

NEW PERSPECTIVES ON BAHAMIAN ARCHAEOLOGY: THE LUCAYANS AND THEIR WORLD

Special Editor:

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Since its inception, the archaeology of the Bahama archipelago has followed the major paradigms of North American archaeology. These include the classificatory-descriptive, classificatory-historical, processual, and processual plus paradigms. The post-processual paradigm has received little attention in this archaeological community. Most of today's archaeological research embraces a mixture of approaches most influenced by the processual and processual plus paradigms, although an occasional study falling into the classificatory-historical paradigm finds its way into editorially-reviewed venues. While the islands have been largely surveyed, most excavations have concentrated on two areas: San Salvador island in the central Bahamas, and the Turks and Caicos. Thus much work needs to be done, as there are major gaps in our knowledge, some as fundamental as the development of local island chronologies. And while some of the research is published in peer-reviewed journals, much of it lays buried in unpublished reports or is simply not written up for wide-spread circulation. Finally, Bahamian archaeology has dealt with a few of the major topics considered to be the "grand challenges" of contemporary archaeological research because of their relevancy to global issues. Because we can learn a lot from the Lucayan's impact on the fragile ecosystems of the archipelago and vice versa, archaeologists working in the Bahamas are encouraged to address more of these issues.

Desde sus inicios, la arqueología del archipiélago de las Bahamas ha seguido los paradigmas principales de la arqueología norteamericana. Estos han incluido los paradigmas clasificatorio-descriptivo, clasificatorio-histórico, procesualista y "procesualista y más" (processual plus). El paradigma pos-procesualista ha recibido poca atención en esta comunidad arqueológica. La mayoría de las investigaciones arqueológicas de hoy día adaptan una combinación de posiciones, la mayoría influenciadas por los paradigmas procesualista y "procesualista y más", aunque en ocasiones algunos estudios que caen dentro del paradigma clasificatorio-histórico llegan a publicaciones principales. Mientras que la muchas de las islas han sido recorridas, la mayoría de las excavaciones se han concentrado en dos áreas: la isla de San Salvador en el centro de las Bahamas centro y en las Islas Turcas y Caicos. Así pues, nos queda mucho trabajo por hacer, ya que existen lagunas en nuestro conocimiento, algunas tan fundamentales como el desarrollo de cronologías locales de cada isla. Mientras que algunas investigaciones han sido publicadas en revistas con revisión colegiada o "peer-reviewed", la gran mayoría de la información está enterrada en informes no publicados o simplemente no ha sido redactada para su circulación. Finalmente, la arqueología de las Bahamas ha trabajado con algunos temas principales conocidos como los "grandes retos" de las investigaciones arqueológicas contemporánea por su relevancia a problemáticas globales. Ya que también podemos aprender mucho del impacto que los Lucayos tuvieron en el frágil ecosistema del archipiélago y vice-versa, los arqueólogos que trabajan en las Bahamas deben animarse a abordar más de estas problemáticas.

Depuis sa création, l'archéologie de l'archipel des Bahamas a suivi les grands paradigmes de l'archéologie de l'Amérique du Nord. Il s'agit notamment de la classification descriptive, de la classification historique, de la classification processuelle, ainsi que de celle-ci et ses paradigmes. Le paradigme post-processuel a reçu peu d'attention dans cette communauté archéologique. La plupart des recherches archéologiques actuelles proposent un mélange des différentes approches, essentiellement celles influencées par le processuel et le processuel avec

paradigmes. Toutefois, parfois une étude occasionnelle s'articulant autour de découvertes aux paradigmes classificatoires et historiques peut aboutir à une publication dans une édition à comité de lecture. Alors que les îles ont été largement prospectées, la plupart des fouilles se sont concentrées sur deux zones géographiques : l'île de San Salvador dans les Bahamas centrales et les îles Turks et Caïcos. Ainsi, beaucoup de travail doit encore être fourni, car il existe d'importantes lacunes dans nos connaissances, dont certaines aussi fondamentales que le développement des chronologies insulaires locales. Et tandis que certaines recherches sont publiées dans des revues évaluées par des pairs, la majeure partie restent enterrées dans des rapports non publiés ou ne sont tout simplement pas écrits pour une large diffusion. Enfin, l'archéologie des Bahamas a traité quelques-uns des grands thèmes considérés comme les « grands défis » de la recherche archéologique contemporaine en raison de leur pertinence face aux enjeux mondiaux. Parce que nous pouvons apprendre beaucoup de l'impact des Lucayans sur les fragiles écosystèmes de l'archipel et vice versa, les archéologues qui travaillent dans les Bahamas sont encouragés à travailler sur ces multiples questions.

Introduction

The papers in this edited volume come from the 2012 session, “New Perspectives on Bahamian Archaeology: The Lucayans and Their World,” held at the 77th Society of American Archaeology meetings in Memphis, Tennessee. It took a year to gather and edit the papers, so it is both timely and bittersweet that I finish the introduction to this collection in late 2013, as the Commonwealth of the Bahamas completes its celebration of its 40th anniversary of independence and when the Turks & Caicos assumed its own governor. I can't help but note how far Bahamian archaeology¹ has advanced, both theoretically and methodologically, during this period. Today, work on Bahamian archaeology is published in peer-reviewed journals and as chapters in peer-reviewed books, and research results are a regular feature of International Association of Caribbean Archaeology, Society for American Archaeology, and Bahamas Natural History conferences and proceedings. Bahamian archaeology has entries in Caribbean encyclopedias or handbooks (Gilmore and Reid 2014; Keegan et al. 2013; Saunders 2005) and four books have been published (Keegan 1992a, 1997; 2007; Keegan and Carlson 2008). Prior to 1973, there were two doctoral dissertations on Bahamian archaeology; since then there have been nine doctoral dissertations (three

from islands in the Commonwealth, three pertaining to the Turks & Caicos, and three whose subject included material from the Commonwealth and the Turks & Caicos) (Tables 1 and 2) and seven master's theses or master's papers (Table 3). In this brief essay, I attempt to situate the papers presented in this volume in the larger scope of archaeological theory and method, so that archaeologists working in the Bahama archipelago and elsewhere can both gauge how far we have come theoretically and substantively and consider what topics and models we should consider for future research. While the review is not exhaustive nor does it include everything that has been written on the subject of Bahamian prehistoric archaeology, it does highlight those contributions that have made the most significant impacts on what we know about the people who occupied the islands from its earliest peopling to the Spanish contact period.

Changing Paradigms

Generally speaking, Bahamian archaeology followed the early paradigmatic trends that characterized North American archaeology (*sensu* Willey and Sabloff 1980). Beginning with Brook's (1888) brief report on three Lucayan crania, Bahamian archaeology conformed to a natural history paradigm that Willey and Sabloff (1980:34), in their iconic history of North American

archaeology, called the “the Classificatory-Descriptive” period. During this time, archaeologists were interested in the description and classification of archaeological materials and the collection of artifacts for museums. The next paradigm, the “Classificatory-Historical,” was characterized by a concern with culture history. Archaeologists concentrated on the description and classification of artifacts, the development of trait lists, the creation of cultural chronologies, and the definition of cultures. This “school of thought” emerged around 1940 and lasted until 1960 in North

American archaeology (Trigger 2007). These studies invoked diffusion and migration as explanations for culture change. In the Bahamas, Granberry’s (1956) scholarship, based largely on his undergraduate honors paper (1952) and his Master’s thesis (1955), focused on the description and classification of Lucayan ceramics, and so this work exemplifies this classificatory-historical paradigm. Assemblages were defined to different culture periods based on their surface design similarities with Hispaniola.

Table 1. Dissertations on the prehistory of the Bahama archipelago

Name	Year	University	Island
Hoffman	1967	University of Arizona	San Salvador
Sullivan	1981	University of Illinois	Archipelago
Keegan	1985	UCLA	Archipelago
Carlson	1999	University of Florida	Grand Turk
Sinelli	2010	University of Florida	Turks & Caicos
Bate	2011	Indiana University	San Salvador
Morsink	2012	University of Florida	Middle Caicos

During the 1960-1970s, the “Processual” (or “Explanatory”) paradigm, dominated North American archaeology. Processualism championed positivism and its attendant features: hypothesis testing, the search for law-like behavior, and prediction by focusing mainly on environmental adaptations. While many archaeologists in North America and Europe were engaged in processually-oriented research, the archaeologists working in the Bahama archipelago continued their efforts of formal description and classification, something that many of their peers elsewhere were less interested in or largely abandoning. A good

example is in the area of ceramics, which continued to interest Bahamian archaeologists. For example, Sears and Sullivan’s (1978) and Granberry’s (1978) ceramic typologies (based on his 1952 and 1955 work) and Winter’s (1978) description of basketry-impressed ceramic griddles all were published in the same year. Sears and Sullivan’s (1978) typology was based largely on Hoffman’s (1967, 1970), Sullivan’s (1974), and MacLaury’s (1968, 1970) work in the central Bahamas and Sullivan’s ceramic classifications in the Turks & Caicos.

Table 2. Dissertations that include the prehistory of the Bahama archipelago

Name	Year	University	Island
Newsom	1993	University of Florida	Greater and Lesser Antilles and Bahama archipelago
Ostapkowicz	1998	University of East Anglia	Greater and Lesser Antilles and Bahama archipelago
Stokes	1998	University of Florida	Greater and Lesser Antilles and Bahama archipelago

Table 3. Masters theses (MA) or Masters papers pertaining to the prehistory of the Bahama archipelago

Name	Year	University	Island
Granberry	1955	University of Florida	Archipelago
MacLaury	1968	Florida Atlantic University	Cat Island
Sullivan	1974	Florida Atlantic University	Eleuthera
Keegan	1981	Florida Atlantic University	Archipelago
Carlson	1993	University of Florida	Grand Turk
Gubrium*	1998	University of Florida	Grand Turk
Sinelli	2001	University of Florida	Middle Caicos
Roth	2002	University of Calgary	Middle Caicos
Vernon*	2007	University of Florida	New Providence

*Master's papers

Early processualism, as it was practiced in North America, with its focus on settlement organization, subsistence settlement patterns, trade, social organization, and environmental adaptations (Trigger 2007: 442-443) was first realized in the Bahama archipelago through systematic settlement survey studies on individual islands. Many of the same archaeologists who were working on questions of

classification, typology, and culture history at this time also embraced settlement surveys in the late 1960-1970s. Of course, the two are not incompatible because, in order to study culture change, one must have a sound temporal framework, which was missing from earlier studies. The survey work of MacLaury (1968, 1970) on Cat Island, Sullivan (1974) on Eleuthera, and Sullivan in the Turks & Caicos from the

1970s (reported in his 1981 dissertation), are obvious examples of the application of settlement archaeology. The 1980s saw another wave of work. John Winter's work primarily on San Salvador (1980, 1981), but also on Cat Island, Rum Cay, Abaco, and New Providence (1981, 1982), and Keegan's work on Acklins Island, Andros, Crooked Island, Great and Little Exuma, Long Island, and Mayaguana during this period, (summarized in Keegan 1992:68) have added to our understanding of Lucayan settlement patterns. Sinelli's (2001, 2010) surveys on previously unstudied islands and cays in the Turks & Caicos demonstrate the viability of this approach. Nevertheless, coverage is spotty on some islands.

Hoffman's (1967, 1970) work at the Palmetto Grove site is the first systematically excavated site in the Bahama archipelago. It represents an early effort to understand and explain Lucayan culture history and material culture as localized adaptations to the Bahama archipelago's limestone geology environment. In spite of the processual model he tried to advance, his most significant contributions are in the description and classification of ceramics and other objects made from local materials, placing his work squarely in the "classificatory-historical" paradigm. Because of the processual interest in environmental adaptations, Hoffman had Elizabeth Wing analyze the faunal remains from the Palmetto Grove site (Wing 1969) thus beginning an interest in Lucayan subsistence patterns, which continues to this day. The study of trade and exchange captured Bahamian archaeologists' attention a decade later (Daggett 1980; Sullivan 1981) and several archaeologists used petrographic and chemical techniques in their studies to pinpoint source areas. For example, Winter and Gilstrap's (1991) study represents an important attempt at sourcing non-local ceramics and Johnson's (1980) work (in Rose 1987) signifies a prescient attempt at

sourcing jadeite (see below); however, the reasons for, organization of, and types of trade and exchange practiced by the Lucayans remained unexamined and untested. The scholarship on social organization lagged behind other processually oriented studies, but was studied and refined in the 1980-1990s by Keegan and Maclachlan (1989) and Keegan et al. (1998).

By the 1980s, processually oriented archaeologists employed three major paradigms: evolutionary ecology and its subset, human behavioral ecology, behavioral archaeology, and Darwinian or evolutionary archaeology (Hegmon 2003; Trigger 2007). Both human behavioral ecology and behavioral archaeology became well established in Bahamian archaeology. Several works applied the principles of human behavioral ecology. William F. Keegan's (1985, 1992), Keegan and Diamond's (1987) and Keegan's (1995) work addressed migration and colonization and Stokes' (1995, 1998) research focused on subsistence and diet.

Bahamian archaeologists, too, readily embraced behavioral archaeology, about 10 years after it was first introduced to the discipline as a whole. One of the major strategies of behavioral archaeology is the use of experimental archaeology to understand the past (Reid et al. 1975) and numerous archaeologists working in the Bahamas applied this approach to their subject matter. Experimental archaeology has been used to understand Lucayan shell tool production (Keegan 1981, 1984; O'Day and Keegan 2001), fishing strategies (Keegan 1982, 1986), salt extraction (Sullivan 1981), ceramic firing (Lambert et al. 1990), shell bead production (Carlson 1993, 1995); microlith manufacture and use (Berman et al. 1999), basketry production (Hutcheson 2001), and house construction (Aarons 1991). Gerace and Winter's study in this volume fits comfortably into the

behavioral archaeology paradigm since it deals with experimental methods of pottery manufacture. Behavioral archaeologists also sought to understand whether the archaeological record was formed by culture (“c”) or natural (“n”) formation processes (*sensu* Schiffer 1983 and elsewhere), a topic Keegan and Mitchell (1986) and Keegan (1992:72) addressed in their study of artifact distribution modes and Lucayan site types.

Another Caribbean research agenda at this time included environmental archaeology, the study of human-environment interactions through the reconstruction of past environments. Researchers studied plant remains (Berman 1992; Newsom 1993), animal remains (Berman 1994; Mitchell 1983; Wing 1989, 1994; Wing and Reitz 1982; Wing and Scudder (1983); and shorelines and coastal geomorphology (Keegan 1992b) to describe the natural environment and to observe patterns of resource use. Such questions continue to interest Bahamian archaeologists and much work in this area occurred in subsequent decades and continues to the present (Berman and Pearsall 2000, 2008; Berman et al. 2014; Carlson 1999; Carlson and Keegan 2004; Newsom and Pearsall 2003; Newsom and Wing 2004; Sinelli 2001, 2010; Whyte et al. 2005; Wing 2001). As noted below, much of the newer, more recent work reflects changing theoretical positions and addresses questions that go beyond description, quantification, and adaptation.

While the 1960s-1970s processual archaeology dismissed migration as a legitimate research topic, the 1980s-1990s saw a renewed interest in migration studies (Anthony 1990, 1997) and several studies in the Bahamas (Berman and Gnivecki 1995; Keegan 1985, 1992, 1995; Winter et al. 1985) cast new light on why migration took place and looked to new sources, routes, and timing that differed from previous models (Granberry 1956; Keegan 1985, 1992;

Sullivan 1981). While some Caribbean archaeologists who subscribed to the “Classificatory-Historical” paradigm continued to invoke migration as the source of culture change (Rouse 1986), processually-oriented studies, including those in the Bahamas, regarded migration as a social process that drew on environmental and economic push and pull factors. Today, the study of migration and mobility continues to be pursued in the Caribbean by numerous means including isotopic and DNA analyses of human remains [see papers in Curet and Hauser (2011); Keegan et al. (2013)].

In the late 1970s and 1980s, while archaeologists in the Bahamas were working primarily on ceramic typology and settlement survey, archaeologists in other parts of the world were exploring different theoretical perspectives, including post-processualism, which arose as a critique of processualism and its emphases on law-like behavior, scientific objectivity, environmental adaptation, systems theory, and behavior. Post-processualism applies critical theory, and examines culture, historical contingency, agency, religion, cosmology, and iconography and cultural constructions such as gender, ethnicity, and identity, which processualism ignored (Hodder 1985; Trigger 2007:444). Most of the approaches and content of post-processualism seems to have bypassed Bahamian archaeology at this time. Keegan’s (2007) work, a self-reflective cultural narrative of how we have come to understand and know Bahamian archaeology in the Turks & Caicos, is an outstanding exception, but was written many years after post-processualism first appeared.

Over 10 years ago, Hegmon (2003:216-217) introduced the concept of “processual plus” archaeology to describe the incorporation of post-processual subject matter into processual inquiry. While archaeologists pursuing this approach

respect the scientific method, they do not apply the formal hypothetico-deductive methodology that absorbed many archaeologists' attention in the early days of processualism (Hegmon 2013:230). In the "processual plus" approach, research questions transcend the examination of adaptation, are often oriented towards questions pertaining to culture including identity, gender, and symbolic systems, and draw on numerous paradigms. Some examples of the "processual plus" approach include O'Day's (2002) use of faunal data to investigate social differentiation and elite consumption patterns, the use of paleoethnobotanical remains to understand purposeful behavior (agency) in the creation of Lucayan transported landscapes (Berman and Pearsall 2000, 2008; Berman et al. 2014); and the examination of political authority through the symbolic use of wooden objects (Ostapkowicz'sv1998; Ostapkowicz et al. 2012; Ostapkowicz et al. 2013); Berman and Hutcheson's (2000) interpretation of Lucayan basketry as important social signifiers; and Berman's (2011a) work on the cosmological entanglement of Lucayan trade and exchange of non-local (and some local) materials. Several papers in this volume reflect Bahamian archaeologist's application of the "processual plus" perspective. The works by Hutcheson and Ostapkowicz, for example, investigate the role of perishable technologies in creating personal, community (i.e. village), island, and inter-island identities. Critical theory plays a role in today's "processual plus" archaeology (Hegmon 2003:230), and, as Trigger (2007) has argued in multiple publications, how we do archaeology or interpret the archaeological record is often influenced by the contemporary political, cultural, and social contexts in which we find ourselves. While Figuerdo does not claim critical theory as his theoretical basis, the approach is implicit in how he addresses long-held

assumptions about why manioc dominates discussions of Lucayan and Taíno subsistence economies.

Notable Achievements

Throughout its history, Bahamian archaeology marched largely to the same drum or lagged slightly behind contemporary theoretical trends in North American archaeology. In the case of post-processual archaeology, Bahamian archaeology pretty much bypassed it altogether. Although a few archaeologists adopted the processual approach in the late 1960s-1970s, it was not fully realized until the 1980s, when more sophisticated, mature processual paradigms emerged. The 1990s through the present saw the advent of the "processual plus" paradigm.

Even though there have been theoretical lacunae during these periods, numerous methodological advancements representing "firsts" or "near firsts" in Caribbean archaeology, took place in the Bahamas. In some ways, Bahamian archaeology has served as a "nursery" for techniques that have become accepted, necessary components of the Caribbean archaeology "tool kit." For example, the first zooarchaeological analysis of Caribbean faunal assemblages was Wing's analysis (1969) of the vertebrate remains from the Palmetto Grove site on San Salvador. Keegan (1985, 1992) was the first to conduct stable isotope research on skeletal remains from the Caribbean region. Berman and Pearsall (2000) were the first to apply phytolith analyses, although the findings did not yield certain results.

Recently, Wilson (2013) enumerated several techniques that he believes will contribute to moving Caribbean archaeology forward: the application of DNA to human and animal skeletal remains, the biochemical analyses of human skeletal remains, residue analysis, remote sensing, and chemical characterization of artifacts. While

Bahamian archaeologists have not used all of these techniques in their research, some of them are represented in their work. Stable isotope research is now a widely accepted form of study in the Caribbean (Pestle 2013; Laffoon 2013), and some of the work in the Bahamas laid the foundation for these developments. For example, Keegan and DeNiro's (1988) use of stable-carbon and nitrogen isotope ratios represents one of the first applications of this method to study human diet and as mentioned above, the first application in Caribbean research. This was followed up with Stokes (1995, 1998) work that included Lucayan samples, as well as samples from other parts of the Caribbean. More recently, Schaffer and Carr set samples of teeth from Preacher's Cave site on Eleuthera to the University of Adelaide Australian Centre for Ancient DNA; unfortunately the study did not produce useful results (Adler et al. 2011)

Berman and Pearsall (2000, 2008) conducted one of the earliest starch grain studies in the Caribbean to understand crop introductions, transported landscapes, and tool use. Their work uncovered the earliest evidence of chili peppers (Berman and Pearsall 2008) and squash (Berman et al. 2014) in the Caribbean. Their studies also revealed that stone microliths were used to prepare a variety of seed and root crops and that microliths were not limited to the processing of manioc, although manioc starch grains have been found on a handful of microliths from Early Lucayan sites (Berman et al. 2014). Johnson (1980 in Rose 1982, 1987) was the first to conduct X ray diffraction on jadeite and found it be similar chemically to that found in the Motagua Valley of Guatemala. The sourcing of jadeite is an ongoing research interest in the Caribbean and numerous studies are underway throughout the Antilles and the Bahamas to determine whether its origin is found locally or is external to the Caribbean archipelago (Berman 2011a;

Garcia-Casco et al. 2013; Rodríguez Ramos 2011). In faunal studies, methodological questions pertaining to the quantification of data and interpretation are being raised (Whyte et al. 2005). Finally, Lucayan subject matter has been recognized by the discipline of anthropology. William F. Keegan and Morgan Maclachlan's (1989) article, "The Evolution of Avunculocal Chiefdoms: A Reconstruction of Taíno Kinship and Politics, was bestowed the 1989 American Anthropological Association Morton H. Fried Prize for the best paper in general anthropology.

Moving Forward

In spite of the many advancements, much remains to be done, theoretically, as well as methodologically, however (Berman et al. 2013). In two recent publications, Wilson (2007, 2013) suggested topics that need to be investigated in greater depth in Caribbean archaeology. To their credit, many Bahamian archaeologists have already begun to study or embed these issues into their research, as we see here in this collection of papers and elsewhere. For example, Wilson (2013) advises that cultural links between Central and South America and the Antilles should be studied and that cosmology and symbolism as reflected in artifacts should be investigated. In the Bahama archipelago, archaeologists typically look for Lucayan connections with the Greater Antilles (e.g., Berman 2011a; Granberry 1956; Sears and Sullivan 1978) and Ostapkowicz's important study in this volume addresses how Lucayan duhos resemble and differ from neighboring Antillean examples. The sourcing of jadeite found in Bahamian contexts is another example of this kind of research, and such a study is underway.

Wilson (2013:573) argues that we need to eliminate the boundary between our conceptualization of prehistory and colonial history. Instead of a sharp divide, we need to

consider continuities, not divisions. As Silliman (2005:55) has noted, such a view has served as an “artificial disciplinary barrier” that has lessened the exchange of ideas about “historical processes and cultural histories.” Numerous researchers have begun to question the idea that the Lucayans became extinct soon after Spanish contact, an idea that appears ubiquitously throughout the literature. Gnivecki (1995, 2011), Sinelli (2010), Ostapkowicz (this volume), and Morsink (this volume) raise the possibility that the Lucayans were present in the Bahama archipelago beyond 1513, the date that is most often used to mark their extinction (Sauer 1966 and others). Thus the blurring of what constitutes “prehistory” and the historical era in the Bahama archipelago has begun. In his paper, Morsink attempts to bring the Lucayans in the Turks & Caicos from a place in history that views them primarily as victims of Spanish greed and enslavement to one that views them as active agents engaged in the colonial project. His work challenges us to imagine that another kind of economic relationship (besides enslavement) existed between the Spanish and Lucayans in the emerging sixteenth expanding world economy and that the histories of the Lucayans and Spanish were intertwined in different ways than the documents suggest.

Among his recommendations for Caribbean archaeology, Wilson (2013) notes, too, that the study of the household is a high priority and this is especially important for the Bahama archipelago. For almost 50 years, archaeologists have excavated households or portions of households but, unfortunately, only a few have summarized their findings formally or in peer-reviewed publications (e.g., Berman and Pearsall 2000: Figure 3; Carlson 1993). Similarly, we have very little understanding of village spatial organization (for exceptions, see Blick and Bovee 2007; Keegan 2007). A number of special

purpose sites have been reported (Sinelli 2001; 2010; Vernon 2007), and, in fact they may represent localized activity areas within a household or village. Nevertheless, these, reports, too, have not made their way into the public arena by way of peer-reviewed publications. Another topic worthy of study includes the emergence of complex polities (Wilson 2013: 572-573), which Keegan (2007) has studied in depth on Middle Caicos. As Wilson (2013:573) notes, however, we do not have a good idea of what a Caribbean *caciazago* looks like, and I suspect there is considerable variability in these formations. Keegan (2007) makes a good case for how a secondary Taíno chiefdom on Middle Caicos was organized. However, we have less of an idea if Lucayan chiefdoms existed outside of the Turks & Caicos (Berman 2011a), although Ostapkowicz (this volume) believes they were present in the Bahamas, while Blick et al. (2011) suggests that more than one might have been present per island. The questions for archaeologists working in the rest of the Bahamas is to determine first, what we mean by polities and whether complex polities existed on the other islands outside of the Turks & Caicos. We must also establish whether other forms of social organization existed (e.g., “big man” or “great man” societies), how power and authority were achieved (and how they are to be differentiated), and what the material signatures of these social forms and processes look like (Berman 2011a,b; Berman et al. 2013). The duhos that Ostapkowicz studied (this volume) raises interesting questions about the role they played in the signification and expression of Lucayan power, authority, and hospitality and the emergence of difference—whether it is group difference (local or regional identity) or individual difference such as inherited or achieved positions.

Wilson (2013:572) encourages us also to pursue studies of the human impact

on the environment. As Hegmon (2003) notes, we no longer view humans as a backdrop for adaptation, which was foundational to the processualist approach; we now view humans as a “part of the environment,” where human agency is responsible for wreaking environmental instability and disequilibrium, as well as maintaining stability. Several Bahamian studies have addressed these questions. The exploitation and consumption of animal protein continue to intrigue Bahamian archaeologists and numerous studies such as Blick (2007, 2012), Carlson (1999), Carlson and Keegan (2004), Morgan and Albury (2013), and Wing and Wing (1995) have examined changes in faunal profiles, including extinctions and the decline of certain species, which has been attributed them to anthropogenic behaviors.

Wilson (2007, 2010) notes, too, that we now have enhanced tools to understand past ecosystems, including climate change. On San Salvador and Eleuthera, archaeologists are involved with geologists and botanists in coring projects that are collecting environmental and geological data to be used in long-term climatic and environmental reconstructions. Through this collaborative work, the impact of hurricanes, periods of temperature increase (Medieval Warming Period) and temperature decrease (Little Ice Age), sea level rise, other environmental disturbances, and periods of stability will add to understanding Lucayan responses such as migration, colonization, settlement and land use patterns, while contributing to an understanding of long-term global climate change.

Wilson (2013) also encourages us to examine demographics, which he notes is “uneven” in terms of settlement data. While, as mentioned previously, many of the islands in the archipelago have been surveyed and small-scale surveys continue to be conducted thanks, largely to environmental and cultural resource

management projects, some islands, such as the Turks & Caicos (Keegan et al. 2008; Sinelli 2001, 2010) and San Salvador (Blick 2011) have received greater areal coverage than others. Although we have a general picture, at least on San Salvador, of how site location co-varies with natural features (Blick et al. 2011), questions such as the numbers of people who occupied the sites (the demographics to which Wilson refers), the length of occupation, residential mobility, seasonal occupation, and the function of special purpose sites remain largely unexplored. Except for San Salvador and Middle Caicos, island chronologies are still not worked out fully. Another challenge is to locate more Early Lucayan Periods sites; only a handful of occupations from this period have been excavated (Berman 2011a, b; Berman et al. 2013; Bohon 1999; Sinelli 2013); consequently, the measurement of demographic change and migration and colonization patterns and sequences cannot be approached fully until we have an improved understanding of this period. Finally, the islands of the Bahamas need to be resurveyed regularly to assess the impact of human development and climate-related events on sites. In January and June 2013, Perry L. Gnivecki and I noted that many of the sites that Sullivan (1974) recorded on Eleuthera have been wholly or partially destroyed due to storm erosion and modern day construction.

Wilson (2007, 2013) has provided Caribbean archaeologists with a challenging set of questions to pursue, yet one topic he fails to mention is gender, a subject that Caribbean archaeologists, including those working in the Bahama archipelago have neglected. Hegmon (2003:216) has noted that the archaeology of gender is “paradigmatic of processual-plus” archaeology; in other words, the study of gender has become mainstream archaeology. Its notable absence from our Bahamian (and

Caribbean) scholarship serves as an example of where we have lagged behind other areas of study.

In a somewhat related re-envisioning of archaeological directives for the discipline writ large, Kintigh et al. (2014) have identified a series of 25 “grand challenges;” major archaeological issues that the authors believe should guide contemporary archaeological research and scholarship. They are organized into five topics 1). the emergence of communities and complexity; 2). resilience, persistence, transformation, and collapse; 3). movement, mobility, and migration; and 4). cognition, behavior, and identity; 5). human-environment interactions. A few of the study’s authors also argued that the “grand challenges” should be relevant to current-day issues (Kintigh et al. 2014:7).

In another recent re-charting of contemporary archaeological research, Hegmon (2014) and others have challenged the discipline to explore the “archaeology of the human experience.” Such an approach requires us to first identify past threats to human well being and situations in which societies are vulnerable (e.g., food insecurity, physical safety) and then study strategies that people used to improve their lives, protect themselves from harm, and build systems to insure their physical, social, and cultural quality of life. While several paradigms are being explored, Hegmon (2014) advocates the use of the United Nations Development Programme’s (UNDP) approach to human security (<http://www.undp.org>). This approach should make archaeological research and scholarship more relevant to contemporary global concerns.

Bahamian archaeologists have not been particularly attentive about making their research relevant to today’s concerns, but the possibilities to do so are great and the overlapping programs proposed by Hegmon (2014), Kintigh et al. (2014), and

Wilson (2007, 2023) can be accomplished, particularly in areas for which we have greater empirical evidence. For example, because rich bodies of paleoenvironmental and archaeobiological data have been collected through archaeological excavations and geological and botanical research, Bahamian archaeology has the potential to answer questions related to long-term human-environment interactions. Human response to climatic and environmental issues such as global warming, sea level rise, forest fires, and hurricane frequency, duration, and intensity can be tracked through the archeological record. These findings can provide data for predictive models that can influence potential solutions and policy decisions. Blick (2011, 2012) has charted changes in marine species size and richness at several Lucayan sites on San Salvador; such longitudinal work can be very useful to the Bahamas Department of Marine Resources in understanding intensified or over-harvesting of fish and shellfish due to tourism. Did the Lucayans respond to diminishing returns and if so, how? Another example draws upon paleobotanical remains. Berman et al. (2014) have found evidence for *Calathea latifolia* (leren) in Lucayan sites, yet this crop plays no role in contemporary Bahamian agriculture. Leren offers a nutritious, filling, tasty, easily grown, harvestable, and sustainable food source that can be grown in house gardens or at a larger scale. The production of such plants would be attractive to household subsistence economies, as well as local and global markets (Martin and Cabanillas 1976).

Finally, islands possess profoundly fragile ecosystems (Walker and Bellingham 2011), and the destruction of the Bahamian landscape due to construction, road building, traffic, pollution, population increase, hurricanes, torrential rains, rising sea level, erosion, and a host of other natural and

human-induced factors make it imperative that we intensify environmental and cultural heritage preservation efforts before evidence for the past is compromised or compromised further (Pateman 2011). We must weigh our efforts to understand the past, but at the same time figure out ways to preserve it. Interestingly, neither Kintigh et al. (2014) nor Hegmon (2014 al. (2014) spoke to the role of archaeology in nation-building and cultural heritage management, two important contemporary issues with significant national and global economic and political implications.

Summary

The purpose of this brief historical overview was to contextualize the intellectual trajectory of Bahamian archaeology and to position the papers presented here in Lucayan, Caribbean, and disciplinary theoretical contexts. As the papers demonstrate, today's Bahamian archaeology represents mainly a mix of perspectives largely representative of behavioral archaeology and processual plus paradigms. Like much of the archaeological research being conducted today in North America (Hegmon 2003) and the Caribbean (Keegan et al. 2013; Siegel 2013; Wilson 2007, 2013), the papers in this volume speak to a range of topics including artifact replication, indigenous encounters with Europeans, mortuary variability, and local and regional differences in material culture. Gerace and Winter's contribution falls clearly into the behavioral archaeology paradigm, which has a rich history in Bahamian archaeology. Their work will contribute to a better understanding of Lucayan ceramic variability as observed by Bate (2011), Berman (2012), and Granberry and Winter (1995). Ostapkowicz's work

exemplifies the processual plus paradigm. She demonstrates how questions work related to Lucayan political economy, symbolic systems, and identity can be investigated through a variety of traditional (e.g., stylistic) and cutting edge scientific methods. Hutcheson, too, raises issues of individual, community, and island identity by way of the analysis of perishable technologies such as basketry. Morsink's work pushes us to think in terms of world-systems, while Figueroa's paper urges critical and judicious use of the chronicles that describe indigenous lifeways. Similarly, Schaffer's study demonstrates the importance of constantly revisiting data to correct previous studies or secure new findings and provide new interpretations. His work has the potential to contribute to the "archaeology of human experience" paradigm, as he addresses skeletal pathologies and trauma that speak to disease and other conditions brought on by pathogens and social causes. The "grand challenges" raised in the Kintigh et al. (2014) study are not explicitly addressed in these papers, but the potential to address them exists. For example, Ostapkowicz's and Hutchison's studies contribute to the "grand challenge" topics of cognition, behavior, and identity.

In summary, the papers presented here demonstrate that contemporary Bahamian archaeologists are applying a mix of last 20th century and early 21st century models and methods consistent with archaeologists who work in other areas of the world. The challenge to make Bahamian archaeology relevant to contemporary problems offers exciting opportunities, along with the pursuit of the important Caribbean-specific questions laid out by Wilson (2007, 2013).

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Notes

¹ Throughout this essay, my use of the term Bahamian archaeology refers to the archaeological record of the early peoples who colonized the Bahama archipelago. These include the people who preceded the Lucayans, the Lucayans, and the Spanish. I do not like to distinguish between the “prehistoric” and “historic” periods,

although it is necessary to observe convention. Bahamian archaeology includes the rich European (post Spanish) and African material record, but, here I focus on the pre-European, pre-African past.

² Sullivan's dissertation was completed in 1981, but was based on research conducted in the 1970s.

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