How Public Space is Used in Ancient Cities:

The Case of Songo Mnara, a Medieval Swahili City in Tanzania

Jeffrey Fleisher

Department of Anthropology
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Introduction

Public spaces in urban settings are enigmatic: they are the result of central planning, through the creation of central plazas, malls, or parks, but the vast majority of activities that happen in those spaces are not necessarily proscribed by their construction. In their construction, public urban spaces may seek to project certain meanings, based on urban planning and city leaders, such as commemorating a war, a political leader, or simply the representation of state power. And yet, the way that they are used will often tell a different story completely, drawing a distinction between urban planning and urban practice. For the vast majority of their history, public spaces in urban settings are host to the most humble of practices: the place where friends meet, books are read, deals are struck, robberies take place, drugs are sold. And yet, at moments that seem fleeting compared the rest of their mundane historical trajectories, public spaces can become the setting for political and social transformation, and other events that can alter the course of history. Names of public spaces have become synonymous with social change, even for people who have never visited or even seen them: Washington’s National Mall, Beijing’s Tiananmen Square, Cairo’s Tahrir Square, and New York’s Zuccotti Park.

Recent discussions about public space in urban contexts have increasingly focused on the bottom-up practices that create alternatives to, and alterations of, planned urban space. These ‘insurgent public spaces’ (Hou 2010) include temporary spaces and informal gathering places; led by demands of urban populations for greener and more livable cities, sterile parks and abandoned lots have recently been transformed into active venues for civic activities. Many these critical engagements with open urban/public space derive from dissatisfaction with
modernist urban planning (e.g., landscape urbanism) as older urban cores are rejuvenated and sprawling cities like Houston seek areas of community focus

However modern these critiques and transformations may seem, a similar critique and research focus in ethnographic and ancient urban spaces suggests that these are not only a contemporary phenomenon, but rather ancient patterns and concerns. Recent research on the complex use of extra-domestic space (Robin 2002), urban plazas (Kidder 2004; Low 2000; Moore 1996), and more functional public space like roads and gardens (M. L. Smith 2008) emphasizes the way urban open space, even in ancient examples, was reserved or maintained for both spontaneous and sequential use. All this research suggests that in order to understand the historical uses of public space, we need move beyond narratives that emphasize their construction and/or the dramatic and spectacular events that occur in them (which are often either supportive of, or challenges to, a regional power structure). An important part of the history of public space can be revealed through the mundane and common practices that occurred in them. Because archaeological research works from the debris of everyday life, it is uniquely situated to contribute such historical understandings; through a close reading of everyday practice, the study of ancient public space potentially has much to offer contemporary debates in the social sciences (M. Smith et al. 2012; M. E. Smith 2010).

In order for archaeology to contribute to these debates, specific case studies are needed that explore the use of ancient urban space. Archaeological research at the 14th- to 16th-century AD site of Songo Mnara in Tanzania (Fig. 1) has begun this process, examining the social practices that constituted open/public space through time. The project seeks to address two questions: How was public space used at the site and how did those uses change through
time? What is the relationship between the structuring of public space (through the construction of buildings and walls) and its daily uses by people? This paper will discuss a number of ancient and contemporary examples of public space to explore the important distinctions between how they were planned and built, and how they were shaped by subsequent events and practices. Then, using Songo Mnara as a case study, I describe the research at the site and the interpretations of the public spaces in this ancient urban setting.

A Selective Review of Public Urban Spaces: Anthropological Thoughts on Open Space

Histories of public space often begin with the Greek *agora*, as many regard it as the quintessential public space. The Greek *agora* was, first, a central market, but also “a place of assembly for the town’s people and a setting in which ceremonies and spectacles were performed” (Madanipour 2003:194). In Athens the *agora* was at first surrounded by private houses, but later temples and sanctuaries were built bordering it, as well as *stoa*, or covered walkways and porticos (Hölscher 2007). It is impossible to characterize the *agora* as either a religious, civic, or political space, as it brought together all those activities: “That physical proximity of activities which we would regard as distinct and even disparate both reflected and enabled intensive links between politics and religion, public deliberation, and private initiative” (Alcock and Osborne 2007:162). While this was surely a place where spectacles were viewed and rituals carried out, the *agora* was equally a place where powers were challenged and the setting for prosaic daily acts.

A more familiar contemporary example is the National Mall in Washington DC. The Mall is bookended by the U.S. Capital and the Washington Monument, surrounded by museums and
memorials. The design and organization of the Mall has been accomplished through a series of plans and visions that stretch back to the 18th century. The original plan, by L’Enfant “envisioned a grand city built around a great open space that would establish the relationship between important functions of government” (NPS 2007:1). An early 20th-century plan, the McMillan Plan, was less concerned with establishing the formality of the city, but rather sought to emphasize “the Mall as the city’s [and nation’s] ceremonial core” (2007:4), and idea that remains to this date. As such, the Mall has also been the site of numerous marches and protests, including the first documented march in 1894 by unemployed Ohio workers and the March on Washington in 1963 led by Rev. Martin Luther King, Jr. The history of the National Mall, then, is one recounted through the buildings and memorial that delimit it, the plans that have shaped it, and the formal marches, protests and festivals that use it each year (NPS 2007). Yet histories of the Mall often leave out the less formal activities that occur there on a daily basis. One well-documented example is how it was used as a camp for Union soldiers and a place for cattle pens during the Civil War. Although not necessarily part of a national history of power or protest, such uses are important in understanding the way people perceive and use the Mall, especially those who encounter it on a daily basis.

Setha Low’s study of Latin American urban plazas offers a final important example. She has explored how urban plazas have been studied for their “architectural beauty, political symbolism, and cultural importance” (Low 2000:31). These plazas have been praised as important architectural expressions and regarded as locales that represent the political life of the society: they are places that politicians use to make symbolic statements and, at the same time, where the public attempts to challenge them. In Mexico City, in the Zócalo, the central
urban plaza, an attempt by the city to alter the layout of the plaza (in an effort to ‘green’ it by planting more trees) was greeted with protests from citizens who saw these changes as an effort to reduce the effectiveness of the plaza to be used for public protests and political rallies. In this we can see how the manipulation and use of urban plazas/spaces can become part and parcel of the political life of the society. However, as Low (2000:33) remarks, “these purely aesthetic and macropolitical interpretations...are not sufficient for understanding the plaza because they leave out the people who use the plazas and its importance in their everyday lives.” This is perhaps the most challenging aspect of public space, documenting daily activities that leave no permanent record, and are believed to be too inconsequential to study in their own right. This was, in fact, Low’s aim in working on Latin American plazas, to document some of the more humble and mundane acts that are part of the daily life of urban public space. Thus we need to think of open space, in all times and places, as places where power and authority is stated and restated, power is challenged and contested, as well as where daily acts occur and life unfolds.

In anthropological archaeology, researchers have been successful in distinguishing between public performances and more mundane everyday acts. The former are normally investigated in central plazas and focus on political performances (Fox 1996; Moore 1996; Whalen and Minnis 1996), while the latter are explored in the yards of houses and focus on domestic activities and the way these were part of the socio-economic life of the house (Hutson et al. 2007; Robin 2002). In both cases, archaeologists are skilled at deciphering the deposits that indicate daily acts, and thus sensitive to repetitive activities that are most closely associated with daily life. Therefore, while the archaeology and interpretation of ancient open
space surely offers a challenge (especially in the absence of documentary evidence), it also offers the possibility of revealing a set of practices that are not normally recorded or discussed, and thus a broadening our understanding of urban open space.

The Case of Songo Mnara

Songo Mnara is an exceptionally well-preserved ancient Swahili town on the southern Tanzanian coast. It was built of rough-coral and mortar architecture during the late 14th century, and then occupied for 100-150 years. The period from 1350-1500 AD was one of significant construction of monumental towns and when East African coastal settlements were transformed into urban centers by increasingly powerful sultans and merchants (Fig. 1). Their power came from their ability to control the growing intercontinental trade between Africa and ports on the Indian Ocean rim, and to reorganize religious and social life in town based on Islam and hierarchical political organizations (Horton and Middleton 2000; LaViolette and Fleisher 2009).

A plan of Songo Mnara (Fig. 2) shows that the town included two-dozen housing blocks (many of which contained multiple houses), six mosques, four cemeteries and an enclosing wall that delimits three large areas of open space in the northern, central and western zones. Some of this space is devoted to cemeteries which were active public spaces during the life of the town. Of the four cemeteries, the most extensive is located at the center of the site and includes gravestones and walled tomb enclosures, and a separate walled cemetery just south of a mosque. Two smaller, walled cemeteries were associated with other mosques, one in the northern part of the site, the other just outside the town wall, southwest of the site. The fourth
cemetery is located outside the eastern wall of the site, and also includes walled tombs and gravestones.

The Songo Mnara Urban Landscape Project (Wynne-Jones and Fleisher 2010, 2011) investigated these spaces and produced data to decipher ancient activities within the open areas. The development of techniques to study open space archaeologically has been transformed in recent years through a number of techniques:

- **Geophysics**: these techniques, including magnetometry and electromagnetic methods, allow for large areas to be explored rapidly, revealing underground disturbances and anomalies without excavation (Gaffney and Gater 2003; Kvamme 2003).
- **Geochemistry**: chemical testing of soil samples collected over closely-spaced grids provide distributions of specific chemical elements that have been linked to particular human activities (Middleton and Price 1996; Wells 2004).
- **Phytoliths**: phytoliths are silica remains of plants that preserve long after the plant has decomposed. They are often found where the plant grew or was used and thus allowed for the examination of activities and events in space (French 2003; Shahack-Gross et al. 2005; Sulas and Madella 2012).

These techniques, paired with traditional archaeological testing and excavation, allow for the interpretation of ancient public space in detail once thought impossible.

**The Use of Open Space at Songo Mnara: Commemoration, Public Space, and Production**

*Central Open Space: Burial and Public Commemoration*

In the central open space of Songo Mnara coral houses serve as a boundary on three sides
to the north, south and east. The houses to the south and east are large, composite structures that represent a number of domestic spaces grouped together; the largest structures are what have been called palaces, located in the southwestern and northeastern part of the site. To the north are individual houses, each likely representing a single domestic space. The open space defined by these houses contains hundreds of grave markers, more than a dozen tombs, a walled cemetery and small coral mosque (Fig. 3). The large houses to the south are built on mounded earth to raise them up above the rest of the settlement; when looking out from them to the north, they provide an unbroken vista across the central cemetery and space.

The central cemetery is extensive and marked by hundreds of sandstone slabs set vertically into the ground. In 2011, excavation of a sample of burials (Robson Brown and Migliaccio 2012) suggests that these slabs were added after the burial, as they only rarely correlated with the grave shaft. Similarly, walled enclosures that surround some of the graves (tombs) were also probably built long after burial; tomb walls often overlaid the actual burial such that skeletal remains extended underneath the walls. These were not mausolea, but rather walled enclosures around grave markers. The graves are not evenly distributed across the central space but rather concentrated into two areas, one associated with the central mosque and walled cemetery, and another in the west, associated with most of the tombs. It is possible that these burial patterns represent different social groups within the town (see Horton 1996:75).

Excavations in the central area, in the space around graves and tombs, suggest that it was an active zone of commemoration and memorialization throughout the life of the settlement. Excavations have revealed a depositional history of offerings made on graves themselves,
including copper coins, quartz pebbles, plants, and possibly incense or food in ceramic vessels.

In an area around a 15th-century tomb (SM012, SM024), which included nine gravestones (Fleisher and Wynne-Jones 2010:51-59), various linked features were exposed at a single level, presumed to be the ground level during Songo Mnara’s main occupation. Contained in these features and deposits were twelve locally-minted copper coins of 15th-century date (Fig. 4) Wynne-Jones and Fleisher 2012:32); contemporary practice suggests that coins could have been left near important tombs, by family members referencing and celebrating their ancestors, and by others seeking favor from important deceased individuals. This practice continues at Songo Mnara today with modern coins left at a tomb believed to belong to a holy man in the cemetery southwest of the town.

Another historically-known practice is that of leaving small, round quartz pebbles on the ground at gravesites (Fig. 4). These stones, called mbwe, were described by Burton (1872:359) when he visited the region in the late 19th century, who described an “ancient custom...[in which] small stones are washed, perfumed and sundried...finally, they are strewed with prayers upon the tomb.” Oral histories recorded at Songo Mnara confirm the continuity of this practice, with one local elder describing a practice that includes reciting the Shahada, the Muslim declaration of faith, while casting stones on the grave. According to this description, this is done in order to ask forgiveness for wrongs committed. While such stones are visible on the ground surface of the walled cemetery southwest of the town, they have a limited distribution in the central cemetery. Stones were only found in one of three areas excavated in the central cemetery: at this grave close to six thousand stones were found at the 15th-century ground surface. The stones were deposited in a defined, 5-square-meter area, to the west of the tomb,
covering a space with six grave markers. In contrast, areas excavated directly to the east, surrounding the other sides of the tomb, contained only five quartz pebbles. The dense deposit of pebbles suggests that certain burials were singled out for commemoration and repetitive acts of memorialization.

Finally, phytoliths provide some intriguing evidence of plant use in a burial context. In general, phytolith samples from across the settlement are dominated by grassy phytoliths, with greater or lesser frequencies of woody phytoliths. Samples from around the tomb indicate relatively grassy vegetation, but to the north and south of it very high frequencies of palm phytoliths were found at the 15th-century ground surface. Although the site is presently covered in palm trees, there is little phytolith evidence across the open areas that this was the case in the past. The high numbers of palm phytoliths at this tomb, therefore, might suggest that palm fronds were laid over burials after internment.

Unfortunately, there has been little attention paid to ancient mortuary spaces and practices in the Swahili world. Some archaeologists have argued that tombs themselves were “tangible manifestations of ancestry” symbolizing a clan’s “identity, history, and claims to status” (Kusimba, 1999a: 330). Additionally, cemetery locations are thought to reflect class divisions with society, with elite burials inside the town walls (north of the Friday mosque), and those of commoners outside (Kusimba 1999b:151). These explanations leave unconsidered how cemeteries may have been public places where memories were created after burial, and how these were experienced in the urban landscape. Ethnographically, tombs are known as destinations for regional and coastal pilgrimages (Horton 1996:76; Kusimba 1999a:331), where offerings are made and supplications proffered at important graves (el-Zein 1974; Middleton
Tombs and cemeteries have also provided important settings for rituals of power negotiation, as at Vumba Kuu where the investiture of the sultan took place at the tomb of a prominent early ruler (Hollis 1900; Wynne-Jones 2010). The evidence from Songo Mnara of offerings left graveside suggests that this was an ongoing process, carried out over many years or decades. While the individual acts themselves were likely conducted individually, they were carried out in one of the most public and visible locations at the site, and thus must be considered as public acts as well.

**Western open area: Entrance Zone and Protected Public Space**

The western open space is today a long grassy area bordered on the west by the town wall and mangrove-choked beach front. This area likely served as an entrance zone/open plaza and an area of non-elite residence and production. Geophysical surveys revealed many anomalies in this zone, circular in shape, roughly 8-10 m in diameter (Fig. 5). Because the site has been largely undisturbed since the early 16th century, these anomalies very likely reflect ancient activity areas. The arrangement of at least fourteen anomalies defines a large rectangular zone with no geophysical readings, just inside the town wall. The remains of collapsed earthen houses were located at the northern and southern edges of the open plaza, representing two rows extending perpendicularly from the town wall. This area lies adjacent to a small mosque, at which the town wall terminates. Thus, the space between the small mosques likely defines an entrance for the settlement. The open area/plaza is roughly centered, north/south adjacent to the mosque, and may be an open area accessed once one entered the settlement. The contemporary Swahili name for this area would be *uwanda*, a
term which means ‘public square’ or the ‘space before houses’ (Fleisher and Wynne-Jones 2012).

One way we examined whether the uwanda area was, in fact, a protected open space, was to look at the distributions of larger and smaller artifacts to see if there was a difference between the open space and surrounding areas. Plotting the ratio of weight/number for local pottery sherds (the most ubiquitous artifact) offers a simple way of examining whether certain areas contained smaller artifacts; smaller artifacts could have been those that were acceptable in a space that was meant to be kept essentially clear, while larger artifacts would be relegated to the margins and/or middens. The plot of this value suggests that the possible uwanda contains smaller sherds than the areas that surround it, with an area of larger sherds to the east (Fig. 6).

Geochemical data also provides patterns that can be compared to geophysical anomalies and distributions of artifacts, to examine possible activities occurring in the uwanda and surrounding area. The distribution of phosphate (P) and potassium (K) are good indicators of the intensity of human activity; human actions such as the deposition of food and human waste add and fix phosphate in the soil. In the uwanda area, higher P and K values were found in the areas in and around the earthen houses (Fig. 7); areas with lower P values correlate closely with the possible uwanda suggesting that this was a zone where human activity did not produce organic waste. Other geochemical distributions show an inverse relationship with these areas, with higher values of sodium (Na), calcium (Ca), strontium (Sr), and magnesium (Mg) found in the uwanda area (Fig. 8). Elevated values of these elements might indicate human activity (but not waste disposal; Middleton and Price 1996:677). These elevated
chemical levels, especially Na, might be related to ancient activities, such as the drying of maritime products such as fish, shellfish and seaweed, and the drying and mending of fishing nets. These are often carried out in large open areas close to the sea. The elevated levels of Ca and Sr could be related to the presence of calcium rich materials used in the past. This could include lime (produced from burning coral rag) used in the facing of buildings or shell (see also Middleton and Price 1996:678; Wells 2004:75).

**Western Open Area: Evidence for Craft Production**

As previously mentioned, elevated levels of Ca within the *uwanda* area could also result from shell; shell fragments are relatively common in the soils, some of which are natural to the local, sandy matrix. However, the greatest density of shell beads in the open space was found in this area, and it is likely that shell beads were made locally (Flexner et al. 2008). When mapped together, the distribution of shell beads correlates roughly with areas of elevated levels of Ca, with a concentration of shell beads centered in the areas with the highest Ca values (Fig. 9). This shell bead distribution can be distinguished from those in the eastern and southeastern part of the test area, which are related to trash deposits, where artifact densities are highest. The distribution of shell beads can also be compared to that of glass beads; the latter have a much wider distribution, and are not clustered in the same way as shell ones. Thus, these patterns might indicate areas of shell bead production that could have contributed to the Ca-rich soils.

There was also evidence of craft production in the interstices between the western and central area, where a spread of iron slag (waste product created from iron production) was
located (Fig. 10). These were small fragments of iron slag including scale and droplets, which suggest that it was related to iron smithing (Kusimba 1996). While it is difficult to determine when the smithing activities occurred, the slag was found throughout the occupation levels; therefore, production may be related to the construction phase of the settlement as well as activities occurring in the town itself. Evidence of iron smithing has been found at many other coastal settlements, although its location is often relegated to “edges of villages, towns, and individual homesteads” (Kusimba 1996:390). Thus, the presence of possible iron smithing in the space between the uwanda and central cemetery is interesting, but not surprising. Small-scale iron smithing in Swahili towns is related to the construction of boats, in the production of iron fittings, as well as agricultural implements (Kusimba 1996b:289), activities that would have been well-situated near the earthen houses and active space of the uwanda. Additionally, Kusimba’s (1996) work with contemporary Swahili smiths describes their ritual power within Swahili towns, and their socially ambiguous roles due to the productive nature of iron forging; whether the proximity of iron forging to the active central cemetery has something to do with these social aspects of iron forging is tantalizing but requires further study.

Conclusion

As should be clear from the presentation of data from Songo Mnara, one of the primary challenges for an archaeology of public space is to reconstruct past activities in the absence of documents and writings. By combining new scientific techniques with traditional archaeological excavations, patterns of geophysics, geochemistry, phytoliths and material culture can be compared and explored. While difficult, the results can reveal a level a detail that is often
overlooked or forgotten when studying historical or contemporary public spaces. At Songo Mnara, it has allowed for public spaces and the activities carried out 500 years ago to come to light. The archaeology of public spaces reminds us that these were complex and multi-use places (a conclusion that would be lost by only studying architecture or documentary sources), which incorporated mundane and profane acts, as well as those likely considered sacred and/or politically charged. In the central open space at Songo Mnara, people made repeated offerings at graves, some likely for private concerns, but others, carried out in the most public of places, likely had more political overtones. One can imagine an aspiring leader publicly identifying himself with a prominent ancestor, through offerings at his grave. Likewise, the entrance complex at the site, with its protected and maintained unwanda area, provides a place for formal urban activities—perhaps the location of public ceremonies, rituals, dances—but mundane acts like the production of shell beads, and the drying of fish and nets. The location of earthen houses at the very entrance of the settlement also calls into question the ability of town leaders to maintain the elaborate and formal structure of the settlement. This formal entrance area was also where people lived, altering the urban landscape and open spaces, likely in ways never dreamed of by urban planners. In this way, the case of Songo Mnara, and the archaeology of public space, offers instructive examples of how urban space emerges not just in urban planning, but in urban practice.
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