

Island Shores, Distant Pasts. Archaeological and Biological Approaches to the Pre-Columbian Settlement of the Caribbean

Fitzpatrick, Scott. M., and Ann H. Ross. University Press of Florida, Gainesville, 2008

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Archaeological methodology has witnessed an enormous progression in the last couple of decades; from isotope studies, to ancient DNA, to computer modeling of settlement patterns and sea-faring voyages, and last, but not least, radiocarbon dating. During the Society for American Archaeology annual meeting in 2006, a whole session was dedicated to the use of new methods in the Caribbean region, named "New Perspectives on the Prehistoric Settlement of the Caribbean." The conference was held in San Juan, Puerto Rico, and provided the perfect stage to discuss the application of these new techniques in Caribbean archaeology. From that meeting, Scott Fitzpatrick and Ann Ross have compiled an excellent volume with these new methods and approaches. Furthermore, this volume translates theoretical perspectives into specific methodological approaches.

The techniques not only produce new data, but also force us to rethink old assumptions. Rodríguez Ramos, Torres and Oliver, in chapter 2, show how the increasing database on calibrated radiocarbon dates in the Caribbean challenge assumptions on chronologies, cultures and pottery styles. The growing corpus of calibrated radiocarbon dates that do not fit Rouse's chronological model are rapidly increasing. According to Rodríguez Ramos, Rouse's model promotes an exclusive chronological perception of time in which a unilinear progression is taken as given. In contrast, they argue that time is a process that emerges, and it is in a constant state of

becoming. Ideas about time, influenced by phenomenological approaches, direct our attention to how people in the past perceived time and how these principles might have differed from our Western perspectives. Finally, they emphasize that multiple pottery styles are contemporaneous on Puerto Rico and that the chronological sequence developed by Rouse is misleading. Diachronic perspectives, the authors argue, should focus on interaction and social relations between different groups, producing different pottery styles, on a regional level, rather than explaining changes in the archaeological re-

cord as products of migration and replacement of pottery styles and people.

This change in perspective on human interaction, from the large regional levels to more local perceptions and social relations, is also exemplified in Hoogland, Hofman and Panhyusen's chapter (7). Isotope studies on human remains on Guadeloupe indicate that people were highly mobile within the Caribbean region. Looking at Strontium isotopes from teeth, it is possible to establish if a person was living in the immediate vicinity of the place of burial in his or her younger years or clearly came from another region. In their case study on Anse à la Gourde, Guadeloupe, Hoogland et al. show that multiple individuals did not live at the site as children and must have migrated from another location to Guadeloupe later in their life. Most of the nonlocals are females and these nonlocals often have nonlocal objects, such as lithics, shell or coral, deposited in their graves, insinuating that kinship and rules of marriage and residence are of importance in this context. The emerging patterns of mobility and creation of social identity stress the significance of investigations of local practices that can inform on larger regional structures.

Computer simulations or computer-aided data management has also provided the power to manage a large database of archaeological data in Cuba. Jago Cooper's chapter (4) is an excellent example how GIS can facilitate our understanding of settlement patterns and chronologies while dealing with a large number of sites. In the past, managing and processing archaeological distribution maps was time intensive. Cooper deploys these new methods to order all available data and visualize settlement patterns in Cuba, facilitating our understanding of the complexity underlying these regional structures. Cooper also discusses the importance of contextual information on radiocarbon dates. First, exact locations of samples are often incomplete or lacking. Second, calibration

methods and information on sample material are absent. Both jeopardize the credibility of dates. I agree with Cooper that a critical re-evaluation of original data is necessary.

Richard Callaghan's chapter (6) uses computer simulations of seafaring in the Caribbean archipelago to understand the migration of Archaic groups into the region. Two culturally distinct groups are assumed to have inhabited the northern Lesser Antilles in Archaic times, disconnected from each other by the Guadeloupe passage. Callaghan questions the contrast between these groups and the associated archaeological data. He concludes that the Guadeloupe passage was not an unnavigable obstacle that people could not pass, and the lack of data south of the passage is most likely related to sample bias. Finally, he argues that the differentiation between Ortoiroid and Casimiroid series is an archaeological creation. Technological differences between both assemblages, blade technology and expedient flake technology, are not outcomes of different cultural groups/behaviors, according to Callaghan, but a functional adaptation to a lack of suitable material. A differentiation between the two series is, therefore, unnecessary.

Fitzpatrick, Kappers and Giovas (Chapter 8) consider the chronology of migration events in the southern Lesser Antilles. Radiocarbon dates and substantial excavation data from Carriacou suggest that the island was bypassed during initial waves of migration and people started settling here only after AD 400-600. The availability of fresh water, marine and other resources should not have prohibited habitation. This means that Saladoid pottery-making groups specifically targeted the northern Lesser Antilles first, subsequently migrating south, colonizing the southern Lesser Antilles. Carriacou might be crucial in understanding these migration pattern, because plentiful resources are locally available. The

reason why this island, and perhaps adjacent islands in the southern Lesser Antilles, were bypassed during the first waves of migration should be subject of future studies, and should focus on differences in resource distributions and overwater access between the southern and northern Lesser Antilles.

Martínez-Cruzado's and Schurr's chapters (3 & 9) both focus on the use of DNA to assess waves of migration and colonization. Martínez-Cruzado uses mitochondrial DNA (mtDNA) from modern populations on Puerto Rico and adjacent regions. This mtDNA is strictly inherited through a maternal line and does not recombine during processes of reproduction, preventing it from rapid changes and securing its stability over large periods of time. In total, nineteen mtDNA lineages were identified, of which nine lineages settled Puerto Rico in pre-Columbian times. Four lineages probably reached the island in pre-Arawakan times, while the remaining five in Arawakan times. Although the earlier migrations do not show a clear place of origin of these groups, three lineages of the later migrations are clearly related to northern South America. Schurr's study focuses on ancient DNA and on larger scales of migration including the colonization of North and South America. The frequency of different haplogroups is used to determine possible places of origin and migration routes. In particular, the prevalence of haplogroup A among many native American groups, but almost absent in Taino or Ciboney populations, requires explanations that specifically focus on processes of migration and colonization.

Ross and Uberlaker use craniometry to measure relatedness among prehistoric populations. Their findings show that there is a close relatedness between Hispaniola, Puerto Rico, and Jamaica, but the Cuban sample is very dissimilar. Ross and Uberlaker argue that this must be the result of a different popula-

tion history, with groups moving to Cuba from the west while northern South America is the place of origin of the peoples on the other islands. As Schurr stresses, these approaches rapidly move to normative categories. Sample size and context are important, and using these samples as representative of island populations or single events of migration clearly dismisses the diversity and dynamics of processes of human interaction and mobility. Integration of other archaeological evidence, such as the construction of social identity, distance and relatedness, would also significantly increase the anthropological value of these approaches.

In summary, this book is an excellent compilation of new methods and theories in Caribbean archaeology. However, multiple approaches still seem to integrate their findings and conclusions into existing models of culture history, the exact models from which we try to distance ourselves. The true strength in these new methodological approaches, as discussed in this book, lies in their ability to produce new theories of historical developments and social relations in the past. Furthermore, these approaches also direct our attention away from important questions of origin and chronology of migration, to the dynamic decision making processes of social groups within these situations. Keegan's introductory chapter discusses the importance of kinship principles and social distance as crucial factors that guide migration and colonization. This shift from large and regional scales to local levels of social interaction in Caribbean archaeology is also underlined by Rodríguez Ramos et al.'s and Hoogland et al.'s chapters. Attention for the details of social interaction, identity and practices that constitute and produce systems recognized on larger levels of research is a direction that would strengthen our understanding about the dynamics of human interaction in this region. These two

chapters in particular, but all others as well, not only materialize the methodological advance in Caribbean archaeology, but also signify the

strong theoretical progression that this discipline is experiencing.

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