest Georgia: The Hardin Bridge site (9BR34). *Early Georgia* 39: 119–136.
- Braun, D. P. (1986). Midwestern Hopewellian exchange and supralocal interaction. In Renfrew, C., and Cherry, J. F. (eds.), *Peer Polity Interaction and Socio-Political Change*, Cambridge University Press, Cambridge, UK, pp. 117–126.
- Brewer, A. J. (1973). Analysis of floral remains from the Higgs site (40LO45). In McCollough, M. C., and Faulkner, C. H. (eds.), *Excavation of the Higgs and Doughty Sites*, *I-75 Salvage Archaeology*, Tennessee Archaeological Society, Knoxville, pp. 141–144.
- Brose, D. S. (1979). An interpretation of the Hopewellian traits in Florida. In Brose, D. S., and Greber, N. B. (eds.), *Hopewell Archaeology: The Chillicothe Conference*, Kent State University Press, Kent, OH, pp. 141–149.
- Brose, D. S., and Greber, N. B. (eds.) (1979). Hopewell Archaeology: The Chillicothe Conference, Kent State University Press, Kent, OH.
- Broster, J. B., and Schneider, L. (1976). Pinson Mounds: A Middle Woodland mortuary center in west Tennessee. *Central States Journal of Archaeology* 23: 18–25.
- Brown, J. A. (2006). The shamanic element in Hopewellian period ritual. In Charles, D. K., and Buikstra, J. E. (eds.), *Recreating Hopewell*, University Press of Florida, Gainesville, pp. 475–488.
- Brown, J. A. (2013). On ceremonial landscapes. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 237–246.
- Broyles, B. J. (1968). Reconstructed designs from Swift Creek complicated stamped sherds. Southeastern Archaeological Conference Bulletin 8: 49–74.
- Bullen, R. P. (1951). The enigmatic Crystal River site. American Antiquity 17: 142–143.
- Bullen, R. P. (1953). The famous Crystal River site. Florida Anthropologist 6: 9-37.
- Burks, J., and Cook, R. A. (2011). Beyond Squier and Davis: Rediscovering Ohio's earthworks using geophysical remote sensing. *American Antiquity* 76: 667–689.
- Burks, J. D. (2010). Rediscovering prehistoric earthworks in Ohio, USA: It all starts in the archives. In Cowley, D. C., Standring, R. A., and Abicht, M. J. (eds.), *Landscapes through the Lens: Aerial Photographs and Historic Environment*, Oxbow Books, Oxford, UK, pp. 77–87.
- Burks, J. D. (2014). Geophysical survey at Ohio Earthworks: Updating nineteenth century maps and filling the "empty" spaces. Archaeological Prospection 21: 5–13.
- Burks, J., and Pederson, J. (2006). The place of nonmound debris at Hopewell Mound Group (33RO27), Ross County, Ohio. In Charles, D. K., and Buikstra, J. E. (eds.), *Recreating Hopewell*, University Press of Florida, Gainesville, pp. 376–401.
- Burks, J., and Walter, D. (2009). Hopewell occupation at the Hopeton Earthworks: Large scale surface survey using GPS technology. In Lynott, M. J. (ed.), *Footprints: In the Footprints of Squier and Davis: Archaeological Fieldwork in Ross County, Ohio*, Midwest Archaeological Center, Lincoln, NE, pp. 83–94.
- Byers, A. M. (2004). The Ohio Hopewell Episode: Paradigm Lost, Paradigm Gained, University of Akron Press, Akron, OH.
- Byers, A. M. (2011). Sacred Games, Death, and Renewal in the Ancient Eastern Woodlands: The Ohio Hopewell System of Cult Sodality Heterarchies, AltaMira Press, Lanham, MD.
- Byrd, J. E. (1997). The analysis of diversity in archaeological faunal assemblages: Complexity and subsistence strategies in the Southeast during the Middle Woodland period. *Journal of Anthropological Archaeology* 16: 49–72.
- Cable, J. S. (2000). Early and Middle Woodland occupations. Early Georgia 28: 92-102.
- Caldwell, J. R. (1958). *Trend and Tradition in the Prehistory of the Eastern United States*, Memoir 88, American Anthropological Association, Springfield, IL.
- Caldwell, J. R. (1964). Interaction spheres in prehistory. In Caldwell, J. R., and Hall, R. L. (eds.), *Hopewellian Studies*, Illinois State Museum, Springfield, pp. 133–143.
- Carmody, S. B., Caffrey, M. A., and Horn, S. P. (2011). Palynological and chemical analyses of pipe residues as evidence of tobacco use in the Southeastern US. Paper presented at the annual meeting of the Association of American Geographers, Seattle, WA.
- Carr, C. (2006a). Rethinking interregional Hopewellian "interaction." In Carr, C., and Case, D. T. (eds.), Gathering Hopewell: Society, Ritual, and Ritual Interaction, Springer, New York, pp. 575–623.

- Carr, C. (2006b). Scioto Hopewell ritual gatherings: A review and discussion of previous interpretations and data. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual, and Ritual Interaction*, Springer, New York, pp. 463–479.
- Carr, C. (2006c). The tripartite ceremonial alliance among Scioto Hopewellian communities and the question of social ranking. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual,* and Ritual Interaction, Springer, New York, pp. 258–338.
- Carr, C. (2008). World view and the dynamics of change: The beginning and end of Scioto Hopewell culture and lifeways. In Case, D. T., and Carr, C. (eds.), *The Scioto Hopewell and Their Neighbors: Bioarchaeological Documentation and Cultural Understanding*, Springer, New York, pp. 289–328.
- Carr, C., and Case, D. T. (eds.) (2006a). *Gathering Hopewell: Society, Ritual, and Ritual Interaction*, Springer, New York.
- Carr, C., and Case, D. T. (2006b). The nature of leadership in Ohio Hopewellian societies: Role segregation and the transformation from shamanism. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual, and Ritual Interaction*, Springer, New York, pp. 177–237.
- Case, D. T., and Carr, C. (eds.) (2008). The Scioto Hopewell and Their Neighbors: Bioarchaeological Documentation and Cultural Understanding, Springer, New York.
- Chapman, J. (1973). *The Icehouse Bottom Site—40MR23*, Report of Investigations, Department of Anthropology, University of Tennessee, Knoxville.
- Chapman, J. (1985). *Tellico Archaeology*, Report of Investigations, Department of Anthropology, University of Tennessee, Knoxville.
- Chapman, J., and Crites, G. D. (1987). Evidence for early maize (Zea mays) from the Icehouse Bottom site, Tennessee. American Antiquity 52: 352–354.
- Chapman, J., and Keel, B. C. (1979). Candy Creek-Connestee components in eastern Tennessee and western North Carolina and their relationship with Adena-Hopewell. In Brose, D. S., and Greber, N. B. (eds.), *Hopewell Archaeology: The Chillicothe Conference*, Kent State University Press, Kent, OH, pp. 157–161.
- Chapman, J., and Shea, A. B. (1981). The archaeobotanical record: Early Archaic period to contact in the lower Tennessee River Valley. *Tennessee Anthropologist* 6: 61–84.
- Chapman, R. (2006). Middle Woodland/Hopewell: A view from beyond the periphery. In Charles, D. K., and Buikstra, J. E. (eds.), *Recreating Hopewell*, University Press of Florida, Gainesville, pp. 510–528.
- Charles, D. K., and Buikstra, J. E. (eds.) (2006). *Recreating Hopewell*, University Press of Florida, Gainesville.
- Charles, T. (2001). The Pumpkin Site: 38GR226, Archaeological Investigation of a Prehistoric Middle Woodland Village in Northern Greenville County, South Carolina, South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Cherkinsky, A., Pluckhahn, T. J., and Thompson, V. D. (2014). Variation in radiocarbon age determinations from the Crystal River archaeological site, Florida. *Radiocarbon* 56: 801–810.
- Clay, R. B. (1992). Chiefs, big men, or what? Economy, settlement patterns, and their bearing on Adena political models. In Seeman, M. F. (ed.), *Cultural Variability in Context: Woodland Settlements of the Mid-Ohio Valley*, Kent State University Press, Kent, OH, pp. 77–80.
- Clay, R. B. (2009). Where have all the houses gone? Webb's Adena house in historical context. *Southeastern Archaeology* **28:** 43–64.
- Clay, R. B. (2013). Like a dead dog: Strategic ritual choice in the mortuary enterprise. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 56–70.
- Cobb, C. R. (2003). Mississippian chiefdoms: How complex? Annual Review of Anthropology 32: 63-84.
- Cobb, C. R. (2005). Archaeology and the "savage slot": Displacement and emplacement in the premodern world. *American Anthropologist* **107**: 563–574.
- Cobb, C. R. (2014). What I believe: A memoir of processualism to neohistorical anthropology. *Southeastern Archaeology* **33**: 214–225.
- Cobb, C. R. (2015). Mississippian microhistories and submound moments. In Gilmore, Z. I., and O'Donoughue, J. M. (eds.), *The Archaeology of Events: Cultural Change and Continuity in the Pre-Columbian Southeast*, University of Alabama Press, Tuscaloosa, pp. 196–222.
- Cobb, C. R., and Nassaney, M. S. (2002). Domesticating self and society in the Woodland Southeast. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 525–539.

- Cotter, J. L., and Corbett, J. M. (1951). Archaeology of the Bynum Mounds, Mississippi, Archaeological Research Series No. 1, US Department of the Interior, National Parks Service, Washington, DC.
- Cowan, C. W. (1985). From Foraging to Incipient Food Production: Subsistence Change and Continuity on the Cumberland Plateau of Eastern Kentucky, Ph.D. dissertation, Department of Anthropology, University of Michigan, Ann Arbor.
- Cowan, F. L. (2006). A mobile Hopewell? Questioning assumptions of Ohio Hopewell sedentism. In Charles, D. K., and Buikstra, J. E. (eds.), *Recreating Hopewell*, University Press of Florida, Gainesville, pp. 26–49.
- Cridlebaugh, P. A. (1981). The Icehouse Bottom site (40Mr23): 1977 Excavations, Report of Investigations, Department of Anthropology, University of Tennessee, Knoxville.
- Crites, G. D. (1978). Plant food utilization patterns during the Middle Woodland Owl Hollow phase in Tennessee: A preliminary report. *Tennessee Anthropologist* **3**: 79–82.
- Dalan, R. A., Holley, G. R., Woods, W. I., Watters, H. W., and Koepke, J. A. (2003). Envisioning Cahokia: A Landscape Perspective, Northern Illinois University Press, Dekalb.
- Dancey, W. S., and Pacheco, P. J. (1997a). A community model of Ohio Hopewell settlement. In Dancey, W. S., and Pacheco, P. J. (eds.), *Hopewell Community Organization*, Kent State University Press, Kent, OH, pp. 3–40.
- Dancey, W. S., and Pacheco, P. J. (eds.) (1997b). Ohio Hopewell Community Organization, Kent State University Press, Kent, OH.
- Davis, R. P., Jr. (1990). Aboriginal Settlement Patterns in the Little Tennessee River Valley, Report of Investigations, Department of Anthropology, University of Tennessee, Knoxville.
- DeBoer, W. R. (1997). Ceremonial centres from the Cayapas (Esmeraldas, Ecuador) to Chillicothe (Ohio, USA). Cambridge Archaeological Journal 7: 225–253.
- Dekle, V. G. (2013). Ritual life and landscape at Tunacunnhee. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 196–203.
- Dempsey, E. C. (2010). Small scale geoarchaeological investigations of earthen wall construction at the Hopeton Earthworks (33Ro26). *Hopewell Newsletter* 7: 1–10.
- Dickens, R. S., Jr. (1975). A processual approach to Mississippian origins in the Georgia Piedmont. Southeastern Archaeological Conference Bulletin 18: 31–42.
- Dietler, M., and Hayden, B. (2001). Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power, Smithsonian Institution Press, Washington, DC.
- Dunnell, R. C. (1990). The role of the Southeast in American archaeology. Southeastern Archaeology 9: 11–22.
- Ehrhardt, K. L. (2009). Copper working technologies, contexts of use, and social complexity in the Eastern Woodlands of Native North America. *Journal of World Prehistory* 22: 213–235.
- Elliott, D. T. (1998). The northern and eastern expression of Swift Creek culture: Settlement in the Tennessee and Savannah River Valleys. In Williams, M. W., and Elliott, D. T. (eds.), A World Engraved: Archaeology of the Swift Creek Culture, University of Alabama Press, Tuscaloosa, pp. 19–35.
- Espenshade, C. T. (2008). *Woodland Period Archaeology of Northern Georgia: Update 2008*, New South Associates Technical Report 1593, Stone Mountain, GA.
- Eubanks, P. N. (2013). Late Middle Woodland settlement and ritual at the Armory site. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 167–180.
- Faulkner, C. H. (1977). The winter house: An early Southeast tradition. *Midcontinental Journal of* Archaeology 2: 141–159.
- Faulkner, C. H. (2002). Woodland cultures of the Elk and Duck River Valleys, Tennessee: Continuity and change. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 183–203.
- Fischer, F. W., and McNutt, C. H. (1962). Test excavations at Pinson Mounds, 1961. *Tennessee* Archaeologist 18: 1–13.
- Fish, S. K., and Jefferies, R. W. (1986). The site plan at Cold Springs, 9Ge10. Early Georgia 11: 61-73.
- Ford, J. A. (1963). Hopewell culture burial mounds near Helena, Arkansas. Anthropolological Papers of the American Museum of Natural History 50: 1–56.
- Ford, J. A., and Willey, G. (1940). Crooks Site, a Marksville Period Burial Mound in La Salle Parish, Louisiana, Anthropological Study 3, Department of Conservation, Louisiana Geological Survey, New Orleans.

- Fowke, G. (1928). Archaeological excavations II: Explorations in the Red River Valley in Louisiana. In Forty-Fourth Annual Report of the Bureau of American Ethnology, Government Printing Office, Washington, DC, pp. 399–436.
- Fowles, S. M. (2002). From social type to social process: Placing "tribe" in a historical framework. In Parkinson, W. A. (ed.), *The Archaeology of Tribal Societies*, International Monographs in Prehistory, Ann Arbor, MI, pp. 13–33.
- Fowles, S. M. (2013). An Archaeology of Doings: Secularism and the Study of Pueblo Religion, School for Advanced Research Press, Santa Fe, NM.
- Franklin, J. D., Dennison, M., Hays, M. A., Navel, J., and Dye, A. W. (2013). Early and Middle Woodland of the upper Cumberland Plateau, Tennessee. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 71–88.
- Fritz, G. J. (1986). Prehistoric Ozark Agriculture: The University of Michigan Rockshelter Collections, Ph.D. dissertation, Department of Anthropology, University of North Carolina, Chapel Hill.
- Fritz, G. J. (1990). Multiple pathways to farming in precontact eastern North America. Journal of World Prehistory 4: 387–435.
- Fritz, G. J. (1993). Early and Middle Woodland period paleoethnobotany. In Scarry, C. M. (ed.), *Foraging and Farming in the Eastern Woodlands*, University Press of Florida, Gainesville, pp. 39–56.
- Fritz, G. J. (1995). Dates and data on early agriculture: The legacy of complex hunter-gatherers. Annals of the Missouri Botanical Garden 82: 3–15.
- Fritz, G. J. (1998). The development of Native agricultural economies in the lower Mississippi Valley. In Steponaitis, V. P. (ed.), *The Natchez District in the Old, Old South*, Center for the Study of the American South and Research Laboratories of Archaeology, University of North Carolina, Chapel Hill, pp. 23–47.
- Fritz, G. J. (2008). Paleoethnobotanical information and issues relevant to the I-69 overview process, northwest Mississippi. In Rafferty, J., and Peacock, E. (eds.), *Times River: Archaeological Syntheses* from the Lower Mississippi River Valley, University of Alabama Press, Tuscaloosa, pp. 299–343.
- Fuller, J. (1981). The development of sedentary village communities in northern West Virginia: The test of a model. In O'Brien, M. J., and Lewarch, D. (eds.), *Plowzone Archaeology: Contributions to Theory and Technique*, Publications in Anthropology 27, Vanderbilt University, Nashville, TN, pp. 187–214.
- Gardner, P. S. (1987). New evidence concerning the chronology and paleoethnobotany of Salts Cave, Kentucky. American Antiquity 52: 358–367.
- Gibson, J. L. (1993). Ceramics. In Johnson, J. K. (ed.), *The Development of Southeastern Archaeology*, University of Alabama Press, Tuscaloosa, pp. 18–35.
- Gibson, J. L. (2001). The Ancient Mounds of Poverty Point, University Press of Florida, Gainesville.
- Giles, B., Bauder, J., and Alfonso-Durruty, M. P. (2010). Revisiting the dead at Helena Crossing, Arkansas. Southeastern Archaeology 29: 323–340.
- Gilmore, Z. I., and O'Donoughue, J. M. (eds.) (2015). *The Archaeology of Events: Cultural Change and Continuity in the Pre-Columbian Southeast*, University of Alabama Press, Tuscaloosa.
- Goad, S. I. (1976). Copper and the southeastern Indians. Early Georgia 4: 48-67.
- Goad, S. I. (1978). Exchange Networks in the Prehistoric Southeastern United States, Ph.D. dissertation, Department of Anthropology, University of Georgia, Athens.
- Goad, S. I. (1980). Copena burial practices and social organization. Journal of Alabama Archaeology 26: 67–86.
- Greber, N. B. (1996). A commentary on the contexts and contents of large to small Ohio Hopewell deposits. In Pacheco, P. J. (ed.), A View from the Core: A Synthesis of Ohio Hopewell Archaeology, Kent State University Press, Kent, OH, pp. 150–172.
- Greber, N. B. (1997). Two geometric enclosures in the Paint Creek Valley: An estimate of possible changes in community patterns through time. In Dancey, W. S., and Pacheco, P. J. (eds.), *Ohio Hopewell Community Organization*, Kent State University Press, Kent, OH, pp. 207–229.
- Greber, N. B. (ed.) (2009). Re-interpretation of a Group of Hopewell Low Mounds and Structures, Seip Earthworks, Ross County, Ohio, Midcontinental Journal of Archaeology special issue 34.
- Greenman, E. F. (1938). Hopewellian traits in Florida. American Antiquity 3: 327-332.
- Gremillion, K. J. (2002). The development and dispersal of agricultural systems in the Woodland period Southeast. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 483–501.

- Griffin, J. B. (1952). Culture periods in eastern United States archaeology. Archaeology of Eastern United States, University of Chicago Press, Chicago, pp. 352–364.
- Griffin, J. B. (1967). Eastern North American archaeology: A summary. Science. 156: 175-191.
- Hall, R. L. (1997). An Archaeology of the Soul: North American Indian Belief and Ritual, University of Illinois Press, Urbana.
- Hargrave, M. L. (2006). Ground truthing the results of geophysical surveys. In Johnson, J. K. (ed.), *Remote Sensing in Archaeology: An Explicitly North American Perspective*, University of Alabama Press, Tuscaloosa, pp. 269–304.
- Hayden, B. (1995). Pathways to power: Principles for creating socioeconomic inequalities. In Price, T. D., and Feinman, G. M. (eds.), *Foundations of Social Inequality*, Plenum Press, New York, pp. 13–86.
- Henry, E. R. (2011). A multistage geophysical approach to detecting and interpreting archaeological features at the LeBus Circle, Bourbon County, Kentucky. Archaeological Propertion 18: 231–244.
- Henry, E. R. (2013). Working out Adena political organization and variation from the ritual landscape in the Kentucky Bluegrass. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainseville, pp. 219–236.
- Henry, E. R., and Barrier, C. R. (2016). The organisation of dissonance in Adena-Hopewell societies of Eastern North America. World Archaeology 48: 87–109.
- Henry, E. R., Laracuente, N. R., Case, J. S., and Johnson, J. K. (2014). Incorporating multistaged geophysical data into regional-scale models: A case study from an Adena burial mound in central Kentucky. *Archaeological Prospection* 21: 15–26.
- Herbert, J. M. (2002). A Woodland period prehistory of coastal North Carolina. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 292–317.
- Herrmann, J., King, J., and Buikstra, J. E. (2014). Mapping the internal structure of Hopewell yumuli in the lower Illinois River Valley through archaeological geophysics. *Advances in Archaeological Practice* 1: 164–179.
- Hively, R., and Horn, R. (2010). Hopewell cosmography at Newark and Chillicothe, Ohio. In Byers, A. M., and Wymer, D. (eds.), *Hopewell Settlement Patterns, Subsistence, and Symbolic Landscapes*, University Press of Florida, Gainesville, pp. 128–164.
- Holmes, W. H. (1903). Aboriginal Pottery of the Eastern United States, Government Printing Office, Washington, DC.
- Horsley, T. J., Wright, A. P., and Barrier, C. R. (2014). Prospecting for new questions: Integrating geophysics to define anthropological research objectives and inform excavation strategies at monumental sites. Archaeological Prospection 21: 75–86.
- Jackson, H. E. (1998). Little Spanish Fort: An early Middle Woodland enclosure in the lower Yazoo Basin, Mississippi. *Midcontinental Journal of Archaeology* 23: 199–220.
- Jackson, H. E., Higgins, M. L., and Reams, R. E. (2002). Woodland cultural and chronological trends on the southern Gulf Coastal Plain: Recent research in the Pine Hills of southeastern Mississippi. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 228–248.
- Jackson, H. E., and Scott, S. L. (2002). Woodland faunal exploitation in the Midsouth. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 461–482.
- Jefferies, R. W. (1976). *The Tunacunnhee Site: Evidence of Hopewell Interaction in Northwest Georgia*, Anthropological Papers No. 1, University of Georgia, Athens.
- Jefferies, R. W. (1994). The Swift Creek site and Woodland platform mounds in the southeastern United States. In Hally, D. J. (ed.), *Ocmulgee Archaeology*, 1936–1986, University of Georgia Press, Athens, pp. 71–83.
- Jefferies, R. W. (2006). Death rituals at the Tunacunnhee Site. In Charles, D. K., and Buikstra, J. E. (eds.), *Recreating Hopewell*, University Press of Florida, Gainesville, pp. 161–177.
- Jefferies, R. W., Milner, G. R., and Henry, E. R. (2013). Winchester Farm: A small Adena enclosure in central Kentucky. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes* of the Southeast, University Press of Florida, Gainesville, pp. 91–107.
- Jenkins, N. J. (1979). Miller Hopewell of the Tombigbee drainage. In Brose, D. S., and Greber, N. B. (Eds.), *Hopewell Archaeology: The Chillicothe Conference*, Kent State University Press, Kent, OH, pp. 171–180.
- Jennings, J. (2011). Globalizations and the Ancient World, Cambridge University Press, Cambridge, UK.

- Johnson, J. K. (1989). Woodland settlement in northeast Mississippi. In Mainfort, R. C., Jr. (ed.), Middle Woodland Settlement and Ceremonialism in the Mid-South and Lower Mississippi Valley, Mississippi Department of Archives and History, Jackson, pp. 49–59.
- Johnson, J. K., and Haley, B. S. (2006). A cost-benefit analysis of remote sensing application in cultural resource management archaeology. In Johnson, J. K. (ed.), *Remote Sensing in Archaeology: An Explicitly North American Perspective*, University of Alabama Press, Tuscaloosa, pp. 33–46.
- Jones, B. C., Penton, D. T., and Tesar, L. D. (1998). 1973 and 1994 excavations at the Block-Sterns site, Leon County, Florida. In Williams, M. W., and Elliott, D. T. (eds.), A World Engraved: Archaeology of the Swift Creek Culture, University of Alabama Press, Tuscaloosa, pp. 222–246.
- Jones, C. C. (1873). Antiquities of the Southern Indians, Particularly of the Georgia Tribes, D. Appleton, New York.
- Jones, D., and Kuttruff, C. (1998). Prehistoric enclosures in Louisiana and the Marksville site. In Mainfort, R. C., Jr., and Sullivan, L. P. (eds.), Ancient Earthen Enclosures of the Eastern Woodlands, University Press of Florida, Gainesville, pp. 31–56.
- Kassabaum, M. C. (2014). What I believe about what you believe: Discussing social theory in southeastern archaeology. *Southeastern Archaeology* 33: 267–275.
- Keel, B. C. (1976). Cherokee Archaeology: A Study of the Appalachian Summit, University of Tennessee Press, Knoxville.
- Keith, S. (2010). Archaeological Data Recovery at the Leake Site, Bartow County, Georgia, Georgia Department of Transportation, Atlanta.
- Keith, S. (2011). The Leake complex: A Middle Woodland Hopewellian ceremonial center and gateway community. *Early Georgia* 39: 173–200.
- Keith, S. (2013). The Woodland period cultural landscape of the Leake site complex. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 138–152.
- Kellar, J. H., Kelly, A. R., and McMichael, E. V. (1962). The Mandeville site in southwest Georgia. *American Antiquity* 27: 336–355.
- Keller, C., and Carr, C. (2006). Gender, role, prestige, and ritual interaction across the Ohio, Mann, and Havana Hopewellian regions, as evidenced by ceramic figurines. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual, and Ritual Interaction*, Springer, New York, pp. 428–460.
- Kelly, J. E. (2002). Woodland period archaeology in the American Bottom. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloos, pp. 134–161.
- Kelly, R. L. (1992). Mobility/sedentism: Concepts, archaeological measures, and effects. Annual Review of Anthropology 21: 43–66.
- Kerner, S., Chou, C., and Warmind, M. (2015). *Commensality: From Everyday Food to Feast*, Bloomsbury, New York.
- Kidder, T. R. (2002). Woodland period archaeology of the lower Mississippi Valley. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 66–90.
- Kidder, T. R. (2011). Transforming hunter-gatherer history at Poverty Point. In Sassaman, K. E., and Holly, D. H. (eds.), *Hunter-Gatherer Archaeology as Historical Process*, University of Arizona Press, Tuscon, pp. 95–119.
- Kidder, T. R., and Fritz, G. J. (1993). Subsistence and social change in the lower Mississippi Valley: The Reno Brake and Osceola sites, Louisiana. *Journal of Field Archaeology* 20: 281–297.
- Kimball, L. R., Whyte, T. R., and Crites, G. D. (2010). The Biltmore Mound and Hopewellian mound use in the southern Appalachians. *Southeastern Archaeology* 29: 44–58.
- Kimball, L. R., Whyte, T. R., and Crites, G. D. (2013). Biltmore Mound and the Appalachian Summit Hopewell. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 122–137.
- Kline, G. W., Crites, G. D., and Faulkner, C. H. (1982). The McFarland Project: Early Middle Woodland Settlement and Subsistence in the Upper Duck River Valley in Tennessee, Miscellaneous Paper No. 8, Tennessee Anthropological Association, Knoxville.
- Knight, V. J., Jr. (2011). Themes and future directions in the Woodland archaeology of the Etowah-Coosa-Alabama Basin. *Early Georgia* 39: 213–219.

Johannessen, S. (1993). Farmers of the Late Woodland. In Scarry, C. M. (ed.), Foraging and Farming in the Eastern Woodlands, University Press of Florida, Gainesville, pp. 57–77.

- Knight, V. J., Jr. (1990). Excavation of the Truncated Mound at the Walling Stie: Middle Woodland Culture and Copena in the Tennessee Valley, Office of Archaeological Research, Alabama State Museum of Natural History, Huntsville.
- Knight, V. J., Jr. (2001). Feasting and the emergence of platform mound ceremonialism in eastern North America. In Dietler, M., and Hayden, B. (eds.), *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power*, Smithsonian Institution Press, Washington, DC, pp. 311–333.
- Knight, V. J., Jr. (2010). Mound Excavations at Moundville: Architecture, Elites, and Social Order, University of Alabama Press, Tuscaloosa.
- Knight, V. J., Jr., and Schnell, F. T. (2004). Silence over Kolomoki: A curious episode in the history of southeastern archaeology. *Southeastern Archaeology* 23: 1–11.
- Kohl, P. L. (2008). Shared social fields: Evolutionary convergence in prehistory and contemporary practice. American Anthropologist 110: 495–506.
- Kozarek, S. E. (1997). Determining sedentism in the archaeological record. In Dancey, W. S., and Pacheco, P. J. (eds.), *Ohio Hopewell Community Organization*, Kent State University Press, Kent, OH, pp. 131–152.
- Kroeber, A. L. (1939). Cultural and Natural Areas of Native North America, University of California, Berkeley.
- Kvamme, K. L. (2003). Geophysical surveys as landscape archaeology. American Antiquity 68: 435-458.
- Kwas, M. L. (1996). Antiquarians' perspectives on Pinson Mounds. *Tennessee Anthropologist* 21: 83–123.
- Kwas, M. L. (2013). Antiquarians' perspectives on Pinson Mounds 2.0. In Mainfort, R. C., Jr. (ed.), *Pinson Mounds: Middle Woodland Ceremonialism in the Midsouth*, University of Arkansas Press, Fayetteville, pp. 19–66.
- Kwas, M. L., and Mainfort, R. C., Jr. (1986). The Johnston site: Precursor to Pinson Mounds? *Tennessee Anthropologist* 11: 29–41.
- Kwas, M. L., and Mainfort, R. C., Jr. (2007). Antiquarians' perspectives on Pinson Mounds revisited: A response to McNutt. *Southeastern Archaeology* 26: 145–150.
- Lazazzera, A. J. (2004). Hopewell household variation at the Fort Ancient site. In Connolly, R. P., and Lepper, B. T. (eds.), *The Fort Ancient Earthworks: Prehistoric Lifeways of the Hopewell Culture in Southwestern Ohio*, Ohio Historical Society, Columbus, pp. 84–106.
- Lekson, S. H. (2016). Hopewell and Chaco: The consequences of rituality. In Jones, L., and Shiels, R. D. (eds.), *The Newark Earthworks: Enduring Monuments, Contested Meanings*, University of Virginia Press, Charlottesville, pp. 111–128.
- Lepper, B. T. (2004). The Newark Earthworks: Monumental geometry and astronomy at a Hopewellian pilgrimage center. In Townsend, R. F., and Sharp, R. V. (eds.), *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South*, Art Institute of Chicago, Chicago, pp. 73–81.
- Lesser, A. (1961). Social fields and the evolution of society. *Southwestern Journal of Anthropology* **17**: 40–48.
- Levy, J. E. (2014). What I believe: Doing archaeology as a feminist. *Southeastern Archaeology* 33: 226–237.
- Lindauer, O., and Blitz, J. H. (1997). Higher ground: The archaeology of North American platform mounds. *Journal of Archaeological Research* 5: 169–207.
- Lynott, M. J. (2015). Hopewell Ceremonial Landscapes of Ohio: More Than Mounds and Geometric Earthworks, Oxbow Books, London.
- Lyon, E. A. (1996). A New Deal for Southeastern Archaeology, University of Alabama Press, Tuscaloosa.
- Mainfort, R. C., Jr. (1986). Pinson Mounds: A Middle Woodland Ceremonial Center, Tennessee Department of Conservation, Division of Archaeology, Nashville.
- Mainfort, R. C., Jr. (1988a). Middle Woodland ceremonialism at Pinson Mounds, Tennessee. American Antiquity 53: 158–173.
- Mainfort, R. C., Jr. (1988b). Middle Woodland Settlement and Ceremonialism in the Mid-South and Lower Mississippi Valley, Mississippi Department of Archives and History, Jackson.
- Mainfort, R. C., Jr. (2013). Pinson Mounds: Middle Woodland Ceremonialism in the Midsouth, University of Arkansas Press, Little Rock.
- Mainfort, R. C., Jr., Cogswell, J. W., O'Brien, M. J., Neff, H., and Glascock, M. D. (1997). Neutron activation analysis of pottery from Pinson Mounds and nearby sites in western Tennessee: Local production vs. long-distance importation. *Midcontinental Journal of Archaeology* 22: 43–68.

- Mainfort, R. C., Jr., Kwas, M. L., and Mickelson, A. M. (2011). Mapping never-never land: An examination of Pinson Mounds cartography. *Southeastern Archaeology* 30: 148–165.
- Mainfort, R. C., Jr., and McNutt, C. H. (2004). Calibrated radiocarbon chronology for Pinson Mounds and Middle Woodland in the Midsouth. *Southeastern Archaeology* 23: 12–24.
- Mainfort, R. C., Jr., and Sullivan, L. P. (eds.) (1998). Ancient Earthen Enclosures of the Eastern Woodlands, University Press of Florida, Gainesville.
- Mainfort, R. C., Jr., and Walling, R. (1992). 1989 Excavations at Pinson Mounds: Ozier Mound. *Midcontinental Journal of Archaeology* 17: 112–136.
- Marquardt, W. H. (2010). Shell mounds in the Southeast: Middens, monuments, temple mound, rings, or works? *American Antiquity* 75: 551–570.
- Marsh, A. (1998). Swift Creek site excavations: The works progress and black labor. In Williams, M. W., and Elliott, D. T. (eds.), A World Engraved: Archaeology of the Swift Creek Culture, University of Alabama Press, Tuscaloosa, pp. 12–18.
- McFadden, P. S. (2016). Coastal dynamics and pre-Columbian human occupation in Horseshoe Cove on the northern Gulf Coast of Florida, USA. *Geoarchaeology* Early View: 1–21.
- McGimsey, C. (2003). The rings of Marksville. Southeastern Archaeology 22: 47-62.
- McGimsey, C. (2010). Marksville and Middle Woodland. In Rees, M. A. (ed.), Archaeology of Louisiana, Louisiana State University Press, Baton Rouge, pp. 120–134.
- McGimsey, C., Roberts, K. M., Jackson, H. E., and Hargrave, M. L. (1999). Marksville then and now: 75 years of digging. *Louisiana Archaeology* 26: 75–98.
- McNutt, C. H. (2005). The Pinson observatory. Southeastern Archaeology 24: 142-164.
- McNutt, C. H. (2007). A reply to Kwas's and Mainfort's response to the Pinson observatory. Southeastern Archaeology 26: 151–154.
- Mikell, G. A. (2012). Sheepshead country: Coastal Woodland subsistence from the perspective of Mack Bayou and other northwest Florida sites. *Southeastern Archaeology* **31:** 17–32.
- Milanich, J. T., Cordell, A. S., Knight, V. J., Jr., Kohler, T. A., and Sigler-Lavelle, B. J. (1997). Archaeology of Northern Florida AD 200–900: The McKeithen Weeden Island Culture, University Press of Florida, Gainesville.
- Moore, C. B. (1903). Certain aboriginal mounds of the central Florida west coast. Journal of the Academy of Natural Sciences of Philadelphia 12: 440–494.
- Moore, C. B. (1907). Crystal River revisited. Journal of the Academy of Natural Sciences of Philadelphia 13: 406–425.
- Moore, C. B. (1918). The northwest Florida coast revisited. Journal of the Academy of Natural Sciences of Philadelphia 16: 518–581.
- Moore, C. B. (1999a). The East Florida Expeditions of Clarence Bloomfield Moore, Mitchem, J. M. (ed.), University of Alabama Press, Tuscaloosa.
- Moore, C. B. (1999b). The Northwest Florida Expeditions of Clarence Bloomfield Moore, Brose, D. S., and White, N. M. (eds.), University of Alabama Press, Tuscaloosa.
- Moore, C. B. (1999c). The West and Central Florida Expeditions of Clarence Bloomfield Moore, Mitchem, J. M. (ed.), University of Alabama Press, Tuscaloosa.
- Moore, C. B. (2002). The Tennessee, Green, and Lower Ohio Rivers Expeditions of Clarence Bloomfield Moore, Polhemus, R. R. (ed.), University of Alabama Press, Tuscaloosa.
- Morse, D. F. (1986). Preliminary investigation of the Pinson Mounds site: 1963 field season. In Mainfort, R. C., Jr. (ed.), *Pinson Mounds: A Middle Woodland Ceremonial Center*, Tennessee Department of Conservation, Division of Archaeology, Nashville, pp. 96–119.
- Morse, D. F. (1989). The Keller site: Its implications for interpreting the Late Marksville period occupation in northeast Arkansas. In Mainfort, R. C., Jr. (ed.), *Middle Woodland Settlement and Ceremonialism in the Mid-South and Lower Mississippi Valley*, Mississippi Department of Archives and History, Jackson, pp. 69–75.
- Mueller, N. G. (2013). Mound Centers and Seed Security: A Comparative Analysis of Botanical Assemblages from Middle Woodland Sites in the Lower Illinois Valley, Springer, New York.
- Muller, J. (1997). Mississippian Political Economy, Plenum Press, New York.
- Ortmann, A. L., and Kidder, T. R. (2013). Building Mound A at Poverty Point, Louisiana: Monumental public architecture, ritual practice, and implications for hunter-gatherer complexity. *Geoarchae*ology 28: 66–86.
- Pacheco, P. J. (1996a). A View from the Core: A Synthesis of Ohio Hopewell Archaeology, Ohio Archaeological Council, Columbus.

- Pacheco, P. J. (1996b). Ohio Hopewell regional settlement patterns. In Pacheco, P. J. (ed.), A View from the Core: A Synthesis of Ohio Hopewell Archaeology, Ohio Archaeological Council, Columbus, pp. 16–35.
- Pacheco, P. J. (1997). Ohio Middle Woodland intracommunity settlement variability: A case study from the Licking Valley. In Dancey, W. S., and Pacheco, P. J. (eds.), *Ohio Hopewell Community Organization*, Kent State University Press, Kent, OH, pp. 41–84.
- Pacheco, P. J. (2010). Why move? Ohio Hopewell sedentism revisited. In Byers, A. M., and Wymer, D. (eds.), *Hopewell Settlement Patterns, Subsistence, and Symbolic Landscapes*, University Press of Florida, Gainesville, pp. 37–55.
- Pacheco, P. J., Burks, J., and Wymer, D. A. (2009). The 2006 archaeological investigations at Brown's Bottom #1 (33RO1104). Current Research in Ohio Archaeology 1: 1–31.
- Parkinson, W. A. (2002). Introduction: Archaeology and tribal societies. In Parkinson, W. (ed.), The Archaeology of Tribal Societies, International Monographs in Prehistory, Ann Arbor, MI, pp. 1–12.
- Pauketat, T. R. (2001). Practice and history in archaeology: An emerging paradigm. Anthropological Theory 1: 73–98.
- Pauketat, T. R., and Loren, D. D. (2005). Alternative histories and North American archaeology. In Pauketat, T. R., and Loren, D. D. (eds.), *North American Archaeology*, Wiley, Oxford, UK, pp. 1–29.
- Peacock, E. (2002). Shellfish use during the Woodland period in the Middle South. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 444–460.
- Pluckhahn, T. J. (2000). Fifty years since Sears: Deconstructing the domestic sphere at Kolomoki. Southeastern Archaeology 19: 145–155.
- Pluckhahn, T. J. (2003). Kolomoki: Settlement, Ceremony, and Status in the Deep South, AD 350 to 750, University of Alabama Press, Tuscaloosa.
- Pluckhahn, T. J. (2007). Reflections on paddle stamped pottery: Symmetry analysis of Swift Creek paddle designs. Southeastern Archaeology 26: 1–11.
- Pluckhahn, T. J. (2010a). Practicing complexity (past and present) at Kolomoki. In Alt, S. M. (ed.), Ancient Complexities: New Perspectives in Precolumbian North America, University of Utah Press, Salt Lake City, pp. 52–72.
- Pluckhahn, T. J. (2010b). The sacred and the secular revisited: The essential tensions of early village society in the southeastern United States. In Bandy, M., and Fox, J. (eds.), *Becoming Villagers*, University of Arizona Press, Tuscon, pp. 100–118.
- Pluckhahn, T. J. (2010c). Household archeology in the southeastern United States: History, trends, and challenges. *Journal of Archaeological Research* 18: 331–385.
- Pluckhahn, T. J. (2012). Cooperation and competition among Late Woodland households at Kolomoki, Georgia. In Carballo, D. M. (ed.), *Cooperative and Collective Action: Archaeological Perspectives*, University Press of Colorado, Denver, pp. 175–196.
- Pluckhahn, T. J., Compton, J. M., and Bonhage-Freund, M. T. (2006). Evidence of small-scale feasting from the Woodland period site of Kolomoki, Georgia. *Journal of Field Archaeology* 31: 263–284.
- Pluckhahn, T. J., Hodson, A. D., Rink, W. J., Thompson, V. D., Hendricks, R. R., Doran, G., Farr, G., Cherkinsky, A., and Norman, S. P. (2015a). Radiocarbon and luminescence age determinations on mounds at Crystal River and Roberts Island, Florida, USA. *Geoarchaeology* **30**: 238–260.
- Pluckhahn, T. J., and Thompson, V. D. (2009). Mapping Crystal River: Past, present, and future. Florida Anthropologist 62: 3–22.
- Pluckhahn, T. J., and Thompson, V. D. (2013). Constituting similarity and difference in the Deep South: The ritual and domestic landscapes of Kolomoki, Crystal River, and Fort Center. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 181–195.
- Pluckhahn, T. J., and Thompson, V. D. (2014). Monumentality beyond scale: The elaboration of mounded architecture at Crystal River. In Wallis, N. J., and Randall, A. R. (eds.), *New Histories of Pre-Columbian Florida*, University Press of Florida, Gainesville, pp. 62–73.
- Pluckhahn, T. J., Thompson, V. D., and Cherkinsky, A. (2015b). The temporality of shell-bearing landscapes at Crystal River, Florida. *Journal of Anthropological Archaeology* 37: 19–36.
- Pluckhahn, T. J., Thompson, V. D., and Weisman, B. R. (2010). Toward a new view of history and process at Crystal River (8CI1). Southeastern Archaeology 29: 164–181.

- Pollack, D., and Schlarb, E. J. (2013). The Adena mortuary landscape: Off-mound rituals and burial mounds. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 45–55.
- Prufer, O. (1965). The McGraw Site: A Study in Hopewellian Dynamics, Cleveland Museum of Natural History, Cleveland, OH.
- Rafferty, J. (1990). Test excavations at Ingomar Mounds, Mississippi. Southeastern Archaeology 9: 93–102.
- Rafferty, J. (1994). Gradual or step-wise change: The development of sedentary settlement patterns in northeast Mississippi. American Antiquity 59: 405–425.
- Rafferty, J. (2002). Woodland period settlement patterning in the northern Gulf Coastal Plain of Alabama, Mississippi, and Tennessee. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 204–227.
- Rafferty, S. M. (2002). Identification of nicotine by gas chromatography/mass spectroscopy analysis of smoking pipe residue. *Journal of Archaeological Science* 29: 897–907.
- Rafferty, S. M. (2016). Smoking pipes of eastern North America. In Bollwerk, E. A., and Tushingham, S. (eds.), *Perspectives on the Archaeology of Pipes, Tobacco and Other Smoke Plants in the Ancient Americas*, Springer, New York, pp. 13–26.
- Ramsey, C. B. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon 51: 337-360.
- Reitz, E. J., and Quitmyer, I. R. (1988). Faunal remains from two coastal Georgia Swift Creek sites. Southeastern Archaeology 7: 95–108.
- Renfrew, C. (1994). Towards a cognitive archaeology. In Renfrew, C., and Zubrow, E. B. (eds.), *The Ancient Mind: Elements of Cognitive Archaeology*, Cambridge University Press, Cambridge, UK, pp. 2–12.
- Riley, T. J., Walz, G. R., Bareis, C. J., Fortier, A. C., and Parker, K. E. (1994). Accelerator mass spectrometry (AMS) dates confirm early Zea mays in the Mississippi River Valley. American Antiquity 59: 490–498.
- Romain, W. F. (2009). Shamans of the Lost World: A Cognitive Approach to the Prehistoric Religion of the Ohio Hopewell, AltaMira Press, Lanham, MD.
- Romain, W. F. (2015). An Archaeology of the Sacred, The Ancient Earthworks Project, Olmsted Township, OH.
- Rosenswig, R. M., and Burger, R. L. (2012). Considering early New World monumentality. In Burger, R. L., and Rosenswig, R. M. (eds.), *Early New World Monumentality*, University Press of Florida, Gainesville, pp. 3–24.
- Rowan, Y. M. (2011). Beyond belief: The archaeology of religion and ritual. In Rowan, Y. M. (ed.), *Beyond Belief: The Archaeology of Religion and Ritual*, Archeological Papers Vol. 21, American Anthropological Association, Washington, DC, pp. 1–10.
- Ruby, B. J., Carr, C., and Charles, D. K. (2006). Community organizations in the Scioto, Mann, and Havana regions: A comparative perspective. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual, and Ritual Interaction*, Springer, New York, pp. 119–176.
- Ruby, B. J., and Shriner, C. M. (2006). Ceramic vessel compositions and styles as evidence of the local and nonlocal social affiliations of ritual participants at the Mann site, Indiana. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual, and Ritual Interaction*, Springer, New York, pp. 553–572.
- Ruhl, K. C. (2006). Hopewellian copper earspools from eastern North America: Their social, ritual, and symbolic significance of their contexts and distribution. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual, and Ritual Interaction*, Springer, New York, pp. 696–713.
- Russo, M. (2004). Measuring shell rings for social inequality. In Gibson, J. L., and Carr, P. J. (eds.), Signs of Power: The Rise of Cultural Complexity in the Southeast, University of Alabama Press, Tuscaloosa, pp. 26–70.
- Russo, M., Dengel, C., and Shanks, J. (2014). Northwest Florida Woodland mounds and middens: The sacred and not so secular. In Wallis, N. J., and Randall, A. R. (eds.), *New Histories of Pre-Columbian Florida*, University Press of Florida, Gainesville, pp. 121–142.
- Russo, M., Schwadron, M., and Yates, E. M. (2006). Archaeological Investigations of the Bayview Site (8BY137), a Wedden Island Ring Midden, Tyndall Air Force Base, Panama City, Florida, National Park Service, Southeast Archeological Center, Tallahassee, FL.
- Sampson, C. P. (2015). Oyster demographics and the creation of coastal monuments at Roberts Island Mound Complex, Florida. Southeastern Archaeology 34: 84–94.

Sassaman, K. E. (2005). Poverty Point as structure, event, process. Journal of Archaeological Method and Theory 12: 335–364.

Sassaman, K. E. (2010). The Eastern Archaic, Historicized, AltaMira Press, Lanham, MD.

- Sassaman, K. E., and Rudolphi, W. (2001). Communities of practice in the early pottery traditions of the American Southeast. *Journal of Anthropological Research* 57: 407–425.
- Saunders, J. W. (2004). Are we fixing to make the same mistake again? In Gibson, J. L., and Carr, P. J. (eds.), Signs of Power: The Rise of Cultural Complexity in the Southeast, University of Alabama Press, Tuscaloosa, pp. 146–161.
- Saunders, J. W., Mandel, R. D., Sampson, C. G., Allen, C. M., Allen, E. T., Bush, D. A., Feathers, J. K., Grmillion, K. J., Hallmark, C. T., Jackson, H. E., Johnson, J. K., Jones, R., Saucier, R. T., Stringer, G. L., and Vidrine, M. F. (2005). Watson Brake, a Middle Archaic mound complex in northeast Louisiana. *American Antiquity* **70**: 631–668.
- Scarry, C. M. (1993). Variability in Mississippian crop production strategies. In Scarry, C. M. (ed.), Foraging and Farming in the Eastern Woodlands, University Press of Florida, Gainesville, pp. 78–90.
- Scarry, C. M. (2003). Patterns of wild plant utilization in the prehistoric Eastern Woodlands. In Minnis, P. E. (ed.), *People and Plants in Ancient Eastern North America*, Smithsonian Books, Washington, DC, pp. 50–104.
- Scarry, C. M. (2008). Crop husbandry practices in North America's Eastern Woodlands. In Reitz, E. J., Scudder, S. J., and Scarry, C. M. (eds.), *Case Studies in Environmental Archaeology*, Springer, New York, pp. 391–404.
- Schilling, T. (2013). The chronology of Monks Mound. Southeastern Archaeology 32: 14-28.
- Schilling, T. (2015). A model of the construction chronology of the Hopeton Earthworks. Hopewell Ceremonial Landscapes of Ohio: More than Mounds and Geometric Earthworks, Oxbow, London, pp. 261–265.
- Schneider, B. B., Mandel, R. D., Tsoflias, G. P., De Vore, S. L., and Lynott, M. J. (2016). Combining ER and GPR surveys for evidence of prehistoric landscape construction: Case study at Mound City, Ohio, USA. *Journal of Applied Geophysics* 129: 178–186.
- Sears, W. H. (1956). Excavations at Kolomoki: Final Report, University of Georgia Press, Athens.
- Seeman, M. F. (1979a). The Hopewell Interaction Sphere: The Evidence for Interregional Trade and Structural Complexity, Indiana Historical Society, Indianapolis.
- Seeman, M. F. (1979b). Feasting with the dead: Ohio Hopewell charnel house ritual as a context for redistribution. In Brose, D. S., and Greber, N. B. (eds.), *Hopewell Archaeology: The Chillicothe Conference*, Kent State University Press, Kent, OH, pp. 39–46.
- Setzler, F. M. (1934). A phase of Hopewell mound builders in Louisiana. In *Explorations and Fieldwork* of the Smithsonian Institution in 1933, Smithsonian Institution, Washington, DC, pp. 38–40.
- Shelby, T. M. (2011). The Cobbs Swamp phase and the Middle Woodland period of east-central Alabama: The view from Catoma Creek. *Early Georgia* **39**: 147–171.
- Sherwood, S. C., Carmody, S. B., and Wright, A. P. (2015). Ground truthing: The Pinson Environment and Archaeology Regional Landscape (PEARL) project begins testing geophysical results (accessed September 2015: https://tennesseearchaeologycouncil.wordpress.com/2015/09/03/30-days-oftennessee-archaeology-2015-day-3/).
- Simon, M. L. (2014). Reevaluating the introduction of maize into the American Bottom and western Illinois. In Raviele, M. E., and Lovis, W. A. (eds.), *Reassessing the Timing, Rate, and Adoption Trajectories of Domesticate Use in the Midwest and Great Lakes*, Occasional Papers No. 1, Illinois State Archaeological Survey, Urbana-Champaign, pp. 97–134.
- Smith, B. D. (1986). The archaeology of the southeastern United States: From Dalton to de Soto, 10,500–500 BP. Advances in World Archaeology 5: 1–92.
- Smith, B. D. (1992). Hopewellian farmers of eastern North America. In Smith, B. D. (ed.), Rivers of Change: Essays on Early Agriculture in Eastern North America, Smithsonian Institution Press, Washington, DC, pp. 201–248.
- Smith, B. D. (2001). Low-level food production. Journal of Archaeological Research 9: 1-43.
- Smith, B. D. (2007). The Mississippian Emergence, University of Alabama Press, Tuscaloosa.
- Smith, K. Y., and Knight, V. J., Jr. (2012). Style in Swift Creek paddle art. Southeastern Archaeology 31: 143–156.
- Smith, K. Y., and Knight, V. J., Jr. (2014). Core elements and layout in Swift Creek paddle art. Southeastern Archaeology 33: 42–54.
- Snow, F. (1975). Swift Creek designs and distributions. Early Georgia 3: 38-59.

- Snow, F., and Stephenson, K. (1998). Swift Creek designs: A tool for monitoring interaction. In Williams, M. W., and Elliott, D. T. (eds.), A World Engraved: Archaeology of the Swift Creek Culture, University of Alabama Press, Tuscaloosa, pp. 61–98.
- Spielmann, K. A. (2002). Feasting, craft specialization, and the ritual mode of production. American Anthropologist 104: 195–207.
- Spielmann, K. A. (2008). Crafting the sacred: Ritual places and paraphernalia in small-scale societies. In Wells, E. C., and McAnany, P. A., (eds.), *Dimensions of Ritual Economy*, JAI Press, Bingley, UK, pp. 37–72.
- Spielmann, K. A. (2009). Ohio Hopewell ritual craft production. In Lynott, M. J. (ed.), *Footprints: In the Footprints of Squier and Davis*, Midwest Archaeological Center, Lincoln, NE, pp. 179–188.
- Spielmann, K. A. (2013). The materiality of spiritual engagement: Art and the end of Ohio Hopewell. World Art 3: 141–162.
- Spielmann, K. A., and Livingood, P. (2005). Ritual, politics, and the "exotic" in North American prehistory. In Hegmon, M., and Eiselt, B. S. (eds.), *Engaged Anthropology: Research Essays on North America Archaeology, Ethnobotany, and Museology*, Anthropological Papers 94, Museum of Anthropology, University of Michigan, Ann Arbor, pp. 155–173.
- Spivey, S. M., Kidder, T. R., Ortmann, A. L., and Arco, L. J. (2015). Pilgrimage to Poverty Point? In Gilmore, Z. I., and O'Donoughue, J. M. (eds.), *The Archaeology of Events: Cultural Change and Continuity in the Pre-Columbian Southeast*, University of Alabama Press, Tuscaloosa, pp. 141–159.
- Squier, E. G., and Davis, E. H. (1848). Ancient Monuments of the Mississippi Valley, Comprising the Results of Extensive Original Surveys and Explorations, Smithsonian Institution, Washington, DC.
- Stephenson, K., Bense, J. A., and Snow, F. (2002). Aspects of Deptford and Swift Creek on the South Atlantic and Gulf Coastal Plains. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.), *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 318–351.
- Stoltman, J. B. (1999). Icehouse Bottom and the Hopewell Connection, Frank H. McClung Museum Research Notes No. 17, University of Tennessee, Knoxville.
- Stoltman, J. B. (2015). Ceramic Petrography and Hopewell Interaction, University of Alabama Press, Tuscaloosa.
- Stoltman, J. B., and Mainfort, R. C., Jr. (2002). Minerals and elements: Using petrography to reconsider the findings of neutron activation analysis of ceramics from Pinson Mounds, Tennessee. *Midcontinental Journal of Archaeology* 27: 1–33.
- Struever, S., and Houart, G. L. (1972). An analysis of the Hopewell Interaction Sphere. In Wilmsen, E. N. (ed.), *Social Exchange and Interaction*, Anthropological Papers No. 46, Museum of Anthropology, University of Michigan, Ann Arbor, pp. 47–79.
- Sullivan, L. P. (2014). What I believe: Taking up the serpents of social theory and southeastern archaeology. Southeastern Archaeology 33: 238–245.
- Thomas, C. (1894). Report on the Mound Explorations of the Bureau of Ethnology, Smithsonian Institution, Washington, DC.
- Thomas, C. R., Carr, C., and Keller, C. (2006). Animal-totemic clans of Ohio Hopewellian peoples. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual, and Ritual Interaction*, Springer, New York, pp. 339–387.
- Thompson, V. D. (2014). What I believe: Reflections on historical and political ecology as research frameworks in southeastern archaeology. *Southeastern Archaeology* **33**: 246–254.
- Thompson, V. D., Arnold, P. J., Pluckhahn, T. J., and Vanderwarker, A. M. (2011). Situating remote sensing in anthropological archaeology. Archaeological Prospection 18: 195–213.
- Thompson, V. D., Gremillion, K. J., and Pluckhan, T. J. (2013a). Challenging the evidence for prehistoric wetland maize agriculture at Fort Center, Florida. *American Antiquity* 78: 181–193.
- Thompson, V. D., and Pluckhahn, T. J. (2010). History, complex hunter-gatherers, and the mounds and monuments of Crystal River, Florida, USA: A geophysical perspective. *Journal of Island and Coastal Archaeology* 5: 33–51.
- Thompson, V. D., and Pluckhahn, T. J. (2012). Monumentalization and ritual landscapes at Fort Center in the Lake Okeechobee basin of South Florida. *Journal of Anthropological Archaeology* 31: 49–65.
- Thompson, V. D., and Pluckhahn, T. J. (2014). The modification and manipulation of landscape at Fort Center. In Wallis, N. J., and Randall, A. R. (eds.), *New Histories of Pre-Columbian Florida*, University Press of Florida, Gainesville, pp. 163–182.
- Thompson, V. D., Pluckhahn, T. J., Das, O., and Andrus, C. F. (2015). Assessing village life and monument construction (cal. AD 65–1070) along the central Gulf Coast of Florida through stable isotope geochemistry. *Journal of Archaeological Science Reports* 4: 111–123.

- Thompson, V. D., Pluckhahn, T. J., Rink, W. J., Doran, G., Sampson, C. P., Hodson, A., and Norman, S. (2013b). Exploring Middle Woodland period architectural engineering through shallow geophysics and coring at Crystal River, Florida. Poster presented at the 70th annual meeting of the Southeastern Archaeological Conference, Tampa, FL.
- Thompson, V. D., and Waggoner, J. C., Jr. (eds.) (2013). The Archaeology and Historical Ecology of Small Scale Societies, University Press of Florida, Gainseville.
- Thruston, G. P. (1890). The Antiquities of Tennessee and the Adjacent States and the State of Aboriginal Society in the Scale of Civilization Represented by Them: A Series of Historical and Ethnological Studies, R. Clarke and Company, Cincinnati, OH.
- Thunen, R. L. (1998). Defining space: An overview of the Pinson Mounds enclosure. In Mainfort, R. C., Jr., and Sullivan, L. P. (eds.), Ancient Earthen Enclosures of the Eastern Woodlands, University Press of Florida, Gainesville, pp. 57–67.
- Toth, A. (1974). Archaeology and Ceramics at the Marksville Site, Anthropological Papers No. 56, Musuem of Anthropology, University of Michigan, Ann Arbor.
- Toth, A. (1988). Early Marksville Phases in the Lower Mississippi Valley: A Study of Culture Contact Dynamics, Mississippi Department of Archives and History, Jackson.
- Trubitt, M. B. (2000). Mound building and prestige goods exchange: Changing strategies in the Cahokia chiefdom. American Antiquity 65: 669–690.
- Trubitt, M. B. (2003). The production and exchange of marine shell prestige goods. Journal of Archaeological Research 11: 243–277.
- Turff, G. M., and Carr, C. (2006). Hopewellian panpipes from eastern North America: Their social, ritual, and symbolic significance. In Carr, C., and Case, D. T. (eds.), *Gathering Hopewell: Society, Ritual,* and Ritual Interaction, Springer, New York, pp. 648–695.
- VanDerwarker, A. M., Bardolph, D. N., Hoppa, K. M., Thakar, H. B., Martin, L. S., Jaqua, A. L., Biwer, M. E., and Gill, K. M. (2016). New World paleoethnobotany in the new millennium (2000–2013). *Journal of Archaeological Research* 24: 125–177.
- Vanderwarker, A. M., Wilson, G. D., and Bardolph, D. N. (2013). maize adoption and intensification in the central Illinois River Valley: An analysis of archaeobotanical data from the Late Woodland to Early Mississippian periods (AD 600–1200). *Southeastern Archaeology* **32**: 147–168.
- Van Gilder, C., and Charles, D. K. (2003). Archaeology as cultural encounter: The legacy of Hopewell. In Jeske, R. J., and Charles, D. K. (eds.), *Theory, Method, and Practice in Modern Archaeology*, Praeger, Westport, CT, pp. 114–129.
- Walling, R., Mainfort, R. C., Jr., and Atkinson, J. R. (1991). Radiocarbon dates for the Bynum, Pharr, and Miller sites, northeast Mississippi. *Southeastern Archaeology* 10: 54–62.
- Wallis, N. J. (2006). The case for Swift Creek paddles as totemic symbols: Some anthropological considerations. *The Florida Anthropologist* 59: 55–61.
- Wallis, N. J. (2007). Defining Swift Creek interaction: Earthenware variability at ring middens and burial mounds. Southeastern Archaeology 26: 212–231.
- Wallis, N. J. (2011). The Swift Creek Gift: Vessel Exchange on the Atlantic Coast, University of Alabama Press, Tuscaloosa.
- Wallis, N. J., Boulanger, M., Glascock, M. D., and Ferguson, J. R. (2010). Woodland period ceramic provenance and the exchange of Swift Creek complicated stamped pottery in the southeastern United States. *Journal of Archaeological Science* 37: 2598–2611.
- Wallis, N. J., and Cordell, A. S. (2013). Petrographic analysis of pottery and clay samples from the Georgia Bight: Evidence of regional social interactions. In Thompson, V. D., and Thomas, D. H. (eds.), *Life Among the Tides: Recent Archaeological Investigations on the Georgia Bight*, American Museum of Natural History, New York, pp. 119–144.
- Wallis, N. J., and McFadden, P. S. (2016). Recovering the forgotten Woodland mound excavations at Garden Patch (8DI4). Southeastern Archaeology 35: 1–19.
- Wallis, N. J., McFadden, P. S., and Singleton, H. M. (2015). Radiocarbon dating the pace of monument construction and village aggregation at Garden Patch: A ceremonial center on the Florida Gulf Coast. *Journal of Archaeological Science Reports* 2: 507–516.
- Wallis, N. J., and O'Dell, A. (2011). Swift Creek paddle designs from the Florida Gulf Coast: Patterns and prospects. *Florida Anthropologist* 64: 187–206.
- Wallis, N. J., Pluckhahn, T. J., and Glascock, M. D. (2016). Interaction networks of the Woodland period American Southeast: Neutron activation analysis of Swift Creek Complicated Stamped Pottery. *American Antiquity* 81: in press.

- Walthall, J. A. (1973). Copena: A Tennessee Valley Middle Woodland Culture, Ph.D. dissertation, Department of Anthropology, University of North Carolina, Chapel Hill.
- Walthall, J. A. (1979). Hopewell and the southern heartland. In Brose, D. S., and Greber, N. B. (eds.), *Hopewell Archaeology: The Chillicothe Conference*, Kent State University Press, Kent, OH, pp. 200–210.
- Walthall, J. A. (1980). Prehistoric Indians of the Southeast: Archaeology of Alabama and the Middle South, University of Alabama Press, Tuscaloosa.
- Walthall, J. A. (1981). Galena and Aboriginal Trade in Eastern North America, Scientific Papers, Illinois State Museum, Springfield.
- Walthall, J. A. (1985). Early Hopewellian ceremonial encampments in the South Applachian highlands. In Dickens, R. S., Jr., and Ward, H. T. (eds.), *Structure and Process in Southeastern Archaeology*, University of Alabama Press, Tuscaloosa, pp. 243–262.
- Walthall, J. A., and DeJarnette, D. S. (1974). Copena burial caves. Journal of Alabama Archaeology 20: 1–59.
- Watson, P. J. (1990). Trend and tradition in southeastern archaeology. Southeastern Archaeology 9: 43–54.
- Weisman, B. R. (1995). Crystal River: A Ceremonial Mound Complex on the Florida Gulf Coast, Florida Department of State, Division of Historical Resources, Tallahassee.
- Wetmore, R. Y. (2002). The Woodland period in the Appalachian Summit of western North Carolina an the Ridge and Valley Province of eastern Tennessee. In Anderson, D. G., and Mainfort, R. C., Jr. (eds.) *The Woodland Southeast*, University of Alabama Press, Tuscaloosa, pp. 249–269.
- White, N. M. (2010). Gotier Hammock mound and midden on St. Joseph Bay, northwest Florida. Florida Anthropologist 63: 149–184.
- White, N. M. (2014). What I believe about the useful diversity of theory in southeastern archaeology. Southeastern Archaeology 33: 255–268.
- Whitley, D. S. (2008). Cognition, emotion, and belief: First steps in an archaeology of religion. In Whitley, D. S., and Hays-Gilpin, K. (eds.), *Belief in the Past: Theoretical Appraoches to the Archaeology of Religion*, Left Coast Press, Walnut Creek, CA, pp. 85–104.
- Willey, G. R., and Phillips, P. (1958). Method and Theory in American Archaeology, University of Chicago Press, Chicago.
- Williams, M. W., and Elliott, D. T. (eds.) (1998a). A World Engraved: Archaeology of Swift Creek Culture, University of Alabama Press, Tuscaloosa.
- Williams, M. W., and Elliott, D. T. (1998b). Swift Creek research: History and observations. In Williams,
 M. W., and Elliott, D. T. (eds.), A World Engraved: Archaeology of the Swift Creek Culture,
 University of Alabama Press, Tuscaloosa, pp. 1–11.
- Williams, M. W., and Harris, J. F. (1998). Shrines of the prehistoric South: Patterning in Middle Woodland mound distribution. In Williams, M. W., and Elliott, D. T. (eds.), A World Engraved: Archaeology of the Swift Creek Culture, University of Alabama Press, Tuscaloosa, pp. 36–47.
- Windham, R. J. (2011). Hardin Bridge: A look at early Middle Woodland hinterland settlement and continuity. *Early Georgia* 39: 137–145.
- Windham, R. J., Keith, S., Sheldon, C., Jenkins, N., and Branch-Raymer, L. (2011). The Woodland period of the Etowah, Coosa, and Alabama River basins. *Early Georgia* 39: 111–117.
- Winter, J. C. (2000). Tobacco Use by Native North Americans: Sacred Smoke and Silent Killer, University of Oklahoma Press, Norman.
- Wright, A. P. (2013). Under the mound: The early life history of the Garden Creek Mound No. 2 site. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 108–121.
- Wright, A. P. (2014a). History, monumentality, and interaction in the Appalachian Summit Middle Woodland. American Antiquity 79: 277–294.
- Wright, A. P. (2014b). Inscribing Interaction: Middle Woodland Monumentality in the Appalachian Summit, 100 BC-AD 400, Ph.D. dissertation, Department of Anthropology, University of Michigan, Ann Arbor.
- Wright, A. P., and Gokee, C. D. (2013). Modeling the interaction sphere: Social network approaches to Hopewellian material culture in the Middle Woodland Southeast. Paper presented at the 70th annual meeting of the Southeastern Archaeological Conference, Tampa, FL.
- Wright, A. P., and Henry, E. R. (eds.) (2013a). Early and Middle Woodland Landscapes of the Southeast, University Press of Florida, Gainesville.

- Wright, A. P., and Henry, E. R. (2013b). Introduction: Emerging approaches to the landscapes of the Early and Middle Woodland Southeast. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 1–18.
- Wright, A. P., and Loveland, E. (2015). Ritualized craft production at a Hopewell periphery: New evidence from the Appalachian Summit. *Antiquity* 89: 137–153.
- Wyman, J. (1875). Fresh Water Shell Mounds of the St. John's River, Florida, Memoirs 1(4), Peabody Academy of Science, Salem, MA.
- Wymer, D. A. (1993). Cultural change and subsistence: Middle Woodland-Late Woodland transition in the Mid-Ohio Valley. In Scarry, C. M. (ed.), *Foraging and Farming in the Eastern Woodlands*, University Press of Florida, Gainesville, pp. 13–26.
- Yaeger, J., and Canuto, M. (2000). Introducing an archaeology of communities. In Canuto, M., and Yaeger, J. (eds.), *The Archaeology of Communities*, Routledge, London, pp. 1–15.
- Yarnell, R. A. (1993). The importance of native crops during the Late Archaic and Woodland periods. In Scarry, C. M. (ed.), *Foraging and Farming in the Eastern Woodlands*, University Press of Florida, Gainesville, pp. 13–26.
- Yarnell, R. A., and Black, M. J. (1985). Temporal trends indicated by a survey of Archaic and Woodland plant food remains from southeastern North America. *Southeastern Archaeology* 4: 93–106.
- Yerka, S. J. (2010). Geophysical study at Old Stone Fort State Archaeological Park, Manchester, Tennessee. Master's thesis, Department of Anthropology, University of Tennessee, Knoxville.
- Yerkes, R. W. (1994). A consideration of the function of Ohio Hopewell bladelets. *Lithic Technology* 19: 109–127.
- Yerkes, R. W. (2002). Hopewell tribes: A study of Middle Woodland social organization in the Ohio Valley. In Parkinson, W. (ed.), *The Archaeology of Tribal Societies*, International Monographs in Prehistory, Ann Arbor, MI, pp. 227–245.
- Yerkes, R. W. (2003). Ideology and social organization in Ohio Hopewell societies. Wisconsin Archeologist 84: 15–19.
- Yerkes, R. W. (2005). Bone chemistry, body parts, and growth marks: Evaluating Ohio Hopewell and Cahokia Mississippian seasonality, subsistence, ritual, and feasting. *American Antiquity* 70: 241–265.
- Yerkes, R. W. (2006). Middle Woodland settlements and social organization in the central Ohio Valley. In Charles, D. K., and Buikstra, J. E. (eds.), *Recreating Hopewell*, University Press of Florida, Gainesville, pp. 50–61.

Bibliography of Recent Literature

- Alfonso-Durruty, M. P., Bauder, J., and Giles, B. (2014). Dental pathologies and diet in the Middle Woodland burials from Helena Crossing, Arkansas. *North American Archaeologist* 35: 87–108.
- Applegate, D., and Mainfort, R. C., Jr. (eds.) (2005). Woodland Period Systematics in the Middle Ohio Valley, University of Alabama Press, Tuscaloosa.
- Beck, R. A., and Brown, J. A. (2012). Political economy and the routinization of religious movements: A view from the Eastern Woodlands. In Rowan, Y. M. (ed.), *Beyond Belief: Archaeology of Religion* and Ritual, Archeological Papers 21, American Anthropological Association, Washington, DC, pp. 72–88.
- Blanton, D. B. (1992). Middle Woodland settlement systems in Virginia. In Reinhart, T. R., and Hodges, M. E. (eds.), *Middle and Late Woodland Research in Virginia: A Synthesis*, Special Publication No. 29, Archaeological Society of Virginia, Dietz Press, Richmond, pp. 65–96.
- Boudreaux, E. A. III (2013). Archaeological Investigations at Jackson Landing: An Early Late Woodland Mound and Earthwork Site in Coastal Mississippi, Mississippi Department of Archives and History, Jackson.
- Carder, N., Reitz, E. J., and Compton, J. M. (2004). Animal use in the Georgia pine barrens: An example from the Hartford site (9PU1). Southeastern Archaeology 23: 25–40.
- Clay, B. (2014). What does mortuary variability in the Ohio Valley Middle Woodland mean? Agency, its projects, and interpretive ambiguity. *Southeastern Archaeology* 33: 143–152.
- Colvin, G. H. (2011). The presence, source and use of fossil shark teeth from Ohio archaeological sites. *Ohio Archaeologist* **61:** 26–46.

- Daniel, I. R., Moore, C. R., and Caynor C. E. (2013). Sifting the sands of time: Geoarchaeology, culture chronology, and climate change at Squires Ridge, northeastern North Carolina. *Southeastern Archaeology* 32: 253–270.
- Dennison, M. E., Franklin, J. D., Hays, M. A., and Dean, S. D. (2013). Linville Cave (40SL24) revisited: Multiple lines of evidence to address assemblage formation. *Tennessee Archaeology* 7: 18–41.
- Deter-Wolf, A., and Tuschl, J. (2005). Middle Archaic through Mississippian occupations at site 40DR226 along the Tennessee River in Decatur County. *Tennessee Archaeology* 2: 19–31.
- Emerson, T. E., Walthall, J. A., Fortier, A. C., and McElrath, D. L. (2006). Advances in American Bottom prehistory: Illinois transportation archaeology two decades after I-270. *Southeastern Archaeology* 25: 155–169.
- Fortier, A. C., Emerson, T. E., and McElrath, D. L. (2006). Calibrating and reassessing American Bottom culture history. *Southeastern Archaeology* 25: 170–211.
- Franklin, J. D. (2008). Luminescence dates and Woodland ceramics from rock shelters on the Upper Cumberland Plateau of Tennessee. *Tennessee Archaeology* 3: 87–100.
- Franklin, J, D., Hammett, M. L., and Walker, R. B. (2008). The Nelson site: Late Middle Woodland habitation of the Nolichucky River, Washington County, Tennessee. *Tennessee Archaeology* 3: 181–199.
- Fritz, G. J. (2007). Keepers of Louisiana's levees: Early mound builders and forest managers. In Denham, T., Iriarte, J., and Vrydaghs, L. (eds.), *Rethinking Agriculture: Archaeological and Ethnoarchae*ological Perspectives, Left Coast Press, Walnut Creek, CA, pp. 189–209.
- Garrow, P. H. (2009). The Woodland period north of the fall line: A summary of investigations from 1975 to 2000. *Early Georgia* **37**: 25–52.
- Girard, J. S. (2012). The Bellevue site (16BO4): A Woodland period mound in northwest Louisiana. *Louisiana Archaeology* **35:** 53–78.
- Hendryx, G. S., and Wallis, N. J. (2007). The Woodland period in northeastern Florida: A view from the Tillie Fowler site. *The Florida Anthropologist* 60: 179–200.
- Herbert, J. M., Feathers, J. K., and Cordell, A. S. (2002). Building ceramic chronologies with thermoluminescence dating: A case study from the Carolina Sandhills. *Southeastern Archaeology* 21: 92–108.
- Keller, B., and Thompson, V. D. (2013). A preliminary report on the role of shark teeth at Fort Center (8GL13), Florida. *The Florida Anthropologist* 66: 23–30.
- Little, K. J. (2011). Woodland ceramic diversity and social boundaries in northeastern Alabama. Early Georgia 39: 201–212.
- McLearen, D. C. (1992). Virginia's Middle Woodland period: A regional perspective. In Reinhart, T. R., and Hodges, M. E. (eds.), *Middle and Late Woodland Research in Virginia: A Synthesis*, Special Publication No. 29, Archaeological Society of Virginia, Dietz Press, Richmond, pp. 39–64.
- Meredith, S. M. (2008). The Middle Woodland Montevallo phase in north-central Alabama. Journal of Alabama Archaeology 54: 29–52.
- Nolan, K. C., and Howard, S. P. (2010). Using evolutionary archaeology and evolutionary ecology to explain cultural elaboration: The case of Middle Woodland Ohio Valley Woodland period ceremonial subsistence. *North American Archaeologist* **31**: 119–154.
- Palmiotto, A. (2011). A zooarchaeological synthesis of South Carolina's prehistoric coastal sites. Southeastern Archaeology 30: 166–175.
- Pluckhahn, T. J. (2007). "The mounds themselves might be perfectly happy in their surroundings": The "Kolomoki problem" in notes and letters. *The Florida Anthropologist* **60**: 63–76.
- Pluckhan, T. J., and Norman, S. P. (2011). Typological, functional, and comparative contextual analyses of woodland hafted bifaces. *The Florida Anthropologist* 64: 207–240.
- Rafferty, J., and Peacock, E. (2008.) *Times River: Archaeological Syntheses from the Lower Mississippi River Valley*, University of Alabama Press, Tuscaloosa.
- Reid, D. (1996). Caching behavior in northwest Georgia in the Middle Woodland period. *Early Georgia* 24: 24–33.
- Simon, M. L., and Parker, K. E. (2006). Prehistoric plant use in the American Bottom: New thoughts and interpretations. *Southeastern Archaeology* 25: 212–257.
- Smith, K. Y., and Neiman, F. D. (2007). Frequency seriation, correspondence analysis, and Woodland period ceramic assemblage variation in the Deep South. *Southeastern Archaeology* 26: 47–72.
- Turner, J. C. (2011). Macrobotanical analysis of two Hopewell mound samples from the Mann site (12PO2) in Indiana. Southeastern Archaeology 30: 365–376.

- Wallis, N. J. (2015). The living past: Itineraries of "Swift Creek" images through wood, earthenware, and ether. In Joyce, R. A., and Gillespie, S. D. (eds.), *Things in Motion: Object Itineraries in Archaeological Practice*, School for Advanced Research Press, Santa Fe, NM, pp. 201–219.
- Wallis, N. J., Cordell, A. S., and Newsom, L. A. (2011). Using hearths for temper: Petrographic analysis of Middle Woodland charcoal-tempered pottery in northeast Florida. *Journal of Archaeological Science* 38: 2914–2924.
- Wallis, N. J., Cordell, A. S., and Stoltman, J. B. (2014). Foundations of the Cades Pond culture in northcentral Florida: The River Styx site (8AL458). *Southeastern Archaeology* 33: 168–188.
- White, N. M. (2011). Middle Woodland and protohistoric Fort Walton at the lost Chipola Cutoff Mound, northwest Florida. *The Florida Anthropologist* 64: 53–87.
- Williams, M. W. (2014). Archaeological Excavations at the Annewakee Creek Site, 9DO2: Roy Dickens' 1972 Archaeology Field School, Laboratory of Archaeology, University of Georgia, Athens.
- Williams, M. W. (2000). Archaeological site distributions in Georgia: 2000. Early Georgia 28: 1-41.
- Williams, M. W., Turck, J. A., and Chamblee, J. F. (2010). New data on the number and distribution of archaeological sites in Georgia by time and space. *Early Georgia* 38: 65–116.
- Whyte, T. R. (2011). Archaeofaunal remains from Garden Creek Mound No. 2 (31HW2) in Haywood County, North Carolina. North Carolina Archaeology 60: 53–64.