Curating the Past: Caribbean Archaeology at the Yale Peabody Museum of Natural History

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ABSTRACT
Well-curated archaeological collections can be used as sources of information in developing new research programs or to complement established ongoing projects. In addition, with the pace of modern development and subsequent archaeological site destruction, museums may become increasingly important as the only repositories of an obliterated cultural patrimony. I review the papers presented here from the perspective of current issues in Caribbean archaeology.

KEYWORDS
Heritage preservation, zooarchaeology, cultural systematics, ceramic compositional analysis, human skeletal analysis, historical archaeology.

Introduction

The Caribbean papers in this issue highlight the importance of existing archaeological collections for problem-oriented research. Depending on quality of recovery and curation methods, the collections may be used in pilot studies to guide additional follow-up fieldwork or to answer specific questions. Several of the authors noted the importance of old archaeological museum collections, especially given the pace of modern development and subsequent site destruction. The urgency of this unfortunate state of affairs cannot be emphasized enough and, in the world of heritage management and legislation, politicians need to be told constantly that it is indeed crucial to preserve cultural patrimony. Unfortunately, many of the Caribbean island nations are so strapped financially that offers from multinational corporations with deep pockets for resort development on prime beachfront land are tough to resist. In these cases, heritage preservation is often overlooked by local politicians in their desire to attract and not delay the influx of tourist money (Cummins 2000; Sutty 2001; Crock 2005; Sanz 2005).

So, museum collections are important. Given that, let's take a look at what these 11 papers tell us about Caribbean archaeology based on collections housed at Yale University's Peabody Museum of Natural History, undoubtedly the largest, most extensive, and best-organized repository of archaeological collections from the Caribbean in the world.

The papers by Maureen DaRos and Roger Colten (DaRos and Colten 2009) and Arie Boomert (2009) are excellent overviews of Yale's involvement in Caribbean archaeology and the nature of cultural interactions between the Orinoco Valley and the southern Lesser Antilles, respectively. The other papers can be divided into

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five themes: Archaic zooarchaeology (1 paper); cultural systematics (3 papers); ceramic compositional analysis (2 papers); human skeletal analysis (2 papers); and historical archaeology (1 paper).

Archaic Zooarchaeology

Preceramic occupations in the Caribbean are receiving renewed interest in recent years. Even the term "preceramic" is being called into question, with some evidence that these people invented the use of pottery independent of the Saladoid interlopers (Keegan 2006; Rodríguez Ramos et al. 2008). Given suggestive evidence for the use of pottery in the "preceramic" age, I think we should jettison that term from our vocabulary and replace it with "Archaic."

Quite a bit of research is now suggesting that Archaic populations did not tread so lightly on the landscape and that it is a mistake to think of those people as simple foragers and collectors. Consistent with other detailed studies of early occupations in the Americas, Roger Colten, Elizabeth Newman and Brian Worthington (2009) found a degree of complexity in Archaic subsistence adaptations heretofore little recognized in the Caribbean.

Colten et al. (2009) describe how the more than half-century-old Paul Hahn collection can be used to reveal new insights into Archaic adaptations on Cuba. They noted that Hahn's own research centered on the chronology and artifacts of the Archaic, so it is gratifying to read that his collection was made by almost modern standards, including the retention of all vertebrate remains that did not pass through the one-quarter-inch mesh screen of his field sifters. Walter Taylor's (1948) *A Study of Archeology* had been out for eight years by the time of Hahn's fieldwork and he may have taken the message seriously: "The archeologist is obligated to preserve, whether in publication or some permanent repository, the full body of his empirical data and records. Since he has destroyed the original record, his transcript and the recovered specimens are the only substitute" (Taylor 1983:155). Unfortunately, Hahn did not seem to retain a systematic collection of invertebrate remains. If Hahn had been in the field 10 years later, he may also have reserved bulk unsifted soil samples to collect smaller than one-quarter-inch remains using the newly important technique of flotation analysis (Struever 1968). In any case, the large and systematic collection of vertebrate remains allowed Colten and his coworkers to conduct a sophisticated zooarchaeological analysis.

Two shell dates obtained from the Hahn collection (Colten et al. 2009) placed a portion of the Las Obas occupation to the Late Archaic, just before the earliest known Ostionoid occupations on Cuba. Given the acknowledged complications stemming from the marine reservoir effect on shell dates (Colten et al. 2009), it might be a good idea to submit samples of hutia bones for dating as well. Flemming and MacPhee (1999:7-8, tbl. 1) have had success in dating hutia bones from archaeological sites on Puerto Rico.

No matter how the excavation levels were combined or separated for analytical units (Colten et al. 2009), the people of Las Obas were eating lots of hutias, apparently of a single species. If flotation had been conducted the relative percentages of faunal classes, including fish, birds and reptiles, may have been somewhat different, but in absolutes there were great feasts of hutias in this Archaic village. It would be interesting to get some idea of meat weight through allometric studies. I wonder what the viability is for the breeding population of hutias if subadults were consistently targeted for consumption. The suggestion of hutia management is intriguing and brings us closer to ideas being considered for ceramic age lifeways and adaptations. I am now curious about the associated artifact assemblage in the Las Obas site: What is the groundstone technology like? Is there any evidence of plant processing? What is the nature of the paleoecological record associated with these people? Is there any evidence of managed landscapes? We are finding such tantalizing evidence in recent studies in Puerto Rico and elsewhere in the Caribbean (Newsom and Wing 2004; Siegel et al. 2005). The Maruca site on Puerto Rico has given us a pretty good picture into less-than-simple settlement organization and mortuary behavior in the Archaic (Rodríguez López 1997, 1999).

Elizabeth Wing observed that hutias were introduced to Puerto Rico during the ceramic age from Hispaniola (Wing 1989:141, 2001; Newsom and Wing 2004:157; see also Morgan and Woods 1986). There is documentation (Woods et al.

2001) of pre-human distributions of hutias across the western Antilles, including Cuba, based on molecular, morphological and paleogeographic data. If Archaic people captured and kept hutias on Cuba, then it is conceivable that these animals were transported to other islands in the Greater Antilles, including Puerto Rico, before the arrival of Saladoid colonists from South America (Flemming and MacPhee 1999:6).

Cultural Systematics

The usefulness of the Yale collections varies in relation to the questions asked. In common with any museum archaeological collections, especially old ones, Yale's holdings are probably most useful when addressing cultural systematics, reflected by most of the papers here. If nothing else, archaeologists of bygone years collected culturally distinctive artifacts. If our research interests happen to coincide with those of the original excavators, then we may be in pretty good shape. Of course, this also depends on how well the excavators maintained provenience control, especially in the case of stratified sites, and how well the collections are curated. The papers by Barse (2009), Hardy (2009) and Gutiérrez and Rodríguez (2009) rely most directly on the collections in the spirit of the goals for which they were made originally.

I think it is important to talk a little about terminology. Ben Rouse is probably best known for his systematic and careful classifications of artifact assemblages at clearly defined scales of analysis. Regardless of what we in the Caribbean may think of Rouse's approach to archaeology, we all tend to use his time-space framework and taxonomic terminology as a way to organize data and communicate with each other (Wilson 2007).

The earliest Neolithic groups who migrated to the Caribbean islands from South America are called the Saladoid series of cultures. To distinguish people in the islands from the mainland, Rouse used the term Cedrosan Saladoid, named after the type site of Cedros on Trinidad. Cedrosan is the subseries name. The subseries term modifies and is used in relation to a series name. Other examples of subseries are Huecan Saladoid, Meillacan Ostionoid, and so on. Subseries consist of sets of related styles that are narrower in time or space, or both, than the total set of styles defining a given series. The most specific level of assignment is the "complex" or "style." A complex is relatively narrow in time and space and refers to the local group. Gary Vescelius (1980) argued that a complex can be subdivided into what he called "facies" that represent specific activities, with associated sets of artifacts, conducted by members of a local group.

Bill Barse, who has had a long commitment to Orinoco Valley prehistory, works very well within the terminological structure. I don't have a problem with Barrancas dating to 900 BC, but I don't see how Ronquin is a first millennium AD occupation, unless there is long-term continuity in this region from BC times to AD 1000, similar to what Corinne Hofman documented for a hold out of Saladoid on the island of Saba (Hofman 1993:158, 1995:237). We do get zoned-incised-cross-hatched pottery, well-executed white-on-red pottery, and modeled-incised pottery by 500 BC in Cedrosan Saladoid assemblages.

According to Rouse (1992), the Caribbean early-ceramic age is characterized by the Saladoid series of cultures, which brought a well-developed ceramic technology and attendant behavioral strategies from the Orinoco Valley. Evidence to date indicates that the early-ceramic age spans the period from about 500 BC to AD 600, depending on where in the Caribbean between Venezuela and the east coast of Hispaniola we're talking about. Post-Saladoid groups occupying the Lesser and Greater Antilles are referred to collectively as late-ceramic age peoples.

Much of the basis of Rouse's influence of over six decades of research in the Caribbean was his careful modal or attribute study of ceramic decorations, technology and vessel shapes and of other classes of material culture, including shell, bone and stone. The papers by Hardy (2009) and Gutiérrez and Rodríguez (2009) follow in this tradition. Gary Vescelius was one of Rouse's undergraduate students at Yale and his 1952 bachelor's honor's thesis (Vescelius 1952) is still considered one of the most authoritative references in the archaeology of St. Croix specifically, and the Virgin Islands generally. Meredith Hardy combined an analysis of Vescelius's Yale collection with the results of more recent investigations to address chronology and settlement patterns on St. Croix. A couple of quibbles here: I am not sure that there is any good evidence for rank social organization in Saladoid society and we can no longer treat ce-

ramic griddle fragments as de facto evidence for manioc bread preparation. This latter point has been established through archaeobotanical studies (Pagán Jiménez et al. 2005; Perry 2005). Hardy (2009:105) makes a curious point about the presence of "the Cuevas culture from Puerto Rico" in the Salt River site. This begs the question: What is the relationship between the Cuevas and Coral Bay–Longford complexes? I am also interested in the decrease in the number of settlements and possible reorganization with "a new hub" during the Magens Bay–Salt River II period (AD 900 to 1200) and further decreases during the Magens Bay–Salt River III period (AD 1200 to 1500). I made a similar observation for site distributions in two river valleys of Puerto Rico in the transition from the Santa Elena to Esperanza periods (AD 1200 to 1500). In that case, I suggested that local population restructuring was related to increasingly territorial Taíno polities (Siegel 2004:91–92). Perhaps the late-prehistoric geopolitical dynamics in the Greater Antilles were spilling over and having an effect on life in the Virgin Islands as revealed in Hardy's settlement analysis (Hardy 2009).

Regarding artifact systematics, Gutiérrez and Rodríguez (2009) lament that many archaeologists uncritically use Rouse's method of classification in Puerto Rican ceramics analysis. And, they suggest that Rouse's use of modes was inconsistent, imprecise and often undefined, resulting in confusion and poor definition of ceramic styles. I agree with Gutiérrez and Rodríguez that uncritical use of Rouse's (or anybody's) analytical method is lamentable and poor scholarship.

Some clarification is needed in regard to Rouse's work. Gutiérrez and Rodríguez (2009:123) state "that Rouse introduced confusion about modes and types in 1939, when he stated that jar and boat-shaped bowl were modes.... However, according to his own definition of type as 'a complete artifact'..., these attributes defined by him as modes are actually types." Gutiérrez and Rodríguez fail to understand that Rouse tabulated modes of pottery *by three dimensions*: material, shape and decoration. Rouse defined specific modes appropriate for a given assemblage of artifacts. For instance, in the Hacienda Grande site he identified vessel-shape modes for incense burners, bottles and a variety of bowls (Rouse and Alegría 1990:41). When these modes were defined and tabulated, he was *not* dealing with complete vessels but sherds, evidenced by photographs and illustrations (e.g., Rouse and Alegría 1990, figs. 9, 10 and pl. 3).

Gutiérrez and Rodríguez (2009:123) state that "the major limitation of Rouse's work...was that he never published his modal listings, with the exception of those he established for Fort Liberté...and the 'Scientific Survey'." On this point, Rouse was unambiguous: "The list of modes given below is not exhaustive.... The list merely presents the features of artifacts which seem most favorable for historical study" (Rouse 1964:46). In regard to the Hacienda Grande analysis, Rouse noted that his "tabulations are too extensive to publish here. They are on file in the Yale Peabody Museum, where interested persons may consult them" (Rouse and Alegría 1990:39). I requested his list of modes from the Yale Peabody Museum and was sent an unpublished manuscript with 186 attributes and modes for the then-defined Cuevas ceramic style (Rouse 1952). Rouse was unabashedly interested in time-space systematics. To that end he published modes of artifacts that he felt best addressed the geographic and temporal distributions of cultural units, or complexes. Moreover, Rouse did this with clarity and an open mind. If Gutiérrez and Rodríguez have a more refined and objective way to classify Caribbean artifacts, then I invite them to do so as clearly and concisely as Rouse did over his 60-plus-year career. Of course, and as I tell my students in introductory archaeology classes, the methods we use in archaeology derive from the questions we are asking. Rouse had clearly defined questions and he devised methods, including modal analysis, to answer them. It would be a sorry state of affairs in Caribbean archaeology if we have not come up with additional questions to address since Rouse.

In furthering their critique, Gutiérrez and Rodríguez question Rouse's discussion of the La Hueca style, but then review Peter Roe's (1989) componential analysis of Cedrosan Saladoid vessels. They disassociate Roe's work from "the Cultural History paradigm" (read Rouse) because it "is within the theoretical framework of the New Archeology" (Gutiérrez and Rodríguez 2009:126). I think Roe would take some exception to being characterized as a "New Archeologist," given his interest in pots as expressions of mind. In fact, he contrasts his approach to that of the New Archae-

ologists: "This systemic perspective stands in stark contrast to the 'artifact physics' approach common in modern archaeology. In the latter highly 'etic' mode the archaeologist is often content to portray the accidental fragments he/she encounters (potsherds), rather than attempting to reconstruct the cultural wholes (pots).... It appears to have escaped the attention of most archaeologists [read New Archaeologists] that Amerindians did not manufacture potsherds; they made pottery" (Roe 1989:268). Roe embraced Rouse's modal analytic approach: "When coupled with modal analysis...[generative grammatical methodology] can compare both ceramic vessel form and surface decoration between traditions or series" (Roe 1989:279). And, Rouse embraced Roe's approach: "See Roe 1989 for a study of the whole vessels...from the Hacienda Grande site" (Rouse and Alegría 1990:39).

Ceramic Compositional Analysis

The Missouri University Research Reactor Center (MURR) has sponsored a remarkably large-scale, geographically extensive compositional study of pre-Columbian and historical period pottery in the Caribbean. I am finding these studies to be more provocative and tantalizing than definitive at this point, including my contribution of Puerto Rican samples to the research (Siegel et al 2008). Hardy (2009:115) refers to "interactions between...communities" on St. Croix and Puerto Rico in the early and post-Saladoid periods based on ceramic compositional data. In our compositional analysis, we found one sherd from Maisabel with 6% to 8% probability coming from St. Croix (Siegel et al 2008). The point is that we are now taking the necessary next steps in Caribbean archaeology to address inter- and intra-island trade and exchange networks through systematic compositional studies.

The paper by Christopher Descantes, Robert Speakman and Michael Glascock on the Antiguan sites is part of this larger research. By carefully selecting sherds from deposits in a series of Saladoid and post-Saladoid sites on the island these researchers hoped to find some unique recipes in the construction of pottery associated with specific cultural complexes. Results suggest that throughout ceramic-age prehistory, from the earliest Saladoid through the late prehistoric occupations, people selected the same clays in fabricating pots (Descantes et al. 2009). I had precisely the same results from the samples submitted to MURR from the Maisabel site (Siegel et al 2008). I think the next step in this research is to carefully select sherds from a diverse range of ceramic wares *within* cultural complexes to address compositional variability against vessel functions. One thing we did find was that site location on Puerto Rico seemed to bear strongly on compositional makeup of the vessels. Compositionally, sherds from Maisabel were more similar to each other, regardless of time period, than to sherds from Site HU-7, on the east coast of Puerto Rico.

The MURR team also analyzed a sample of sherds from St. Croix reported by Birgit Faber Morse (2009). On the basis of some of these data, she suggested connections between St. Croix and the Dominican Republic, specifically the late-prehistoric occupations in the ball court centers of Salt River and La Aleta. This idea is consistent with Hardy's observations on sociopolitical dynamics during the Magens Bay–Salt River periods.

Human Skeletal Analysis

The papers by Rose Drew (2009) and Alan Gillott (2009) offer glimpses into pre-Columbian behavior based on skeletal remains excavated by Rainey and Rouse. Ambiguities in placing many of the burials into the chronological sequence potentially may be resolved by accelerator mass spectrometry (AMS) dating, which will help Drew develop her arguments about changing patterns of health and disease. Her efforts to identify status distinctions on the basis of stress and pathologies in the skeletal remains are laudable and should be treated as testable hypotheses. Once issues of burial chronology are clarified and we have larger sample sizes, then Drew's ideas can be assessed objectively.

Historical Archaeology

The post-Columbian era is represented by Annette Silver's analysis of English pottery from Trinidad (Silver 2009). I found her analysis of the St. Joseph ceramics a tantalizing way to identify the presence of an English military regiment by way of comparison with similar assemblages ex-

cavated in English regimental sites in Canada. It will be crucial to examine the non-ceramic components of the collection to confirm her hypothesis and Silver indicates that this will be done. I wonder too whether there might be an English 19th-century military handbook that details the things an ideal regiment (ranging from enlistees to officers) should have when quartered overseas. In our investigation of Valley Forge National Historical Park (Valley Forge, Pennsylvania, USA), Baron von Steuben's (1985) drill manual was indispensable for interpreting the distribution of various-gauge musket and rifle balls (Siegel et al. 2006).

As a group, I found these papers to be a stimulating series of pilot studies. (Barse's paper is more than a pilot study, reflecting his long involvement and definite perspective on Orinoco Valley prehistory.) In this world of massive capital "improvements" and dwindling supplies of money, museum collections increasingly may become important as the last repository of a nation's cultural patrimony. These papers show the importance of well-curated archaeological collections. Ben Rouse would have enjoyed reading and commenting on them.

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