Introduction

Songo Mnara, in the Kilwa archipelago on the southern coast of Tanzania (Figure 1), is the setting for a new research project exploring the use of space across a Swahili urban center. This paper reports on the first field season, completed July 2009, under COSTECH permit no. RCA2009/46. Fieldwork aimed to explore spatial practice at this ancient urban center across the range of public and private contexts. Domestic, monumental and cemetery spaces were explored, in an attempt to trace particular material signatures related to domestic activity and to ritual/commemorative practices around centrally-located cemeteries and open areas.

Despite Songo Mnara’s prominence and excellent preservation, most of the work completed there has been focused on recording the extensive architecture (Dorman 1938; Garlake 1966); only test excavations have been conducted at the site (Chittick 1961; Mathew 1959; Pradines 2005; Pradines and Blanchard 2005). Most research in the region has been focused on the more famous and well-known site of Kilwa Kisiwani (Chittick 1974; Fleisher 2004; Sutton 1998; Wynne-Jones 2007).

Songo Mnara is dominated by the well-preserved remains of more than 40 large domestic room-blocks, five mosques, and numerous tombs (Figure 2). Room blocks wrap around and enclose an open, central area of the site where tombs, a walled cemetery and a small mosque are located. The site was occupied for a maximum of 200 years, between the late 14th and early 16th centuries. This relatively short lifespan (in comparison with the 800-year occupation of Kilwa) means that the stratigraphy is simple, with little vertical complexity, making it an ideal site at which to explore horizontal variation and spatial patterning.

Public and Private Spaces

In the context of the Swahili town, private space is primarily associated with the stone houses. As Donley-Reid (1990) has shown, the performance of social roles in these private places, or ‘structuring structures,’ was critical to the constitution and reaffirmation of Swahili social realities. Although these insights have been shown to apply to the archaeology of 17th to 20th century Swahili houses in Lamu, few studies have investigated whether similar understandings existed in earlier centuries (cf. Fleisher and LaViolette 2007) or in different parts of

Figure 1: The Swahili Coast, showing Songo Mnara.
the eastern African coast. The spatial organization of southern stonetowns (those along the Tanzania coast and south) suggests that a distinctive, more hierarchical social organization dominated these urban centers (LaViolette and Fleisher 2005). Thus, insights from 19th and 20th century northern towns such as Lamu may not be directly analogous. Investigation of chronological and geographical variation is required if we are to understand the ways that private spaces were used and experienced locally in Swahili towns. Songo Mnara, with its extensive stone house architecture, will provide a solid southern example with which to compare data from northern towns.

Public spaces, in contrast, have rarely been explored in Swahili towns, despite the presence of monumental architecture, tombs and open areas in the plans of many of the urban centers. By expanding our focus to explore these public areas, we can begin to understand the practices occurring directly outside the houses, as well as in communal contexts. Were open, central areas places for the dead and thus relatively “empty spaces” except for the graves and tombs? If this was their main use, were they places where public rituals occurred, either through personal, practice or more group-oriented events? In what ways were these locations for the construction and enactment of social memory? Swahili tombs seem to hint at these practices, including offering niches and incorporating symbols of authority, such as imported ceramics and representations of sumptuary goods (Fleisher and LaViolette 2007). Modern ethnographies and historical documents also speak of ritual practice at tombs as an ongoing part of Swahili memorialization practices (Wilson 1979). However, open spaces might also be locations of more prosaic economic activity, such as craft production and/or marketplaces (Fleisher 2010). By approaching open spaces, then, the project begins to address the spatial practices of both the private and public sphere, through a multipronged approach to the material record.
Methodology

Fieldwork at Songo Mnara in 2009 had three goals: to build a foundational dataset by thoroughly mapping and describing the site, assessing previous efforts; to evaluate the future archaeological promise of the site; and finally, to address the research questions posed above. All of these included traditional archaeological excavations and site survey, as well as a set of scientific approaches aimed at examining more ephemeral aspects:

- Excavations were conducted within the houses, exploring one entire house (House 44) and testing deposits in a second (House 23). These excavations were conducted using single-context recording techniques, and whole rooms were opened to explore spatial patterning inside;
- Excavation also explored public spaces, both immediately outside houses and in areas of activity in the central areas, including a tomb, well, and craft-activity areas identified through geophysical survey;
- Magnetometry survey was conducted across the site, along with magnetic susceptibility and electrical conductivity sampling. This survey was undertaken by Dr Kate Welham and Mr Harry Manley of the University of Bournemouth. The results helped guide excavations to areas of high potential;
- Soil samples were taken at intervals across the open areas, and multi-element analysis was conducted to explore chemical traces of activity. These samples, as well as those from excavations, were also subjected to phytolith sampling. This work was done by Dr Federica Sulas of the University of Cambridge;
- Micromorphological samples were taken during the excavations, to explore the potential of this technique for reconstructing activity within houses and around site features. Again, this work was done by Dr Federica Sulas;
- Samples were taken from excavated contexts for flotation to recover macrobotanical remains. These are under analysis by Dr Sarah Walshaw of Simon Fraser University, Burnaby;
- A parallel program of coring in the surrounding mangrove in order to explore the changing marine and island landscape was undertaken by Mr Jack Stoetzel of the University of Virginia.

The Houses of Songo Mnara

Eight trenches were excavated within the domestic architecture (Figure 3), including six in House 44 (SM001, SM003, SM004, SM008, SM009, SM010), and two in House 23 (SM014, SM015). Most of these trenches were entire rooms, and the entirety of House 44 was exposed, while only a sample of House 23 was possible.

House 44 was identified for excavation as a self-contained and relatively small structure, representative of a set of individual houses in the northern part of the site. Across the house, we recovered distinct areas of activity, represented by circumscribed deposits atop the plaster floors. These seem to have been left in the rooms when the houses were abandoned, and careful excavation recovered spatial information from these layers. The initial results also give an indication that particular areas might have been used for specialized purposes. For example, defined areas of activity were identified to the right of each door as one moved back through the house, suggesting the patterning of discard and storage practices in particular spaces. The general spread of artifacts also suggests much more diversification of activity than has been assumed by idealized models of the Swahili house with cooking, food processing and craft activity indicated at every level.

House 23, at the southwestern corner of the site, was selected as a representative of the grander, more ornamental architecture found on the southern side of Songo Mnara. The house has many of the features of the grandest architecture at the site, including a monumental stairway leading down to the southern open area, a stepped internal courtyard, and many ornamental wall niches in the interior spaces. House 23 is a relatively small example of these grand structures and this also recommended it for excavation. Due to a lack of time, House 23 could only be sampled, and the courtyard and a single interior room were investigated.

The results are harder to interpret due to this sampling strategy, but it was immediately clear that the deposits were different from those encountered in House 44. The house itself was very different too, and despite its architectural grandeur, had a packed
red earth floor as opposed to the plastered surfaces in House 44. The courtyard excavations recovered little in the way of artifacts, suggesting that this area was kept very clean (this was supported by the geochemical signatures for this area). The interior room, however, contained a pit with evidence of burning and a high density of ceramic and faunal debris in the center, immediately below a decorative wall niche. High quantities of spindle whorls indicate the spinning of thread in even these ornamental spaces. Clearly, further excavation is required to allow us to interpret the activities represented here.

**Open Spaces**

Exploration of the open spaces was of a number of different kinds. Geophysical survey was crucial in providing a broad coverage of the site, and guiding more intensive research to areas of high potential. The survey immediately demonstrated the fact that the town would have been much more densely populated and utilized than is evident from the footprint of the stone structures alone; anomalies across the apparently-empty spaces pointed to activities occurring across much of the delimited urban space.

Excavations then followed, with two trenches just outside the houses that had been explored, near the doorways/staircases; four trenches in open areas, guided by geophysical anomalies; finally two trenches were situated around coral built features, a tomb and the central well (Figure 4).

Trenches outside houses demonstrated clearly the potential for delineating extended domestic activities. In each, a cultural layer with pottery scatters and other artifacts was easily identifiable, sealed beneath rubble from architectural collapses and deposits that built up after the site was abandoned in the 16th century. These cultural layers included a rich mix of local and imported pottery, beads, coins, and faunal material. The geochemistry of the soils in these locations displayed an enhanced phosphate signature, potentially linked to stock-keeping near the entrances. Further excavations in these areas will aim to define particular activities associated with these artifactual and chemical signatures, particularly in the spaces outside doorways, and at the base of monumental staircases. These data will provide a complement to those from inside the houses, and allow for a consideration of the differences between internal and external activities.

**Figure 3:** Plan of House 44 (left) and House 23 (right) showing numbered excavation units.
Trenches situated in open spaces at the site were guided in large measure by the anomalies located through geophysical survey. Excavation of these features, designed to explore more ephemeral activities in the public spaces, is exploratory work. Additionally, trenches were situated around two open air features: a tomb and well. In general, the findings supported those from trenches just outside of structures: well-sealed and undisturbed cultural surfaces were preserved, with rich and variable artifact assemblages. Large numbers of copper coins were found in the open areas, particularly atop a geophysical anomaly near the palace and around the tomb (Fleisher and Wynne-Jones n.d.). Additionally, these areas often contained well-defined and stratified pottery scatters that allowed for the definition of cultural surfaces even in the absence of significant soil changes. These trenches demonstrate a number of important findings: first, that there may have been earth and thatch houses within the coral built town; second, that industrial activities can be isolated within the open areas, as indicated by iron smithing debris located just outside the palace; and third that artifact patterning is associated with active outdoor spaces, specifically those around the well and tomb.

In these latter contexts, a surprisingly robust assemblage of archaeological materials provides hints of the types of activities that were occurring in these outdoor spaces. By the well, a varied assemblage including local and imported pottery and glass suggests that this space might have served as a possible meeting space. The space excavated just surrounding a stepped, coral rag tomb provides evidence of contemporary and ancient ritual practice. Ceramic concentrations marked the groundsurface, evidence of more recent offering vessels. More ancient practices were indicated by the presence of small stones, coins and local ceramics in the surrounding deposits. A number of small water-worn stones were found.
around the tomb, similar to ones visible on the ground surface at a cemetery and mosque complex just outside the town (called here ‘the Necropolis’). Burton (1872:359) described this practice, when visiting Songo Mnara in the late 19th century, noting that a few days after burial, “small stones are washed, perfumed, and sun-dried; finally, they are strewn with prayers upon the tomb.” Additionally, the deposits surrounding the tomb contained one of the highest densities of copper coins, which indicate that coins may have been left as memorial offerings as well; this is also a contemporary practice evident at the Necropolis cemetery. Analysis of the ceramics from this trench will allow us to examine whether special function vessels were left as offerings as well.

**Conclusions and Potential for Future Work**

The 2009 field season at Songo Mnara successfully addressed our research questions on domestic and open spaces and provides a firm foundation for future work on these issues. As previous researchers at the site have noted, the material assemblage from Songo Mnara is surprisingly limited given the monumentality of its architecture and its proximity to the powerful center of Kilwa Kisiwani. In short, the architectural wealth of the site does not seem to extend fully to a wealth in material culture. For example, the 2009 excavations demonstrated a surprising dearth of imported pottery at the site; overall the imported sherd ratio (ratio of imported to local sherds) was less than 1% (.5%), far less than ratios from other sites which often range from 2 to 6%. The small numbers in the archaeological deposits also contrast with the significant number of imported ceramics that were built into the structures. For example, in the palace, an intact barrel-vaulted room still contains 121 small glazed imported bowls (Garlake 1966:38). Other artifacts were found in similarly small quantities, including glass vessel fragments, and objects of iron and copper.

Two artifact classes, however, were found to be much richer than previously noted, coins and beads. Copper coins of Kilwa type were found across the site (63 in total), and in relatively high densities in a number of trenches. Based on an initial analysis of these coins, they represent at least eight different types, related to individual sultans at Kilwa (Fleisher and Wynne-Jones n.d.). The distribution of these coins across the site, in houses, open areas, and around the tombs suggests that they were in common use, and offers the possibility of providing the first contextual understanding of coins at a Swahili settlement. Similarly, close to 2,000 glass and shell beads were recovered; they were common in most trenches, often related to floor deposits. These beads are currently being analyzed by Ms. Marilee Wood. The recovery of coins and beads at Songo Mnara, where few of these materials had been previously recorded, is due in large part to the methodology employed, including the sieving of all deposits with 2 mm mesh.

For the purposes of this project, it was significant that excavations showed the integrity of the deposits at Songo Mnara. Although they are somewhat thin compared to other coastal sites, the strata identified represent a host of primary contexts, with horizontal variability evident across the areas investigated, inside and outside the houses. This is amply demonstrated by the diversity evident; rather than a scatter of undifferentiated remains, excavations recovered definite activity areas and artifact associations.

In sum, the 2009 field season provides a firm foundation from which to continue research at the site: new topographic and architectural renderings of the site are currently being produced; geophysical surveys are providing a rich understanding of the subsurface deposits in open and other areas; geoarchaeological research is offering clues to more ephemeral practices; and the archaeological excavations provide an initial sense of the rich material assemblages related to different parts of the site. In future seasons we aim to continue this research, working to build a more comprehensive understanding of life in this ancient Swahili town, and the way that material practices and the use of space were central to its inhabitants and its history.

**Acknowledgements**

Research at Songo Mnara was funded primarily by Rice University, through the Social Sciences Research Institute and the Archaeological Field School of the Department of Anthropology. The British Institute in Eastern Africa and The Leverhulme Trust provided supplementary funding.
Fieldwork was conducted in collaboration with the Antiquities Department of Tanzania, and we are very grateful to the Director, Donatius Kamamba, for his assistance. We would also like to acknowledge the help of our Antiquities representative, Mohammed Chidoli, who was invaluable to the success of the 2009 fieldwork. In Kilwa Masoko we were also helped by Idiphonse, Bwanga and Hassan.

Topographic and buildings survey of the site was completed by Mr Benson Kimeu of the British Institute in Eastern Africa. Dr Kate Welham and Mr Harry Manley of Bournemouth University were responsible for the geophysical survey, and the ongoing GIS work in mapping the site. Geoarchaeological work was completed by Dr Federica Sulas of the University of Cambridge; the Pitt-Rivers Laboratory generously donated space and time for her analyses.

Excavations were conducted by Abidemi Babatunde Babalola, Brian Clark, Jack Stoetzel, Kylie Klein, Sarah Nouri, Helen Horn-Mitchem, Elizabeth Johnson, Dominic Pistor and Noelle Tankard. We were assisted by Masoudi Mohammed, Yusuf Hamadi, Suleiman Mohammed, Ahmed Issa, Mohammed Ali Bakari, Ali Mohammed, Assi Abdallah, Suleiman Abdallah, Abdallah Omari, Ahmad Awari, Makame, Yaheya Mohammed, Mahibu Saidi, Issa Hassan, Hassan Mwinyi, Ahmed Abdallah, Zurafa Mwinyi, Rehena Abdallah, and Yusufu Masud. Our camp was organized and run by Bw. Polo, Mama Sofia, Rukia, Fatouma, and Nankunda.

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Footnotes:

1 A full field report for the 2009 season is available for download at www.songomnara.rice.edu.

2 House numbers were assigned by Garlake (1966) when he mapped the site in the early 1960s.