Introduction

This paper reports on ongoing archaeological research in the Sierra Leone Estuary that examines the impacts of the Atlantic trade by contextualizing the region’s history in the longue durée. We review initial archaeological fieldwork conducted between 2011 and 2013, and discuss plans for future archaeological research. This interdisciplinary research is part of the Syracuse University Archaeological Initiative for the Sierra Leone Estuary (AISLE) that focuses on the examination of the region’s terrestrial and maritime cultural landscapes. Atlantic history has become a discrete area of scholarly focus due to developments in both academic research and popular history. However, not all areas of the Atlantic world are equally rich in relevant historical documentation and research concentration. Sierra Leone is particularly neglected in West African Atlantic historiography despite its important status as a center of transatlantic trade. Our research elucidates how coastal Africans in Sierra Leone engaged with, influenced, and were affected by this growing sphere of global economic interaction.

AISLE is an outgrowth of fieldwork on Bunce Island conducted by Christopher DeCorse, undertaken with the support and permission of the Sierra Leone Monuments and Relics Commission and the Sierra Leone Ministry of Tourism (DeCorse 2007, 2011, this volume of Nyame Akuma). DeCorse’s research provides information on the region’s primary node of African-European trade during the 17th and 18th centuries. Our research situates Bunce Island and related trade sites in the wider sociocultural and political landscapes of Europeans’ interactions with indigenous populations.

Our work has two overarching objectives. First, we investigate transformations in sociopolitical organization in the region. We will examine settlement spatial and material practices and their implications for changes in sociopolitical organization and the emerging Atlantic world economy. These spatial and material practices include settlement size and distribution and clusters
and assemblages of artifacts and features. Second, we will focus on long-term processes and change by examining changes in maritime resource exploitation and coastal agriculture before and during the period of Atlantic trade beginning in the 15th century.

Sierra Leone in the Atlantic World

Cartographic information suggests that Portuguese navigators may have reached coastal Sierra Leone by the mid-15th century (Hair 1992, 1997). Here the Portuguese found access to trade in ivory, wax, gold, slaves, amber, and malagueta pepper. After two centuries of dominating the trade, the Portuguese monopoly waned in the 17th century and they were largely displaced by other European powers. By this time, however, an Afro-Portuguese creole community of traders and middlemen existed along the coast, mostly descendants of renegade Portuguese traders called lancados or tangomaos (Brooks 2003; Rodney 1970). In the 17th and 18th centuries, when profitable plantation farming systems developed in the Americas with high labor requirements, the Sierra Leone Estuary became one of the important places of trade where enslaved Africans could be obtained to meet the labor needs of these plantations. Bunce Island, located at the

Figure 1: Map of Sierra Leone Estuary with some of the identified sites. Inset: Map of West Africa showing Sierra Leone.
farthest point of the estuary for navigable ocean-going ships, became the center of this trade during the 17th through to the end of the 18th centuries. Established as a fortified trading post by English merchant companies around 1670, it was attacked and destroyed several times through the course of the 18th century but remained an important center of commerce (see DeCorse this volume). The English and British traders at the fort established a network of outfactories around the estuary and up its tributary rivers to support their trade. While not as many enslaved Africans were taken from this region as other portions of Africa, many of those taken were transported directly to the United States. The genesis of modern Freetown was Granville Town, the Province of Freedom, established in 1787 when indigent members of London’s “Black Poor” community were resettled from England. However, an indigenous ruler destroyed this settlement in 1789 after a dispute. In 1792, Freetown was established when the Sierra Leone Company organized the resettlement of freed slaves from the American War of Independence from Nova Scotia to Sierra Leone. This new settlement included the surviving London “Black Poor” of Granville Town, and was later joined by Maroons from Jamaica (Alie 1990; Fyfe 1962; Fyle, 2011; Braidwood 1994). In 1808, after the official abolition of the slave trade in 1807, Freetown became the first official British Colony in sub-Saharan Africa. It is Freetown that the Royal Navy used as a post for enforcing compliance of the Slave Trade Act of 1807. From here, the Royal Navy patrolled the coast, seized suspected slave ships, liberated and resettled enslaved Africans in the new colony. Despite the enforcement of the ban, the trade in slaves continued in the estuary for some time, but underwent a shift towards other areas such as Sherbro and Rio Pongo (Jones 1983; Mouser 2003, 2013). From the 1920s onward, production of so-called legitimate commodities such as timber, groundnut, and palm oil for export became important economic activities in the estuary (Fyfe 1962; Howard 1979, 2006).

Current Research

AISLE is a collaborative, interdisciplinary project focusing on the history and archaeology of the Sierra Leone Estuary. It includes research on the natural and cultural features of the estuary, the archaeology of the surrounding African sites, and the European trading locations. Fieldwork has included the survey of Bunce Island directed by Christopher DeCorse, excavations at Bunce Island and survey of surrounding sites in the estuary by DeCorse and Amartey in 2011, and additional excavations on Bunce Island and survey of sites in the estuary by DeCorse, Amartey, and Reid in 2013. Although focusing on different aspects of the past and varied loci, this research benefits from a collaborative approach to fieldwork, analysis, and data sharing. Fieldwork has been undertaken with the permission and support of the Sierra Leone Monuments and Relics Commission and the Sierra Leone Ministry of Tourism. Ongoing archaeological research on Bunce Island by Christopher DeCorse is discussed separately in this issue of Nyame Akuma. Research by Samuel Amartey and Sean H. Reid focuses on the history and archaeology of the estuary. Work by Reid and Amartey is discussed in turn below.

A Maritime Cultural Landscape

Research being undertaken by Sean H. Reid is an archaeological maritime cultural landscape study of the Sierra Leone Estuary. This study draws on Christer Westerdahl’s concept of the maritime cultural landscape and the threads that weave it together. This approach is holistic in that it includes both material and immaterial aspects of maritime life found across the land/seascape which he viewed as a changing network of sailing routes, ports and harbors, and related features of human activity, underwater and terrestrial that “mirrors the entire range of maritime economies, that is, mariculture” (Westerdahl 1992:6). His approach goes beyond traditional maritime archaeology and is inclusive of the immaterial and cognitive landscape. To this end, he advocates the study of oral histories, traditions, and place names, as well as material remains such
as wharfs, ballast dumps, and boathouses. Building on fieldwork completed in 2013, research by Reid utilizes archaeological survey and the analysis of satellite imagery to understand relic landscapes and past settlement in coastal Sierra Leone. The maritime cultural landscape views archaeological sites and cultural features in terms of human interaction with this environment and with each other through time. It includes how people settled it, exploited its resources, engaged in agriculture, and adopted or developed new technologies. This, in turn, provides a lens to understand interactions with other groups and change through time. These changes situate the Atlantic trade in the context of the *longue durée* of the African past.

Preliminary data from the estuary are being compiled and analyzed in a GIS environment. The project integrates multiple forms of spatial data into an ArcGIS framework, including GPS data, satellite imagery, topographic data, and directly surveyed vector data. Figure 2 is a Landsat 7 image (in false color to highlight land/water boundaries) of the primary survey area with integrated GPS points taken at sites of interest. This study will reveal how societies exploited and were affected by their estuarine ecology. This relationship has implications for wider history of African settlement.

**Figure 2:** False-color Landsat 7 image of the Sierra Leone Estuary with sites of archaeological interest.
patterns in coastal regions after direct contact and trade began with Europeans in the 15\textsuperscript{th} century. This study will use nuanced supervised classification of high resolution satellite imagery in conjunction with GPS field data collected during 2013 to assess modification in African settlement patterns and the cultural landscape during this period of dramatic sociocultural change.

**Transformations in Sociopolitical Organization**

Research by Samuel Amartey examines the transformations in sociopolitical organization in the Sierra Leone Estuary region in response to changes in the emerging Atlantic world economy. He is exploring the changes from the pre-contact period through to post-abolition (that is the end of the 19\textsuperscript{th} century) in terms of settlement organization and size, production and craft specialization, and consumption practices. He will examine the nature of pre-contact sociopolitical organization as a prelude to the emerging Atlantic world to highlight what changes came about as the region developed new direct linkages in this growing global economy. Additional changes in sociopolitical organization developed with the abolition of the slave trade and subsequent establishment of the so-called legitimate trade, which his research will also assess. To evaluate these changes, Amartey will use data from settlements surveys, surface collections, shovel testing, and small-scale trench excavations to examine spatio-temporal changes in settlement distribution, size, and artifact clusters and assemblages. He will make comparative assessment of sites in terms of size, artisanal areas, and materials assemblages and densities.

**Archaeological Reconnaissance Surveys**

Preliminary survey work was conducted in the Sierra Leone Estuary in 2011, 2012, and 2013. Initial site visits were made by Amartey during the months of June and July of 2011 and 2012. Amartey and Reid made additional site visits throughout June 2013. These field visits were aimed at locating settlement areas and making preliminary assessments of the cultural materials and features present. The research potential of individual sites was then evaluated and appropriate field techniques for future research developed. While some sites are known from historic records and previous archaeological survey reports (e.g., Newman 1966; Ozanne 1966), others were identified through our reconnaissance work. Twenty sites have been identified so far. These range from small village sites to dense ‘town’ sites. During the 2013 season, Amartey and Reid took GPS points on features and middens that they encountered or that were shown to them during these surveys. Site features are variable, but most share similar characteristics. Jetties, trade factories, wells, and dense scatters of European trade materials characterize most of these sites. Additionally, we noted gravestones and house mounds at Robombana and Makipit.

In 2013, Amartey and Reid conducted surface collections at Tumba and Benkia in areas of dense artifact scatters. A handheld GPS was used to record the locations of these scatters and other site features such as wells and stone masonry. Collected materials from both sites included European ceramics, local ceramics, European-made smoking pipe fragments, and glass (Figure 3a,b,c,d). These materials were deposited at the National Museum of Sierra Leone, Freetown for eventual detailed analysis.

**Discussion and Future Directions**

Based on preliminary assessment of settlements survey data from the 2011, 2012, and 2013 fieldwork seasons, some tentative observations have been made. Limited data is available to assess settlement size and its implications for sociopolitical organization. However, the archaeological data suggests a pattern of dispersed, small-scale settlements. Trade was likely a major factor in the orientation and historical development of these settlements. Locally made ceramics are sparse, compared to European made ceramics. Trade factories constitute an important component of the region’s archaeological record.
Six of these factories, including extant masonry, have so far been noted. They were mostly located at the tapered end of headlands with possible good anchorage for vessels to offload their cargoes. These factories have huge research potentials. Jetties that connect the shore to these factories are also critical structural features of these settlement landscapes. Now-abandoned wells that served the needs of traders and the communities are ubiquitous at these sites. At Makipit alone, five of these wells were noted within a less than 100m radius of the settlement. Further work needs to be done to assess the implications of these wells for supplying the water needs of Atlantic mariners and also local traders. The emergence and transformations within these settlements may have resulted from fission and fusion of earlier core settlements connected to the vicissitudes of the Atlantic trade (see for example...
DeCorse 2012). Subsequent intensive survey of these settlements will provide indications on the sociopolitical organization and settlement histories and their implications for the Atlantic trade.

One puzzling aspect of this maritime landscape is the oyster mounds. Maps of the oyster mounds on Bunce Island are published in DeCorse 2007 and our preliminary survey work took note of more oyster mounds at the sites of Makapit and Puluntunt. Some appear to be of possible antiquity, while others seem to be of recent deposition; so one priority will be to untangle the age and origin of these mounds.

The results of our research will assist in the management and protection of cultural resources threatened by a growing maritime industry with its associated traffic and infrastructure. The Sierra Leone Estuary is in the process of being impacted by increased ship traffic due to a revived iron ore mining industry. While these industrial activities form a part of the contemporary maritime landscape and are of interest in themselves, they are threatening our ability to understand and interpret relic maritime landscapes. Mining companies are actively dredging the shipping channels in areas that, in the 18th and 19th centuries, were also bustling areas of maritime commerce serving the slave trade. One mining company has renewed their activities, including a great deal of construction at a probable slave-trade era archaeological site near the village of Pepel. These coastal construction projects and estuary dredging operations are actively threatening and destroying sites of maritime and terrestrial cultural significance.

Future research will extend the survey area up the Port Loko Creek and the Rokel Rivers. Port Loko, for instance, was once an important outpost for trade during the early Portuguese period, and we suspect possibly important sites to exist at Forodugu and Rokon on the Rokel River. Furthermore, we eventually intend to examine areas that the slave trade shifted towards during its suppression around the estuary after 1807, such as Sherbro. The continuation of our work will depend on funding opportunities, but our preliminary work has demonstrated the valuable potential of future work at these sites. Samuel Amartey will be focusing his research on a comparative examination of excavated material culture from settlement sites around the estuary to better understand the impact of the Atlantic trade, while Sean H. Reid will continue to survey the estuary broadly, both by foot and boat with the assistance of knowledgeable locals, historical documents, and satellite imagery to understand settlement patterns, land use, and maritime resource exploitation.

Bibliography

Alie, J. A.

Braidwood, S. J.

Brooks, G. E.

DeCorse, C. R.

2011 Bunce Island Archaeological Investigation.
Syntactically correct natural text:


Fyfe, C.


Fyle, M. C.

2011 *A Nationalist History of Sierra Leone*. Freetown: Self Published, Securicom Printers.

Hair, P. E.


Howard, A. M.


Jones, A.


M’bayo, T. E.


Mouser, B.


Mouser, L. B.


