



From Categories to Connections in the Archaeology of Eastern North America

Jacob Holland-Lulewicz¹

Published online: 4 January 2021

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC part of Springer Nature 2021

Abstract

A renewed adoption of relational perspectives by archaeologists working in eastern North America has created an opportunity to move beyond categorical approaches, those reliant on the top-down implementation of essentialist models or “types.” Instead, emerging approaches, concerned with highlighting the agential power of relationships between individuals, communities, and institutions, and, more generally, with simply moving beyond categories, are allowing archaeologists to move from the bottom-up, focusing instead on the relationships that underlie, and indeed constitute, social, political, and economic phenomena. In this paper, I synthesize recent archaeological work from across eastern North America in which archaeologists have productively moved beyond a reliance on categorical perspectives. I explicitly focus on the potential for relational perspectives to recalibrate our social and temporal referents in crafting archaeological narratives.

Keywords North American archaeology · Eastern North America · Archaeological theory · Networks · Scale · Time and temporality · Chronology

Introduction

Since the early 20th century, archaeologists have moved through a revolving door of categorically based perspectives, trading in culture-historical units for neo-evolutionary categories and, then again, for categories of organizational characteristics (e.g., heterarchical, corporate, network, cyclical, apical, etc.). In general, we remain committed to exploring the categorical properties of the entities and processes that we seek to elucidate in the past. Even those approaches that have emerged as a counter to such epistemological tendencies (e.g., those rooted in practice, agency, history) continue to be accompanied by a categorical imperative, especially through

✉ Jacob Holland-Lulewicz
jlulewicz@wustl.edu

¹ Department of Anthropology, Washington University in St. Louis, Campus Mailbox 1114, One Brookings Drive, St. Louis, MO 63130, USA

the continued use of culture-historical/typological units to organize, categorize, and interrogate archaeological data. Such continued uses tether us to archaeologically derived categories that serve as barriers to theoretical and methodological advances that could enhance our perceived relevance to the broader social and humanistic sciences. This article serves as a meta-analysis of the last ten years of archaeological research across eastern North America with two goals: synthesizing recent studies that have adopted relational theoretical and methodological perspectives and reconsidering how the archaeological record is broadly conceptualized as an object of study.

The intent of this article is not to burn the axiomatic strawman of culture history or neo-evolutionary frameworks. Neither is the purpose of this review to critically engage these categorical descriptors. Rather, I propose that despite decades of theoretical and methodological advances, taxonomic principles and fundamentals continue to constitute the foundation of archaeological research in eastern North America. Indeed, there remains a conspicuous preoccupation with refining pottery types, evaluating lithic taxonomies, and conceptualizing new categories to describe social, political, and economic organization. Even studies that do not explicitly seek to contribute to classification implicitly build narratives on taxonomic legacies (e.g., using ceramic types to explore political change, relying on lithic forms to tell time). The sustained defense to this position is that these materials and their culture-historical baggage remain useful heuristics for situating archaeological research in space and time. In this review I argue, via a synthesis of recent research agendas, that advances in archaeological method and theory, and social science theory more broadly, have equipped us with approaches to temporal and spatial contextualization that can proceed without “heuristic” crutches. While heuristics remain useful as just that, heuristics, they become problematic when deployed as meaningful analytical units. That said, throughout this review I use familiar names for broadly defined periods of time (e.g., Woodland, Mississippian). In none of the recent examples that I cite, however, are these heuristics leveraged as analytical tools. The difference between communication and analysis is a critical, yet often blurred, distinction.

I use the term meta-analysis to denote the goal of exploring, identifying, and developing an emerging methodological and theoretical orientation among eastern North American archaeologists, an approach rooted in network or relational perspectives (used interchangeably throughout this article). Rather than just review and synthesize, I hope to provide tangible examples of the implementation of relational principles. These perspectives provide a refreshing new foundation for archaeological interpretation, re-situating both our conceptualization of the past as well as re-configuring our relationship to archaeological data and practices of categorization. An approach that explores the relational foundations of social phenomena, I argue, is a welcome antidote to some of our broadly accepted theoretical shortcomings. When we make use of particular organizational categories (e.g., chiefdom), we bring to our interpretations a set of *a priori* understandings about the kind and quality of social, political, and economic relationships that define the phenomena we seek to describe. Instead, we must begin with the relationships that underlie our categorical forms.

Over the last decade or so, and more notably so within the last five years, archaeologists across eastern North America have been implicitly moving toward such

approaches. I begin with an introduction to eastern North American archaeology, a continental-scale region not often considered *en masse*. I pay particular attention to outlining recent, emerging epistemological developments among eastern North American archaeologists. I then outline and describe relational approaches from the perspective of the broader social sciences, delineating the applicability of such perspectives to archaeology. By way of application, I synthesize archaeological research from across eastern North America over the last decade that exemplifies the ethos of relational, anti-categorical objectives. I organize this synthesis into two major realms: sociospatial and temporal perspectives, within which I consider broad themes related to sociopolitics, interaction and economy, and time/chronology. Instead of outlining particular emerging research themes as other reviews of the region have done in the past, I specifically explore how relational perspectives are allowing us to reform, revise, critique, and update themes of perennial interest to archaeologists working in eastern North America.

The Recent Archaeology of Eastern North America

In 1958, Caldwell (1958, p. vii) opined that “the history of the Eastern Woodlands can be regarded as a single structure of interrelated parts, connected in large degree in a great interaction sphere from a time as remote as the first (Archaic) period for which we have any considerable information.” While this perspective generally holds true, no archaeologist today, including myself, would be so bold as to attempt a historical synthesis of the Eastern Woodlands as Caldwell (1958) did. On the other hand, the generally unbroken expanse of cultural continuity and acute lack of geographic barriers makes eastern North America an effective container for bounding a body of scholarship. Despite the widely varying Indigenous histories, languages, and cultural milieu that give human texture to the eastern half of North America, connections among, within, and between groups at every scale are undeniable. The geographic boundaries for eastern North America adopted here are simple: the Mississippi River to the west, the Atlantic Ocean to the east, the Gulf of Mexico to the south, and the mouth of the St. Lawrence River (ca. modern day Québec City) in the north (Fig. 1). In terms of classic culture areas, this region includes the Southeast, Midwest, Great Lakes, Northeast, and the Mid-Atlantic. The connectedness of the social, political, economic, and cultural landscapes that constitute this region certainly manifest as a mosaic of contemporary, shared research agendas. Thus, given the added entanglement of the intellectual histories of eastern North Americanist archaeologists, while a sociohistorical synthesis of the region may be untenable, a unified review of overarching methodological and theoretical orientations among researchers is warranted.

Several recent reviews of eastern North American archaeology have explicitly challenged the categorical preoccupation that continues to implicitly define and guide many research agendas. One of the most explicit of these efforts has been the recent treatment and exploration of platform mounds in the Southeast (Kassabaum 2019). Drawing on a review of over 100 “pre-Mississippian” platform mounds, Kassabaum (2019) traces a long history of platform mound use and highlights the

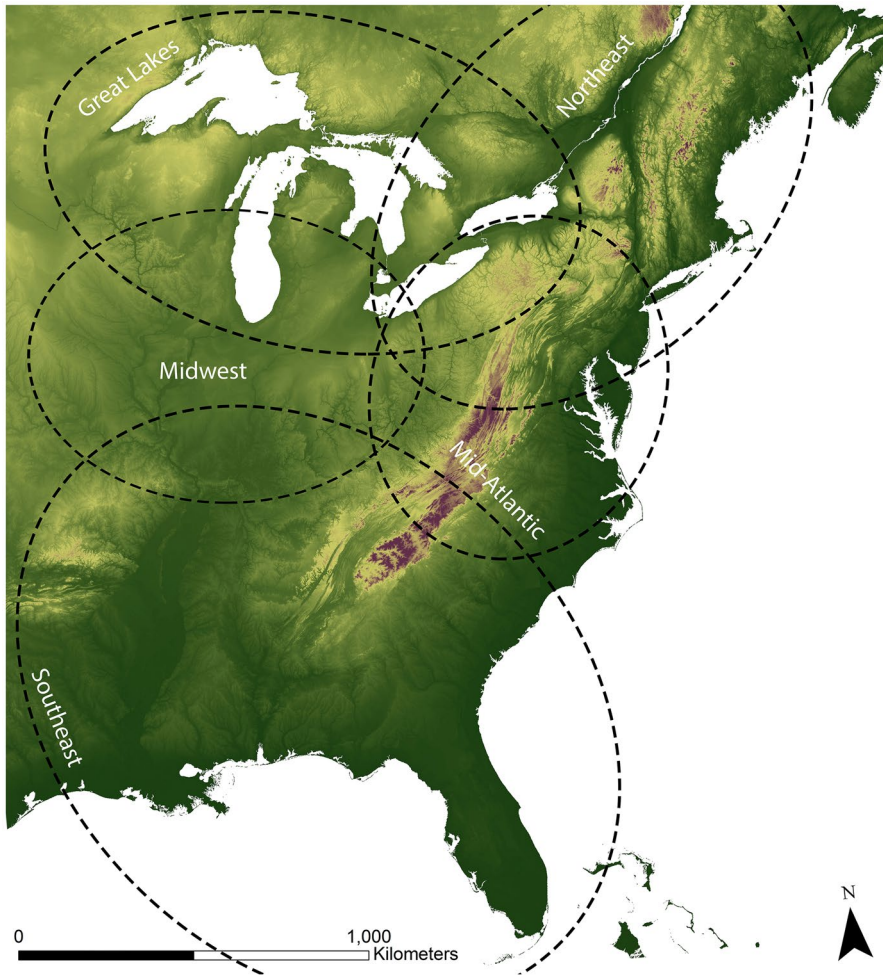


Fig. 1 Map of eastern North America depicting commonly defined culture areas referenced in the text. Digital elevation data from the U.S. Geological Survey’s Center for Earth Resources Observation and Science (EROS) and downloaded from Data Basin (databasin.org)

underappreciated time depth and diversity of platform mound use across the southeastern United States, characteristics that are often hampered by the use of the “platform mound” as a check-box trait for Mississippian societies, or at the very least, for sociopolitical complexity. As Kassabaum (2019, p. 230) points out, identifying complex and diverse patterns of mound construction and use remains difficult because the variability in such practices within a given culture-historic period is often equal to, if not greater than, variability between archaeologically defined periods. In fact, it would seem that geographic location, more than any identifier of time, might account for a great deal of this variability. In explicitly challenging top-down approaches, Kassabaum (2019, p. 230) argues that interpretations must be built

on the basis of evidence at particular sites and that, while broader categorical patterns may be useful in formulating hypotheses, the heterogeneity and asynchronous nature of broader patterns means that we must take care to not rely too heavily on expectations rooted in categorical approaches, especially those hinging on artificial conceptions of time that do not in fact wholly describe the observed variation. She concludes with the proposition that we should be more interested in those who built and used the mounds than in the mounds themselves as objects to be studied (Kas-sabaum 2019, p. 231). I adapt this sentiment, as I would argue that the interest must lie in the dense entanglements of relationships among groups and individuals and the webs of social, political, and economic institutions within which the prerogatives to build, use, and transform mounds were embedded.

In a similar vein, in a recent review of northern Iroquoia, while recognizing the tension between the abandonment of culture-historical taxa and their centrality in defining real changes/patterns in elements of past societies, Birch (2015, p. 306) poses that we must acknowledge that culture is constantly produced and reproduced in practice and that those practices are enmeshed in relationships. Indeed, “we must work these understandings into our research designs, methodologies, interpretive frameworks, and data management systems if we are going to be able to use the collective resources of the archaeological record, the insights of researchers and practitioners, and the knowledge and desires of descendant communities to further develop our understanding of the historical development of Iroquoian peoples” (Birch 2015, p. 306).

Just as Birch (2015) calls for more attention to be paid to the connections of the Iroquoian world to societies and groups across eastern North America, this idea of a global, multiscalar perspective on the historical development of eastern North American societies is further highlighted in a recent review of the Middle Woodland societies of the southeastern United States by Wright (2017). One of the justifications for Wright’s review is the continued use of culture-historical taxa to structure the interpretations of Woodland period societies in the Southeast. Specifically, Wright points out that southeastern histories are defined by the presence/absence of materials/practices that are used to define the more attractive Woodland histories of the Midwest. These complications are further exacerbated, as Wright (2017) points out, by the boundaries of state lines, regional archaeological organizations, and the persistence of traditional culture area concepts.

To move past these shortcomings, Wright (2017) draws on Lesser’s (1961) concept of the “social field.” In doing so, Wright emphasizes “the universality of human contact and influence [sic] as a fundamental feature of socio-historical process” and argues that we must “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” (Lesser 1961, p. 42). Wright (2017, p. 64) concludes by noting that such research will require archaeologists to move beyond our culture-historical foundations and to begin to develop archaeologies that can effectively consider notions of power, historicity, and materiality (sensu Knight 2011, p. 214).

While similar calls in archaeology have been made broadly over the last several decades (e.g., Brück and Fontijn 2013; Feinman and Neitzel 1984; Hart 1999, 2012;

Hart and Brumbach 2003; Henry et al. 2017; Kowalewski et al. 1983; Nassaney and Sassaman 1995; Pauketat 2001, 2007, 2013; Sassaman 2001, 2010; Sassaman and Holly 2013), many of the answers to these calls have remained bounded by taxonomic legacies, with interpretations continuing to rely on correct classifications of artifact types and categorical characteristics. For instance, while clearly a productive movement beyond culture-historical approaches, studies emphasizing practice, agency, and history are often found wanting in terms of empirical rigor, where middle-range theory remains underdeveloped as the advancement of high-level theory has outpaced advances in method.

What is offered here is different from what previous reviews have offered on the archaeology of eastern North America. The discussion that follows is not guided by spatial or geographic boundaries any more specific than eastern North America. Nor is this review concerned with particular social phenomena, artifact classes, or trending research themes (e.g., paleobotany, complexity, economics). Instead, this review is explicitly about the broad development in method and theory that has begun to (re)emerge among archaeologists working in eastern North America. This review is about how we *do* archaeology. Beyond the general labels sometimes applied to describe a range of approaches leveraged in eastern North American archaeology (e.g., processual, post-processual, processual-plus), theoretical orientations have recently become more implicit than explicit. That is, in few recent studies will one find an outline of the researcher's explicit theoretical goals, orientation, or affiliation. Nevertheless, a unified approach is emerging that sits at the threshold between productive theory and middle-range explanatory frameworks that can be, and demonstrably has been, leveraged toward the study of any period, region, or phenomena. In the remainder of this review I characterize these emergent approaches as being founded in relational epistemologies and, more importantly, demonstrate how such theoretical tendencies have begun to transform archaeological interpretations of eastern North America.

Relational Perspectives and Network Metaphors

In a recent review in *American Anthropologist*, Kosiba (2019, p. 448) pointed out that in American archaeology's theoretical infancy, Willey and Phillips's call for a unified archaeological theory prompted an "exhaustive exploration of taxonomy" that yielded a series of boxes used to define space, time, cultural difference, and social complexity that would eventually become cemented into the foundations of Americanist archaeology. Indeed, the many approaches that emerged throughout the mid-to-late 20th century shared epistemological underpinnings due to the shared inquiry into the character of particular social, spatial, and temporal boxes (Kosiba 2019, p. 448). While Kosiba argues that anthropological archaeology has long been a processes of categorization (2019, p. 447), he uses his review to highlight how these practices are being transformed and to point out that archaeologists are becoming increasingly less comfortable with reified categories and the assumptions built into these categories (2019, p. 448). As such, although we share a long history borne of classificatory objectives, eastern North American archaeologists remain

committed to exploring complex and fluid relationships, networks of interaction, and entanglements of peoples, things, and institutions that do not easily or often correspond to the brittle boundaries of archaeological categories (Kosiba 2019, p. 448).

From Categories to Connections

The types, concepts, and attributes that have been proposed over the last century to organize archaeological research are all inherently abstractions of relationships or arrangements of relationships. What is called for, yet remains elusive, are frameworks and perspectives that move beyond concepts and toward more relational, inductive understandings of historical phenomena. For example, when terms such as tribe or chiefdom, or Woodland/Mississippian, are employed, they bring from the top-down a number of assumptions about the relational structure of society, that is, the organization and quality of the relationships that constitute the phenomenon in question.

The network/relational perspective employed here is not the only theoretical or methodological approach that has sought to forefront the primacy of relationships in the interpretation of social and political histories. The most conspicuous of these approaches have certainly been Marxist, structuration/practice, and other post-processual frameworks. While the conceptual framework that I construct here articulates well with these relationally situated bodies of work, it offers a number of analytical advantages over them (Table 1). Noticeably absent from my discussion is the recent literature on new materialism, assemblage theory, and the entanglement of “things” (e.g., Hamilakis and Jones 2017; Harris 2017; Harris and Cipolla 2017; Hodder 2012; Hodder and Mol 2016) that adopt more extreme approaches to de-categorization, drawing relations among, and dissolving the boundaries between, categories of human and nonhuman actors. While such approaches are effectively and productively expanding the possibilities of archaeological narrative building, the scope of my review specifically concerns relationships among social entities (e.g., individuals, communities, institutions).

Table 1 Common frameworks used to construct historical narratives in archaeology

Framework	Agency	Scalar Focus	Boundedness
Culture History	Elite?	Culture	Closed
Cultural Evolution	Elite	Society	Closed
Marxist	Elite	Society, Class (rarely)	Potentially open
Darwinian	All	Individual/population	Not considered
Postprocessual	Elite (situational for commoners)	Society	Mostly closed
Network/Relational	All	Any institution or entity (society, community, household, individual, kin group, etc.)	Open

Table adapted from Feinman and Nicholas (2016, p. 276) but proposes an additional relational/network perspective

One of the best examples of relational/network thinking from a Marxist perspective is presented in Wolf's (1982) *Europe and the People without History*. Wolf poses that we must understand societies and cultures as “bundles of relationships” (1982, p. 3). Indeed, the impetus for Wolf's work was his recognition that anthropologists had the tendency to conceive of cultures, societies, and even nations as bounded and integrated systems standing in contrast and apart from other bounded systems (1982, p. 4). Regarding change, Wolf (1982, p. 6) made his position clear using the United States as an example, posing that the “U.S. was never a thing propelled towards its unfolding goal by some imminent driving spring, but rather a temporally and spatially changeable set of relationships, or relationships among sets of relationships.” From this perspective, “society takes its departure from real or imputed interactions among people” (Wolf 1982, p. 76).

Theories of structuration and practice offer a more generalized relational perspective that focuses on the ways that actions and relationships between individuals and society are negotiated, maintained, and transformed (e.g., Bourdieu 1972; Giddens 1984). In these cases, structure “is the complex of rules and resources that shape (but do not determine) social action; agents review rules and resources as objective conditions; they use them creatively to perform activities and achieve ends” (Roscoe 1993, p. 113). While social agents undoubtedly review rules and resources and use them creatively to perform activities and achieve ends, as Roscoe (1993) points out, many archaeological studies deploying theories of practice and structuration remain unconcerned with empirically exploring the social, or relational, fields within which agents perform these activities (cf. Wilson et al. 2020). That said, such approaches do impose explicitly relational perspectives on society, even posing that histories are not the histories of individuals, groups, or institutions, but rather the histories of relationships between individuals, groups, and materials (Robb and Pauketat 2013; Terrell 2013).

While Marxist, structuration/practice, and post-processual frameworks all begin to approach society from a relational perspective, Feinman and Nicholas (2016, p. 276) have recently argued that they continue to lack in their scope of agency, constrained scalar foci, and rigidity in boundedness (Table 1). The first three frameworks listed in Table 1 (culture history, cultural evolution, and Marxism) “give inadequate consideration to the whys and hows of human groups, often simply presuming their existence, continuity, and closure” and afford little agency to the non-elite, or most people (Feinman and Nicholas 2016, p. 280). More recent post-processual approaches are mostly circumstantial or situational in their considerations of agency. As a result, to give an example, the opportunity to understand shifts in, or diversity of, the rules and practices of cooperation and collective action are lost (Feinman and Nicholas 2016, p. 280). The network approach lobbied for here attempts to remedy the shortcomings of these extant approaches by serving as a framework that “not only takes account of the multiple, scalable, and interlinked networks in which humans participate, but also recognizes that human groups and networks rarely have been entirely isolated or closed (e.g., Adams and Kasakoff 1976)” (Feinman and Nicholas 2016, p. 280).

In this way, a network/relational perspective provides explanations that highlight the structural factors that govern change as well as the multiple pathways that

change might follow (Little 2000, p. 89). This approach offers a way to consider outcomes on the basis of both social context and individual actions so that they are inherently multiscale (Hechter and Kanazawa 1997, p. 208; Feinman and Nicholas 2016, p. 281). As Feinman and Nicholas (2016, p. 281) argue, and as I argue below, approaches rooted in network perspectives can provide the foundations for constructing new frames that are specifically structured to evaluate the diversity of societies and their histories. The relational framework I deploy here attempts to bypass completely, without ignoring historical context, the research programs that have thus been described, especially those rooted in culture histories and social evolutionism. As Drennan (1987, p. 320) has claimed, advances come less by resolving major questions than by replacing them with better questions. In this way, I do not attempt to use this synthesis to address questions rooted in extant perspectives, for example, to evaluate the organization of chiefdoms, to track their development, or even to negate their existence. Rather, I provide a new framework within which questions of a different quality may be more productively explored, questions that do not hinge on the practice of categorization or the consideration of reified archaeological classifications of society, history, or time (Bauer 2019; Beaudoin 2016; Henry et al. 2017).

The Foundations of Network Perspectives

A network perspective represents neither a set of middle-range theories on social phenomena nor a grand theory from which the world can be explained. Rather, it represents a type of analytical ontology within which the onus of explanation, interpretation, and investigation rests primarily on the study of relationships between peoples, groups, or entities and explicitly rejects the use of categorical principles. No matter the particular components, studies that adopt such a framework focus on the characteristics of the relationships and connections between components rather than on the surficial attributes of the components themselves.

An engagement with networks in social science research is inherently a practice in both method and theory simultaneously. Network methodologies have developed over the last seven decades as an integral part of advances in social theory. Indeed, many of the key structural measures and concepts of social network analysis are founded in the research of those attempting to describe empirical phenomena motivated by central components of social theory (Wasserman and Faust 1994, p. 3). An explicitly network perspective thus encompasses theories, models, and applications expressed in terms of relational concepts or processes that recognize relations, defined by linkages among entities, as fundamental components of social theories (Wasserman and Faust 1994, p. 4). Wasserman and Faust (1994, p. 4) outline four principles that distinguish a network perspective from other approaches: actors and their actions are viewed as interdependent rather than independent, autonomous units; relational ties (linkages) between actors are channels for transfer or “flow” of resources (either material or nonmaterial); network models that focus on individuals view the relational environment

as providing opportunities for or constraints on individual action; and network models conceptualize structures (social, economic, political, and so forth) as lasting patterns of relations among actors.

The main difference between network approaches and nonrelational frameworks is the inclusion of concepts and information on relationships among units within a study (Wasserman and Faust 1994, p. 6). Regularities or patterns in interactions give rise to the kinds of social, political, or economic phenomena we seek to explain (Wasserman and Faust 1994, p. 6). Already, we can draw parallels between a network perspective and the relational perspectives offered by the structuration/practice theorists, especially in terms of the historical contexts of relationships and the structures they continually generate (e.g., Bourdieu 1972; Brumfiel 2006; Giddens 1984; Pauketat 2013; Robb and Pauketat 2013; Sewell 1992). Unlike these approaches however, a network perspective provides the appropriate conceptual and methodological scaffolding to empirically operationalize such a perspective.

There are two broad categories of data in the social sciences: attribute data and relational data (Scott 2013, pp. 2–3). Attribute data refer to the properties, qualities, and characteristics that belong to entities (e.g., age, sex, education, occupation) while relational data refer to the ties, contacts, and connections that relate one entity to another and so cannot be reduced to the properties of the individual entities. These relations are not properties of the entities themselves but of entanglements of entities; they connect pairs of entities into larger relational structures (Scott 2013, p. 3). As such, while attribute and relational data can certainly be used to explain one another, they offer distinct sets of information. What becomes clear is that categorical and classificatory efforts in archaeology have attempted to collect, present, and interpret relational data as if it were attribute data (or vice versa). These archaeological traditions have sought to generalize and essentialize the relationally constituted characteristics of societies and convert them to concrete attributes for the purpose of manageable comparison.

A network perspective is not, however, a unitary theory or set of methods; it remains “a constellation of diverse methodological strategies” while as a paradigm it remains a “loose confederation of approaches” (Burt 1980; Emirbayer and Goodwin 1994, p. 1414). Where all of these diverse approaches converge is on their implicit assumptions about the relationships between individuals and society, between micro- and macroprocesses, and the structuring of social action by patterns of social relationships (Emirbayer and Goodwin 1994, p. 1414). The major difference between classic approaches and network approaches is the “anti-categorical imperative” of network perspectives that rejects attempts to explain human behavior or social processes solely in terms of categorical attributes (Emirbayer and Goodwin 1994, p. 1414) and thus rejects explanations of social behavior as the result of some common possession of attributes rather than as the result of certain involvements in structured social relations (Wellman 1983, p. 165). A network perspective shields against an appeal to categories to explain why people behave the way they do (Emirbayer and Goodwin 1994, p. 1415). In this way, structures need not be treated as undifferentiated boxes (e.g., tribe, chiefdom, Woodland, Mississippian); they can be effectively parsed into their constituent elements of entities and relations (Emirbayer and Goodwin 1994, p. 1418).

Network Perspectives Applied

The most notable, explicit applications of network perspectives in archaeology are those that have made use of formal social network analysis (SNA) (Brughmans 2010; Brughmans et al. 2016; Crabtree and Borck 2019; Knappett 2013; Mills 2017; Peeples 2019). For example, Peeples (2018) used network perspectives to evaluate the collective production of identity in the context of social transformations that he characterizes as social movements across the Cibola region of the southwestern United States. Borck (2016, p. 14) defined social movements as a specific type of contentious politics that are often investigated with a focus on why and how groups mobilize to enact religious, ideological, and political change. Borck thus utilized a relational framework, within a historical perspective, to evaluate how political and ideological structures were maintained and transformed. Crabtree et al. (2017) used principles of network theory to evaluate human-ecosystem interactions by modeling food webs of Ancestral Puebloan peoples in the Mesa Verde region. While additional studies, including those from across eastern North America, have successfully leveraged SNA to achieve and facilitate relational perspectives, this review is not uniquely about applications of SNA but the conceptual principles that underlie these formal applications of SNA that could otherwise be applied without it.

The most explicit deployment of the network/relational perspectives across the social sciences has been in regard to the study of social movements and collective action. While there now exists a well-developed body of archaeological work on collective action, this work remains bound to issues of cooperation within the context of rational choice theories and evolutionary perspectives on human groups (e.g., Boyd and Richerson 2009; Henrich and Henrich 2006; Henrich et al. 2004; Olson 1965; Ostrom 1990). As Peeples (2011, pp. 24–25) highlights, however, among relational sociologists, collective action has most frequently been considered within the realm of research on political mobilization and social movements (see Polleta and Jasper 2001). From this perspective, the primary question shifts from why collective action occurs to how populations are able to coordinate action across time and space to successfully negotiate fundamental changes within a particular social setting (e.g., Diani 1992; McAdam et al. 2001; Tarrow 1998).

In the introduction to an edited volume on the relationships between social movements and networks (Diani and McAdam 2003), Diani (2003, p. 105) defines social movements as resembling strings of connected events scattered across time and space and posits that entities supporting these movements do so not as atomized or isolated actors but as actors linked through complex webs of direct or mediated interactions. Thus, processes of collective action, or the coordinated mediation of social changes, are structured by relationships (Booth and Babchuk 1969; Oberschall 1973; Pickvance 1975; Pinard 1968; Snow et al. 1980). In this way, network characteristics, including the qualities and organizations of both relationships and actors, play fundamental roles in shaping and defining engagement (Centola and Macy 2007; Diani and McAdam 2003; González-Bailón et al. 2013; Gould 1991, Granovetter 1973, 1978, 1982; Macy 1991a, b; Marwell et al. 1988; Oliver 1984; Oliver and Marwell 1988; Opp 1989). Networks invariably affect the levels of collective performance that different social units can achieve (Diani 2003, p. 115), including the structuring of opportunities for

communication that bear directly on the evaluation of collective processes (Hedström 1994; Hedström et al. 2000). While current archaeologies of collective action, rooted in evolutionary frameworks and economic contexts, attempt to address the “whys” and “whats” of collective action in the past, a consideration of collective action in the context of social networks and relational organizations can move us toward the “hows.”

Much energy across the broader social sciences has also been spent on evaluating the role of history on influencing the relational foundations of social change. In Gargiulo and Benassi’s (2000) study of managerial organizations, they found that relationships cemented through years of common organizational history may outlive the specific contexts in which they arose (and may, in fact, become a liability for leaders and for the organization). Indeed, if changes to institutional contexts are not drastic enough, old relationships may remain strong (Gargiulo and Benassi 2000, p. 183). Gargiulo and Benassi (2000, p. 184) go on to point out that the environments created by overly cohesive networks may have detrimental effects on cooperation, as they may hinder opportunities to develop social ties necessary to initiate and sustain cooperation beyond the bounds of the existing network. Thus, the tradeoff is between networks that guarantee the “safety” of cooperation and those that secure the “flexibility” to adapt the composition of the network as necessary (Gargiulo and Benassi 2000, p. 185). Given these features, managers and leaders tend to seek the safety of cohesive networks in situations of uncertainty when, at the same time, flexibility remains crucial for enacting organizational change and taking advantage of opportunities (Gargiulo and Benassi 2000, p. 185).

The histories of these networks and relationships (e.g., previous socialization in a different organizational culture) have a critical impact on how organizations are able to change, transform, and adapt to uncertainty. Indeed, mechanisms of informal control, rooted in deep organizational histories, coupled with the tendency toward wanting “safe” cooperation in the context of change and uncertainty, may cement interpersonal bonds and curtail an organization’s ability to effect change (Gargiulo and Benassi 2000, p. 185). As such, being able to track relational structures, forms of social capital, and institutions through time without the constraints of categorical principles is necessary for understanding how social histories unfold.

The conceptual space of networks and relationships detailed above contrasts with much of the history of North American archaeological method and theory. My main goal in this discussion was to elucidate the foundations of the anti-categorical perspective and to crystallize it in archaeological research. As outlined below, archaeologists across eastern North America are beginning to adopt many of the principles laid out above but have yet to recognize the maturation of these perspectives outside of archaeology or the relevance of such archaeological work to the broader social sciences.

From Landscapes to Networks

One would be hard pressed to identify an archaeology that wasn’t about or involved, implicitly or explicitly, some kind of interaction. Within the scope of this paper, I stress the need for archaeologists to reframe the analytical units that we deploy to

address interaction. Indeed, it is not uncommon to find archaeologists continuing to explore interactions among categorically defined entities (e.g., interactions between “Woodland” and “Mississippian” peoples or between “cultures”) that dehumanize and generalize encounters and connections. With growing datasets and analytical capabilities, archaeologists are increasingly able to fully conceptualize complexities of interactions, including the precise timing and tempo of interactions and exchanges, the exact kinds of interactions taking place, and the intricate movements and flows that gave form to connected social, political, and economic worlds. Along these lines, eastern North American archaeologists have been conceptualizing interactions as “landscapes” that indeed conjure appreciations for relationality (sensu Basso 1996; Fowles 2010a; Ingold 1993; Thomas 2008). With a network perspective, however, archaeologists may move forward from this base, from more platitudinal concepts like the amorphous “landscape” to a consideration of interaction in terms of actual, measurable, and comparable relationships and networks.

The absence of explicit categorization does not preclude generalization, comparison, or model building. Within a network framework, however, processes of comparison and generalization do move from a preoccupation with essentialized entities to a focus on the qualities of relationships. Instead of comparing the boxes within which cases have been placed, we can compare, for instance, the diversity of relationships, particular processes of establishing, maintaining, transforming, and leveraging relationships, or the ways that institutions are built within broader relational contexts. When we compare categories (e.g., one chiefdom to another), it is usually the case that only a select few types of relationships (e.g., relationships of power, political ties between elites, economic relationships between elites and non-elites) are assumed relevant and compared while other kinds of relationships are effectively excluded from analytical consideration. In the absence of such categorization, we are forced to explore the complexity and variability of relational arrangements that underlie the phenomena of interest. Below I identify challenges to these efforts and evaluate recent archaeological approaches to a range of interactions.

Rethinking Scale

A major challenge in moving toward relational and network-focused perspectives is the continued use of traditionally defined sociospatial scales (e.g., the house, the community, the region). Studies are often couched in terms of the scale with which they engage (e.g., household economics or regional political organization), while “multiscalar” studies are often simply the comparison of two of these reified scales. Relational approaches provide us with opportunities to reconfigure archaeological perspectives on scale. They offer a basis for the critique of archaeologically derived scales and their a priori imposition.

Social, political, and economic institutions (sensu Holland-Lulewicz et al. 2020a) have spatial extents that can be measured, to be sure. However, scale should not be understood to be a categorical variable but rather, metaphorically, like a continuous zoom function that can be adjusted to frame the phenomena of interest. The spatial boundaries of institutions exist on a continuum and are often difficult to define by

strict scalar categories. The legacy and pervasiveness of the use of such scales by archaeologists has led to an overemphasis on institutions, processes, and sociopolitical phenomena that tend to fit into these categories as well as the misrepresentation of essentialized scales (e.g., the village) as meaningful institutions a priori (Holland-Lulewicz et al. 2020a). When we stop assuming that these categories are meaningful, relevant institutions and their arrangements can be inductively explored and identified in full without masking variation in favor of neat scalar units.

By focusing on meaningful institutions (which may indeed include such institutions that map onto traditionally defined scales like the household or village), the actual properties of institutions and their roles relative to one another can be formally compared (Holland-Lulewicz et al. 2020a). For instance, the village-as-institution may be compared along the same axes of characterization as a polity, household, lineage, or ritual sodality. Instead of a multiscale perspective, we arrive at a multi-institutional perspective that seeks to explore institutional constellations. If we rid ourselves of scalar constraints, we can compare and contrast, for example, the internal organization, relevant resources, or exclusivity of a household versus a ritual sodality. Beyond comparing two isolated institutions of the same scale (e.g., southeastern chiefdoms vs. Iroquoian confederacies), it becomes necessary to compare the entire arrangement of overlapping institutions, of which chiefdoms and confederacies represent but single institutions among many. In contrast to the use of scalar boxes, the focus is shifted to relationships between individuals and groups that form meaningful institutions and to the relationships between those institutions in constituting societal forms and institutional histories.

Another solution to the scale issue that has found ground in recent years is the application of a communities of practice approach (e.g., Crown 2014; Sassaman and Rudolphi 2001). As a response to the uncritical correlation of archaeological materials and phases with identities and “real” social groups in the past, the concept of the community of practice has been gaining popularity among archaeologists. A community of practice can be defined as a special type of community bound together by multiple dimensions of coherence: mutual engagement, a joint enterprise, and shared repertoires (Wenger 1998, pp. 72–85; Worth 2017, p. 138). A community of practice represents a group of people who come together by way of a mutual engagement in an endeavor, defined by both its membership and by the practice in which that membership engages (Eckert and McConnell-Ginet 1992, p. 464). In this way, the community of practice is, in essence, a locus of engagement in action, interpersonal relations, shared knowledge, and negotiation of particular enterprises (Wenger 1998, p. 85). They are defined simply by shared histories of learning (Wenger 1998, p. 86). As Worth (2017) argues, the concept of the community of practice represents a valuable analytical tool for archaeologists to leverage in moving beyond reified uses of archaeological phases or cultures, forcing us to consider the relationships and relational institutions through which the material record was actually produced. Indeed, the community of practice concept is valuable as just that: an analytical tool whose purpose is to provide theoretical and methodological linkages between the archaeological record and meaningful social groupings. Problems arise, however, when the community of practice itself becomes reified.

When the community of practice itself becomes a category to be defined and studied, its analytical utility as an anti-categorical tool is lost. The goal of an archaeological study should never be to identify and characterize communities of practice alone. A community of practice approach should be used to identify and describe meaningful social institutions. Archaeologically, a community of practice as identified through ceramic production may represent a matrilineal kin group, within which teaching and learning occurs between women of multiple generations. Herein lies the utility in the community of practice concept, the correlation of institutionalized relational constellations (e.g., kin groups, labor parties, elite networks) with the material record.

On the Georgia coast, Sanger (2017; Sanger et al. 2020) takes the community of practice as a point of investigation with the goal of defining the geographic extent of institutions tied to ceramic and lithic production. Using data on the techno-functional aspects of pottery production, Sanger (2017) demonstrated that two separate potting communities occupied different Late Archaic settlements just 3 to 4 km apart. In their study of lithic production, Sanger et al. (2020) use biface shape to reveal similarities between these two Late Archaic villages. They suggest that this pattern is the result of potters (presumably women) remaining in their natal homes while stone tool makers (presumably men) engaged in post-marital relocation, a distinct pattern of matrilocality. Through the use of the community of practice concept, Sanger et al. demonstrate that archaeologists can indeed explore some of the relational institutions like kinship and residence patterns that have often been deemed inaccessible. In a more novel application of the approach, Mueller (2013, 2017a) adapted the community of practice concept to the study of domestication and the relational underpinnings of post-domestication diversification, taking into consideration not only relevant plant characteristics but also the networks of communities and lineages through which these characteristics would have been propagated across the Midwest and Southeast.

Across southern Georgia and northern Florida, work on ceramic sourcing, stamped iconography, and regional distributions have been used to illustrate an interlocking network of movement and interaction. Wallis et al. (2016; Wallis 2011) have shown how interactions among Woodland societies of the Deep South resulted in the movement of ceramic vessels from habitation sites to distant burial mounds and that wooden stamping paddles were also traded at ceremonial centers located far from villages. While Wallis et al. do not themselves employ the concept, there are a number of communities of practice that can be identified and effectively used to assess the kinds of relationships that constituted this entangled landscape: communities of practice related to the production of pottery, the production of wooden paddles, the use of communal burial mounds, and participation in practices at ceremonial centers. Each of these communities of practice is linked to meaningful social institutions through which relationships between individuals and communities were established and defined. The leverage of such conceptual links between the material record and social groups has allowed archaeologists to successfully explore the centrality of relationships to a range of phenomena, adeptly sidestepping legacies of categorical practice.

Networks in Motion

One of the primary ways in which networks and relationships are constituted is through movement. While movements, including those of people, things, and ideas, are certainly structured by the opportunities and constraints afforded by networks, such movements and flows themselves work to constitute, maintain, reinforce, and transform networks. While migratory events may be the most conspicuously encoded in the archaeological record, millennia of population movements, migration, and circulation (of different spatial and temporal magnitudes) has undoubtedly resulted in complex historical entanglements among eastern North American Indigenous peoples. In this way, we may conceptualize some forms of relationships as those generated through movement. Migration (especially the relationships altered and forged through migration) as an explanatory framework has faced a number of critiques (see Pluckhahn et al. 2020). As Pluckhahn et al. (2020) argue, however, advances in both method and theory, especially better control over time and more robust models of migration processes, have allowed for a renewed interest in migration as a meaningful transformative force. Contrary to previous migrationist arguments for eastern North America that invoked large-scale, long-distance migration movements as “blanket processes to explain seeming discontinuities in material culture” (Pluckhahn et al. 2020, p. 45), Pluckhahn et al. instead propose a model of migration for the Woodland Gulf Coast that hinges on social and historical contexts. Drawing on high-precision, high-resolution Bayesian chronological modeling of radiocarbon data, Pluckhahn et al. (2020) assess the contemporaneity of such processes like village decline, formation, and reorganization to assess the complex web of relatively small-scale population movements that structured the social, political, and cultural networks that defined the southeastern Gulf Coast for roughly 2,000 years.

Ritchison (2018a) has assessed a large-scale, regional dataset of radiocarbon dates within a Bayesian interpretive framework to explore the timing and scale of demographic transformation, specifically population growth and community reorganization, on the Georgia coast. His work has leveraged a methodological framework that links the abandonment of the Savannah River valley to the explosion of settlement and processes of community transformation on the Georgia coast. It is likely that this movement, and others like it across eastern North America (e.g., Comstock and Cook 2018; Cook and Price 2015; Cook and Schurr 2009; Hedman et al. 2018; Slater et al. 2014; Thompson et al. 2015), were rooted in pre-established, historically defined networks built and transformed over generations and millennia. Future work must move to understand *how* existing networks between populations worked to structure the scale, tempo, and topology of migratory events as well as small-scale population movements over both the long and short terms. Such work is especially important for understanding how immigrants were incorporated (or not) into pre-existing communities.

Many kinds of movements, broadly defined, are responsible for generating, transforming, and constituting different kinds of relationships (see Skousen and Buchanan 2015). One of these kinds of movements is pilgrimage. Skousen (2018, p. 261) has recently proposed that an archaeology of pilgrimages must “prioritize

the interconnections among persons, places, things, and substances.” Focusing on a case study of the Emerald Acropolis, a Cahokian pilgrimage center, Skousen (2016, 2018) argues that people traveled to Emerald from both Cahokia and the Lower Illinois Valley and that these interactions/actions played a critical role in Cahokia’s emergence. Skousen posits that the alignment of Emerald’s natural landscape, along with its mounds and features, to lunar events gathered people and relationships as reflected in the communal, repeated renewal of mounds, participation in feasts, and the construction of special structures. While Skousen (2016, p. iii) argues that the relationships formed during these pilgrimages “ensured world renewal, sufficient rainfall, and successful harvests” they also would have served to generate important networks that could be leveraged towards social, political, and economic motives. Indeed, the networks produced through such pilgrimages may have served as the foundational core of large-scale Mississippian period networks that eventually enmeshed much of eastern North America. Similar, perhaps diametrically opposite processes of diaspora that occurred with the decline of Cahokia may have served to establish far-reaching networks among eastern North American populations through which the traditions and practices crystallized at Cahokia differentially diffused throughout the continent (e.g., Baltus and Baires 2019; Mehta and Connaway 2019). In any case, recent work across eastern North America has aptly demonstrated that some of the most critical relationships defining the social, political, and economic relationships we seek to explore are those borne through movement.

Such considerations of movement, circulation, and flow naturally lead us to examine processes of diffusion. Conceptual frameworks rooted in network perspectives provide tools for archaeologists to empirically reconsider diffusion as an important process. The reaction against diffusionism (e.g., Rowe 1966) seems to have uncritically thrown the proverbial baby out with the bath water. Others have rightly echoed these complaints (e.g., Adams et al. 1978; Schiffer 1975; Shanks and Tilley 1987). The uncritical reliance on diffusion as a primary mechanism driving cultural change and form was exceedingly unempirical and, in some cases, morally unjust. While I am not advocating the reemergence of interpretive frameworks that accept diffusion as a transformative force, I am arguing that the relationships through which things, people, and immaterial resources diffuse (move or flow) may themselves be agential in affecting certain kinds of change.

Alternatively, the establishment of relationships between distinct social, political, or cultural groups may result in the diffusion of material or immaterial agents that *do* have transformative potential. The diffusion of materials or ideas from nonlocal places, or “others,” may indeed contribute to such processes as emergent inequality, privileged leadership positions, or the undermining of extant institutional organizations. Researchers have long shown how Great Lakes copper circulated at a continental scale all the way back through the Archaic period (e.g., Hill et al. 2019; Sanger et al. 2018, 2019), and how, during the same general period, Poverty Point in Louisiana served as a socio-ritual hub at the center of a profound, continental scale entanglement of peoples, things, and practices (Sassaman 2005; Sassaman and Brookes 2017; Spivey et al. 2015). Others have pointed out long-distance connections between southeastern and Iroquoian groups (e.g., Giles and Knapp 2015) and between midwestern and southwestern groups (e.g., Blatt et al. 2011; Redmond

2012). Far from being mere “connections” or instances of “trade,” these cases provide avenues into inquiries that concern the effects of such connections on local relational structures. Such objectives are not so farfetched. Indeed, while potentially a bold claim, the use of the term “Mississippianization” has itself served as a conceptual placeholder for “diffusion,” except for that it carries with it a significant amount of categorical baggage.

Social Networks

Part of the turn toward relational perspectives is the recognition that we can reconceptualize a range of phenomena as social networks. Categorical concepts like culture areas, regions, communities, or interaction spheres can be understood as networks of peoples and institutions and can thus be subjected to the full range of methodologies appropriate for relational data and phenomena. Such a realization allows us not necessarily to abandon socio-material traits but to consider these traits in their relational contexts. In a consideration of Woodland period platform mounds (and plazas), Kassabaum (2019) breaks apart the platform mound as a categorical index that has traditionally tended to collapse understandings of history, time, and social/spatial context. Kassabaum effectively demonstrates how an overreliance on the category of the platform mound/plaza complex as defined and characterized primarily in regard to Mississippian traditions has masked important variation relevant to these structures in their varied social and historical contexts. Such attention allows us to move beyond the use of index traits to assign phenomena to particular social, cultural, or temporal categories. When we move beyond a reliance on such traits, we also begin to challenge the very foundations of categories like “culture areas” and instead consider such spatial and temporal continuities as dynamic, variable, and heterogeneous networks of interaction.

For example, in contrast to predominant narratives that attribute pan-regional commonalities primarily to analogous developmental processes, Pluckhahn and Thompson (2013) propose that the social, political, and ritual landscapes of the Middle Woodland Deep South were constructed to strategically emphasize both similarity and difference through local interpretations of common sociopolitical themes. Woodland monumental communities (e.g., Kolomoki, Crystal River, Fort Center) were built to signal across both local and regional networks. While these places and their emplaced symbolism would have served to generate tightly bound local networks, they would have similarly served to maintain long, productive bridging ties across the region with other communities. Similarities among site plans would have served to facilitate participation in extralocal ceremonies and social networks, while differences would have underscored the uniqueness of the community and the practices that took place there (Pluckhahn and Thompson 2013). As such, we might think about these widespread communities and their constructed landscapes as exhibiting a great degree of historical and social connectedness, more so than permitted by existing categorical models that homogenize this important variation in favor of totalizing culture areas, traditions, and categories (e.g., Swift Creek area, Middle Woodland monumental centers).

Stoltman (2015) presents decades of petrographic work on Woodland period ceramics and raw clay resources to characterize the structures of relationships across the midwestern and southeastern United States, highlighting the variability in the kinds of interactions that gave form to the so-called Hopewell world. Emerson et al. (2013) focused specifically on stone pipes, the use of which expanded over the entirety of the Middle Woodland period, showing not only how different geographically bound stone resources were utilized through time, but more broadly how the structure of macroregional networks that cross-cut traditional categorical cultures can shift through time. As these stone pipes are traditionally categorized as being characteristic of a particular set of Ohio Hopewell cultures, any reorganization of networks is not necessarily encapsulated by the categorical characteristics attached to “Ohio Hopewell” as an analytical unit. Similarly, Wright has demonstrated not just how the quality of relationships and the structure of Woodland period networks in southern Appalachia might change through time but how the specific roles of nodes embedded in such networks can be altered (2014; Wright and Loveland 2015). Demonstrating how the internal organization of a southern Appalachian mica-processing community shifted over time, Wright provides a case where the social, political, and economic properties of a node (community) may affect network participation and alter the kinds of flows occurring through regional networks (2014; Wright and Loveland 2015).

At a broader scale, using the distribution of ideologically imbued Ramey Incised pottery, Friberg (2018) has recently explored the ways that communities within macroregional networks (e.g., subnetworks or network clusters) translated, mediated, and transformed the resources (especially immaterial resources like religious traditions and cosmic ideologies) that flowed from powerful nodes. Friberg (2018) critically evaluates the scope of relationships that bound Cahokians to populations up through the Lower Illinois Valley, the Central Illinois Valley, and the Apple River valley into Wisconsin. While Cahokians may have been attempting to frame relationships between social groups in appeals to the broader cosmos, such perspectives were reconceptualized in the context of local worldviews. Friberg’s study illustrates the dynamic, active role that network structures and relational qualities play in affecting the diffusion and spread of worldviews, ideologies of power, and conceptions of sociality. Rather than the unbridled flow of particular traditions, histories, and cultural forms across a region or set of communities, such flows were interrupted and transformed by way of both nodal qualities and relational topologies of interacting peoples, communities, and institutions.

Aside from regional networks, the development and organizational dynamics of villages as a point of comparative departure has also received much attention across eastern North America. Instead of focusing on models of categorical development, the most effective of these studies have conceptualized villages as particular constellations of relationships, motives, and institutions. In a recent edited volume on the archaeology of eastern North American villages (Birch and Thompson 2018), Thompson and Birch (2018, p. 1) propose that the emergence of villages represented a transformation of social milieus that had no prior analogues. Arguing for a characterization of villages as loci for face-to-face interactions, Thompson and Birch (2018, p. 2) shape the comparative study of villages as a comparison of how new

societal forms (and relationships) were developed through processes of emplacement, negotiation, cooperation, and competition. They propose the village as an avenue for comparative relational exploration by highlighting that as villages developed, the ways that individuals and groups expressed power would have operated under unfamiliar social constraints, and thus one focus of comparison should be how such relations of power played out in these hyper-emplaced social networks (Thompson and Birch 2018, p. 2). From northern Iroquoia (e.g., Birch 2012, 2015; Birch and Williamson 2013; Creese 2016, 2014, 2013) to the southeastern and mid-western United States (e.g., Meyers 2017; Pluckhahn and Thompson 2018; Pluckhahn et al. 2018), studies of village development, especially as the navigation of emergent relational constraints and the generation of new relational forms, continue to effectively move beyond traditional categorical approaches that would instead conceive of the village as a reified social entity without consideration of its complex internal and external relational foundations.

Many of these relational, anti-categorical perspectives have been exemplified in a number of recent archaeologies of European colonization across eastern North America. The sociopolitical, economic, cultural, and historical entanglements generated by the European colonization of North America have, by their very nature, resisted categorical approaches to their elucidation. That is, the sheer complexities of the diverse livelihoods, contexts, and interactions that took place can hardly be fit into generalized models of “contact” but nonetheless can be robustly investigated and compared. Indeed, many of the post-structural critiques that embody an anti-categorical imperative, including frameworks derived from critical feminist theory (e.g., Gellar 2009; Gougeon 2017; Wylie 1992), queer theory (e.g., Blackmore 2015; Cobb 2005; Dowson 2000), anarchist theory (Borck and Sanger 2017; Flexner and Gonzalez-Tennant 2018), and more general theories of intersectionality that include Black feminist archaeologies (e.g., Battle-Baptiste 2017; González-Tennant 2018; Watkins 2020), are implicitly embodied by much of the emerging work on the lived experiences of colonization and the relationships generated between Indigenous and European people—and remain devoted to outlining the necessity of diverse archaeological practitioners in enriching narratives of the past (e.g., Heath-Stout 2020).

Recent work at the Berry site in central North Carolina, the location of the Indigenous town of Joara and the Spanish Fort San Juan, has explicitly explored the effects of intersectional identities on the relational dynamics between Indigenous women and male Spanish soldiers. While generalized models of Indigenous-Spanish relationships in the southeastern United States undermine the lived experiences and identities of those embedded in these relationships, work at the Berry site has revealed the intricacies and crucial nuances of how gender and contextual identity (e.g., male vs. female and Indigenous vs. Spanish) intersect to structure experience (Beck 2016; Beck et al. 2016, 2017).

At a broader perspective, multiple studies from the Southeast (e.g., Beck 2013; Thompson et al. 2018) to the Northeast and Great Lakes regions (e.g., Beaudoin 2019, Ferris 2009; Walder and Yann 2018) have taken thick historical approaches to by-pass overgeneralizing categorical narratives. Beck (2013) works to bridge the arbitrary prehistoric/historic (or pre-contact/contact) boundaries that continue to plague the archaeology of eastern North America. Writing on the Catawba of the

Carolinas, Beck (2013) begins his study circa AD 1400 and intricately traces transformations to sociopolitical and economic entanglements through the mid-1700s, from the height of chiefdom-based political organizations through their collapse and eventual coalescence into historically documented Indian nations. In rejecting top-down models of sociopolitical change, Beck (2013) reestablishes the deep ancestral links (links that are often blurred or disconnected by categorical discourse) between historically known Indigenous groups and those groups often homogenized as Mississippian. Similarly, for the Great Lakes region in the 18th century, Beau-doin (2019) argues that traditional Indigenous-colonizer dichotomies are a reflection more of colonial discourse than of reality. Working on both Mohawk and European settlements in Ontario, Beau-doin (2019) highlights the nuanced contexts of colonial power relations in structuring sociopolitics.

Political Networks

The disciplinary legacies that define the archaeological treatment of sociopolitics continue to loom large in archaeological practice. Recent work from across eastern North America, however, can be cited to demonstrate how the constraints of categorical approaches can be overcome to explore sociopolitical dynamics. The perspective adopted by these recent approaches move from the bottom-up, without reference to top-down organizational models. While many of these studies do not explicitly exude anti-categorical motives, they nonetheless contribute to movements beyond neo-evolutionary frameworks in meaningful and empirical ways.

I use the term “sociopolitics” to refer to the varying ways in which social and political capital (material and immaterial resources) are accumulated, distributed, and sometimes leveraged toward particular motives and objectives and contextualized within discourses of power (both power *over* and power *to*). As such, sociopolitical organization refers to the arrangements or constellations of relationships through which these processes are enacted. These relationships, and their particular arrangements, not only serve as the mode by which capital is deployed but themselves constitute forms of social and political capital that can be manipulated, transformed, and accumulated to maintain, reinforce, or transform manifestations of power. In general, a concern with sociopolitics represents a concern with the ways that relationships are organized and how these organizations structure particular outcomes.

The most explicit engagement with relational perspectives has been through the archaeological application of formal social network analysis (SNA) (see Peoples 2019). Through the use of archaeological network analysis, patterns have emerged that are not constrained by a priori assumptions about the range of potential relationships to be expected. Indeed, phenomena have come into focus that are unaccounted for, or masked, by the use of traditional sociopolitical categories across eastern North American cases (e.g., tribe, chiefdom; hierarchy, heterarchy; corporate, network). In the northern Iroquoian region, archaeologists have linked the distribution of pottery decorations with the social and political relationships maintained by women (Birch and Hart 2018, pp. 19–20; Hart and Engelbrecht 2012; Hart

et al. 2016, pp. 6–7, 2019). In exploring northern Iroquoian confederacy dynamics, a chain of logic has been outlined that acknowledges women as the primary producers of pottery and demonstrates how women were active participants in Iroquoian politics, holding councils, arranging marriages, electing and deposing leaders, and maintaining domestic economies (Hart et al. 2016, p. 6). Given these associations, between women, politics, and collar decorations, the use of pottery to conduct archaeological network analysis allowed for the characterization of particular forms of social capital that were available throughout northern Iroquoian societies (Birch and Hart 2018; Hart et al. 2019).

Such studies do not necessitate that we dispose completely of our typological schema but that we begin outside these boxes if we are to critically and empirically interrogate past political organizations. Indeed, the Indigenous nations and confederacies of northern Iroquoia are well documented in the ethnohistorical and historical record. Using ceramic decorative practices, Hart et al. (2016) have demonstrated that signaling networks reflect sociopolitical changes like the formation of nations and the emergence of confederacies. Birch and Hart (2018) have demonstrated that the uncritical use of the confederacy concept homogenizes important variation in political structure and organizational strategy between northern Iroquoian confederacies. While the Wendat confederacy formed a tight-knit network characterized by strong bonding capital, the Haudenosaunee confederacy was composed of bridging capital, lacking the strong bonding capital that characterized the Wendat confederacy. Differences in the functions of norms of reciprocity, trust, and information sharing between the two confederacies were substantial, all of which was previously masked by the use of the essentialized category of “the confederacy.”

Similarly, Lulewicz’s (2019a) study of the evolution of southern Appalachian political landscapes, explored through multiple kinds of overlapping networks as gleaned through pottery, revealed sociopolitical dimensions of chiefdom political organizations that stood in stark contrast to one another. While signaling networks based on decorative practices revealed “long” networks of weak ties constituting bridging forms of social capital (*sensu* Crowe 2007; Putnam 2000), networks based on technological practices were tight knit, indicative of a different form of social capital that could be politically leveraged: bonding capital (*sensu* Crowe 2007; Putnam 2000). Likewise, in their recent work on the structure of Mississippian sociopolitics across eastern North America, based on the similarities in assemblages of iconography depicted on shell pendants, Lulewicz and Coker (2018) demonstrated that powerful elites drew different kinds of social capital from multiple sociospatial scales and that the traditional characterization of these political bodies at the scale of the individual entity (e.g., intra-polity relationships, individual chiefdoms) is not sufficient for describing the diverse relationships through which sociopolitics were structured.

While formal network analysis very visibly invokes principles of a relational approach, many recent studies across eastern North America have effectively bypassed traditional categorical thinking without adopting such analytical frameworks, highlighting the utility of relational perspectives across a range of methodological and theoretical contexts. Investigating the ways that social bonds in the Woodland period Southeast facilitated coalition and consensus in regard to the maintenance

and generation of massive earthworks and extensive trade networks, Henry and Barrier (2016) proposed a relationally inspired framework for understanding how such institutions of coalition were formed, organized, and maintained or transformed as a means to coordinate labor and ritual. When dispersed groups come together and enter into temporary coalitions, dissonance may arise whereby leadership roles and worth may be evaluated differentially (Henry and Barrier 2016, p. 92). Henry and Barrier present a framework for characterizing different domains of leadership by their strategies of authority and level of accountability. By doing so, they plot the relationships between potentially overlapping leadership positions and highlight how relationships between leaders of different socio-ritual domains may be leveraged in achieving coalition. Rather than identifying a category of best fit for characteristics that define ritual sociopolitics, Henry and Barrier move from the bottom-up, preferencing the inherent variability in structural relationships and identifying a range of potential organizational scenarios and dynamics that would have necessitated mediation.

An understanding that leadership roles and organizational strategies are relationally dependent, that is, dependent on the relationships within which those leadership positions are embedded, strikes at the very basic foundations of categorical approaches to sociopolitical structures. Henry (2013) and Henry and Barrier (2016) have demonstrated that leadership was indeed situational for some Middle Woodland groups across areas in what is today Kentucky. While common ideological structures (e.g., the range of tools, concepts, and practices related to social, political, and ritual organization) were pervasive, local practices varied significantly between subregions. Indeed, while specific rituals and practices were leveraged to fit specific events or socio-ritual situations, the basic foundations of these ideological structures were understood across kin groups. This variation within Middle Woodland ritual structures seems to have been the product of a particular form of political organization, one grounded in the interactions and variable relationships between highly mobile kin groups moving around the landscape (Henry 2013). The similarities and differences in each of these eastern North American examples in terms of organizational structure and political action, as gleaned from anti-categorical approaches, illustrate the promise of comparative archaeological analysis without the use of categorical referents for enriching sociopolitical narratives and revealing substantial variation that has long been inaccessible due to a reliance on top-down categorical models.

De-categorizing Time and Temporality

The categories that may be the most critically in need of dismantling are categories of time. I am specifically referring to culture-historical units that often contribute to the conflation of time, history, and culture, those units that homogenize, essentialize, and, in some cases, contribute to the erasure of eastern North American Indigenous histories. With the rapid advancement of scientific approaches to radiometric dating, the high-resolution, high-precision chronologies needed for such efforts are becoming readily achievable. To be clear, the goal should not be the creation of smaller

and smaller units of time. Rather, we must think beyond time and chronology as a set of building blocks and toward approaches to Indigenous histories that highlight, accept, and interpret these histories as complex, messy, and variable, borne of thousands of years of relationships, movement, and interaction.

Recent applications of anarchist theory within archaeology have further highlighted issues of time and anti-categorical practice (e.g., Angelbeck and Grier 2012; Borck and Sanger 2017; Flexner 2014; Fowles 2010b; Henry et al. 2017; Morgan 2015; Wengrow and Graeber 2015). Anarchist approaches force a critical evaluation of our archaeological histories, especially our accepted processions of categorical periods and sociopolitical states. While much of the effort in applying anarchist theory has been devoted to the study of decentralized political strategies, the relevance here is in its critique of temporal categories, especially those often deemed “transitional” or “intermediate” (and their corollary “florescent” periods) (Borck and Sanger 2017, p. 11). Such categories derived from neo-evolutionary models or culture-historical types bring from the top down a set of assumptions about historical trajectories that in many cases have turned out to be oversimplifications or plainly false.

We must recognize that “seemingly neutral aspects of archaeological thought [like the ordering of events and building chronologies] are highly laden interpretatively and have significant implications for the kinds of archaeology that we write” (Griffiths 2017, p. 1347). Indeed, archaeologists continue to adopt culture-historical approaches even in light of a number of so-called radiocarbon revolutions, and in this way, archaeological evidence continues to be reified into culture-historically predefined entities divorced from material bases (Griffiths 2017, p. 1347). Griffiths (2017, p. 1355) offers a solution: “If we can emphasize archaeological analytical terms as constructs, the inventions of the late 20th century...and use them as heuristic devices or iconic analogues that we *test* explicitly, we stand a chance of not mistaking our models for data.”

Challenging Socio-Chronologies

There is a growing trend across North America (e.g., Abel et al. 2019; Brown et al. 2019; Cobb et al. 2015; Hamilton and Krus 2018; Krus and Cobb 2018; Marquardt et al. 2020; Miller 2018a; Thompson and Krus 2018; Thompson et al. 2019; Thulman 2019) to critically reevaluate extant temporal frameworks and the histories built on these chronological foundations. These efforts go beyond merely enriching our understandings of the past. The categories we use have real and potentially adverse effects on the political nature of eastern North American histories in the present. For instance, Panich and Schneider (2019), working in California, have recently demonstrated that the uncritical use of chronological units to categorize archaeological sites for the purpose of cultural resource management has contributed to the false erasure of many contact-period Indigenous sites. The visibility of these histories, indeed the impact of the erasure of sites from the landscape for this time period, will certainly be critical in constructing narratives of Indigenous-colonizer dynamics and for understanding the impacts of European settlement on Indigenous practices

and populations. More importantly, such erasure serves as continual justification for settler-colonial policies predicated on misrepresentations of the scale of Indigenous occupation across North America before European arrival.

In eastern North America specifically, these issues are being uncovered by similar work on the period of European colonization. Across northern Iroquoia, new settlement chronologies and sequences based on hundreds of new AMS dates across dozens of sites have elucidated the temporality of occupations and, in some cases, has moved occupations around in time by multiple generations (Birch et al. 2020; Manning et al. 2018, 2019). This movement beyond categories of time and culture (e.g., culture-historical units) has allowed archaeologists to begin liberating Indigenous histories from the materiality of European colonization and to more robustly explore the sociopolitics of these critical encounters. Similarly, using a suite of new, stratified AMS dates, Holland-Lulewicz et al. (2020b) have challenged archaeological narratives that presume the collapse of Indigenous traditions following contact with De Soto's entrada in the interior of the southeastern United States. Instead, Holland-Lulewicz et al. (2020b) have demonstrated that classic Indigenous religious traditions seem to have remained intact for up to 130 years after initial contact with Spanish conquistadors (until ca. AD 1670). Despite the lack of European materials in mound-top contexts or throughout the region, the traditional use of mounds as places for religious ceremony and practice seems to have continued unaltered, contrasting with narratives that propose the mass destabilization of Indigenous livelihoods, politics, and tradition. Indeed, archaeologies of Indigenous-colonizer dynamics continue to model the effective application of relational perspectives that embody the real potential of an anti-categorical approach for archaeology.

While these radiocarbon-intensive, Bayesian approaches have been adopted across eastern North America to address particular phenomena or elucidate the temporality of individual sites and contexts, such methods have been less readily adopted as a means to critically evaluate, reconsider, and challenge the socio-material schemes that continue to dominate our approaches to time and chronology. Much of our time-telling abilities remain tied to temporal schemes anchored by ceramic or lithic seriations. As mentioned at the outset of this article, such heuristics remain valuable in situating ourselves in space and time only at the most general level. Few studies, however, have specifically leveraged advances in dating and chronology building to formally evaluate the legacy effects of our categorical, culture-historical units.

For instance, Lulewicz (2018) has explored the effects of extant chronological frameworks on our understanding of the sociopolitical histories of the southern Appalachian region, including the emergence of centralized leadership, socio-economic inequality, politicized religious traditions, and a large-scale agricultural economy. Building a series of Bayesian models that incorporated different kinds of archaeological assumptions that have been included in extant chronological models, including assumptions about the contemporaneity of ceramic styles, the temporality of stylistic change, and the reliability and archaeological integrity of extant radiocarbon data, Lulewicz (2018) highlighted how subjective, taken-for-granted assumptions about the archaeological record greatly influence chronological assessment, demonstrating that the ceramic styles used to delineate major sociopolitical

shifts were actually almost wholly contemporaneous with each other, not sequential, throwing into question the processes by which sociopolitical transformations actually unfolded. Although a handful of similar studies across the Southeast and Midwest have attempted to revisit outstanding ceramic and lithic chronologies (e.g., Gilmore 2015; Lulewicz 2019b; Miller 2018a; Ritchison 2018b; Wilson et al. 2018), further scrutinization of temporal categories (especially the assumptions that structure these categories) across eastern North America remains wanting. Such evaluations hold the potential to yield transformative insights into the timing, tempo, and rhythms of Indigenous histories on both local and continental scales.

The Importance of Temporal Resolution

“Happy is the archaeologist with a single radiocarbon date,” or so goes the archaeological folk proverb. This kind of thinking is emblematic of the context that has made possible the continued use of the categorical units discussed above. Indeed, this context is also what makes new (and more) radiocarbon dates so powerful in the movement beyond such categories. We should no longer be content with relying on a mere handful (or less, or none) of radiocarbon dates to construct archaeological narratives. Regional histories require radiocarbon datasets that are appropriate for constructing histories on a regional scale, sometimes composed of thousands of square kilometers and just as many sites and contexts. Likewise, a few radiocarbon dates no longer represent a robust attempt at dating large, complex archaeological palimpsests like Mississippian towns, large Iroquoian communities, or engineered landscapes. The historical, temporal, and spatial complexity of such phenomena necessitate, indeed demand, that principles of sampling are applied to radiocarbon data. And, in most cases, if radiocarbon dates were treated like any other class of materials, the number of dates traditionally obtained would certainly not meet the requirements of a sample suited for robust, representative, and empirically sound interpretations.

Indeed, there are ways to statistically assess an appropriate sample size of radiocarbon dates (see Griffiths 2014; Krus and Cobb 2018) needed to robustly model archaeological temporal boundaries, spans, and traditions via Bayesian methods. Here lies the real power of numbers in terms of radiocarbon dating: advances in Bayesian statistical interpretation. Bayesian modeling allows for radiocarbon dates to be formally assessed alongside other archaeological information (e.g., stratigraphy, material associations, etc.). Unlike traditional practice that uses “the eye-ball test,” Bayesian modeling of radiocarbon dates allows us to treat dates like other archaeological materials and assess them in relation to other knowledge we might have about those materials. In the case of radiocarbon dates, the more dates we have, and the better our knowledge of those dates (e.g., their relationships to other dates and to the archaeology), the more precise our grasp on time and temporality becomes. Across eastern North America, archaeologists have been quick to adopt such perspectives and have conducted some of the most sophisticated chronological research in the Americas. From the complex histories of coalescence and European materiality of northern Iroquoia (Abel et al. 2019; Birch et al. 2020; Manning and

Hart 2019; Manning et al. 2018, 2019) to the evaluation and timing of demographic and economic trends in the Midwest and Southeast (Cobb et al. 2015; Emerson et al. 2020; Krus 2016; Krus and Cobb 2018; Ritchison 2018a, b) to the elucidation of complex landscape engineering of coastal environments (e.g., Thompson et al. 2016), eastern North American archaeologists are indeed at the forefront of moving beyond, and directly challenging, the use of homogenizing socio-temporal categories in Americanist archaeology and indeed across the world. Such efforts would not be as critical or fruitful without the growing trend and development of large radio-carbon dating programs.

An Archaeology of Firsts and Lasts

While many may scoff at the importance of “firsts” and “lasts” in the context of anthropological knowledge building, advances in the resolution and precision of radiocarbon dating mean that an archaeology of firsts and lasts could have major implications for archaeological narratives from a relational perspective. When an archaeology of firsts and lasts is contextualized within a categorical framework, such efforts become futile, if meaningless. Searches for the “start” or “end” of “Mississippian” are assuredly fruitless endeavors. When we reconsider history, however, as a series of dynamic, overlapping, embedded entanglements of peoples and institutions, constituted through movements and flows, it becomes imperative to understand when and where particular phenomena do and do not occur. From this perspective, information on the “first” event or occurrence provides valuable insight into the structure and history of the movements and flows that we attempt to unravel. While this could apply to such firsts as the founding of a settlement, the use of a stone tool form, the incising of a particular iconographic symbol, or the colonization of a new area, I retain a limited scope and focus here on issues related to domestication to illustrate this point.

Contributing to an understanding of the scale and extent of knowledge exchange networks, agricultural communities of practices, and more broadly the institutions that facilitated the movement of such practices and traditions are advances in radiometric dating that allow archaeologists to begin pinpointing, with accuracy, the “extremes” (e.g., the “firsts” and “farthest”). There is no doubt that the ability to directly date preserved seeds has greatly increased our understanding of domestication and agricultural innovation. From a network perspective, the geographic distribution and timing of these processes are crucial for understanding how relationships maintained, generated, and transformed the kinds of interactions that would have facilitated the flow of resources (whether material or immaterial), including agricultural practices (or at least processes of domestication and the subsequent use of domesticates).

For example, a cache of domesticated chenopod (*Chenopodium berlandieri* subsp. *jonesianum*) was recently uncovered in southern Ontario, roughly 800 km north of the previous northernmost occurrence of the crop for this time period (ca. 930 cal BC) (Crawford et al. 2019). The implications of this find for understanding interactions are multiple. As the authors point out, the presence of the crop

may indicate either interactions and relational institutions that facilitated nonlocal exchange of the crop or relationships that allowed for the exchange of knowledge and resources that allowed the crop to be grown locally. This study clearly highlights how an archaeology of extremes might open avenues for research into the qualities of relationships that produced the archaeobotanical record. Similarly, in the northern region of the Lake Michigan basin of the western Great Lakes area, a recent study has confirmed the presence of maize via residue analysis up to 800 years before the macrobotanical record would suggest (Albert et al. 2018). Advances in AMS dating and microscopic analyses of residue have yielded empirical fodder for new narratives concerning the relational landscapes of the western Great Lakes region and the effects of these relational structures on the diffusion of agricultural innovations.

In recognizing seeds as “rich artifacts of traditional ecological knowledge” (Mueller 2017a, p. xiii), Mueller has explicitly sought to explore domesticated plants, and the processes through which they came to be as such, as proxies for agricultural communities of practices, through which information sharing, interaction, and intimate relational loci of teaching and learning played fundamental roles. By-passing categorical dichotomies of wild/domesticated, Mueller instead considers variation under cultivation, highlighting the intricate relational processes by which domestication unfolded across the midwestern and southeastern United States. Mueller (2013, 2018) proposed that the large-scale exchange at mound centers associated with Middle Woodland societies across eastern North America would have been instrumental in maintaining and generating networks of cultivators through which plants were domesticated (and re-domesticated and exchanged). Agricultural knowledge surely would have been maintained and shared (or not shared) by individuals and groups interacting with one another, and the structures of these relationships certainly would have affected such processes not only of domestication but of the maintenance of biodiversity and diversification *after* initial domestication (Mueller 2017b, 2019). These considerations involve particular processes that took place through time across varying temporalities. In such a case, earliest and latest dates for phenomena, including the presence of particular cultivars or the occupation spans of communities, could contribute valuably to elucidating the topology and character of network flows that structured not only processes of domestication but also the network context within which these processes unfolded and their subsequent effects on human societies.

Taking a “deep history macroeconomic approach,” Miller (2018b) examines the environmental and demographic context prior to the appearance of domesticated plants in eastern North America. In a complex, multifaceted analysis that explores how large-scale demographic trends, broad environmental fluctuations, and shifts in household economies articulated with one another, Miller explored the often overlooked, deep-time sociohistorical context of initial domestication. While Miller situates his analyses at a mostly gross scale, an archaeology of firsts that endeavors to consider the specifics of the earliest places and events upon which Miller’s boom-bust cycles are intricately balanced would complement this broad historical outline by way of elucidating the lived temporalities and relational properties of these generalizations. While I have used examples of domestication to illustrate my point about a renewed archaeology of extremes, information on the firsts, farthest, and

lasts is certainly invaluable to a range of archaeological phenomena (e.g., iconography, settlement, etc.). An “archaeology of firsts” does not draw its value from mere discourses of discovery and “the unknown” but rather from its potential to elucidate the qualities of particular kinds of interactions and to disrupt narratives tied to social, spatial, and categorical anchors.

Future Challenges for Eastern North American Archaeologists

The last decade has seen a critical rise in the adoption and application of relational perspectives in the archaeology of eastern North America. Every section of this paper could be expanded to reviews of their own. The range of issues omitted from this review was not for lack of importance. Other such issues include the continued use of environmental/climatic categories and their conflation with culture-historical units; categories of archaeological knowledge production; and the development of data-sharing/accessibility platforms as a way to counter the critical embeddedness of archaeological categories. These issues are certainly deserving of more space than allotted here, as each constitutes a critical challenge of de-categorization facing eastern North American archaeologists.

Noticeably absent from this review are archaeologies of human-environment interactions across eastern North America. Environmental reconstructions, discussions of human-environmental dynamics, inquiries of subsistence practices, etc., across eastern North America are plentiful and, indeed, exist at the cutting edge of ancient human-environment research globally. One issue that we must confront, however, is the continued correlation of global climatic events with specific culture-historical units. Many of our culture-historical boundaries line up with global climatic shifts (e.g., Little Ice Age, Medieval Warm). Are these temporal correlations real? Are there significant relationships between environmental change and social histories? There may be, but the use of categories on either side (e.g., culture-historical categories and global categories of climate change) continue to impede empirical understandings of these relationships beyond the “eye-ball test,” or simple correlation. The issue is further compounded when we use climatic categories derived from geographies thousands of miles away, without investigating how these global events manifested at particular locations (cf. Surge and Walker 2005; Walker and Surge 2006; Wang et al. 2013).

Many of the categories that have been used to organize the past into neat, intelligible units are the sole products of archaeological knowledge building and have tenuous connections to real Indigenous histories. Too few archaeologists (not just those working in eastern North America) recognize the politics of names and naming in archaeological practice, of which the practice of categorization takes center stage. For instance, tribal members of the Muscogee (Creek) Nation live primarily in Oklahoma today, forcibly removed from their ancestral homelands to the east. While descendant communities and tribal towns refer to themselves as belonging to the Muscogee (Creek) Nation, or as Mvskoke, their histories remain in a state of epistemological disconnect within academic and archaeological discourses. While we know for certain that Mvskoke peoples and their ancestral towns populated southern

Appalachia for millennia, the name Mvskoke (or even Muskogean) is rarely used in archaeological or ethnohistoric context. Rather, from an extant analytical perspective, before they were Mvskoke they were Creek, and before they were Creek they were Muskogean-speaking groups (or contact-period Indigenous groups), and before they were contact-period Indigenous groups, they were Mississippians. Each of these categories is associated with a distinct historical narrative. While archaeologists and ethnohistorians certainly recognize that these are all the same people, histories continue to be written for each individual category (cf. Beck 2013). We have Mississippian archaeology of Mississippians, we have contact-period/historical archaeology of the Muskogean-speaking peoples and contact-period groups, we have the archaeology and ethnohistory of the Creeks, and we go to conferences and consult with members of the Muscogee (Creek) Nation. This point about naming and categories is not a novel recognition. Dawdy (2010) makes the argument that ideas of modernity encourage false temporal breaks that set up before-after dichotomies, thus arbitrarily categorizing history and disenfranchising later histories from their deep counterparts. While the focus here is not necessarily on relationships in the strictest sense, the anti-categorical ethos forces consideration of the quality, character, and continuity of the relationships we study.

Beyond constraining the narratives of our scholarship and contributing to such disenfranchisements, the categorical boxes we have constructed as archaeologists are also routinely employed in policy making and contemporary discourse. An explicit example of this is the use of culture-historical categories to assign cultural affiliation to Indigenous burials and burial objects under the premises of the Native American Graves Protection and Repatriation Act (NAGPRA). Indeed, a poor fit between the archaeological record with established culture-historical categories and typologies can be leveraged to deny determinations of cultural affiliation (Beisaw 2010). If we maintain pre-established trait lists of archaeological “cultures,” how are we to interpret deviations from these assumptions when we attempt to establish cultural affiliation? The reification of these culture-historical categories provides justification for Indigenous erasure and creates a significant imbalance of power whereby archaeological categories are privileged over empirical observations and Indigenous knowledge.

It is, of course, true that these categorized histories of the southeastern United States are not necessarily representative of the practices or histories of archaeologies in other regions of eastern North America. Indeed, the archaeology of northern Iroquoia is deeply connected to contemporary Indigenous communities, tracing the historical linkages between descendant communities and particular towns, clans, events, and migrations back through the at least the 13th century (e.g., Birch 2015; Birch and Hart 2018; Birch and Williamson 2013; Hart et al. 2016). This is certainly, in part, a product of history in that many southeastern Indigenous communities no longer reside on, or even near, their ancestral homelands as a result of forced removal.

In this vein, the future of eastern North American archaeology, indeed all North American archaeology, must be founded on more productive relationships with descendant Indigenous communities. For too long we have categorized our work as “knowledge for knowledge’s sake” or as contributing to “perennial anthropological

questions.” As such, we pose questions that we as archaeologists deem important and then we publish the results in some repository of knowledge (most often an academic journal or CRM report, both of which generally represent inaccessible forms of knowledge). We must begin to de-categorize the knowledge we produce through archaeological practice as we should no longer be writing solely for one another. The data, results, interpretations, and histories we curate (literally and figuratively) do not belong to us or, at the very least, are politically imbued in ways that we continue to take for granted.

One of the major barriers to de-categorizing archaeological practice and knowledge production is the extreme disciplinary embeddedness of categories. I have written this paper primarily with an academic audience in mind, and the examples that I have reviewed relate primarily to the endeavors of academic archaeologists: the way we answer questions, design research, write histories, approach perennial themes of anthropological importance, etc. No matter the effort made by academic archaeologists, however, the fact remains that the vast majority of archaeological work, especially the work of identifying, recording, and interpreting the raw archaeological record, is undertaken by professional archaeologists in the realm of cultural resource management or other applied positions. In this way, categorization, the continued use of culture-historical units as organizational tools, remains a hard-wired institutional foundation. If the majority of archaeological data across eastern North America are collected and processed categorically (e.g., lists and table of ceramic types, lithic forms, single radiocarbon dates used to assign culture-historical identities), how are we to move beyond modes of thinking that are fundamentally rooted in such categories?

I do not know the answer to this question, nor does a discussion of this critical disconnect fall within the scope of this paper. That said, whether we are training academic or applied archaeologists, we must forefront the limitations of the categories we employ. We must be aware of what we can and cannot meaningfully do with them. We have to be intimately familiar with the assumptions built into these categories and how these assumptions constrain our narratives of the past. Part of this is to remove the stigma of archaeological theory from our practice. I do not mean, for instance, that professional archaeologists need to engage Darwinian archaeology or feminist perspectives more explicitly. What I mean is that even the most mundane tasks, like sorting and identifying ceramic sherds or lithic points, are riddled with substantive interpretive implications. We must rethink the common pedagogical distinction between theory/method and academic/applied work. We need to reevaluate how we categorize knowledge.

I would argue that an emerging counter to these practices, from the bottom-up, from data collection to interpretation, and across the boundaries of academic and professional archaeology, is the development of large-scale platforms of data sharing and accessibility (e.g., Anderson and Miller 2017; Anderson et al. 2010; Gajewski et al. 2011; Kansa et al. 2020, 2018; McCoy 2017; Williams et al. 2018). While current North America-wide databases like the Digital Index of North American Archaeology remain constrained (by no fault of their own) by legacies of culture history that continue to guide state-level archaeological data management, those like the Canadian Archaeological Radiocarbon Database and the Paleoindian Database

of the Americas contribute to data curation that exists outside categorical constraints, curating information on individual radiocarbon dates or individual lithic forms. At the opposite scale, hyper-specific projects like “Colonial Encounters: The Lower Potomac River Valley at Contact, 1500–1720 AD” (www.colonialencounters.org) (King et al. 2014), the “Comparative Mission Archaeology Portal” (www.cmap.floridamuseum.ufl.edu), or the Digital Archaeological Archive of Comparative Slavery (www.daacs.org) (Bates et al. 2020; Galle et al. 2019) are working to digitally curate and provide open access to raw archaeological data in easily accessible, standardized, and usable ways, completely by-passing the need to organize, distill, or simplify via processes of categorization. Such efforts represent a critical contribution to processes of archaeological de-categorization, to the diversification of knowledge production and access, and to efforts at countering the disenfranchisement of descendant communities from their histories.

My purpose in writing this paper has not been to set up and knock down the proverbial strawmen of culture history and neo-evolutionism. Nor has my purpose been to critically engage with such epistemologies. In highlighting the ways that taxonomic principles continue to fundamentally structure archaeological knowledge production, I have tried to demonstrate, via explicit archaeological examples from across eastern North America, how we might productively move beyond categorical imperatives and free ourselves from our “heuristic” crutches. I have argued that emerging network approaches, concerned with highlighting the agential power of relationships between individuals, communities, and institutions, and, more generally, with simply moving beyond the use of categorical principles, are allowing archaeologists to move from the bottom-up, to focus instead on the relationships that underlie, and indeed constitute, social, political, and economic phenomena. Aside from the contribution of anti-categorical approaches to constructing historical narratives, I have also noted how such approaches provide more productive spaces for collaboration with descendant communities whose histories we take as our field of study. Anthropology and archaeology are undisputedly the products of colonialism. The categories upon which we continue to rely are the product of a long history of colonial attempts to organize, dichotomize, control, and in some cases erase Indigenous pasts. The perspectives for which I advocate here are not a simple matter of theory, of how we interpret the archaeological record. Rather, the perspectives outlined here beg for a consideration of what eastern North American archaeology has been, is becoming, and where its future lies.

Acknowledgments Thanks to Jennifer Birch, Victor Thompson, Steve Kowalewski, Isabelle Holland-Lulewicz, Brandon Ritchison, and Megan Conger for listening to my ideas and contributing valuable insight, whether knowingly or not. Thanks also to Gary Feinman and Linda Nicholas for the invitation and opportunity to explore the topics discussed in this manuscript. I’d also like to thank Lewis Borck, John Hart, Shane Miller, Jill Neitzel, Alice Wright, and one anonymous reviewer for their exceptionally constructive comments on the first draft of this manuscript.

References Cited

- Abel, T. J., Vavrasek, J. L., and Hart, J. P. (2019). Radiocarbon dating the Iroquoian occupation of northern New York. *American Antiquity* **84**: 748–761.
- Adams, J. W., and Kasakoff, A. B. (1976). Central-place theory and endogamy in China. In Smith, C. A. (ed.), *Regional Analysis: Social Systems*, Academic Press, Cambridge, pp. 175–187.
- Adams, W. Y., Van Gerven, D. P., and Levy, R. S. (1978). The retreat from migrationism. *Annual Review of Anthropology* **7**: 483–532.
- Albert, R. K., Kooiman, S. M., Clark, C. A., and Lovis, W. A. (2018). Earliest microbotanical evidence for maize in the northern Lake Michigan basin. *American Antiquity* **83**: 345–355.
- Anderson, D. G., and Miller, D. S. (2017). PIDBA (Paleoindian Database of the Americas): Call for data. *PaleoAmerica* **3**: 1–5.
- Anderson, D. G., Miller, D. S., Yerka, S. J., Gillam, J. C., Johanson, E. N., Anderson, D. T., Goodyear, A. C., and Smallwood, A. M. (2010). PIDBA (Paleoindian Database of the Americas) 2010: Current status and findings. *Archaeology of Eastern North America* **38**: 63–89.
- Angelbeck, B., and Grier, C. (2012). Anarchism and the archaeology of anarchic societies: Resistance to centralization in the Coast Salish region of the Pacific Northwest Coast. *Current Anthropology* **53**: 547–587.
- Baltus, M. R., and Baires, S. E. (2019). Creating and abandoning “homeland”: Cahokia as place of origin. *Journal of Archaeological Method and Theory* **27**: 111–127.
- Basso, K. H. (1996). *Wisdom Sits in Places: Landscape and Language among the Western Apache*, University of New Mexico Press, Albuquerque.
- Bates, L. A., Bollwerk, E. A., Galle, J. E., and Neiman, F. D. (2020). Archaeological data in the cloud: Collaboration and accessibility with the Digital Archaeological Archive of Comparative Slavery (DAACS). In Crowder, J. W., Fortun, M., Besara, R., and Poirier, L. (eds.), *Anthropological Data in the Digital Age*, Springer, New York, pp. 85–107.
- Battle-Baptiste, W. (2017). *Black Feminist Archaeology*, Routledge, London.
- Bauer, H. E. (2019). The problem with the problematical: An investigation and critique of typological categories in Maya archaeology, Senior independent study thesis, Department of Anthropology, College of Wooster, Wooster.
- Beaudoin, M. A. (2016). Archaeologists colonizing Canada: The effects of unquestioned categories. *Archaeologies* **12**: 7–37.
- Beaudoin, M. A. (2019). *Challenging Colonial Narratives: Nineteenth-Century Great Lakes Archaeology*, University of Arizona Press, Tucson.
- Beck, R. A. (2013). *Chiefdoms, Collapse, and Coalescence in the Early American South*, Cambridge University Press, Cambridge.
- Beck, R. A. (2016). The iron in the posthole: Witchcraft, women’s labor, and Spanish folk ritual at the Berry site. *American Anthropologist* **118**: 525–540.
- Beck, R. A., Fritz, G. J., Lapham, H. A., Moore, D. G., and Rodning, C. B. (2016). The politics of provisioning: Food and gender at Fort San Juan de Joara, 1566–1568. *American Antiquity* **81**: 3–26.
- Beck, R. A., Newsom, L. A., Rodning, C. B., and Moore, D. G. (2017). Spaces of entanglement: Labor and construction practice at Fort San Juan de Joara. *Historical Archaeology* **51**: 167–193.
- Beisaw, A. M. (2010). Memory, identity, and NAGPRA in the northeastern United States. *American Anthropologist* **112**: 244–256.
- Birch, J. (2012). Coalescent communities: Settlement aggregation and social integration in Iroquoian Ontario. *American Antiquity* **77**: 646–670.
- Birch, J. (2015). Current research on the historical development of northern Iroquoian societies. *Journal of Archaeological Research* **23**: 263–323.
- Birch, J., and Williamson, R. F. (2013). *The Mantle Site: An Archaeological History of an Ancestral Wendat Community*, AltaMira Press, Lanham, MD.
- Birch, J., and Hart, J. P. (2018). Social networks and northern Iroquoian confederacy dynamics. *American Antiquity* **83**: 13–33.
- Birch, J., and Thompson, V. D. (eds.) (2018). *The Archaeology of Villages in Eastern North America*, University Press of Florida, Gainesville.
- Birch, J., Manning, S., Sanft, S., and Conger, M. A. (2020). Refined radiocarbon chronologies for northern Iroquoian site sequences: Implications for coalescence, conflict, and the reception of European goods. *American Antiquity* **FirstView**: 1–21.

- Blackmore, C. (2015). Queer theory, archaeology of. In Whelehan, P., and Bolin, A. (eds.), *The International Encyclopedia of Human Sexuality*, Wiley-Blackwell, London, pp. 1043–1058.
- Blatt, S. H., Redmond, B. G., Cassman, V., and Sciuilli, P. W. (2011). Dirty teeth and ancient trade: Evidence of cotton fibres in human dental calculus from Late Woodland, Ohio. *International Journal of Osteoarchaeology* **21**: 669–678.
- Booth, A., and Babchuk, N. (1969). Personal influence networks and voluntary association affiliation. *Sociological Inquiry* **39**: 179–188.
- Borck, L. (2016). *Lost Voices Found: An Archaeology of Contentious Politics in the Greater Southwest, AD 1100–1450*, Ph.D. dissertation, Department of Anthropology, University of Arizona, Tucson.
- Borck, L., and Sanger, M. C. (2017). An introduction to anarchism in archaeology. *SAA Archaeological Record* **17**: 9–16.
- Bourdieu, P. (1972). *Outline of a Theory of Practice*, Cambridge University Press, Cambridge.
- Boyd, R., and Richerson, P. J. (2009). Culture and the evolution of human cooperation. *Philosophical Transactions of the Royal Society B: Biological Sciences* **364**: 3281–3288.
- Brown, T. J., Gilmour, D. M., Solimano, P. S., and Ames, K. M. (2019). The radiocarbon record of the western stemmed tradition on the southern Columbia Plateau of western North America. *American Antiquity* **84**: 471–494.
- Brück, J., and Fontijn, D. (2013). The myth of the chief: Prestige goods, power, and personhood in the European Bronze Age. In Harding, A., and Fokkens, H. (eds.), *The Oxford Handbook of the European Bronze Age*, Oxford University Press, Oxford, pp. 197–215.
- Brughmans, T. (2010). Connecting the dots: Towards archaeological network analysis. *Oxford Journal of Archaeology* **29**: 277–303.
- Brughmans, T., Collar, A., and Coward, F. (eds.) (2016). *The Connected Past: Challenges to Network Studies in Archaeology and History*, Oxford University Press, Oxford.
- Brumfiel, E. M. (2006). Cloth, gender, continuity, and change: Fabricating unity in anthropology. *American Anthropologist* **108**: 862–877.
- Burt, R. S. (1980). Models of network structure. *Annual Review of Sociology* **6**: 79–141.
- Caldwell, J. R. (1958). *Trend and Tradition in the Allatoona Reservoir, Northern Georgia*, Memoir No. 88, American Anthropological Association, Scientific Papers, Vol. 10, Illinois State Museum, Springfield.
- Centola, D., and Macy, M. (2007). Complex contagions and the weakness of long ties. *American Journal of Sociology* **113**: 702–734.
- Cobb, H. (2005). Straight down the line? A queer consideration of hunter-gatherer studies in north-west Europe. *World Archaeology* **37**: 630–636.
- Cobb, C. R., Krus, A. M., and Steadman, D. W. (2015). Bayesian modeling of the occupation span of the Averbuch site in the Middle Cumberland drainage, Tennessee. *Southeastern Archaeology* **34**: 46–56.
- Comstock, A. R., and Cook, R. A. (2018). Climate change and migration along a Mississippian periphery: A Fort Ancient example. *American Antiquity* **83**: 91–108.
- Cook, R. A., and Schurr, M. R. (2009). Eating between the lines: Mississippian migration and stable carbon isotope variation in Fort Ancient populations. *American Anthropologist* **111**: 344–359.
- Cook, R. A., and Price, T. D. (2015). Maize, mounds, and the movement of people: Isotope analysis of a Mississippian/Fort Ancient region. *Journal of Archaeological Science* **61**: 112–128.
- Crabtree S. A., and Borck, L. (2019). Social networks for archaeological research. In Smith, C. (ed.), *Encyclopedia of Global Archaeology*, Springer, Cham.
- Crabtree, S. A., Vaughn, L. J. S., and Crabtree, N. T. (2017). Reconstructing Ancestral Pueblo food webs in the southwestern United States. *Journal of Archaeological Science* **81**: 116–127.
- Crawford, G. W., Lytle, J. L., Williamson, R. F., and Wojtowicz, R. (2019). An Early Woodland domesticated chenopod (*Chenopodium berlandieri* subsp. *jonesianum*) cache from the Tutela Heights site, Ontario, Canada. *American Antiquity* **84**: 143–157.
- Creese, J. L. (2013). Rethinking early village development in southern Ontario: Toward a history of place-making. *Canadian Journal of Archaeology/Journal Canadien d'Archéologie* **37**: 185–218.
- Creese, J. L. (2014). Village layout and social experience: A comparative study from the northeast Woodlands. *Midcontinental Journal of Archaeology* **39**: 1–29.
- Creese, J. L. (2016). Emotion work and the archaeology of consensus: The northern Iroquoian case. *World Archaeology* **48**: 14–34.
- Crowe, J. A. (2007). In search of a happy medium: How the structure of interorganizational networks influence community economic development strategies. *Social Networks* **29**: 469–488.

- Crown, P. L. (2014). The archaeology of crafts learning: Becoming a potter in the Puebloan Southwest. *Annual Review of Anthropology* **43**: 71–88.
- Dawdy, S. L. (2010). Clockpunk anthropology and the ruins of modernity. *Current Anthropology* **51**: 761–793.
- Diani, M. (1992). The concept of social movement. *The Sociological Review* **40**: 1–25.
- Diani, M. (2003). Leaders or brokers? Positions and influence in social movement networks. In Diani, M., and McAdam, D. (eds.), *Social Movements and Networks: Relational Approaches to Collective Action*, Oxford University Press, Oxford, pp. 105–122.
- Diani, M., and McAdam, D. (eds.) (2003). *Social Movements and Networks: Relational Approaches to Collective Action*, Oxford University Press, Oxford.
- Dowson, T. A. (2000). Why queer archaeology? An introduction. *World Archaeology* **32**: 161–165.
- Drennan, R. D. (1987). Regional demography in chiefdoms. In Drennan, R. D., and Uribe, C. A. (eds.), *Chiefdoms in the Americas*, University Press of America, Lanham, MD, pp. 307–324.
- Eckert, P., and McConnell-Ginet, S. (1992). Think practically and look locally: Language and gender as community-based practice. *Annual Review of Anthropology* **21**: 461–488.
- Emerson, T. E., Hedman, K. M., Simon, M. L., Fort, M. A., and Witt, K. E. (2020). Isotopic confirmation of the timing and intensity of maize consumption in Greater Cahokia. *American Antiquity* **85**: 241–262.
- Emerson, T. E., Farnsworth, K. B., Wissemann, S. U., and Hughes, R. E. (2013). The allure of the exotic: Reexamining the use of local and distant pipestone quarries in Ohio Hopewell pipe caches. *American Antiquity* **78**: 48–67.
- Emirbayer, M., and Goodwin, J. (1994). Network analysis, culture, and the problem of agency. *American Journal of Sociology* **99**: 1411–1454.
- Feinman, G., and Neitzel, J. (1984). Too many types: An overview of sedentary prestate societies in the Americas. *Advances in Archaeological Method and Theory* **7**: 39–102.
- Feinman, G. M., and Nicholas, L. M. (2016). Framing the rise and variability of past complex societies. In Fargher, L. E., and Heredia Espinoza, V. Y. (eds.), *Alternative Pathways to Complexity: A Collection of Essays on Architecture, Economics, Power, and Cross-Cultural Analysis*, University Press of Colorado, Boulder, pp. 271–289.
- Ferris, N. (2009). *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*, University of Arizona Press, Tucson.
- Flexner, J. (2014). The historical archaeology of state and non-states: Anarchist perspectives from Hawai'i and Vanuatu. *Journal of Pacific Archaeology* **5**: 81–97.
- Flexner, J., and Gonzalez-Tennant, E. (2018). Anarchy and archaeology. *Journal of Contemporary Archaeology* **5**: 213–219.
- Fowles, S. (2010a). The southwest school of landscape archaeology. *Annual Review of Anthropology* **39**: 453–468.
- Fowles, S. (2010b). A people's history of the American Southwest. In Alt, S. M. (ed.), *Ancient Complexities: New Perspectives in Pre-Columbian North America*, University of Utah Press, Salt Lake City, pp. 183–204.
- Friberg, C. M. (2018). Cosmic negotiations: Cahokian religion and Ramey Incised pottery in the northern hinterland. *Southeastern Archaeology* **37**: 39–57.
- Gajewski, K., Muñoz, S., Peros, M., Viau, A., Morlan, R., and Betts, M. (2011). The Canadian archaeological radiocarbon database (CARD): Archaeological 14 C dates in North America and their paleoenvironmental context. *Radiocarbon* **53**: 371–394.
- Galle, J. E., Bollwerk, E., and Neiman, F. D. (2019). The Digital Archaeological Archive of Comparative Slavery: A case study in open data and collaboration in the field of archaeology. In Allen, R., and Ford, B. (eds.), *New Life for Archaeological Collections*, University of Nebraska Press, Lincoln, pp. 54–90.
- Gargiulo, M., and Benassi, M. (2000). Trapped in your own net? Network cohesion, structural holes, and the adaptation of social capital. *Organization Science* **11**: 183–196.
- Gellar, P. L., (2009). Identity and difference: Complicating gender in archaeology. *Annual Review of Anthropology* **38**: 65–81.
- Giddens, A. (1984). *The Constitution of Society: Outline of the Theory of Structuration*, University of California Press, Berkeley.
- Giles, B. T., and Knapp, T. D. (2015). A Mississippian mace at Iroquoia's southern door. *Midcontinental Journal of Archaeology* **40**: 73–95.

- Gilmore, Z. I. (2015). Direct radiocarbon dating of Spanish moss (*Tillandsia usneoides*) from early fiber-tempered pottery in the southeastern US. *Journal of Archaeological Science* **58**: 1–8.
- González-Bailón, S., Borge-Holthoefer, J., and Moreno, Y. (2013). Broadcasters and hidden influentials in online protest diffusion. *American Behavioral Scientist* **57**: 943–965.
- González-Tennant, E. (2018). *The Rosewood Massacre: An Archaeology and History of Intersectional Violence*, University Press of Florida, Gainesville.
- Gougeon, Ramie A. (2017). Considering gender analogies in southeastern prehistoric archaeology. *Southeastern Archaeology* **36**: 183–194.
- Gould, R. V. (1991). Multiple networks and mobilization in the Paris Commune, 1871. *American Sociological Review* **56**: 716–729.
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology* **78**: 1360–1380.
- Granovetter, M. (1978). Threshold models of collective behavior. *American Journal of Sociology* **83**: 1420–1443.
- Granovetter, M. (1982). The strength of weak ties: A network theory revisited. *Sociological Theory* **1**: 201–223.
- Griffiths, S. (2014). Simulations and outputs. *Radiocarbon* **56**: 871–876.
- Griffiths, S. (2017). We're all cultural historians now: Revolutions in understanding archaeological theory and scientific dating. *Radiocarbon* **59**: 1347–1357.
- Hamilakis, Y., and Jones, A. M. (2017). Archaeology and assemblage. *Cambridge Archaeological Journal* **27**: 77–84.
- Hamilton, W. D., and Krus, A. M. (2018). The myths and realities of Bayesian chronological modeling revealed. *American Antiquity* **83**: 187–203.
- Harris, O. (2017). Assemblages and scale in archaeology. *Cambridge Archaeological Journal* **27**: 127–139.
- Harris, O., and Cipolla, C. (2017). *Archaeological Theory in the New Millennium: Introducing Current Perspectives*, Taylor and Francis, London.
- Hart, J. P. (1999). Another look at Clemson's Island. *Northeast Anthropology* **57**: 19–26.
- Hart, J. P. (2012). The effects of geographical distances on pottery assemblage similarities: A case study from northern Iroquoia. *Journal of Archaeological Science* **39**: 128–134.
- Hart, J. P., and Brumbach, H. J. (2003). The death of Owasco. *American Antiquity* **68**: 737–752.
- Hart, J. P., and Engelbrecht, W. (2012). Northern Iroquoian ethnic evolution: A social network analysis. *Journal of Archaeological Method and Theory* **19**: 322–349.
- Hart, J. P., Shafie, T., Birch, J., Dermarkar, S., and Williamson, R. (2016). Nation building and social signaling in southern Ontario: AD 1350–1650. *PLoS One* **11**: e0156178.
- Hart, J. P., Winchell-Sweeney, S., and Birch, J. (2019). An analysis of network brokerage and geographic location in fifteenth-century AD northern Iroquoia. *PLoS One* **14**: e0209689.
- Heath-Stout, L. E. (2020). Who writes about archaeology? An intersectional study of authorship in archaeological journals. *American Antiquity* **85**: 407–426.
- Hechter, M., and Kanazawa, S. (1997). Sociological rational choice theory. *Annual Review of Sociology* **23**: 191–214.
- Hedman, K. M., Slater, P. A., Fort, M. A., Emerson, T. E., and Lambert, J. M. (2018). Expanding the strontium isoscape for the American midcontinent: Identifying potential places of origin for Cahokian and pre-Columbian migrants. *Journal of Archaeological Science: Reports* **22**: 202–213.
- Hedström, P. (1994). Contagious collectivities: On the spatial diffusion of Swedish trade unions, 1890–1940. *American Journal of Sociology* **99**: 1157–1179.
- Hedström, P., Sandell, R., and Stern, C. (2000). Mesolevel networks and the diffusion of social movements: The case of the Swedish Social Democratic Party. *American Journal of Sociology* **106**: 145–172.
- Henrich, J., and Henrich, N. (2006). Culture, evolution and the puzzle of human cooperation. *Cognitive Systems Research* **7**: 220–245.
- Henrich, J., Boyd, R., Bowles, S., Camerer, C., Fehr, E., and Gintis, H. (eds.) (2004). *Foundations of Human Sociality: Economic Experiments and Ethnographic Evidence from Fifteen Small-Scale Societies*, Oxford University Press, Oxford.
- 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, Gainesville, pp. 219–233.
- Henry, E. R., Angelbeck, B., and Rizvi, U. Z. (2017). Against typology: A critical approach to archaeological order. *SAA Archaeological Record* **17**: 28–30.

- Henry, E. R., and Barrier, C. R. (2016). The organization of dissonance in Adena-Hopewell societies of eastern North America. *World Archaeology* **48**: 87–109.
- Hill, M. A., Lattanzi, G. D., Sanger, M., and Dussubieux, L. (2019). Elemental analysis of Late Archaic copper from the McQueen Shell Ring, St. Catherine's Island, Georgia. *Journal of Archaeological Science: Reports* **24**: 1083–1094.
- Hodder, I. (2012). *Entangled: An Archaeology of Relationships between Humans and Things*, John Wiley and Sons, London.
- Hodder, I., and Mol, A. (2016). Network analysis and entanglement. *Journal of Archaeological Method and Theory* **23**: 1066–1094.
- Holland-Lulewicz, J., Conger, M. A., Birch, J., Kowalewski, S. A., and Jones, T. W. (2020a). An institutional approach for archaeology. *Journal of Anthropological Archaeology* **58**: 101163.
- Holland-Lulewicz, J., Thompson, V. D., Wettstaed, J., and Williams, M. (2020b). Enduring traditions and the (im)materiality of early colonial encounters in the interior southeastern United States. *American Antiquity* **FirstView**: 1–21.
- Ingold, T. (1993). The temporality of the landscape. *World Archaeology* **25**: 152–174.
- Knappett, C. (ed.) (2013). *Network Analysis in Archaeology: New Approaches to Regional Interaction*, Oxford University Press, Oxford.
- Kansa, S. W., Atici, L., Kansa, E. C., and Meadow, R. H. (2020). Archaeological analysis in the information age: Guidelines for maximizing the reach, comprehensiveness, and longevity of data. *Advances in Archaeological Practice* **8**: 40–52.
- Kansa, E. C., Kansa, S. W., Wells, J. J., Yerka, S. J., Myers, K. N., DeMuth, R. C., Bissett, T. G., and Anderson, D. G. (2018). The Digital Index of North American Archaeology: Networking government data to navigate an uncertain future for the past. *Antiquity* **92**: 490–506.
- Kassabaum, M. C. (2019). Early platforms, early plazas: Exploring the precursors to Mississippian mound-and-plaza centers. *Journal of Archaeological Research* **27**: 187–247.
- King, J., Heath, B. J., Strickland, S. M., and Brown, G. J. (2014). Colonial encounters: The lower Potomac River valley at contact, 1500–1720. <http://colonialencounters.org/index.aspx>.
- Knight, V. J., Jr. (2011). Themes and future directions in the Woodland archaeology of the Etowah-Coosa-Alabama Basin. *Early Georgia* **39**: 213–219.
- Kosiba, S. (2019). New digs: Networks, assemblages, and the dissolution of binary categories in anthropological archaeology. *American Anthropologist* **121**: 447–463.
- Kowalewski, S. A., Blanton, R. E., Feinman, G., and Finsten, L. (1983). Boundaries, scale, and internal organization. *Journal of Anthropological Archaeology* **2**: 32–56.
- Krus, A. M. (2016). The timing of Precolumbian militarization in the US Midwest and Southeast. *American Antiquity* **81**: 375–388.
- Krus, A. M., and Cobb, C. R. (2018). The Mississippian fin de siècle in the middle Cumberland region of Tennessee. *American Antiquity* **83**: 302–319.
- Lesser, A. (1961). Social fields and the evolution of society. *Southwestern Journal of Anthropology* **17**: 40–48.
- Little, D. (2000). Explaining large-scale historical change. *Philosophy of the Social Sciences* **30**: 89–112.
- Lulewicz, J. (2018). Radiocarbon data, Bayesian modeling, and alternative historical frameworks: A case study from the US Southeast. *Advances in Archaeological Practice* **6**: 58–71.
- Lulewicz, J. (2019a). The social networks and structural variation of Mississippian sociopolitics in the southeastern United States. *Proceedings of the National Academy of Sciences* **116**: 6707–6712.
- Lulewicz, J. (2019b). A Bayesian approach to regional ceramic seriation and political history in the southern Appalachian region (northern Georgia) of the southeastern United States. *Journal of Archaeological Science* **105**: 1–10.
- Lulewicz, J., and Coker, A. B. (2018). The structure of the Mississippian world: A social network approach to the organization of sociopolitical interactions. *Journal of Anthropological Archaeology* **50**: 113–127.
- Macy, M. W. (1991a). Chains of cooperation: Threshold effects in collective action. *American Sociological Review* **56**: 730–747.
- Macy, M. W. (1991b). Learning to cooperate: Stochastic and tacit collusion in social exchange. *American Journal of Sociology* **97**: 808–843.
- Manning, S. W., and Hart, J. P. (2019). Radiocarbon, Bayesian chronological modeling and early European metal circulation in the sixteenth-century AD Mohawk River valley, USA. *PLoS One* **14**: e0226334.

- Manning, S. W., Birch, J., Conger, M. A., Dee, M. W., Griggs, C., Hadden, C. S., et al. (2018). Radiocarbon re-dating of contact-era Iroquoian history in northeastern North America. *Science Advances* **4**: eaav0280.
- Manning, S. W., Birch, J., Conger, M. A., Dee, M. W., Griggs, C., and Hadden, C. S. (2019). Contact-era chronology building in Iroquoia: Age estimates for Arendarhonon sites and implications for identifying Champlain's Cahiagué. *American Antiquity* **84**: 684–707.
- Marquardt, W. H., Krus, A. M., and Thompson, V. D. (2020). Rethinking the Estero Island site: A possible satellite village of Mound Key. *Journal of Anthropological Archaeology* **58**: 101145.
- Marwell, G., Oliver, P. E., and Prahl, R. (1988). Social networks and collective action: A theory of the critical mass, III. *American Journal of Sociology* **94**: 502–534.
- McAdam, D., Tarrow, S., and Tilley, C. (2001). *Dynamics of Contention*. Cambridge University Press, Cambridge.
- McCoy, M. D. (2017). Geospatial big data and archaeology: Prospects and problems too great to ignore. *Journal of Archaeological Science* **84**: 74–94.
- Mehta, J. M., and Connaway, J. M. (2019). Mississippian culture and Cahokian identities as considered through household archaeology at Carson, a monumental center in north Mississippi. *Journal of Archaeological Method and Theory* **27**: 28–53.
- Meyers, M. (2017). Social integration at a frontier and the creation of Mississippian social identity in southwestern Virginia. *Southeastern Archaeology* **36**: 144–155.
- Miller, G. L. (2018a). Hopewell bladelets: A Bayesian radiocarbon analysis. *American Antiquity* **83**: 224–243.
- Miller, D. S. (2018b). *From Colonization to Domestication: Population, Environment, and the Origins of Agriculture in Eastern North America*, University of Utah Press, Salt Lake City.
- Mills, B. (2017). Social network analysis in archaeology. *Annual Review of Anthropology* **46**: 379–397.
- Morgan, C. (2015). Punk, DIY, and anarchy in archaeological thought and practice. *AP: Online Journal in Public Archaeology* **5**: 123–146.
- 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.
- Mueller, N. G. (2017a). *Seeds as Artifacts of Communities of Practice: The Domestication of Erect Knotweed in Eastern North America*, Ph.D. dissertation, Department of Anthropology, Washington University, St. Louis.
- Mueller, N. G. (2017b). Evolutionary “bet-hedgers” under cultivation: Investigating the domestication of erect knotweed (*Polygonum erectum* L.) using growth experiments. *Human Ecology* **45**: 189–203.
- Mueller, N. G. (2018). The earliest occurrence of a newly described domesticate in eastern North America: Adena/Hopewell communities and agricultural innovation. *Journal of Anthropological Archaeology* **49**: 39–50.
- Mueller, N. G. (2019). Documenting the evolution of agrobiodiversity in the archaeological record: Landraces of a newly described domesticate (*Polygonum erectum*) in North America. *Journal of Archaeological Method and Theory* **26**: 313–343.
- Nassaney, M. S., and Sassaman, K. E. (eds.) (1995). *Native American Interaction: Multiscalar Analyses and Interpretations in the Eastern Woodlands*, University of Tennessee Press, Knoxville.
- Oberschall, A. (1973). *Social Conflict and Social Movements*, Prentice Hall, New York.
- Oliver, P. (1984) “If you don’t do it, nobody else will”: Active and token contributors to local collective action. *American Sociological Review* **49**: 601–610.
- Oliver, P., and Marwell, G. (1988). The paradox of group size in collective action: A theory of the critical mass, II. *American Sociological Review* **53**: 1–8.
- Olson, M. (1965). *Logic of Collective Action: Public Goods and the Theory of Groups*, Harvard University Press, Cambridge, MA.
- Opp, K. (1989). *The Rationality of Political Protest*, Westview, New York.
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, Cambridge.
- Panich, L. M., and Schneider, T. D. (2019). Categorical denial: Evaluating post-1492 Indigenous erasure in the paper trail of American archaeology. *American Antiquity* **84**: 651–668.
- Pauketat, T. R. (2001). Practice and history in archaeology: An emerging paradigm. *Anthropological Theory* **1**: 73–98.
- Pauketat, T. R. (2007). *Chiefdoms and Other Archaeological Delusions*, Rowman Altamira, New York.

- Pauketat, T. R. (2013). Bundles of/in/as time. In Robb, J., and Pauketat, T. R. (eds.), *Big Histories, Human Lives: Tackling Problems of Scale in Archaeology*, Santa Fe Institute, Santa Fe, NM, pp. 45–56.
- Peeples, M. A. (2011). *Identity and Social Transformation in the Prehispanic Cibola World: AD 1150–1325*. Ph.D. dissertation, Department of Anthropology, Arizona State University, Tempe.
- Peeples, M. A. (2018). *Connected Communities: Networks, Identity, and Social Change in the Ancient Cibola World*, University of Arizona Press, Tucson.
- Peeples, M. A. (2019). Finding a place for networks in archaeology. *Journal of Archaeological Research* **27**: 451–499.
- Pickvance, C. G. (1975). On the study of urban social movements. *The Sociological Review* **23**: 29–49.
- Pinard, M. (1968). Mass society and political movements: A new formulation. *American Journal of Sociology* **73**: 682–690.
- 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. (2018). *New Histories of Village Life at Crystal River*, University Press of Florida, Gainesville.
- Pluckhahn, T. J., Menz, M., West, S. E., and Wallis, N. J. (2018). A new history of community formation and change at Kolomoki (9ER1). *American Antiquity* **83**: 320–344.
- Pluckhahn, T. J., Wallis, N. J., and Thompson, V. D. (2020). The history and future of migrationist explanations in the archaeology of the Eastern Woodlands with a synthetic model of Woodland period migrations on the Gulf Coast. *Journal of Archaeological Research* **28** <https://doi.org/10.1007/s10814-019-09140-x>.
- Polletta, F., and Jasper, J. M. (2001). Collective identity and social movements. *Annual Review of Sociology* **27**: 283–305.
- Putnam, R. D. (2000). Bowling alone: America's declining social capital. In Crothers, L., and Lockhart, C. (eds.), *Culture and Politics*, Palgrave Macmillan, New York, pp. 223–234.
- Redmond, B. G. (2012). Terminal Late Woodland mortuary ceremonialism, social differentiation, and long distance interaction in northern Ohio: New evidence from the Danbury site. *Midcontinental Journal of Archaeology* **37**: 99–140.
- Ritchison, B. T. (2018a). Investigating 14th century immigration and settlement response on the Georgia coast, USA. *Journal of Archaeological Science: Reports* **21**: 606–618.
- Ritchison, B. T. (2018b). Exploring a Bayesian method for examining the regional ceramic sequence along the Georgia coast. *Southeastern Archaeology* **37**: 12–21.
- Robb, J., and Pauketat, T. R. (2013). From moments to millennia: Theorizing scale and change in human history. In Robb, J., and Pauketat, T. R. (eds.), *Big Histories, Human Lives: Tackling Problems of Scale in Archaeology*, School for Advanced Research, Santa Fe, NM, pp. 3–33.
- Roscoe, P. (1993). Practice and political centralization: A new approach to political evolution. *Current Anthropology* **34**: 111–124.
- Rowe, J. H. (1966). Diffusionism and archaeology. *American Antiquity* **31**: 334–337.
- Sanger, M. C. (2017). Coils, slabs, and molds: examining community affiliation between Late Archaic shell ring communities using radiographic imagery of pottery. *Southeastern Archaeology* **36**: 95–109.
- Sanger, M. C., Hill, M. A., Lattanzi, G. D., Padgett, B. D., Larsen, C. S., Culleton, B. J., et al. (2018). Early metal use and crematory practices in the American Southeast. *Proceedings of the National Academy of Sciences* **115**: e7672–e7679.
- Sanger, M. C., Padgett, B. D., Larsen, C. S., Hill, M., Lattanzi, G. D., Colaninno, C. E., et al. (2019). Great Lakes copper and shared mortuary practices on the Atlantic coast: Implications for long-distance exchange during the Late Archaic. *American Antiquity* **84**: 591–609.
- Sanger, M. C., Bourcy, S., Ogden, Q. M., and Troutman, M. (2020). Post-marital residence patterns in the Late Archaic coastal southeast USA: Similarities in stone tools revealed by geometric morphometrics. *Journal of Archaeological Method and Theory* **27**: 327–359.
- Sassaman, K. E. (2001). Hunter-gatherers and traditions of resistance. In Pauketat, T. R. (ed.), *The Archaeology of Traditions: Agency and History before and after Columbus*, University Press of Florida, Gainesville, pp. 218–236.
- 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.
- Sassaman, K. E., and Holly, D. H. (eds.) (2013). *Hunter-Gatherer Archaeology as Historical Process*, University of Arizona Press, Tucson.
- Sassaman, K. E., and Brookes, S. O. (2017). Situating the Claiborne soapstone vessel cache in the history of Poverty Point. *American Antiquity* **82**: 781–797.
- Schiffer, M. B. (1975). Archaeology as behavioral science. *American Anthropologist* **77**: 836–848.
- Scott, J. (2013). *Social Network Analysis*, Sage, New York.
- Sewell, Jr., W. H. (1992). A theory of structure: Duality, agency, and transformation. *American Journal of Sociology* **98**: 1–29.
- Shanks, M., and Tilley, C. (1987). *Social Theory and Archaeology*, Polity Press, Cambridge.
- Skousen, B. J. (2016). *Pilgrimage and the Construction of Cahokia: A View from the Emerald Site*, Ph.D. dissertation, Department of Anthropology, University of Illinois, Urbana-Champaign.
- Skousen, B. J. (2018). Rethinking archaeologies of pilgrimage. *Journal of Social Archaeology* **18**: 261–283.
- Skousen, B. J., and Buchanan, M. E. (2015). Advancing an archaeology of movements and relationships. In Skousen, B. J., and Buchanan, M. E. (eds.), *Tracing the Relational: The Archaeology of Worlds, Spirits, and Temporalities*, University of Utah Press, Salt Lake City, pp. 1–19.
- Slater, P. A., Hedman, K. M., and Emerson, T. E. (2014). Immigrants at the Mississippian polity of Cahokia: Strontium isotope evidence for population movement. *Journal of Archaeological Science* **44**: 117–127.
- Snow, D. A., Zurcher Jr., L. A., and Ekland-Olson, S. (1980) Social networks and social movements: A microstructural approach to differential recruitment. *American Sociological Review* **45**: 787–801.
- Spivey, S. M., Kidder, T. R., Ortmann, A. L., and Arco, L. J. (2015). Pilgrimage to Poverty Point? In Gilmore, Z. I., and O'Donoghue, J. M. (eds.), *The Archaeology of Events: Cultural Change and Continuity in the Pre-Columbian Southeast*, University of Alabama Press, Tuscaloosa, pp. 141–159.
- Stoltman, J. B. (2015). *Ceramic Petrography and Hopewell Interaction*, University of Alabama Press, Tuscaloosa.
- Surge, D. and Walker, K. J. (2005). Oxygen isotope composition of modern and archaeological otoliths from the estuarine hardhead catfish (*Ariopsis felis*) and their potential to record low-latitude climate change. *Palaeogeography, Palaeoclimatology, Palaeoecology* **228**: 179–191.
- Tarrow, S. (1998) Studying contentious politics: From eventful history to cycles of collective action. In Rucht, D., Koopmans, R., and Niedhart, F. (eds.), *Acts of Dissent: New Developments in the Study of Protest*, Rowman and Littlefield, Lanham, MD, pp. 33–64.
- Terrell, J. E. (2013). Social network analysis and the practice of history. In Knappett, C. (ed.), *Network Analysis in Archaeology: New Approaches to Regional Interaction*, Cambridge University Press, Cambridge, pp. 17–41.
- Thomas, J. (2008). Archaeology, landscape, and dwelling. In David, B., and Thomas, J. (eds.), *Handbook of Landscape Archaeology*, Routledge, London, pp. 300–306.
- Thompson, A. R., Hedman, K. M., and Slater, P. A. (2015). New dental and isotope evidence of biological distance and place of origin for mass burial groups at Cahokia's Mound 72. *American Journal of Physical Anthropology* **158**: 341–357.
- Thompson, V. D., and Birch, J. (2018). The power of villages. In Birch, J., and Thompson, V. D. (eds.), *The Archaeology of Villages in Eastern North America*, University Press of Florida, Gainesville, pp. 1–20.
- Thompson, V. D., and Krus, A. M. (2018). Contemplating the history and future of radiocarbon dating in the American Southeast. *Southeastern Archaeology* **37**: 1–11.
- Thompson, V. D., Marquardt, M. H., Cherkinsky, A., Roberts Thompson, A., Walker, K. J., Newsom, L. A., and Savarese, M. (2016). From shell midden to midden-mound: the geoarchaeology of Mound Key, an anthropogenic island in southwest Florida, USA. *PLoS One* **11**: e0154611.
- Thompson, V. D., Roberts Thompson, A., and Worth, J. E. (2018). Political ecology and the event: Calusa social action in early colonial entanglements. In Millhauser, J., Juarez, S., and Morehart, C. (eds.), *Uneven Terrain: Archaeologies of Political Ecology*, Archeological Papers No. 29, American Anthropological Association, pp. 68–82.
- Thompson, V. D., Jefferies, R. W., and Moore, C. R. (2019). The case for radiocarbon dating and Bayesian analysis in historical archaeology. *Historical Archaeology* **53**: 181–192.

- Thulman, D. K. (2019) The age of the Dalton culture: A Bayesian analysis of the radiocarbon data. *Southeastern Archaeology* **38**: 171–192.
- Walder, H., and Yann, J. (eds.) (2018). *Encounters, Exchange, Entanglements: Current Perspectives on Intercultural Interactions throughout the Western Great Lakes*, Midwestern Archaeological Conference Occasional Papers 2. <https://www.midwestarchaeology.org/mcja/occasional-papers>.
- Walker, K. J. and Surge, D. (2006). Developing oxygen isotope proxies from archaeological sources for the study of Late Holocene human–climate interactions in coastal southwest Florida. *Quaternary International* **150**: 3–11.
- Wallis, N.J. (2011). *The Swift Creek Gift: Vessel Exchange on the Atlantic Coast*, University of Alabama Press, Tuscaloosa.
- Wallis, N. J., Pluckhahn, T. J., and Glascock, M. D. (2016). Sourcing interaction networks of the American Southeast: Neutron activation analysis of Swift Creek complicated stamped pottery. *American Antiquity* **81**: 717–736.
- Wang, T., Surge, D., and Walker, K. J. (2013). Seasonal climate change across the Roman Warm Period/Vandal Minimum transition using isotope sclerochronology in archaeological shells and otoliths, southwest Florida, USA. *Quaternary International* **308**: 230–241.
- Wasserman, S., and Faust, K. (1994) *Social Network Analysis: Methods and Applications*, Cambridge University Press, Cambridge.
- Watkins, R. (2020). An alter(ed) native perspective on historical bioarchaeology. *Historical Archaeology* **54**: 17–33.
- Wellman, B. (1983). Network analysis: Some basic principles. *Sociological Theory* **1**: 155–200.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*, Cambridge University Press, Cambridge.
- Wengrow, D., and Graeber, D. (2015). Farwell to the ‘childhood of man’: Ritual, seasonality, and the origins of inequality. *Journal of the Royal Anthropological Institute* **21**: 597–619.
- Williams, J. W., Grimm, E. C., Blois, J. L., Charles, D. F., Davis, E. B., Goring, S. J., et al. (2018). The Neotoma Paleocology Database, a multiproxy, international, community-curated data resource. *Quaternary Research* **89**: 156–177.
- Wilson, G. D., Melton, M. A., and VanDerwarker, A. M. (2018). Reassessing the chronology of the Mississippian central Illinois River valley using Bayesian analysis. *Southeastern Archaeology* **37**: 22–38.
- Wilson, G. D., Bardolph, D. N., Esarey, D., and Wilson, J. J. (2020). Transregional social fields of the Early Mississippian midcontinent. *Journal of Archaeological Method and Theory* **27**: 90–110.
- Wolf, E. R. (1982). *Europe and the People without History*, University of California Press, Berkeley.
- Worth, J. E. (2017). What’s in a phase? Detangling communities of practice from communities of identity in southeastern North America. In Waselkov, G., and Smith, M. (eds.), *Forging Southeastern Identities: Social Archaeology, Ethnohistory, and Folklore of the Mississippian to Early Historic South*, University of Alabama Press, Tuscaloosa, p. 117–156.
- Wright, A. P. (2014). History, monumentality, and interaction in the Appalachian Summit Middle Woodland. *American Antiquity* **79**: 277–294.
- Wright, A. P. (2017). Local and “global” perspectives on the middle woodland southeast. *Journal of Archaeological Research* **25**: 37–83.
- Wright, A. P., and Loveland, E. (2015). Ritualised craft production at the Hopewell periphery: New evidence from the Appalachian Summit. *Antiquity* **89**: 137–153.
- Wylie, A. (1992). The interplay of evidential constraints and political interests: Recent archaeological research on gender. *American Antiquity* **57**: 15–35.

Bibliography of Recent Literature

- Ashley, K., Wallis, N. J., and Glascock, M. D. (2015). Forager interactions on the edge of the early Mississippian world: Neutron activation analysis of Ocmulgee and St. Johns pottery. *American Antiquity* **80**: 290–311.
- Bardolph, D. N. (2014). Evaluating Cahokian contact and Mississippian identity politics in the late prehistoric central Illinois River valley. *American Antiquity* **79**: 69–89.
- Gilmore, Z. I. (2015). *Gathering at Silver Glen: Community and History in Late Archaic Florida*, University Press of Florida, Gainesville.

- Birch, J., and Williamson, R. F. (2015). Navigating ancestral landscapes in the northern Iroquoian world. *Journal of Anthropological Archaeology* **39**: 139–150.
- Briggs, R. V. (2016). The civil cooking pot: Hominy and the Mississippian standard jar in the Black Warrior Valley, Alabama. *American Antiquity* **81**: 316–332.
- Buchanan, B., Hamilton, M. J., Kilby, J. D., and Gingerich, J. A. M. (2016). Lithic networks reveal early regionalization in Late Pleistocene North America. *Journal of Archaeological Science* **65**: 114–121.
- Cook, R. A., and Aubry, B. S. (2014). Aggregation, interregional interaction, and postmarital residence patterning: A study of biological variation in the late prehistoric middle Ohio Valley. *American Journal of Physical Anthropology* **154**: 270–278.
- Farley, W. A., Fox, A. N., and Hrynicky, M. G. (2019). A quantitative dwelling-scale approach to the social implications of maize horticulture in New England. *American Antiquity* **84**: 274–291.
- Gilmore, Z. I., and O'Donoghue, J. M. (eds.) (2015). *The Archaeology of Events: Cultural Change and Continuity in the Pre-Columbian Southeast*, University of Alabama Press, Tuscaloosa.
- Hart, J. P., and Engelbrecht, W. (2017). Revisiting Onondaga Iroquois prehistory through social network analysis. In Jones, E. E., and Creese, J. L. (eds.), *Process and Meaning in Spatial Archaeology: Investigations into Pre-Columbian Iroquoian Space and Place*, University Press of Colorado, Boulder, pp. 189–214.
- Hunter, R., Silliman, S. W., and Landon, D. B. (2014). Shellfish collection and community connections in eighteenth-century Native New England. *American Antiquity* **79**: 712–729.
- Kassabaum, M. C., and Nelson, E. S. (2014). Expanding social networks through ritual deposition: A case study from the Lower Mississippi Valley. *Archaeological Review from Cambridge* **29**: 103–128.
- Keehner, S. P., and Adair, M. J. (2019). Modeling Kansas City Hopewell developments and regional social interactions: A multisite ceramic analysis and new AMS radiocarbon ages. *Midcontinental Journal of Archaeology* **44**: 2–41.
- Kooiman, S. M., and Walder, H. (2019). Reconsidering the chronology: Carbonized food residue, accelerator mass spectrometry dates, and compositional analysis of a curated collection from the Upper Great Lakes. *American Antiquity* **84**: 495–515.
- Krus, A. M., Schilling, T., and Monaghan, G. W. (2013). The timing of Angel Mounds palisade construction: A search for the best chronological model. *Midcontinental Journal of Archaeology* **38**: 171–182.
- Lulewicz, I. H., Thompson, V. D., Pluckhahn, T. J., Andrus, C. F. T., and Das, O. (2018). Exploring oyster (*Crassostrea virginica*) habitat collection via oxygen isotope geochemistry and its implications for ritual and mound construction at Crystal River and Roberts Island, Florida. *The Journal of Island and Coastal Archaeology* **13**: 388–404.
- Lulewicz, I. H., Wallis, N. J., and Thompson, V. D. (2020). Exploring the season of mound building through oxygen isotope geochemistry at the Garden Patch site, Gulf Coast Florida, USA. *Southeastern Archaeology* **39**: 16–28.
- Marshall, C., and Kaestle, F. A. (2013). Ancient DNA from Angel Mounds. *Midcontinental Journal of Archaeology* **38**: 259–268.
- Monaghan, G. W., Schilling, T., Krus, A. M., and Peebles, C. S. (2013). Mound construction chronology at Angel Mounds: Episodic mound construction and ceremonial events. *Midcontinental Journal of Archaeology* **38**: 155–170.
- Pauketat, T. R., Boszhardt, R. F., and Benden, D. M. (2015). Trempealeau entanglements: An ancient colony's causes and effects. *American Antiquity* **80**: 260–289.
- Pluckhahn, T. J., and Wallis, N. J. (2018). Swift Creek at a human scale. *Southeastern Archaeology* **37**: 129–137.
- Rodning, C. B. (2014). Cherokee towns and Calumet ceremonialism in eastern North America. *American Antiquity* **79**: 425–443.
- Schilling, T. (2013). The chronology of Monks Mound. *Southeastern Archaeology* **32**: 14–28.
- Smith, K. Y., and Stephenson, K. (2018). The spatial dimension of the Woodland period. *Southeastern Archaeology* **37**: 112–128.
- Wallis, N. J. (2013). Swift Creek and Weeden Island mortuary landscapes of interaction. In Wright, A. P., and Henry, E. R. (eds.), *Early and Middle Woodland Landscapes of the Southeast*, University Press of Florida, Gainesville, pp. 204–218.
- Waselkov, G. A., and Smith, M. T. (eds.) (2017). *Forging Southeastern Identities: Social Archaeology, Ethnohistory, and Folklore of the Mississippian to Early Historic South*, University of Alabama Press, Tuscaloosa.
- White, A. A. (2013). Subsistence economies, family size, and the emergence of social complexity in hunter-gatherer systems in North America. *Journal of Anthropological Archaeology* **32**: 122–163.

- White, A. A. (2014). Changing scales of lithic raw material transport among early hunter-gatherers in mid-continental North America. *Archaeology of Eastern North America* **42**: 51–75.
- Wilson, G. D. (2016). Long-term trends in the making and materialization of social groups at Moundville. In Steponaitis, V. P., and Scarry, C. M. (eds.), *Rethinking Moundville and Its Hinterland*, University Press of Florida, Gainesville, pp. 44–53.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.