When Did the Swahili Become Maritime?

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ABSTRACT In this article, we examine an assumption about the historic Swahili of the eastern African coast: that they were a maritime society from their beginnings in the first millennium C.E. Based on historical and archaeological data, we suggest that, despite their proximity to and use of the sea, the level of maritimity of Swahili society increased greatly over time and was only fully realized in the early second millennium C.E. Drawing on recent theorizing from other areas of the world about maritimity as well as research on the Swahili, we discuss three arenas that distinguish first- and second-millennium coastal society in terms of their maritime orientation. These are variability and discontinuity in settlement location and permanence; evidence of increased engagement with the sea through fishing and sailing technology; and specialized architectural developments involving port facilities, mosques, and houses. The implications of this study are that we must move beyond coastal location in determining maritimity; consider how the sea and its products were part of social life; and assess whether the marine environment actively influences and is influenced by broader patterns of sociocultural organization, practice, and belief within Swahili and other societies. [*maritime, fishing and sailing, long-distance trade, Swahili, eastern Africa*]

RESUMEN En este artículo, evaluamos la hipótesis de que los pueblos Swahili de la costa oriental africana fueron una sociedad marítima a partir del primer milenio E.C. Basados en información histórica y arqueológica, proponemos que la asociación de la sociedad Swahili con el mar incrementó considerablemente con el tiempo y se manifestó de una forma significativa particularmente desde principios del segundo milenio E.C. Utilizando teorías recientes sobre maritimidad en otras áreas del mundo, así como investigaciones sobre los Swahili, discutimos tres temas que marcan las diferencias del nivel de orientación marítima de esta sociedad costera entre el primer y segundo milenio. Éstas son la variabilidad y discontinuidad en la localización y permanencia de los asentamientos; evidencia de una conexión mayor con el mar a través de la tecnología de pesca y navegación; y desarrollos arquitectónicos especializados que incluyen instalaciones portuarias, mezquitas, y casas. Las implicaciones de este estudio indican que debemos considerar otros aspectos de una sociedad aparte de su localización costera para determinar su maritimidad. Hay que considerar cómo el mar y sus productos son parte de la vida social y evaluar si existe una influencia recíproca entre el ambiente marítimo y los patrones de organización sociocultural, las prácticas, y las creencias de los Swahili y otras sociedades. [*marítimo, pesca y navegación, comercio a larga distancia, Swahili, África Oriental*]

The very existence of an archaeology belonging to the maritime depends on something that actually can be termed maritime. — David Tuddenham, *Maritime Cultural Landscapes: Maritimity and Quasi Objects* [2010:6]

Long either ignored or treated as a marginal interest, the sea and humanity's engagement with it have become recent topics of inquiry within archaeology. Over the last decade and a half, "maritime archaeology" has grown as a subfield (e.g., Catsambis et al. 2011; Green 2009), distinct from and broader than either "underwater" or "nautical" archaeology (e.g., Leshikar-Dinton and Erreguerna 2008; Staniforth and Nash 2006). These developments have encouraged, among other things, a greater interest in the following: the archaeological evidence from intertidal areas and coastal fringes; the evidence for and timing of sea-level change and human and ecosystem responses to it; and the changes and continuities in the nature and pattern of marine resources exploitation. They have also stimulated more concerted efforts to integrate data recovered from terrestrial coastal settings with those from underwater contexts. Despite such developments, in a great many recent studies the term *maritime* is used simply to highlight that the archaeological project was conducted in proximity to the sea or that the past society or communities under study consumed fish and perhaps exploited other coastal or marine resources. By contrast, the conceptualization of what actually constitutes a "maritime society" and what distinguishes it from a terrestrial one typically is left unexplored.

Christer Westerdahl (2013:1), in particular, has critiqued this common lack of theorizing about what makes a past society maritime, arguing that, "if you do not possess a population attuned to maritime preoccupations, even if the current population is residing on the seashore, there is no maritime culture." Numerous ethnographic studies likewise emphasize that in maritime societies the sea plays a fundamental role not only in communication and economy but also in social organization and ideology (e.g., Conte 2006; D'Arcy 2006; Sather 1997). Tom Hoogervorst (2012:248), for example, holds that maritime communities depend on the sea not just for their livelihood but also for their sense of cultural identity and autonomy. This gives rise to what Gabriel Cooney (2003:324) has described as "socialized seascapes." Imbued with history, seascapes act as "storehouses of cultural identity" (Hviding 1996:233) from which routine practices emerge.

Relating such conceptualizations to archaeological criteria is challenging. For Westerdahl (1992:5), a maritime cultural landscape comprises a combination of factors, including the following:

- human utilization of maritime space by boat;
- a tradition of using the sea and its resources;
- terrestrial features and infrastructure that support seaborne practices;
- the naming of topography with reference to the sea or things maritime; and

- attention to the sea in sailing routes, shipping zones, oral traditions, and ritual practices.

Building on Westerdahl's model, here we consider a society "maritime" if, beyond providing resources and facilitating trade and communication, the marine environment influences and is influenced by broader patterns of sociocultural organization, practice, and belief within that society (see Prins 1965:4). Additionally, we argue that it is critical to determine not just what makes a society maritime but also when this transition seems to have occurred. For it is only by tracing the historical roots of the legitimized prerogatives, shared institutions, and inclusive identities that define a society's uniqueness that we are able understand why these characteristics and not others come to matter and assume prominence in that society's own construction and definition of its identity (Giddens 1981:45).

On the eastern African Swahili coast, we believe we can begin to decipher the period during which the ancient Swahili began to practice a maritime lifestyle and so began to articulate a maritime identity. Although the ancestors of the contemporary Swahili (a maritime society, to be sure [Prins 1965]) began living on the coast in the mid–first millennium C.E., we suggest that in practice they should be considered "maritime" only after circa C.E. 1000. In this article, we establish this millennial break by exploring discontinuities in settlement and ceramics at this time; we describe the abandonment and alteration of coastal settlements in the tenth and 11th centuries C.E. and the dissolution of a ceramic horizon that once bridged coast and hinterland. This suggests a particular form of rupture with larger, continental settlement systems that once extended from the coast deep into the hinterlands, as well as an active reorientation away from the societies further inland on the continent, even while maintaining some deep and significant connections to them. Next, we describe a number of post-C.E. 1000 material culture patterns that indicate active efforts by coastal people to connect more fully to the sea itself and to the maritime world of the Indian Ocean. This includes the expansion of Swahili travel further into the Indian Ocean in the 11th and 12th centuries, understood through the reconstruction of fishing practices and documentary references to long-distance voyages. Concurrently, material culture changed, especially locally produced pottery: from a pattern of broad-scale similarity between coast and hinterland to more regional ceramic traditions discontinuous with continental patterns (and, eventually, discontinuous with each other). Finally, significant changes in architecture also took place that we interpret as indicative of the consolidation of Swahili maritime orientation. We document architectural changes in coastal towns, such as the placement of mosques at the shore's edge or on bluffs overlooking the sea, and, later, new forms of domestic and port architecture that facilitated long-distance trade and accommodation of traders. These material changes, we argue, are not simply reflections of an Indian Ocean–oriented society but, rather, active efforts to

effect this transformation. The increasing maritimity of the Swahili was thus crucial to structuring their cosmopolitan status—a status aimed at both drawing visiting merchants closer and distinguishing themselves from other coastal and hinterland peoples. In this way, growing maritimity was as much about constructing new social identities as it was the creation of the idea of the hinterland itself, as the Swahili focused greater attention on the sea than on the continent lying westward.

BACKGROUND TO SWAHILI ARCHAEOLOGY

Over the last 30 years, research on the ancient Swahili of the eastern African coast has transformed our understanding of the origins and character of this middle-range complex society, one that comprised multiple centers and subregions with linguistic, sociocultural, and economic internal ties. Based on the integration of archaeological, linguistic, and historical sources, it is generally accepted that during the late first millennium B.C.E. to early first millennium C.E., peoples from the near interior moved into the coastal niche to establish mixed-farming, earth-and-thatch villages, interacting with and likely either absorbing or displacing preexisting hunting-gathering-fishing communities. Some—perhaps even many—of these early villages had contact with merchant vessels sailing the Indian Ocean on annual monsoon winds and, with them, traded goods and ideas; this pattern continued throughout Swahili history, growing in scale and contributing to their widespread reputation for mercantilism and as being a maritime society. Although it is not embraced unanimously (e.g., Pradines 2009), the developing model of Swahili society, while overturning older, colonial-inspired models of Arab origins and settlement (e.g., Kirkman 1954, 1964), also acknowledges the likelihood of small-scale immigration from multiple Middle Eastern and Indian Ocean peoples without attributing the foundations of Swahili society to them.

With some exceptions discussed below, first-millennium C.E. settlements were mostly small villages characterized by earth-and-thatch domestic structures (Fleisher and LaViolette 1999). With the later growth of towns, the Swahili developed an architectural technology for elite houses and public–ritual buildings that employed both mortared blocks of reef coral and, later, quarried limestone. Other changes included the adoption of Islam, which is first attested at Shanga (Lamu archipelago, Kenya) in the eighth century and, by the 12th century, was practiced widely along the entire Swahili coast (Horton 1991; Insoll 2003; Pouwels 1987). Over the same period, many larger towns on the coast became what are called "stonetowns," with some portion of their buildings in stone and the balance in earth and thatch. Smaller towns were largely the latter, with perhaps a single stone mosque or some stone tombs. During the first half of the second millennium C.E., increasing complexity on the coast—including sophisticated material culture and architecture, long-distance trade connections to the interior of central–southeastern Africa and the Indian Ocean, settle-ment hierarchies, widespread organized religious practice—produced a string of independent urban polities with broadly shared values and qualities. In the last half-millennium, Swahili settlements were faced with colonial threats: initially Arab and Portuguese, subsequently Omani colonization in the early 19th century, and ultimately German and British in the late 19th and early 20th centuries. Nonetheless, Swahili culture and society remains distinct in the 21st century, especially in Kenya, Tanzania, and Mozambique.

MARITIMITY AND THE SWAHILI

Increasing understanding about the history and archaeology of the coast over the last two millennia has made it possible to create working narratives for the entire coast that emphasize continuity in the context of growing mercantilism and cosmopolitanism (Horton and Middleton 2000; Kusimba 1999; LaViolette 2008). However, these narratives have also tended to elide differences between coastal societies of the first and second millennia. We suggest that one such elision is that the overwhelmingly maritime nature of second-millennium Swahili has been assumed to hold largely for the first millennium as well. Swahili archaeology, we think, has produced a great deal of evidence that now allows us to reconsider this assumption. We suggest that significant changes in inter- and intrasettlement patterns, subsistence, domestic spaces, and material culture indicate that the Swahili became increasingly connected to, and reliant upon, their maritime environment over many centuries—and not early in their settlement of the coast. This is not to say that early settlers were not cognizant of the sea and its potential usefulness to them. Indeed, the migration of inland food producers to the sparsely populated coast must have been to exploit the resources of the sea in numerous ways, and evidence from important first-millennium settlements suggests such active engagement (e.g., Badenhorst et al. 2011; Helm 2000; Walz 2010).

As we aim here to tackle narratives that flatten important differences, we do not wish to suggest that our argument holds for every coastal settlement. Rather, what we attempt to draw attention to is evidence for specific steps Swahili people took, at different times and places, that show an accumulation of maritime cultural practices and beliefs, which we argue came together in a transformative way in the early second millennium C.E. These practices and beliefs are, mostly, rooted in the first millennium, but we suggest there is a "sea change" in the 11th and 12th centuries, wherein maritimity becomes inextricable from most elements of Swahili life. Indeed, the increasing maritime orientation of Swahili society (or societies) can be seen, in this case, as interconnected with urbanization, Islamization, and other aspects of coastal transformation that archaeologists have looked at quite carefully. However, we do not view the increasing maritimity of the settlements simply as adjustments to such changing circumstances. Most importantly, we argue, the emergence of Swahili towns was also structured by a changing worldview; the Swahili were not

merely participating more in the Indian Ocean world, they were reimagining themselves as more connected to it, and they effected this transformation through alterations of their material world.

This is not to say that processes of social and economic intensification that began in the first millennium were not ongoing and important to the emergence of second-millennium coastal towns. The emergence of Swahili maritimity did not eclipse ongoing connections to neighboring and more distant peoples and polities (Abungu and Mutoro 1993; Helm et al. 2012; Kusimba and Kusimba 2005; Kwekason 2013; Pawlowicz 2011; Pawlowicz and LaViolette 2013; Vernet 2005; Walz 2010). Maritimity is only one cultural logic characterizing the second-millennium Swahili; although coastal geography is a component of this logic, the coast was not a world unto itself. However, we feel that, in an effort to demonstrate the local origins of later Swahili towns, there has been an overemphasis on continuity, such that features of successful second-millennium towns are sought in the archaeological record of early first-millennium settlements. In terms of the maritimity of the Swahili coast, we argue that there is growing evidence that this quality of Swahili society emerges only later and that it represents a distinct break from earlier ways of life.

How such tangible changes of cultural reorientation toward the sea relate to the rich and well-attested intangible evidence such as is found in Swahili language, poetry, and music remains beyond the scope of this article. Suffice it to note that while such aspects of Swahili practice and tradition undoubtedly have deep historical roots, correlating their emergence with the initial appearance of material expressions of a distinctly maritime orientation remains challenging and can only be resolved, if at all, by future research. As overarching theories about Swahili tend to give way to regional and specific temporal perspectives (e.g., Kusimba et al. 2013; LaViolette and Fleisher 2009), we proceed cautiously, knowing that what we present here will be further elaborated as archaeology continues apace on the coast. Nonetheless, that multiple lines of material evidence now seem to point to, at the very least, a scaling up of engagement with "things maritime" and a general reorientation toward the sea in the early second millennium C.E. calls for a more critical problematization of what it means to call the Swahili a "maritime" society. It is surely more than just living by the sea, using boats, and eating fish.

VARIATION IN TOWN DEVELOPMENT
A normative view of Swahili town development spanning the eighth to 15th centuries (e.g., Kusimba 1999; LaViolette 2008; Nurse and Spear 1985), based on research at well-known sites such as Kilwa and Manda (Figure 1), is being challenged as evidence accumulates from a growing variety of other settlements. Among the many hundreds of farming and fishing villages that proliferated on the coast from the sixth to tenth centuries, a handful of larger settlements emerged. Kilwa flourished from the 11th century onward

as the endpoint of trade routes reaching from the interior, especially controlling gold from the Zimbabwe plateau en route to Indian Ocean destinations. Kilwa was likely always an important town, but as we learn more about others, we begin to see it as somewhat exceptional rather than the norm. In the developmental trajectories of all other well-studied towns, we see different patterns with interesting convergences, with displacements and interruptions particularly in the tenth to 11th centuries. In the case of Manda, its earliest centuries were prosperous, with numerous buildings and extensive evidence of Indian Ocean trade; by C.E. 1100, ten percent of the domestic ceramics were imports, the highest occurrence on the coast, and the settlement covered 20–25 hectares (Horton 1986:207). At both sites, we see a marked transformation in architecture in the tenth to 11th centuries: building in *porites* coral (cut from reefs) with mangrove-pole roof beams—both marine resources—and quarried limestone. At Manda, this was likely the result of Fatimid trading interests with the Swahili (Horton 1986:210) and Red Sea influence.

The five examples that follow suggest that if the 11th century was one of increasing wealth, prosperity, and integration of new architectural technologies for some settlements, others experienced declining fortunes. Three important settlements were abandoned or depopulated by C.E. 1000: Unguja Ukuu, Chibuene, and Tumbe. Unguja Ukuu (Juma 2004; see also Dembeni in the Comoros, Wright 1984) on Zanzibar Island dates to C.E. 500–900 and is the earliest documented coastal settlement with Early Tana Tradition (ETT)–Triangular Incised Ware (TIW) pottery. This pottery is found at similarly dated sites on the coast and in the hinterland, and it exhibits a high degree of homogeneity in forms, decoration, and assemblage composition (Fleisher and Wynne-Jones 2011). By C.E. 750, Unguja Ukuu grew to 17 hectares of earth-and-thatch houses. The settlement was abandoned in the tenth century (Juma 2004:154), perhaps due to fluctuating sea levels (see Punwong et al. 2013), with sporadic reoccupation from the late 11th century. Chibuene (Sinclair et al. 2012), on the southern Mozambican coast, has a similar history: from C.E. 700–1000 it was a busy coastal village, the entry point for glass beads from India, the Middle East, and possibly South Asia with destinations to the interior (Sinclair et al. 2012:728–729). Chibuene's prominence as a trade village diminished after C.E. 1000, and it was abandoned by 1300.

Tumbe on the north coast of Pemba Island, Tanzania, covered 20 to 30 hectares, with earth-and-thatch houses, evidence of diversified subsistence, and a rich material culture of local and imported goods from the seventh to tenth centuries C.E. (Fleisher and LaViolette 2013). Tumbe was then abruptly abandoned during the tenth century. Then, after a century of absence, an adjacent area was newly occupied. This settlement, Chwaka, grew into a prominent town during the dynamic 12th to 15th centuries on the coast; based on regional survey (Fleisher 2010), we know that, across northern Pemba, other villages were being depopulated in

FIGURE 1. *Eastern African Coast with sites mentioned in the text. (Image courtesy of Jeffrey Fleisher)*

the 11th century and people were moving into Chwaka and other towns.

In two final examples, Shanga and Kaole, we see important changes in the 11th century. Mark Horton (1996) documents Shanga's transformation from a mid-eighth-century village into a 14th-century trading town, dense with stonehouses, mosques, and tombs until its 15th-century abandonment. Between C.E. 920–1050, many earlier earth-and-thatch buildings were rebuilt in porites coral, including the central mosque. These are all transformations we would

expect from a thriving Swahili town, akin to Manda and Kilwa. But then a striking change signals internal reorganization: in the decades following the renovation, many porites buildings were robbed of stone, whereas new stonehouses were built (Horton 1996:402). This mid-11th-century disruption was soon followed by a re-emergence of building and prosperity through 1250 (Horton 1996:405). At Kaole, on the northern Tanzanian coast, we see similar architectural distinction at this time. Kaole comprises three sites. The first was a village (Kaole) abandoned before 1000; the second

(Kaole Hill) was occupied from 800 to 1800; and the third (Kaole Ruins) was settled at 1100 (Chami 2002:31), with 56 stone tombs, two stone houses, and two mosques dating to 1200 and after. The onset of construction at Kaole Ruins after 1100 marks a similar temporal break to the abandonment of Tumbe, Unguja Ukuu, and Chibuene and the reorganization occurring at Shanga.

Patterns of local ceramic traditions and their distribution echo these changes, with the homogeneity of ETT–TIW pottery breaking down at circa C.E. 1000–1100 and the emergence of more regional variations of ceramic styles and forms found at coastal and hinterland settlements. By the 13th to 14th centuries, pottery traditions were exclusively regional (Fleisher and Wynne-Jones 2011).

As part of our argument, we suggest that in the various developmental trajectories of a number of well-studied towns, we see certain patterns that have contributed to a normative view of Swahili town development, as noted above (e.g., Kusimba 1999; LaViolette 2008; Nurse and Spear 1985), but as the number of such examples increases, they challenge the very notion of a single set of expectations for coastal settlements. Archaeologists have developed typologies for various scales of settlements (e.g., Fleisher 2010; Wilson 1982), but the towns have emerged as a much more internally diverse group than was apparent previously. Despite these differences, the major organizational changes taking place in the early second millennium, we propose, are tied to the changing identity of the Swahili as they integrated maritime ways of life fully, in combination with increased urbanization.

THE ADVENT OF DEEP SEA FISHING AND LONG-DISTANCE VOYAGES

In addition to the above changes, evidence starting from the period C.E. 900–1050 suggests that coastal dwellers began to fish in deeper water for larger fish and to range further from their settlements to exchange goods.

Fish and Fishing

The eastern African coastline is paralleled by a fringing reef interrupted in the areas around river drainage, where mangrove forests grow in estuarine environments. Coastal dwellers have long exploited these rich resources, as is attested by numerous fish remains (e.g., Badenhorst et al. 2011; Fleisher 2003; Horton and Mudida 1993, in press; Quintana Morales 2013; Quintana Morales and Horton 2014; Van Neer 2001). These assemblages, linked to chronological sequences of settlement occupations, provide a record of changing fishing strategies over time. The occurrence of offshore-fish remains in the archaeological record after C.E. 1000 suggests that particular strategies and tools, such as boats, gillnets, and large handlines, were used to catch large offshore fish.

Evidence from Shanga suggests that sharks were substantially exploited only after C.E. 1100 (Horton 1996:380; Horton and Mudida 1993:679). The pattern of shark ex-

ploitation is similar at Chibuene, where shark remains are found primarily in the late occupation levels after C.E. 1300 (Badenhorst et al. 2011). All evidence of offshore species from Chwaka, Mduuni, Mtambwe Mkuu, Ras Mkumbuu, Tumbatu, and Songo Mnara are found in second-millennium deposits, while those sites dated to the first millennium, for example, Fukuchani and Unguja Ukuu, contain no offshore species; this contrasts with the situation further south at Chibuene, Mozambique, for example (Sinclair et al. 2012), where ceramic evidence suggests rather different cultural affiliations. Additionally, the relative amount of offshore fishing varies among second-millennium towns; Vumba Kuu, Kaliwa, and Kizimkazi (all smaller towns or villages) have smaller percentages of offshore fish species than the larger towns.

Other zooarchaeological evidence similarly supports an increase in offshore fishing. At Shanga, changes in overall fish-species composition suggest an increased exploitation of species with longer maximum body lengths and shorter lifespans after C.E. 950, consistent with those of offshore fish (McClanahan and Omukoto 2011). More evidence includes the remains of sharks (mostly Carcharhinidae), bonito (*Euthynnus affinis*), and skipjack tuna (*Katsuwonus pelamis*). Bonito can be found in open waters close to the shoreline, while skipjack tuna occurs mostly offshore; both can reach lengths of one meter (Froese and Pauly 2012; Taquet and Diringer 2007:465–466). Two species of sharks in the Shanga material, *Carcharhinus limbatus* and *Carcharhinus wheeleri*, can reach over 2.5 meters in length and are found over and near the continental shelf, while a third, the longfin mako (*Isurus paucus*), is an oceanic species that can reach over four meters (Froese and Pauly 2012; Smith and Heemstra 1991:73, 77, 99). Overall these species require a different set of fishing strategies and tools than those commonly used inshore.

In his ethnography of fishers from the Lamu archipelago, A. H. J. Prins (1965:139, 141) notes that shark-fishing methods such as trolling in the open sea and fishing with a tangle net (*jarife*) required "strenuous work" and "much capital." These continue to be observed along the Swahili coast; the gear and vessels are often owned by traders or sponsors who get a large share of the fishing profits (Nakamura 2011), a differentiation that may be attested archaeologically at the 17th-century site of Kua on Mafia Island (Christie 2011). Perhaps propelled by the opening of new exchange markets (Pouwels 2002:371), the early second millennium was marked by important changes that defined the Swahili coast, such as the rise of well-known urban commercial centers (LaViolette 2008:29). Given the necessary investments in offshore technologies, it is not surprising that offshore fishing developed during a period of urban growth and intensifying maritime trade and seafaring.

Voyages and Navigation

According to the *Periplus of the Erythraean Sea* (Casson 1989:59–61), the first-century C.E. inhabitants of the coast of "Azania" used sewn ships and dugout canoes for fishing and
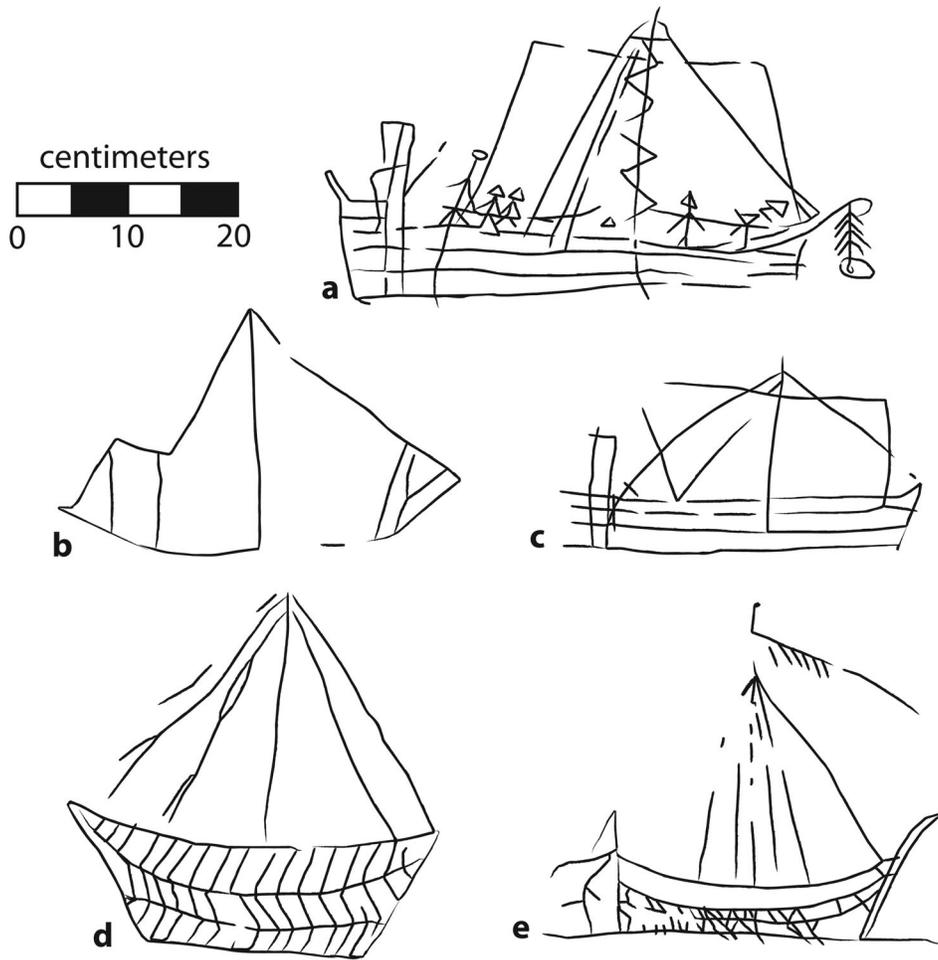
FIGURE 2. *Ship graffiti: a, c: from Great Mosque, Kilwa Kisiwani; b, from Husuni Kubwa, Kilwa Kisiwani; d, from Palace, Songo Mnara; e, from House 17, Songo Mnara (after Garlake and Garlake 1964).*

catching turtles. The sewn-hull technique, invented around 2000 B.C.E. in the Middle East, was common in the Red Sea and Western Indian Ocean until the 19th century (Agius 2008). Studies of the *mtepe*, the iconic Swahili sewn ship, are mostly based on 19th- and early 20th-century evidence (Gilbert 1998; Poumailloux 1999), and few studies have tackled earlier Swahili maritime technology and navigation. There is an absence of relevant evidence such as wrecks (Lane 2012), but some direct evidence including ship graffiti (Garlake and Garlake 1964; see Figure 2), stone anchor shanks (Chittick 1980), and stone ballast (Pollard 2011) may date to this period. What we know through the documentary record is that coastal elites invested in long-distance voyages at least as early as the 13th century and that a small number of ships owned by Swahili patricians sailed as far as Arabia and, from the 16th to mid–18th centuries, Western India (Vernet in press).

From the first centuries of Islam onward, African sailors and sometimes soldiers were common aboard ships of the northwestern Indian Ocean and India. Many were likely slaves or freed slaves, perhaps the majority coming from northeastern African ports in the Horn (Alpers 2004; Vernet 2009:39–41). *The Book of the Wonders of India*, written around C.E. 968 (Ducène in press), mentions dugout canoes in "Sofala of the Zanj" (Sauvaget 1954:221–223). Al-Masudi also mentions the use by Zanj people of crafts for towing or hunting sperm whales to collect ambergris (a waxy substance formed in the digestive system of sperm whales, used in the preparation of fragrances and incense). Earlier, at the exceptional site of Sharma on the Hadrami coast, occupied circa 980–1150, excavations have revealed a high proportion of eastern African ceramics (12.5%) with strong parallels to those at Shanga. Sharma was not a port town—more probably it was a transit entrepôt offering a fortified meeting place for traders at the intersection of routes between the Persian Gulf, Red Sea, India, and eastern Africa. Trade with the latter was substantial, indicated by gum copal sourced to either eastern Africa or Madagascar. The unglazed African ceramics may have held substances such as copal but were also likely used by emigrant Africans living in the settlement. This is particularly the case with numerous burnt, globular cooking

pots (76% of the African pottery; see Regert et al. 2008; Rougeulle 2004). These discoveries point to an important free or servile African community in Sharma. It also suggests that, by the 11th century, eastern African traders were travelling long distances to exchange with other merchants. Eastern African ceramics, mainly post-C.E. 1000 globular pots, also occur on the eastern Hadrami coast, in al-Shihr and smaller port towns (Hardy-Guilbert 2002; Rougeulle 2008), in al-Hamr al-Sharqiya on the southern Omani coast, and as far as Suhar on the Batinah coast of Oman (Rougeulle 2007). While proportions are smaller than in Sharma, these discoveries provide evidence of the intensity of the eastern African trade of that time and may also indicate the existence of African inhabitants or travellers.

Similarly, Philippe Beaujard (2012:120–126, 321–333) argues for a pre-13th-century trade route run by Austronesians, perhaps Malagasy, extending from Madagascar to Southern Arabia via the Swahili coast. This is supported by Ibn al-Mujawir, who travelled to Aden around 1230 and suggested that people from "al-Qumr" (Madagascar), using outrigger canoes, travelled between Madagascar, Kilwa, Mogadishu, and Aden. Austronesians may have frequented Sharma and other Southern Arabian ports, and it is not unreasonable to think that eastern African traders and other workers travelled aboard Austronesian vessels, Arabo-Persian ships, and perhaps, at a later stage, their own.

Nonetheless, explicit documentation of long-distance eastern African navigation appears only in the 13th century; Yemeni sources confirm that, during that century, ships from Mogadishu made annual trips to Aden, al-Shihr, and other Hadramawt ports. Although trade with eastern Africa was marginal to Rasulid Yemen (1229–1454), customs evidence leaves no doubt on the regularity of trade from Mogadishu and the southern Swahili coast, including slaves, ebony, ivory, foodstuffs, cloth, and gum copal from eastern Africa or Madagascar. Settlements of the Somali coast, including Mogadishu and Barawa, appear to have been collection points for eastern African products. Qadi Masud, living in Aden in the late 14th century, states that ships from "each small city of the Sawahil" brought goods to these ports, which were then shipped to Aden and the Hadramawt. Evidence of voyages from Kilwa to Arabia appears in 1336 when a ship "from Kilwa," loaded with rice, reached Aden (Vallet 2010:557–561). This new body of evidence suggests strongly that the general prosperity of the years 1200–1340 led the Swahili to increase regional navigation and develop regular overseas trade. The Swahili might also have filled a gap left by the decline of Malagasy-Austronesian navigations (Beaujard 2007).

PORTS, HOUSES, AND MOSQUES

Architectural changes in Swahili towns, beginning after C.E. 1200, similarly suggest increasing attention to maritime matters: the construction of more formal port and maritime architecture, the movement of mosques from town centers to the edge of shorelines, and the development of domestic architecture featuring the potential for hospitality.

Maritime Architecture

While trade goods testify to a society open to the wider world, architectural features relating to port or maritime functions are generally absent on the Swahili coast during the first millennium. Wood, wattle, and daub provided the building materials, and ships would have anchored on the foreshore obviating the need for docking facilities. Sewn hulls and stone anchors would ensure the ephemeral nature of shipping evidence from the distant past. Where domestic functions took place, the principal activities were fishing, shell gathering, and iron making.

Architectural signs of a wider trading economy appear only with the monumental stone building in the late 13th century. Al Idrisi, writing secondhand in the 12th century, reports iron mining and trading in iron goods at Malindi and Mombasa. This would have had associated shipping, though Al Idrisi states that the mainland used ships from Oman (Freeman-Grenville 1962:19–20). Stone mosques and tombs were featured early, with explicit maritime building following. For example, at Kilwa Kisiwani several stone sea and reclamation walls built in the 14th to 15th centuries (Chittick 1974:232) retain the midden cliff where the Malindi mosque, wells, warehouses, and probable merchant houses were once situated. Steps down from these cliffs and walkways to the intertidal area, where vessels could be anchored, have been recorded at Kilwa Kisiwani, Husuni Kubwa, and Songo Mnara (Pollard 2008a:100, 110; Pollard et al. 2012:52).

During this peak period of commercial activity and architectural flowering, some stone structures were built to lie outside the main settlements. The palace of Husuni Kubwa and the more enigmatic Husuni Ndogo, built in the 14th century, are situated for a commanding harbor view (Chittick 1974:174). Perhaps the most remarkable features on this stretch of coast are the reef-coral causeways in the lagoonal area at the entrance to Kilwa Kisiwani harbor and extending south toward Lindi (Pollard 2011). There is evidence of storing coral, and later forming walkways from it, contemporary with city building activities (Pollard et al. 2012:51). The causeways had practical uses, foremost as navigation aids but also facilitating crossing the lagoon to the reef flat as fishers, shell gatherers, and lime makers do today.

Away from urban centers, coastal activities provided supporting functions including food provisioning through fishing, shellfish gathering, and agriculture in subsidiary settlements extended back from the coast (Pollard 2008b:271–272; Wynne-Jones 2005:116). Foreshore industrial activity occurred in sheltered estuary locations into the second millennium, as exemplified in sand mounds on the foreshore in the Mbegani estuary near Kaole, where iron working and lime and mortar making were taking place (Pollard 2008a:162–167). Iron working was likely sited near the

high-water mark, as signs of flooding of the mounds appear in the lower contexts. The harvesting of mangroves—for architecture, tools, furniture, and firewood as well as for export to Siraf (Whitehouse 2001) and other ports around the Persian Gulf for roofing—also likely occurred from at least the tenth century onward. Iron and lime making were also extra-urban functions, so that settlements formed an integrated system of functionally interdependent communities, of which the overriding rationale of society was, we argue, maritime.

Stonehouses and the Maritime World

The coral and lime domestic architecture that defines Swahili "stonetowns," those settlements with a significant portion of stone structures, is an embodiment and validation of Swahili self-identification as a coastal, maritime people, differentiated from the hinterland and part of the Indian Ocean world (Gensheimer 1997:347–359). The "stonehouses" define and delimit the urban space of the towns and are still today regarded as indicative of cosmopolitan, mercantile identities (Donley-Reid 1990; Middleton 1992). Their role is partly a functional one. Ethnographies in the late 20th century suggest that stonehouses guaranteed creditworthiness, an embodiment of the owner's permanence and wealth (Allen 1979). This is vital in a maritime world with shifting populations characterizing the ocean rim (Pearson 2007). More specifically, the houses also provide accommodation for visiting traders, with the "standard" Swahili house plan including a *sabule* or guest room that demonstrated hospitality and monopolized business. The archaeology of stone houses suggests that this hospitality may have been important from their inception, with guestrooms and courts identified at excavated sites (Allen 1979:2; Garlake 1966; Horton 1996:60; Kirkman 1964; Wynne-Jones 2013).

Other evidence points to the relationship between stonehouses and trade: at Shanga, the area of town most associated with commerce is the southerly portion, closest to the beach, a place where six out of the seven guest rooms identified are located (Horton 1996:62). Storerooms are also found in the center of Shanga stone houses (Horton 1996:60), a feature found also at Manda (Chittick 1984:41), Gede, and Songo Mnara (Allen 1979:23). Thus, the origins of the stonehouse tradition were closely tied to the establishment of a transoceanic trading paradigm based on hospitality and house-based commerce. At Songo Mnara, it seems that the production of cloth may have occurred inside the houses during the 15th century, positioning those structures as crucial nodes in the economy of trade (Wynne-Jones 2013). The conduct of oceanic commerce through domestic structures may have even defined the modus operandi for Indian Ocean commerce in later centuries (Um 2009).

As well as their functional role in trade, the stonehouses helped create symbolic links between Swahili and the maritime world. Cosmopolitanism, considered a defining characteristic of Swahili society (LaViolette 2008), was demonstrated and embodied in the structures through stylis-

tic links to the architecture of the Arab heartlands and in spaces for display of exotic objects. This latter practice is a way that imported goods were used by Swahili and were considered crucial in public and private identity practices of coastal inhabitants (Fleisher and LaViolette 2007; Wynne-Jones 2007). The materials of construction also brought the ocean into the lives of inhabitants in a literal sense. Beach sand was brought to provide a well-drained foundation, before walls were built from limestone and dressed porites, while mortar and plaster were derived from burned coral. Wooden roof supports were cut from mangrove derived from the ocean rim. *Fingo* pots, buried offerings that define the liminal spaces of houses, have often been discovered to contain shells (Horton 2004; Wynne-Jones 2013); as with the anchor in the Tumbatu mosque, these objects built the sea deliberately into the house foundations. On occasion, plastered house (and sometimes mosque) walls were even inscribed with ship graffiti, often around key thresholds (Garlake and Garlake 1964). The stonehouses therefore seem to have cemented Swahili engagement with the maritime world by providing functional spaces for networks of interaction and trade and by symbolically bringing it into the town.

Yet stonehouses were a late addition to the settlements of the coast. It is not until the 14th century that we can identify construction in coral and lime on any significant scale. Settlements from the seventh century onward were entirely of wattle and daub, which continued to provide the majority of housing throughout the centuries (Fleisher and LaViolette 1999; LaViolette and Fleisher 2009; Vernet 2010). As discussed, stonehouses were prefigured by the use of coral and lime mosques and tomb construction from the 11th century. At Shanga it is possible to trace an earlier tradition of setting coral blocks in mud mortar, occurring from the 13th century (Horton 1996:27). This is in keeping with Shanga's organic development from wattle-and-daub to stone construction; elsewhere stonehouses were added suddenly to pre-existing townscapes (Chittick 1974). The foundational study of Swahili architecture (Garlake 1966) traces this phenomenon to 13th-century developments at Kilwa Kisiwani and the palace of Husuni Kubwa. This uniquely grand structure, the earliest to use stone and mortar construction on such a significant scale, prefigures many of the features of coastal architecture. In particular, the huge southern court of Husuni Kubwa was surrounded by storage rooms on two floors. Guest rooms adjoined a large "audience court" and pool, linking the sultan's private rooms with public areas to the south. As such, Husuni Kubwa appears to have intended to attract and contain international traders, scholars, and travelers. The stone architecture of the coast incorporated many such features, domesticating trade and mercantile interaction from the 14th century onward. Both functionally and symbolically, these stonehouses brought the Swahili domestic world into a maritime context and continued to shape coastal identities into the 21st century.

FIGURE 3. *"Mnara" mosque at Songo Mnara. (Photo courtesy of M. Horton)*

Mosques and Their Architecture

A transformation can also been seen in the move to a more seaward-oriented religious architecture beginning in the 13th century. First-millennium settlements located mosques (and associated cemeteries) in the town centers, set back from the sea. At Shanga, the eighth- to 14th-century Friday mosques were hidden behind a ridge of sand dunes (Horton 1996). Similarly, at Ras Mkumbuu (Horton in press) and Kilwa and Sanje ya Kati (Chittick 1974; Pradines 2009), the tenth- to 11th-century Friday mosques are positioned away from the sea. From around C.E. 1200, however, new mosques were built in many coastal settlements, located as close to the seashore as possible. A striking example was at Ras Mkumbuu, where the earliest mosque was leveled (and turned into a cemetery), and some of the stones were used to construct a grand Friday Mosque on the beach. It included a tower minaret—probably the earliest on the Swahili coast—that would have been the most visible town feature from the sea. A similar minaret was recorded by Peter Garlake (1966) in Mogadishu, dated by inscription to 1258. Shortly afterward, another mosque was built at Ras Mkumbuu, also on the beach, while the stone houses formed an impressive waterfront, completing the town's transformation from hilltop settlement to seaward-facing community. At both Tumbatu Island and Chwaka, seaside mosques were constructed in the 13th century, adding to more centrally located mosques or replacing them completely. At both Kilwa and Shanga, the older Friday mosques remained

in use, but new mosques were built on the beach, a tradition that continued in later centuries. Later, during the 14th and 15th centuries, at Kilwa, a series of religious buildings were built on promontories and associated with landing places, visible from both inland roads and ocean approaches to the harbor (Pollard 2008b). This tradition finds expression at different dates elsewhere along the coast, such as in the construction of the Mbaraki Pillar in Mombasa (Sassoon 1982) and of the shoreline Kongo mosque near Diani and at Jumba la Mtwana (Kusimba 1999). Perhaps the most extreme example of this shift can be found at Songo Mnara, where three mosques were built along the seashore and a fourth was constructed in the sea itself (Figure 3). This structure, sometimes known as the "Mnara" and suggested to be a lighthouse or tower, was in fact a mosque. The structure can only be reached at low tide; at high water, it is surrounded entirely by the sea.

The advent of seaside mosques in the 13th century may indicate their use for navigation—providing landmarks on an otherwise featureless coast and serving as indication of an Islamic settlement with a common code of practices. Similarly, Edward Pollard (2008b:271, 277) has suggested that coastal mosques may have been public symbols of the power and prestige of the city and its leaders to incoming sailors and merchants. These reasons do not explain why this happens only during the 13th century, when the coast was already well settled and occupied exclusively by Muslim communities. More convincingly, we consider this part of

the shift toward maritimity, toward a period during which the Swahili communities saw themselves closely linked to the sea, with identities extending across the sea to the Middle East. The direction of prayer toward Mecca takes a line northward in the Indian Ocean and so would have been a link between maritime and Islamic identity on a daily basis while also providing a context in which such an identity was embodied through routine religious practice.

DISCUSSION

Thus far, we have discussed a series of changes in material culture, settlement, and architecture in the early centuries of the second millennium, and we have argued that these changes point to the increasing engagement of coastal peoples with the sea: a growing maritimity. To understand why the Swahili became more maritime, we can look at the religious and economic transformations that were occurring in coastal towns after C.E. 1000: increasingly long-distance exchange and the majority of town inhabitants converting to Islam, a religion with its center far across the sea. However, the argument we have sketched here suggests that growing maritimity was as much about looking toward the Indian Ocean world as it was a turning away from local regional systems. Prior to C.E. 1000, coastal settlements were enmeshed in continental socioeconomic webs; materially they were the easternmost places in a larger interaction sphere that stretched inland hundreds of kilometers (Fleisher and Wynne-Jones 2011; Helm 2000; Walz 2010). As Ceri Shipton and colleagues (2013) and Chapurukha Kusimba and colleagues (2013) have shown, the settlement hierarchies of the first millennium are best understood by looking to the continent from the coast (or looking to the coast from the continent). The emergence of large regional centers was occurring not just at the coast but also in the coastal uplands, and many of these settlements shared material cultural forms and styles, such as local ETT–TIW pottery. Thus the earliest coastal trade, during the first millennium, should not necessarily be understood as the primary reason for early coastal settlement: most archaeological sites with ETT–TIW pottery actually contain few imported goods, and most were simply small farming or near-shore fishing communities. The few places that did have evidence of more extensive trade—Tumbe, Unguja Ukuu, Manda—were likely organized along household lines, with little evidence for hierarchy or settlement complexity (Fleisher and LaViolette 2013).

The changes that we document here serve to highlight the radical shifts that occurred between the first and second millennia in forms of production and consumption but also, importantly, in outlook and worldview. The coastal Swahili were active in the construction of these new ways of perceiving the world, through transformations in settlement, material culture, and architecture. Rather than seeing these changes as the residual effects of changing coastal circumstances and changing sociopolitical dynamics of the larger Indian Ocean world, we understand them as part of the Swahili's active transformation of coastal society into a maritime one. Other transformations accompanied this—changes in social organization, religion, and trade—but the increasing maritimity of the Swahili was crucial to structuring their cosmopolitan status for visiting merchants as well as to their efforts to distinguish themselves from other hinterland peoples. Thus, maritimity was as much about assembling new social identities as it was about the creation of the idea of the hinterland itself, as the Swahili focused greater attention on the sea than the continent. These were transformations set within a changing global situation and the altered perspectives of coastal people as they fit themselves into it. This should make clear that we are not arguing that the turn to maritimity in the second millennium had any basis in simple explanations of "external" influence, arguments that structured interpretations of early coastal history from the 1960s–1980s (Kusimba 1999).

CONCLUSION

After six decades in which Swahili archaeology has been investigated, independent lines of evidence point to a dramatic transformation in coastal lifeways in the early second millennium C.E. Significant shifts in historiography have taken place, concerning such topics as Swahili indigeneity rather than colonial origins; regional differences on the coast despite cultural continuities; enduring interactions between Swahili and interior peoples; and the joint relevance of urban and rural populations. In this mix, the relationship of Swahili people to the sea has not been theorized explicitly. The reasoning behind the movement of African mixed farmers to the coast beginning in the last millennium B.C.E. was in great part, it has been thought, to exploit the coastal niche. The sea thus has been a defining quality of coastal life, and this constancy contributed to projections of a Swahili maritimity into the deep past that we have now called into question. That people ancestral to the Swahili settled on the coast does not alone make them maritime. That they developed new techniques and material practices in the centuries after C.E. 1000, and new ways of being in relation to the sea and the wider world, suggests that maritimity came more than a half-millennium after the coast became densely populated with settlements.

The cumulative contributions of archaeological and historical research have brought us to this new argument. As we said from the outset, there is no moment when maritimity becomes inextricable to Swahili practice and worldview, and relations with the sea and associated seascapes that these produced would have continued to change over ensuing centuries (Breen and Lane 2003; Lane 2005). Nonetheless, in each line of evidence presented, significant changes are traceable to the early centuries of the second millennium. We have shown the abandonments, disruptions, and resettlements that affected the coast from the late tenth and early 11th centuries. The strong continuities among early settlements, including shared manufacture and use of ETT–TIW ceramics (sharing that includes noncoastal eastern Africa), begins to break down in the 11th century, such

that by the 13th to 14th centuries regional traditions have completely superseded the former. This is part of coastal regionalization we see in many kinds of material culture, but we see the break between interior and coastal ceramic traditions as consistent with the emerging maritimity of the Swahili.

Abundant faunal evidence shows a shift in the same centuries to offshore fishing, with its accompanying shifts in vessels, techniques, and toolkits. Ranging farther into the sea characterizes not just fishing but also relationships of trade and communication. Indeed, evidence from 11th-century Sharma indicates Swahili people living in an international entrepôt in the Yemen. The increasing intensity of second-millennium internationalism contributed to coastal wealth, which fed into new building campaigns that addressed maritime interests and orientation. While wattle-and-daub architecture remained the most common building style on the coast, we see evidence for construction in coral in the early centuries of the second millennium. These constructions do not just convey new wealth and local investment but also consolidate both materials and ideology visible locally and presumably evident in the reputations of Swahili towns in foreign lands. Evidence from mosques, most notably the 13th-century trend toward constructing them at the sea's edge, solidified the intertwining of Islam and the Indian Ocean in Swahili life. In conclusion, and in answer to the question posed in our title, we argue that the Swahili became maritime beginning in the 11th century and onward and that this was a fundamental change in coastal society and history. We hope that this presentation of a range of archaeological and historical evidence contributes to more chronologically sensitive analyses of Swahili history and society and is useful to other researchers of coastal and maritime societies.

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