



ISLAND DYNAMICS

The Impacts of Islandness on the Urbanism and Architecture of Mombasa

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Abstract: Most of the Swahili port cities that occupied the western rim of the medieval Indian Ocean long-distance trading system were founded on islands. Dating from as early as the 10th century CE, Lamu and Zanzibar have become 'museumified' as World Heritage sites, while other island port cities, such as Kilwa and Pate, are now uninhabited ruins. Mombasa Island, however, despite numerous calamities, is an increasingly important commercial hub and gateway into East Africa. This study aims to determine how some intrinsic benefits of islandness have shaped the settlement patterns and architectural forms that embody this continuous process of urbanisation. A typological analysis serves to explore Mombasa Island's layers of spatiality and morphology. More than any other East African city, this island reflects the synthesis of the distinctive settlement traditions of the Swahilis, Portuguese, Omanis and, subsequently, the British colonisers, through to its current state as a dynamic, modern urban centre. Compact, complex, and culturally diverse, its unique island concepts offer a wide range of contemporary urban and architectural solutions.

Keywords: Colonial island urbanism, Indian Ocean impacts, island cities, Kenyan coastal architecture, Mombasa Island, port cities, Swahili Coast

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1. Introduction

The Senegalese scholar, historian Sékéne Mody Cissoko (1986: 17), regards just three instances of urbanisation in pre-colonial, sub-Saharan Africa as “significant”: Sahelo-Sudanese cities, Yoruba-Benin cities and the Swahili coastal settlements. The Yoruba-Benin city type developed *in situ* as an adaptation of territory and village traditions and, as regards appearance and functions, demonstrates considerable continuity with the rural countryside. The first and third types were cities linked to long-distance external trade and introduced new architectural and settlement forms. Cissoko writes, “Despite the decline of these [Swahili] cities at the end of the Middle Ages, the urban tradition remained alive on the east coast.” No East African urban entity is more representative of this resilience than Mombasa Island.

The legendary archaeologist, Neville Chittick, “characterised the Indian Ocean as the largest cultural continuum in the world” (qtd. in Sheriff, 2014: 1). For several millennia and certainly long before Portuguese intervention at the end of the 15th Century, trade, social interactions and cultural exchange took place all along its rim (Sheriff, 2014: 2-3). While Chaudhuri (1985: 10) depicts Indian Ocean trade on a trans-continental scale, Sheriff (2014: 14, 18) points out that delimiting the “cultural area” to the maritime belt around the rim is possibly more realistic, picturing the rim as an “intricate network of islands and peninsulas.” Chaudhuri (1985: 3) was correct, however, in proclaiming that “means of travel, movements of people, economic exchange, climate, and historical forces created elements of cohesion,” adding: “The wind system known as the monsoons brought the whole area within the operation of a single global variable” (Chaudhuri, 1985: 23) While the predominantly island-based Swahili port cities constitute the western edge of the medieval Indian Ocean trading system, they nevertheless represent the centre of the Swahili world (Figure 1).



Figure 1: Indian Ocean trade as imagined by Chaudhuri, and the Swahili realm of influence (author’s drawing).

Sujit Sivasundaram (2015: 2) laments, “Islands were critical in birthing our modern world, and yet they have often been forgotten in our accounts of world history.” However, with Africa having the second lowest density in number of islands (Sicking, 2014: 490), and considering the significance of the Swahili who, as a pre-colonial urban society, were primarily settled on islands, it is impossible to ignore the impact of islandness in any study focused on the East African Coast.

In his in-depth study entitled *Mombasa: An African City*, Harm De Blij (1968: 49-52) describes Mombasa as “an island in more than the real, physiographic sense.” He notes its uniqueness in the East African context mainly because its “island-focussed urban pattern may well be exceptional for British-influenced Africa.” Aspects that can be directly attributed to its islandness include high population density, considerably less distinct land-use zoning, less class segregation, closer proximity (between functional elements) and more building types than in other African cities. In fact, De Blij (1968: 65) claims, “the residential areas of Mombasa present almost every conceivable variation existing in sub-Saharan Africa.”



Figure 2: Swahili Coast in its historical and geographical Indian Ocean context (author’s drawing).

Since the early centuries CE, merchants from the Arabian Peninsula and the Persian Gulf, travelling with the seasonal monsoons, have been visiting the East Coast of Africa. The subsequent mingling of Arabs (and, purportedly, Persians too) and locals produced the Swahili culture that emerged in the course of the 10th century. This culture was predominantly Islamic, mercantile and urban, concretised by its distinctive stone houses and towns. These towns stretched from Mogadishu in the north to Sofala in the south, a 2400 km expanse of coastline, also referred to as the Swahili Coast (Figure 2).

Over time the Portuguese, Omanis and thereafter British and German colonisers built their own settlements along the coast, all in their own distinctive urban and architectural typologies. After independence, the Kenyans – arguably informed more by globalisation than a quest for regional identity – added their own. Together with indigenous vernacular forms, these collectively constitute what Robert Baron (1994: 263) calls an “inherited urban morphology.” The Swahili Coast is hot and humid throughout the year, but although it straddles the equator, the average temperatures are moderate because of the ocean breezes.

This study investigates the way in which the intrinsic nature of islandness has been shaping Mombasa Island’s settlement patterns and architectural forms. The central argument is that Mombasa Island was initially settled because of the ancient Indian Ocean trade and that its resilience and ultimate development into an island city are mainly due to it being a spatially defined, safe and strategically located Indian Ocean island.

2. Method and sources of information

Louis Sicking (2014: 491) reports that “the preoccupation of the social sciences with contemporary problems related to islands” has dominated this field of research. At the same time, Godfrey Baldacchino (2008) and Pete Hay (2006), amongst others, identify a number of challenging issues inherent to studying islands, pertaining to objectivity, taxonomy, terminology and identity.

Methodologically, this study is essentially a typological analysis. The technique, widely accepted in architecture and urban design, relies on reducing drawings and diagrams to their relevant essentials. In one of the most authoritative manuals on the topic, *Precedents in Architecture*, Roger Clark and Michael Pause (2005: v) state that this technique focuses exclusively on the “formal and spatial realm of architecture.” Julia Robinson identified four ways to classify the typology of environments (1994: 185). Architects tend to focus on physical properties (the configurational type) and are often criticised for neglecting how environments are made (the genetic code), how environments are used (the functional mode) and how environments are understood (the associational mode). However, these aspects are always intrinsic to the configurational type. As Anthony King (1994: 142) argues, the physical and spatial environments are themselves significant, since they are the settings for social, cultural and political taxonomies: “The material reality of the built environment, the physical and spatial world in which those systems have been constituted, is an essential part of the discourse.” In other words, configurational types are the essential elements of urban and architectural forms and imply time, space, history and cultural conditions.

The research method comprises the cross-referencing of some of the prominent benefits intrinsic to islandness: territorial benefits, defence benefits and transport benefits (as defined

by Adam Grydehøj, 2015: 3) with Mombasa’s positive urban attributes (as per De Blij). By chronologically tracking these aspects, the resulting grid is a convenient morphological matrix to guide research (Table 1). The research question then becomes simply: How have the benefits inherent to islandness been shaping the built environment on Mombasa Island over time?

The author collated information from a plethora of publications, including books, articles, dissertations and reports. Two recent study trips to Mombasa Island provided more insight.

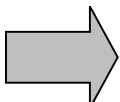
MAJOR HISTORICAL IMPACTS	TIMELINES	BENEFITS			POSITIVE URBAN ATTRIBUTES
		TERRITORIAL	DEFENCE	TRANSPORT	
Swahili	1000 →				<ul style="list-style-type: none"> ▪ Density ▪ Variety ▪ Integration
Portuguese	1500 →				
Omani	1700 →				
British	1900 →				
Independence	1963 →				

Table 1: Research framework (compiled by author).

3. Mombasa Island in context

Mombasa is an island in the Indian Ocean and Kenya’s second largest city after the capital, Nairobi. By the 12th Century, it was an established Swahili trading town, first described by the Arab geographer Al Idrisi in 1151 and subsequently by the Moroccan traveller, Ibn Battuta, who visited it in 1331. The inhabitants, white and black Moors (pure Arabs and half-castes), according to Justus Strandes (1961: 79) were Swahilis. Ivory, leopard skins and slaves were among the exports to India and the Arab Peninsula, while porcelain, metal artefacts and cloth were amongst the imports. Mombasa at that time was the centre of the Indian Ocean cloth trade (Pearson, 1998: 48).

Vasco da Gama arrived in 1498: Because the city, like most other Swahili settlements (but unlike Malindi, which provided a pilot to guide the Portuguese to India), was reluctant to cede its trade to foreign overlords, the Portuguese attacked and destroyed it in 1505, 1526 and again in 1589. The Omani Arabs (historically key players in the Indian Ocean trading system) subsequently defeated the Portuguese and conquered Mombasa in 1698. Apart from a short Portuguese interlude (1728–1729), it remained occupied by Omanis, albeit by the rogue Mazrui clan from 1735-1737. The local people helped Sultan Sayyid Said of Oman to oust the Mazruis; he subsequently granted Mombasa rights and privileges denied other coastal settlements under Omani hegemony. The Sultan, who had moved his seat of state from Muscat to Zanzibar in 1840, directed the Omanis’ main interests: the export of slaves and large clove-producing plantations, which also relied on slave labour.

The Sultan ‘leased’ Mombasa to the British in 1887, and it became the capital of the British East Africa Protectorate, but Kenya achieved independence in 1963. The World Bank (2010: 16)

recently declared unambiguously, "The Port of Mombasa is the largest in East Africa and a vital gateway for imports to Kenya and its neighbouring countries."

4. Territorial benefits

Arab traders probably founded the first settlement on Mombasa Island during the 11th Century: Its original Arabic name is *Manbasā* (Battuta & King, 2005: 21). Since most other Swahili cities, such as Lamu, Takwa, Pate, Pemba, Zanzibar and Kilwa, were also located on islands it seems as if their founders were aware of the benefits of settling on small littoral islands (Hoyle 2000: 3). As Catherine Coquery-Vidrovitch (2005: 127) suggests, "These sites were obviously chosen to protect traders travelling by sea." This is not surprising: Peter Mitchell (2005: 113) maintains that in the 11th Century, "several interlocking networks emerged connecting East Africa with other parts of the Indian Ocean world." Being an integral part of this trading system, these islands were linked to others such as Hormuz, Bahrain, Aden, the Comoros, Mauritius and Madagascar (Rockel, 2014: 104).

Regarding the relationships between Swahili communities and mainland tribes, Michael Pearson (1998: 20) believes that, "Social, political, and economic relations were all, whether friendly or hostile, advantageous or not, overwhelmingly with their fellow Africans to the west rather than with the people and places across the sea." There is very little evidence to support his position. More credible is Abdul Sheriff (2014: 32), who states simply that littoral communities on the rim of the Indian Ocean depended more on other ports across the ocean than on their hinterlands for "their livelihood and prosperity," and adds that they also often had more in common with these. Therefore, in the case of Mombasa, "the islandness of the region and the role of the sea," to quote a phrase by Grydehøj *et al.* (2015: 8), cannot be overemphasised.

Colin Breen and Paul Lane (2003: 479) stress unequivocally that, in the case of Mombasa, "the sea as a facilitator of trade, communications and resources has been an underlying constant in a period of continual cultural flux." In addition, as Rosemary McConkey and Thomas McErlean (2007: 101) contend, "It would be difficult to view any part of Mombasa as anything other than a maritime landscape. All aspects of the cultural heritage could be regarded as having been directly or indirectly influenced by association with the sea, and in many cases sites found on or near the coastline have been deliberately placed to exploit the maritime potential." Finally, Ali Mazrui and Ibrahim Shariff (1994: 81) emphasise, "Kimvita, the dialect of the Swahili people spoken in Mombasa, Kenya, is overwhelmingly associated with Arab ethnicity and Islam."

According to Grydehøj (2015: 3), it is "relatively easy" to conceive small islands as territory, and they are "exceptionally strong as *places*" (Grydehøj's italics). It is, therefore, apart from security reasons, quite logical for the Swahili ruling class, merchants of Arab or mixed African ancestry (Coquery-Vidrovitch, 2005: 131) to claim the island as its territory. The Swahili conception of civilisation means urban living (Sheriff, 2014: 29), and within the identifiable spatial containment of the island, Swahili culture and urbanism could develop and mature. Grydehøj (2014: 184) mentions, "There are different kinds of island cities, most obviously: 1) strongly urbanized small islands and archipelagos; as well as: 2) major population centres located on largely rural islands or archipelagos." Mombasa is an example of the former, and, geographically, is particularly clearly defined as an estuary island with only a narrow creek separating it from the mainland. Lamu and Zanzibar constitute examples of the latter.

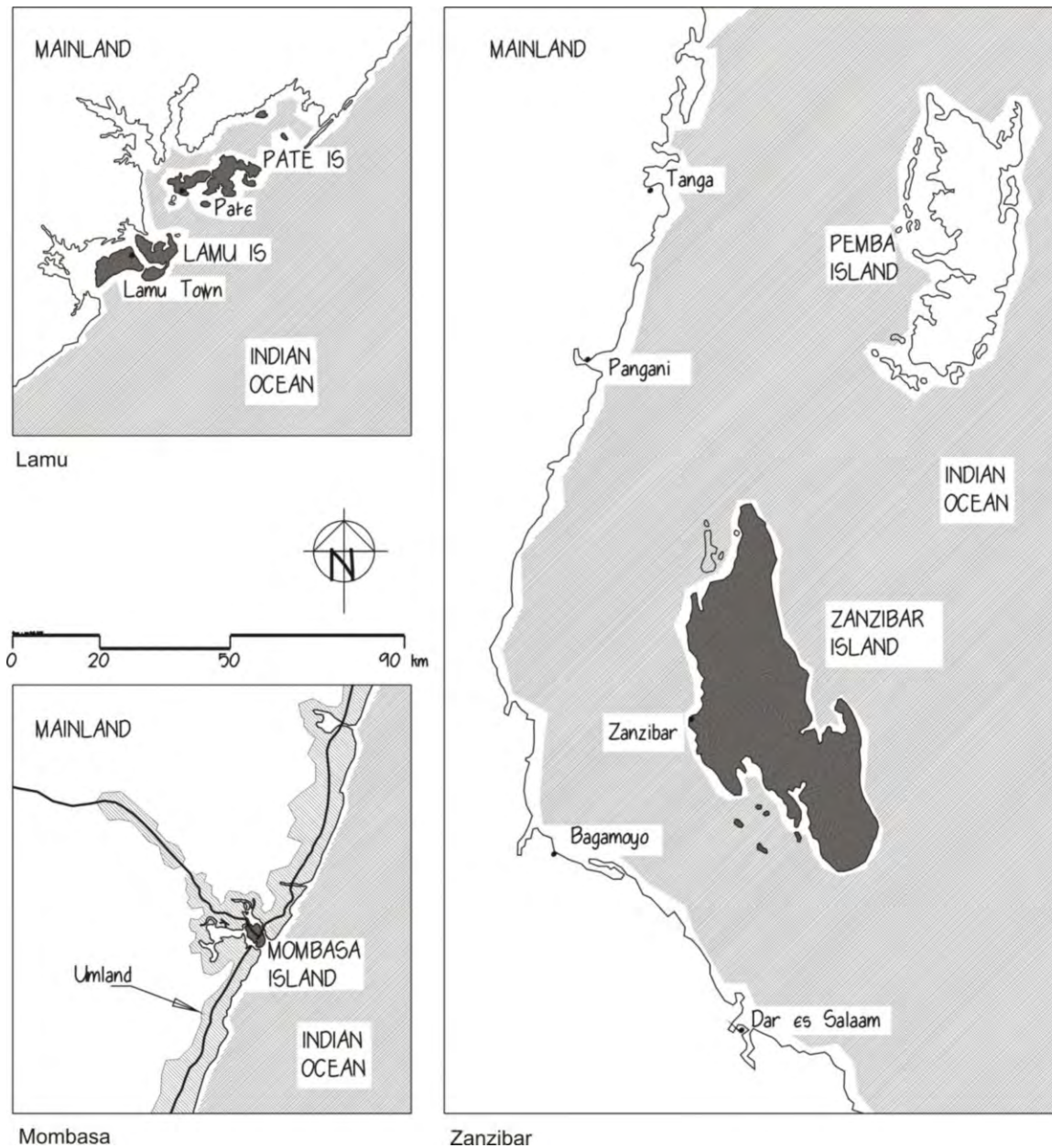


Figure 3: Mombasa Island's geometry compared (author's drawing)

The proximity of Mombasa Island could affect the mainland in ways that were not possible for the other Swahili Islands. As an offshore island, Zanzibar had to project its power to the coast where it relied on representatives, *maliwali* (singular: *liwali* in Kiswahili), to maintain control. Lamu, on the other hand, situated on an archipelago containing many islands and many Swahili towns, had to compete not only for trade, but also for territorial influence.

Although Coquery-Vidrovitch (2005: 91) insists that "Islamised cities seemed to want to turn their backs on their hinterlands," this relationship is not clear at all for Mombasa. Ibn Battuta observed (Battuta & King, 2005: 22), "There is no cultivation of grain among the people of this island; food is brought to them from the *Sawāhil* [coast]," De Blij (1968: 29), however, emphasises that gardens outside the town walls "provided the immediate need for foodstuffs."

Today, Mombasa County has a population of about one million. The population density can be mapped as a Y radiating from Mombasa Island at the junction (Figure 3). The population density along the main road to the interior is also high because of access to transport. This Y-shaped territory is essentially Mombasa's *Umland*. Whereas the strip along the coast is fertile and semi-humid, the region behind it is semi-arid. Mombasa Island's hinterland comprises Nairobi (480 kilometres away), the fertile highlands, and the area around Lake Victoria, including Uganda and northern Tanzania. Two bridges and a ferry link the island to the mainland. Its port remains a prominent feature, as do an international airport and a railway line. These gateways, together with tourism, financial services, an oil refinery and a cement factory, form the major economic centres.

5. Defence benefits

Territorial benefits and those related to defence are, as Grydehøj (2015: 4) argues, "closely related." Coquery-Vidrovitch (2005: 132) remarks, "The cities that grew the most [towards the end of the 15th century] were Mombasa and Pate, thanks to [...] a safer environment and the fact that they controlled trade between the Persian Gulf and the Indian Ocean." Mombasa Island has been a sanctuary from its earliest days. Kai Kresse (2007: 45) recounts that a Sheikh Mvita, a Swahili of purported Shirazi (Persian) descent, moved to Mombasa from the coast further north (after which the settlement was named for him). Subsequent to his arrival, there was a "continuing influx from other towns and regions along the coast," due to instability caused by marauding Galla (Oromo) and Zimba from present day Somalia.

Strandes (1961: 60) highlights the fact that the town was surrounded by a wall just prior to the first Portuguese attack. However, Swahili walls were of doubtful defensive value: They were only about two metres high and no more than a half-metre thick, and from personal observation by the author, they had no crenellations, arrow slits or gun ports. Swahili towns were like the gated estates of today. The island geography, not the wall, was the line of defence.

John Middleton (1992: 7), whose book *Port Cities and Intruders* is seminal in the field, asserts, "Mombasa, in particular, was always the great prize for invaders such as the Portuguese and the Omani Arabs: whoever controlled Mombasa controlled the coast." Although the creek separating Mombasa Island from the mainland could protect it from raiders, it was vulnerable to seaborne artillery attacks. Therefore, in an effort to entrench their monopolistic but rather tenuous control over the East Coast, the Portuguese built Fort Jesus.

Fort Jesus is the oldest surviving construction in Old Mombasa (Rhodes, 2014: 121). While the coast south of Mombasa was controlled from Ilha de Mocambique, Pearson (1998: 135) notes that Fort Jesus was intended as "a cornerstone of Portuguese policy on the northern coast." Even so, although construction started in 1593, Fort Jesus was completed only in the 1630s (Figure 4). Namdi Elleh (1997: 150-153) describes Fort Jesus as a "sophisticated bastion." It was designed by an Italian architect, João Batista Cairato: Elleh praises its "anthropomorphic qualities, which echo the humanistic attitude of the Renaissance artists and architects." It represents a style of fortification that the Portuguese recreated in Africa and the East.



Figure 4: Fort Jesus, 1593 (photos by author) .

The Omanis took Fort Jesus in 1698 and made some alterations. The British used it as a prison, arguably the ultimate gesture of political control. Mombasa Island's defence benefits remained relevant right into the twentieth century; a British Admiralty defence scheme map of 1913 shows beacons, submarine cables and potential landing sites (Figure 5).

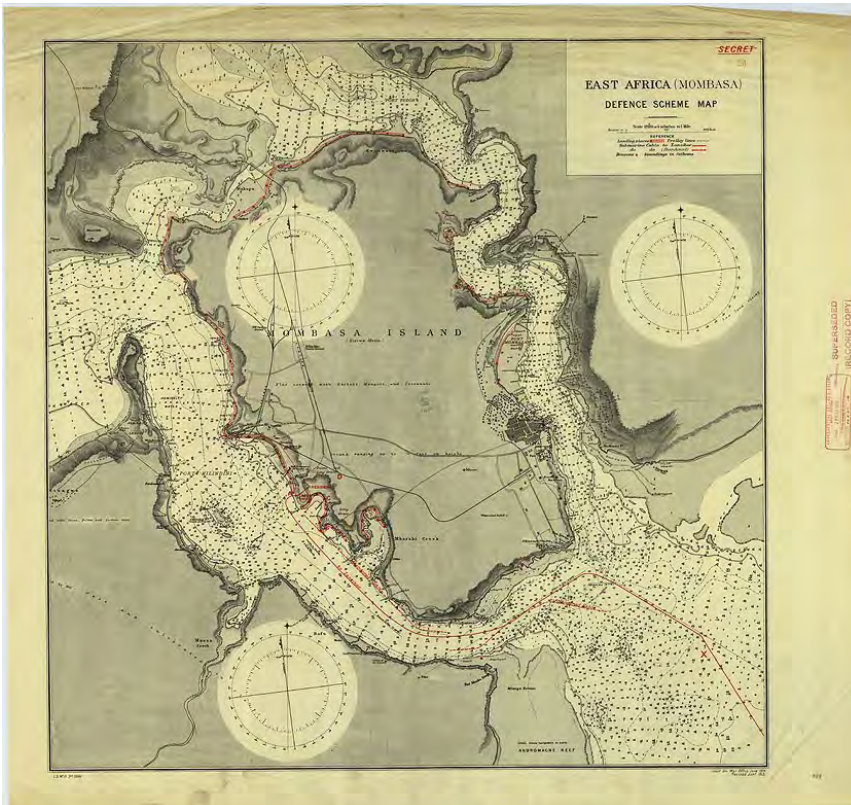


Figure 5: Defence scheme map, covering Mombasa Island and surrounding estuaries (<http://www.bl.uk/onlinegallery/onlineex/maps/africa>).

6. Transport benefits

Many island cities existed as either political or commercial centres (Grydehøj, 2015: 3). Mombasa has always been both. At the pinnacle of Swahili power, just before the Portuguese conquests, there were about ten independent Swahili city-states, with some, certainly including Mombasa, actually controlling the adjacent mainland.

Geographical features contributing to Mombasa's status as "the most powerful city-state on the coast" before the Portuguese era (Ogot, 1999: 368) were not just the seasonal patterns of the monsoon winds (Pearson, 1998: 51-4). They also included Mombasa's safe harbour (Middleton, 1992: 6) and its central locality on the Swahili Coast as well as its relative proximity to Lake Victoria Nyanza, Africa's largest lake. Since waterborne transport has always been an efficient way of moving goods and people, economic development favours small islands with good harbours. Mombasa, as an estuary island, is perhaps the quintessential "easily administrable and defensible [interface] between sea and mainland supply routes" (Grydehøj, 2015: 4).

Coquery-Vidrovitch (2005: 329) found that colonisers were attracted to existing cities which offered a good site and a dynamic and diversified urban society. What Europeans changed "in accordance with their outward-looking interests" were transport and trade networks. This is entirely evident in the case of Mombasa Island. British infrastructure development commenced with the building of Kilindini Harbour and the Kenya-Uganda Railway (Figure 6), which began construction in 1895 (Rhodes, 2014: 121), rejuvenating Mombasa's economy (O'Connor, 1983: 200). The British created an integrated East African urban system of which both Mombasa and Nairobi were part (O'Connor, 1983: 244).

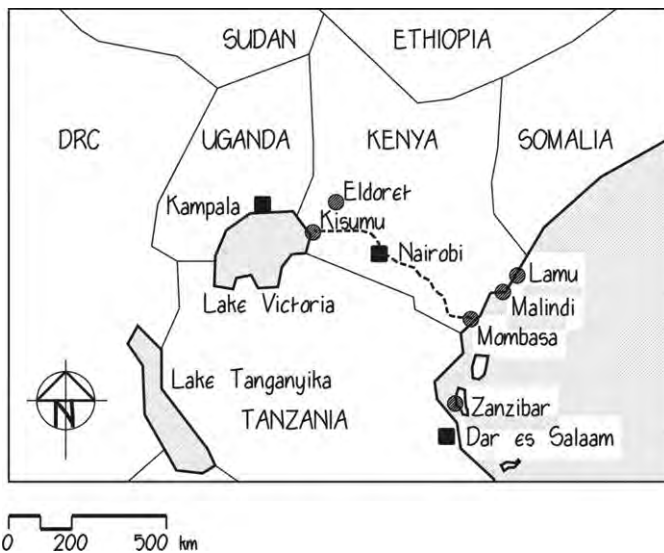


Figure 6: The Mombasa-Uganda railway (author's drawing).

De Blij wrote in 1968 that "Mombasa's immediate hinterland makes little contribution to the traffic of goods reaching the island; it is estimated that less than five per cent of such traffic arrives by means other than rail" (De Blij, 1968: 49). Today, a significant portion of the cargo to and from Mombasa is transported by truck to Nairobi and beyond. Finally, Mazrui (2001: 111) reminds us that Africa is "culturally intermediate between Europe and Asia."

7. Mombasa Island city densification

Grydehøj (2014: 185) classifies Mombasa as one of the "densely populated small islands." Maps made during the 1600s clearly indicate the settlement of the Portuguese as a walled compound adjacent to and directly north of the fort, the area known today as the Old Town (Figure 7). The distinctly separate settlement marked as *Cida de dos Mouros* (English: Town of the Moors), about a kilometre to the north of the Portuguese compound, shows the Swahili

settlement at that time, in the area today known as Mzizima (Aldrick, 1995: 11). After the Portuguese conquest, the Sultan of Malindi, a Portuguese ally and bitter enemy of the Mombasa rulers, moved into the existing Swahili town, known then as Mvita (Aldrick, 1995: 12).



Figure 7: Mombasa maps by João Teixeira, 1649 (Axelson, 1998: 43); Antônio de Mariz Carneiro, 1639 (<http://www.mariapereiraweb.net/?area=historia>); Antônio Bocarro, 1635 (<http://www.colonialvoyage.com/fort-jesus-mombasa>).

Mzizima is now the site of the Coast General Hospital, and there is no evidence of the Swahili stone town. However, excavations of the ruins of other Swahili towns have been informative, since although the Swahili towns were competitors in long-distance trade, they shared a common culture and building tradition. They were small, neighbourhood-sized, compact, urban entities consisting of flat-roofed stone houses and mosques, surrounded by wattle and daub huts. They were true, sharply demarcated enclaves, and stone houses were rarely built outside the walls in rural settings (Figure 8). Mosques seem to have been the centre of social events and interaction.

Apart from mosques, the medieval Swahili stone houses were the first tangible manifestation of Indian Ocean relationships and were continuously constructed along the whole East African coast for the major part of the 2nd millennium CE. They are now generically referred to as Lamu or Lamu-type houses, because that locality is where the only functioning examples are found. However, it is at the sites of ruins that the original form is most legible. Peter Garlake (1966: 5) insists that the major elements still visible at the abandoned sites "are so similar to each other as to be valueless in a typological study." Swahili towns feel distinctly Arab, with all the spatial characteristics one expects to find in an Arab-Islamic town: the narrow lanes (from one to 1.5 metres wide), the blank façades, and the dead-end alleys. The Lamu house was also a symbol of magic and power and only the patrician families were allowed to own them.

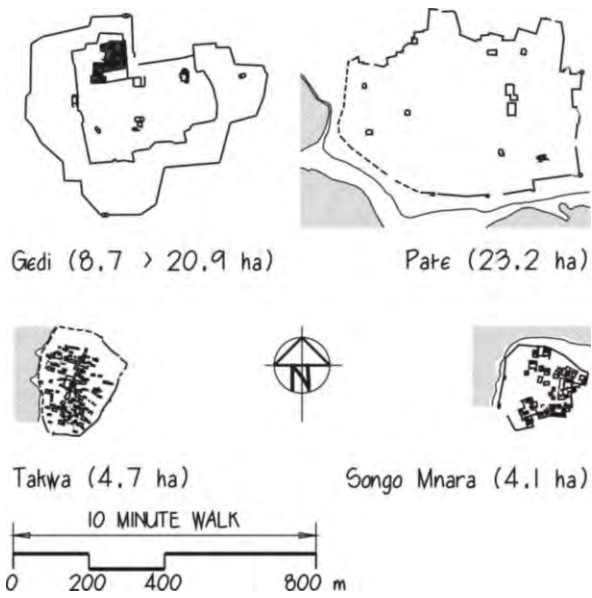


Figure 8: Typical Swahili town footprints (author's drawing).



Figure 9: Mombasa Island in 2015 (author's drawing).

From 1698 onwards, the Omanis simply built over the Portuguese precinct between Fort Jesus and Mvita and, together with the Indian traders, defined the Old Town as it exists today, a Muslim enclave covering 47 hectares. Although there is a modest conservation area, UNESCO has not listed it, unlike Lamu and Stone Town. The fact that it is relatively intact reflects the resilience and robustness of the Omani-era architecture and urban form. De Blij (1968: 29) writes that “‘Old Mombasa’ never came close to filling the available space on the island” and never exceeded 60 hectares. Interestingly, he adds, “Congested as it was, the walled town never sprawled outward along finger-like arteries.” Coquery-Vidrovitch (2005: 212) writes succinctly, “[During the 1860s] Mombasa was still huddled on its island and separated from the mainland by a narrow channel.” However, with the construction of the port, railhead and the Tudor and Kizinga precincts, the island was rapidly covered (Figure 9). Only then did the town form cross over the creek and expand onto the mainland.

Although the Arab-Swahili economy stagnated because of the abolition of slavery and the appropriation of land by the British, some Omani and Indian entrepreneurs profited from this new speculative, colonial economy. Many of their houses still exist in what is today the Old Town Conservation Area (Figure 10). De Blij (1968: 29) is adamant: “Until the late nineteenth century Mombasa had been an Arab town in the true sense of the word.” Only in the 1920s did the economic centre of Mombasa shift from the Old Town to what is today the Central Business District. Incongruously, in 1908 the British considered demolishing the Old Town (Freund, 2007: 76), which, together with Fort Jesus, are at present the two main tourist attractions on the island, and major sources of revenue.



Figure 10: Swahili house in foreground left, Omani house behind it, Indian house right (<http://www.oldeastafricapostcards.com>).

The effect of island-based densification can be illustrated by comparing Mombasa Island to Malindi (Figure 11), with Mombasa’s population density five times that of Malindi’s. Situated 120 kilometres northeast of Mombasa, Malindi is very much part of the same historical and cultural landscape and was subject to the same Omani and British overrule. British colonial

town planning, however, imposed not only functional zoning, but also allocated separate dormitory precincts to tourists and 'high-income' households. Such separation requires buffer zones and needs space, which equals sprawl. Malindi was prominent during Portuguese overrule, at least until the Portuguese relocated their base to Mombasa. Today, Mombasa is large and important, whereas Malindi is in decline, except for tourism (Middleton, 1992: 6).

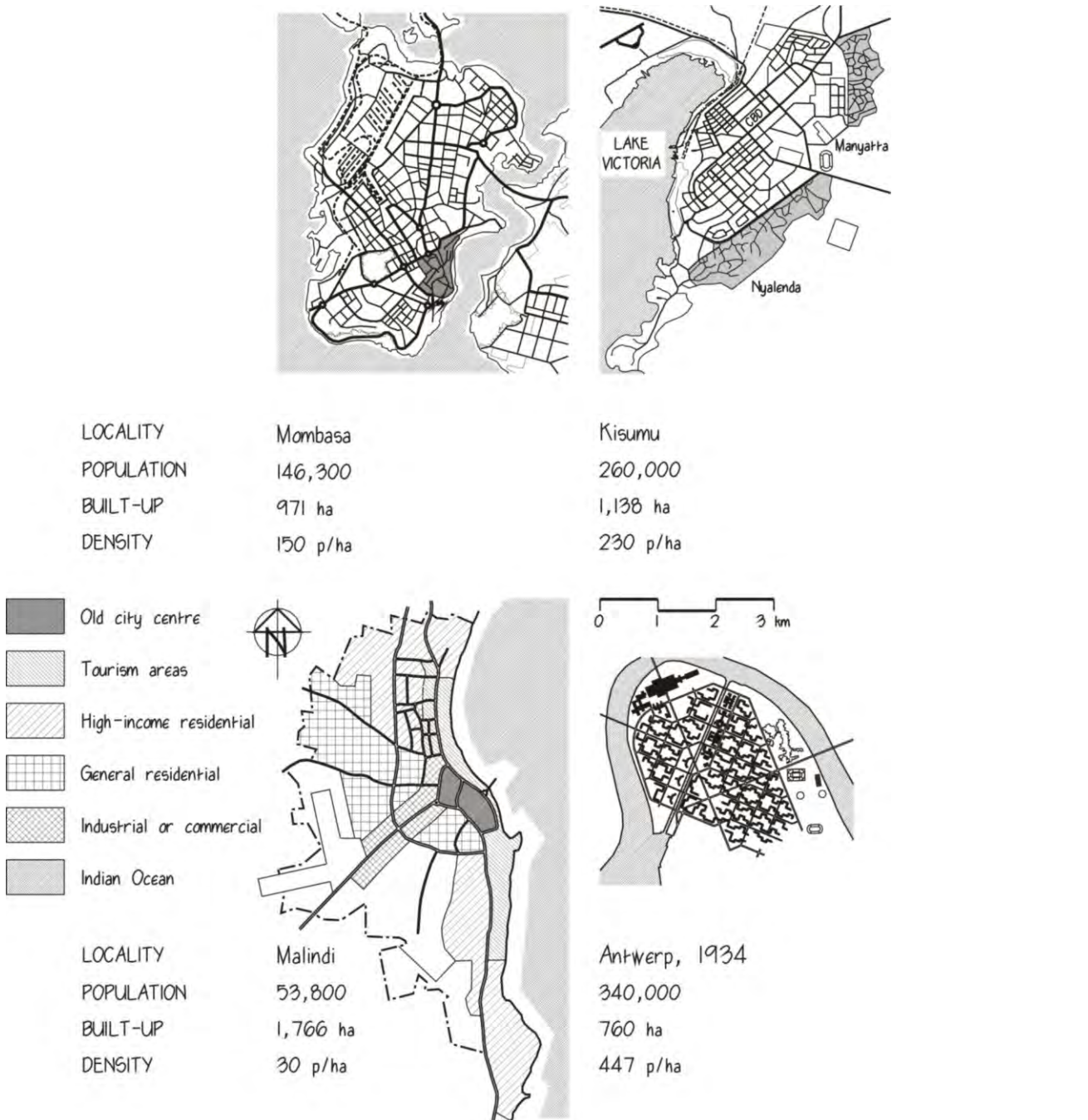


Figure 11: The density of Mombasa Island compared to Malindi, Kisumu and Le Corbusier's unbuilt scheme for the left bank of the river Scheldt in Antwerp (author's drawing).

A comparison with Kisumu, founded in 1903 on the shores of Lake Victoria as the western terminus of the Mombasa railway line, illuminates the effect of unplanned growth. Here the population density is considerably higher than that of Mombasa, because of the existence – and continuous expansion – of the huge, overcrowded slum precincts, Manyatta and Nyalenda. Since Kisumu cannot expand, being between Lake Victoria to the west and a mountain range to the north, it is experiencing uncontrolled, informal urban spread to the east and south-east, expanding into already limited agricultural land.

The unbuilt scheme for the left bank of the river Scheldt in Antwerp by the eminent Swiss-French Modernist architect and city planner (1887-1965) Le Corbusier, is also based on zoning for commerce, culture, recreation and residences. However, Le Corbusier treated the site as an island and celebrated the water's edge with a variety of functions, which certainly promotes choice. He also planned for a range of transport modes to access the precinct. Further below in this article, a comparison between this plan and Mombasa Island reveals a number of existing deficiencies that prevail in spite of, as well as, because of Mombasa being an island.

8. Typological variety

Three Arab and Afro-Arab building types are distinctive to the East Coast (Figure 12). The houses of the original Swahili residents are part of a tradition that emerged in the medieval period in Lamu, and clearly have Middle Eastern roots. Today, they are simply referred to as Lamu houses, but they are typologically identical to the houses of the period all along the Swahili Coast.

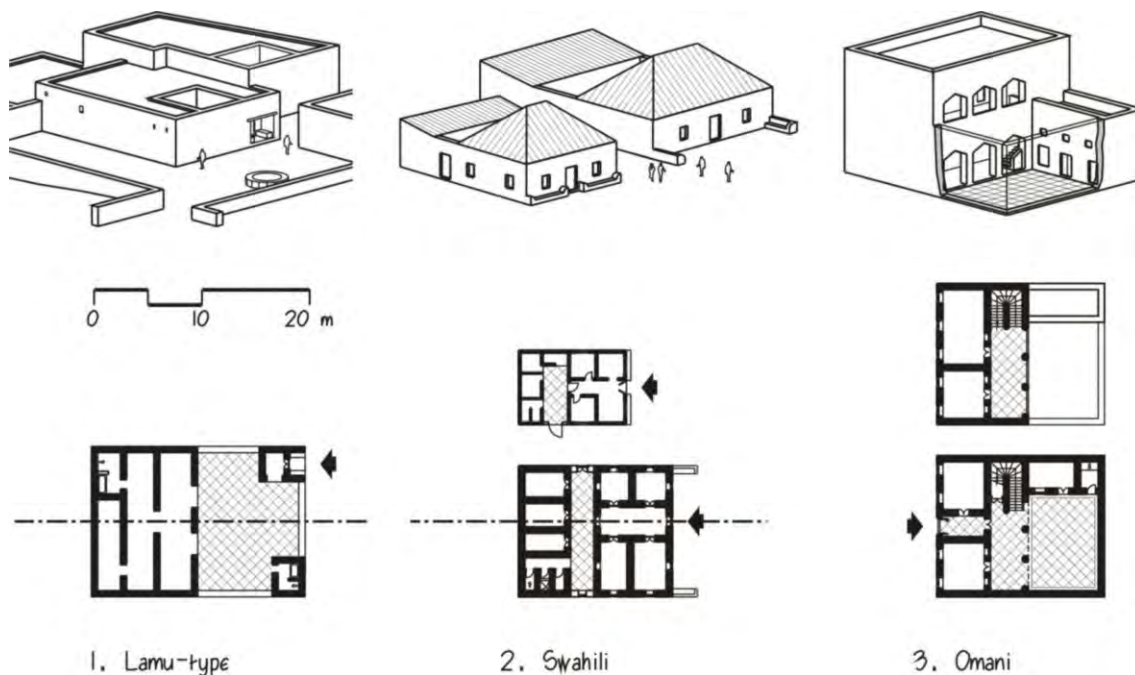


Figure 12: Arab and Afro-Arab house types (author's drawing).

The origin of the contemporary Swahili house, also called a *Majengo* dwelling, remains enigmatic. Sheriff (1998: 16) proposes that it is a derivative of the Lamu house and that it first appeared in Malindi in the latter part of the 19th Century. He theorises that a central corridor was cut through the oblong rooms while the courtyard was moved to the rear.

Conceptually, an Omani house in Zanzibar may be described as a roughly square courtyard building of two or three storeys, in a cuboid, solid form with a flat roof, sometimes with a crenellated parapet. Towards the end of the 19th Century, they were generally roofed over with corrugated iron sheeting as protection against the tropical rain and to reduce direct exposure to the sun. Regularly spaced shuttered windows face the street and any adjacent open space. An ornately carved door defines the main entrance. The term 'Omani house' is generic, since Indian families owned similar houses. In fact, Abdul Sheriff (1998: 50), a preeminent authority on the East Coast, avers that the Omanis brought Indian artisans to the East Coast. It is quite possible that these artisans, who certainly worked according to patterns, influenced both layout and the detailing.

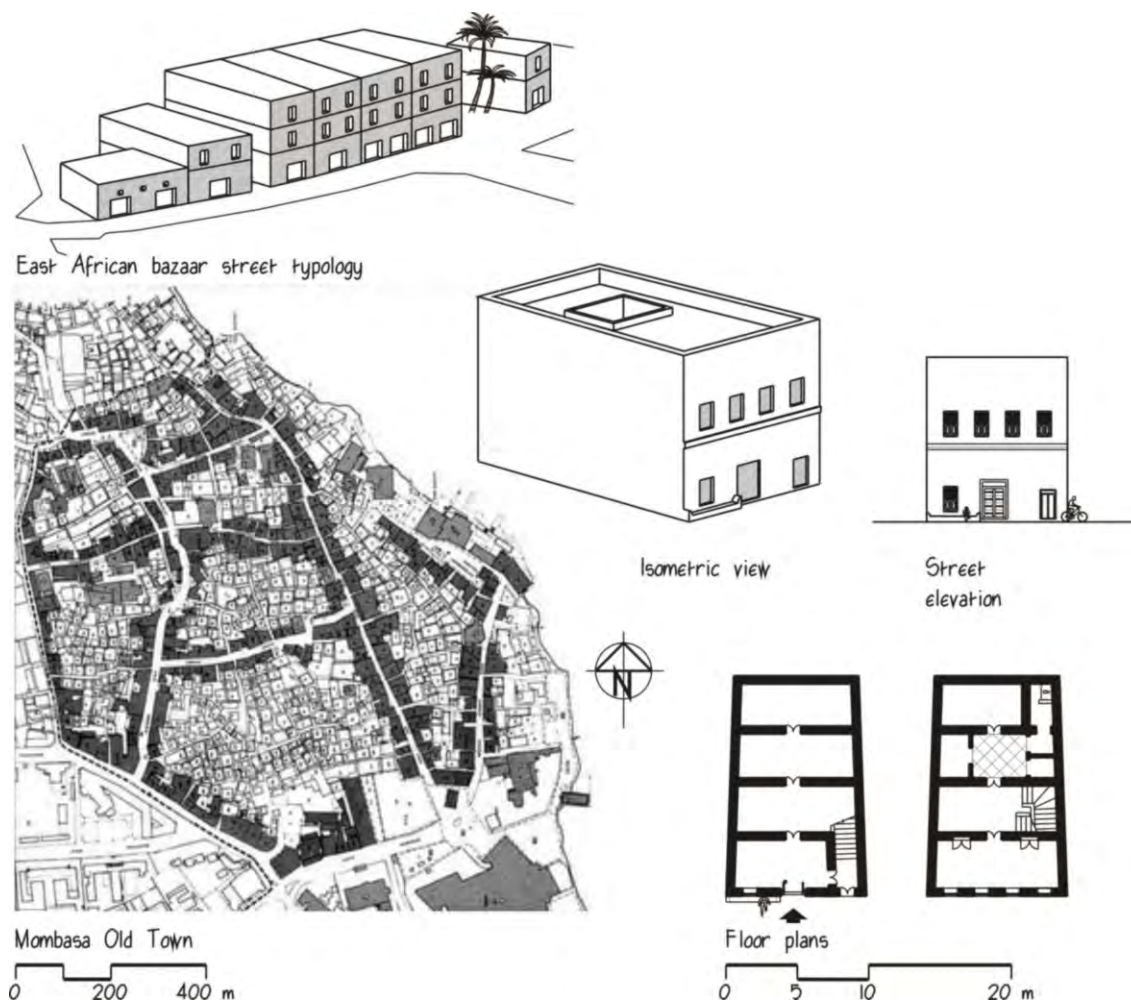


Figure 13: Indian shopfront houses (author's drawing; map from Hart 2007).

During the 19th Century, arising from opportunities offered by Omani hegemony over the region, substantial numbers of Indian businessmen, administrators, artisans, craftsmen and clerics settled in some of the more important mercantile towns such as Zanzibar, Lamu and Mombasa. Most were from Gujarat. Indian shopfront buildings delineate trading routes – bazaar streets – that introduced linearity into the winding street patterns (Figure 13). They gave structure and public paths to a pattern of labyrinthine lanes with dead-end alleys leading into the wards. These routes are today the 'main streets', where the communities shop for

their everyday needs. Tourists (an important source of revenue) tend to restrict their walking to the bazaar streets, which also serve as references in negotiating these historical neighbourhoods. The bazaar streets are indisputably the essence of the neighbourhoods' economic existence so that, without them, the Old Town might not have become a tourist destination or even a functioning town in its present form.

The shopfront houses are two to three storeys with flat roofs, a typology derived from India (Siravo & Pulver, 1986: 53). These shopfront houses are true 'home-above, shop below' types (*uppar makan, niche dukan*). Many feature four-leaf, bifold doors, also known as Gujarati doors, which open the shopfront completely for contact with customers.



Pedestrian street in Central Mombasa



A lane in the Old Town



Swahili house



Villa in Tudor



Colonia-era courthouse



Apartments-over-shops in Central Mombasa

Figure 14: Views of Mombasa Island today (author's photos).

The fabric of Central Mombasa, the business district adjacent to the Old Town, along Kilindini Avenue, consists mainly of three to four-storey buildings right on the sidewalk, erected in the 1930s during colonial times by the British and by Indian businesspeople. As Thomas Gensheimer (2001: 22) comments, these buildings continued the Indian shopfront tradition because of their mix of residences above the ground level shops. The British lived in Tudor and Kizingo, both Garden City types of neighbourhoods, described as a “village [layout]” by Anthony O’Connor (1983: 190). Just as Fort Jesus is a conspicuous reminder of Portuguese presence, so the neoclassical columned and arcaded institutional buildings, banks and the Law Court are of course prominent symbols of British colonialism.

Physically, the island resembles a mosaic of cultures and sub-cultures, clearly reflected in the architectural and urban typologies. Except perhaps for the colonial-era Kizingo garden suburb, the neighbourhoods and precincts are relatively compact and walkable and clearly reflect their cultural orientation (Figure 14).

Ironically, the British, in spite of their self-serving intent, imported the one element that enhances tropical architecture, the veranda. Inextricably associated with the colonial bungalow, that “tool of Empire,” as Anthony King (1995: 200) describes it, the veranda quickly became a common pattern, shared by a variety of building types on both the island and its hinterland. The verandas of Mombasa and its surroundings are not only pleasant and predictable unifying elements, but also inviting social threshold spaces as well as comfortable shelter against heat and rain (Figure 15).



Figure 15: Mombasa's verandas (photos by the author).

The wide range of prevalent building types is an excellent example of a comprehensive “inherited urban morphology,” to repeat Baron’s (1994: 263) phrase. More than anywhere else along the coast, Mombasa represents a concentrated and extensive convergence of African, Swahili, Arab, Indian and European traditions. These seem to cater well to an equally varied range of needs and social structures (Figure 16). Interestingly, an ever-present building type in African cities, the makeshift shanty, is quite rare on Mombasa Island and even its *Umland*.

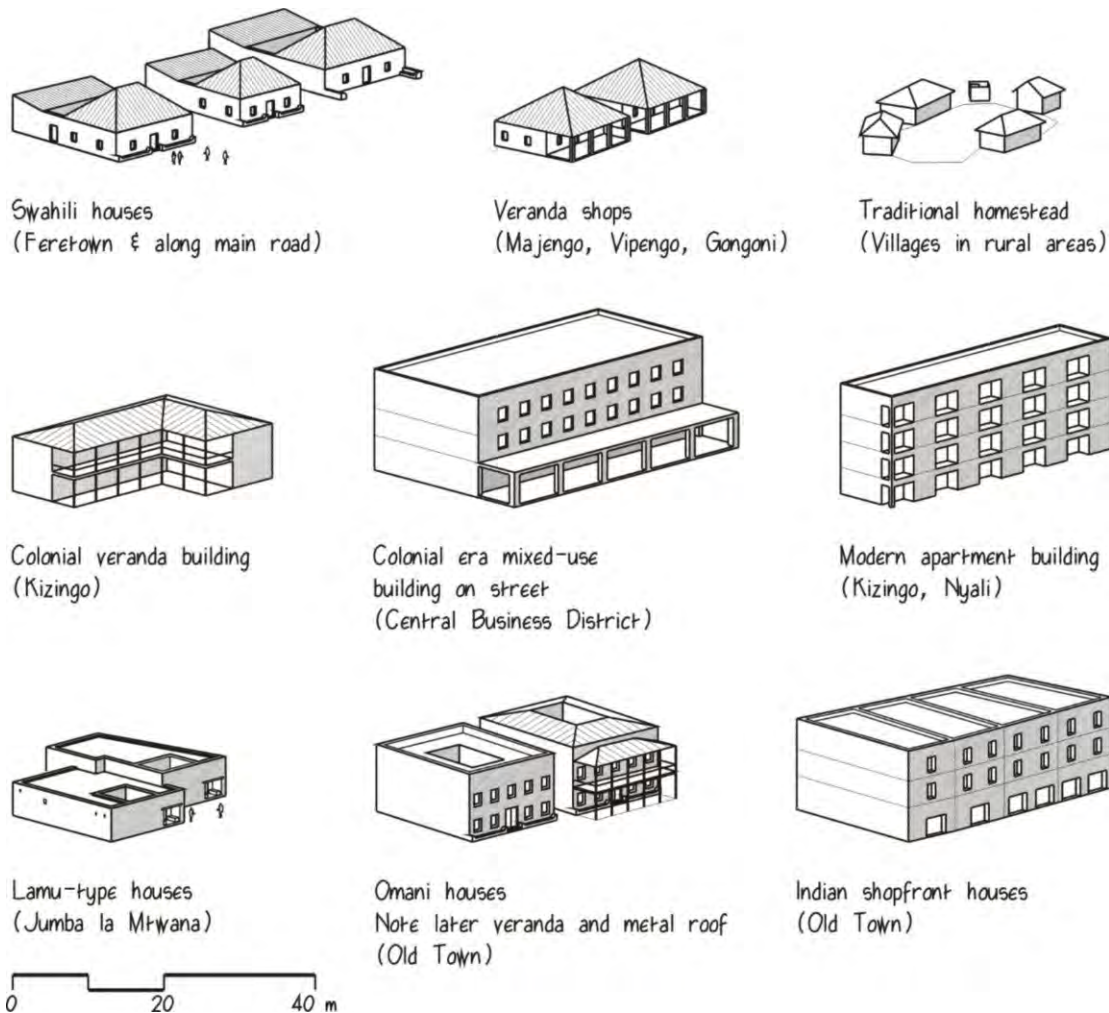


Figure 16: Diversity of building types (author’s drawing).

9. Spatial integration

The most tangible manifestation of multi-culturality is the proliferation of places of prayer for the major religions. In Mombasa, Islam, Christianity and Hinduism have co-existed for many centuries. The majority of the coastal people are Muslim and, as one might expect, there are many mosques evenly spread throughout the fabric. Some, like the Mandhry Mosque in the Old Town, are as old as 500 years. The mosques are generally architecturally less elaborate than, say, the Anglican Cathedral (built in 1903) or the Hindu temples. Often, only the presence of a minaret reveals the function of the former.

Mazrui (2001: 112) believes that “the multiculturalization of Mombasa began quite early.” Inadvertently the British set the stage for the current nature of multi-culturalism when the colonial

economy upset the demographics: Whereas the inhabitants of Mombasa Island were previously mainly Muslim, O'Connor (1983: 121) noticed that the port workers are mostly Luo, a non-Muslim tribe. The colonial enterprises required labour: Upcountry migrant workers often became Muslims and called themselves Swahilis, believing that this would confer social respectability. At the same time, the patrician Swahili families fabricated Persian and Omani genealogies to enhance their status in the eyes of the colonial administration (Mazrui & Shariff, 1994: 29).

10. Potential for enhancing islandness

The Mombasa County Government recognises that tourist attractions such as Fort Jesus are an economic asset (MCG, 2013: x-xi): "There is enormous potential in the tourism and hospitality sector which is yet to be optimally tapped." A master plan and policies are needed to "enhance the aesthetic value of Mombasa City as a beautiful tourist destination."

The first issue spoiling urban aesthetics is that some prominent contemporary buildings in Central Mombasa evidence globalisation in their typical International Style building-as-object paradigm and disregard for cultural and climatic context; they create pockets of placelessness. Mutonga Peninah (2015) is adamant that the 'Islamic' architecture of the Old Town responds better to the hot humid climate than does the "modern breed of architecture [...] that barely even respects materialism and the concept of environmental sustainability."

Grydehøj (2015: 5) advises that, "Island status [...] comes with not only spatial benefits but also spatial constraints in the form of land scarcity, which drives urban densification." Land scarcity is being offset by the benefits that "tight clustering" offers in terms of administrative, residential, industrial, transport and service functions. On Mombasa Island, that "tight clustering" seems difficult to manage; at this stage, the city's planning authorities are under pressure from developers who are eager to build high-rise residential and office towers, in precincts where there is currently a three-storey limit (Sanga, 2013). It is clear that businesses consider the island's central business district as the prime position. The logical alternative is dense courtyard buildings in a carpet pattern that can recapture the walkability and ambience of the Old Town, and achieve the same or higher densities as towers, with the added advantage of providing positive outdoor spaces that freestanding towers, by definition, cannot do (Rogers & Power, 2000: 180).

The second issue is that, ironically, Mombasa Island is not experienced as an island. It offers absolutely no sense of place as an island. Unlike the mainland coast to the north and south, Mombasa Island has no idyllic palm-lined, white, sandy beaches; it is a coralline tectonic mass with "steep, often almost vertical cliffs between 7 and 10 m high" (Hoyle, 2002: 187). Brian Hoyle continues:

There is no waterfront causeway, not even a footpath, along most of the maritime perimeter of the urban Conservation Area; public access to the Old Harbour is available only at certain points such as Fort Jesus and the Leven Steps. Although certain functional access points such as the Old Port obviously provide clear exceptions to this general lack of water-orientated activity, many properties, public and private, appear to turn their backs to the water.

In order to enhance the island experience it is imperative that a master plan must, like Le Corbusier's plan for Antwerp, focus on access to and views of the water, similar to the "promenades" and "panorama" that Le Corbusier envisaged (1967: 272).

The third problem is access. With only two roads and a ferry linking Mombasa Island to the mainland, travelling by car is mostly a frustrating and time-consuming experience. A new bridge linking the island to the south coast is one of a number of planned development projects, which also include a new container terminal and the southern bypass (Figure 17). However, it is doubtful if a bridge replacing the ferry will truly alleviate traffic congestion. Le Corbusier planned an extensive rail and road “urban shuttle service” network between Antwerp and the new Left Bank City (Le Corbusier, 1967: 273). Similarly, only rapid mass transit will solve Mombasa Island’s traffic problems. Quoting Cliff Moughtin (2003: 279):

Clearly, an effective public transport system is the basic requirement for the development of compact, fine-grained sustainable cities of mixed land use, and the foundation for a network of urbane streets and squares. Anything short of this holistic urban agenda is superficial, merely treating the symptoms of the ills that beset our cities.

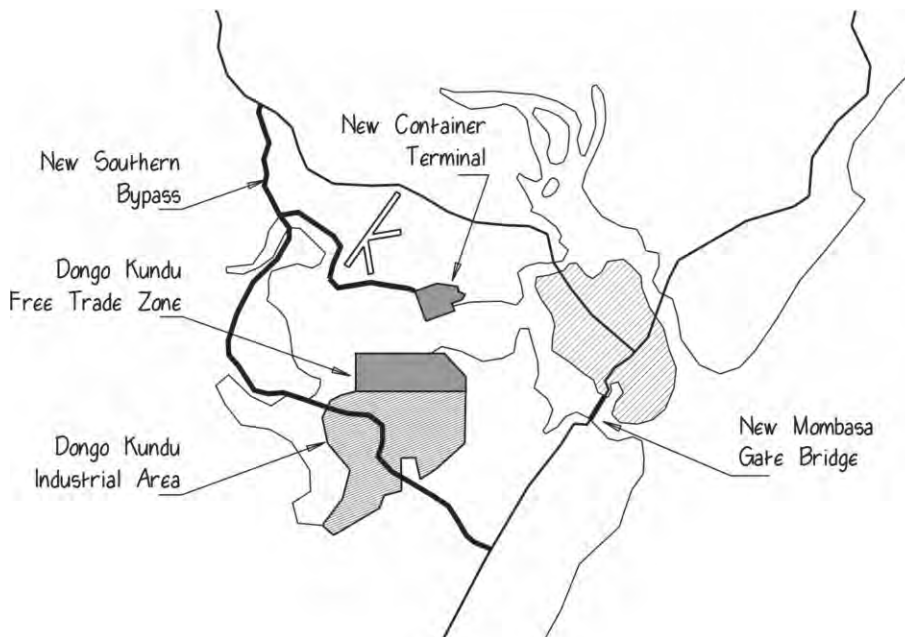


Figure 17: Location map of envisaged Japanese development projects (drawing by the author after a plan by Katahira & Engineers International, 2015).

11. Lessons learned

South African cities are amongst the “most inefficient and dysfunctional cities in the world” because of sprawl and segregation (Schoonraad 2000: 220). Since Mombasa Island represents the typological opposite, it clearly offers lessons in good urbanism. Grydehøj *et al.* (2015: 1) maintain that island concepts are useful to “metaphorically describe developments in urban space.” This requires an “island approach to urban research,” a convenient and credible theoretical position for the present research.

An island is a clearly defined, bounded place, in contrast to the cities and towns of sub-Saharan Africa, whose edges generally fray out into the countryside. Whereas such fluid and blurred boundaries are conducive to fragmentation and urban sprawl, the geographically bounded space intrinsic to islandness, especially for small islands, necessitates densification. Urban Growth Boundaries (UGBs) can achieve spatial containment, emulating islandness (Figure 18). In South Africa, this should allow the gradual densification and transformation – inside the UGB – of traditional low-density suburbs, historical townships and the recent

RDP (Reconstruction and Development Programme) schemes, as well as the development of Apartheid-era buffer zones where these cannot be used as nature reserves for public enjoyment. It might even be advisable to demolish parts or all of particularly degraded and economically unviable historic townships that lie beyond the UGB.

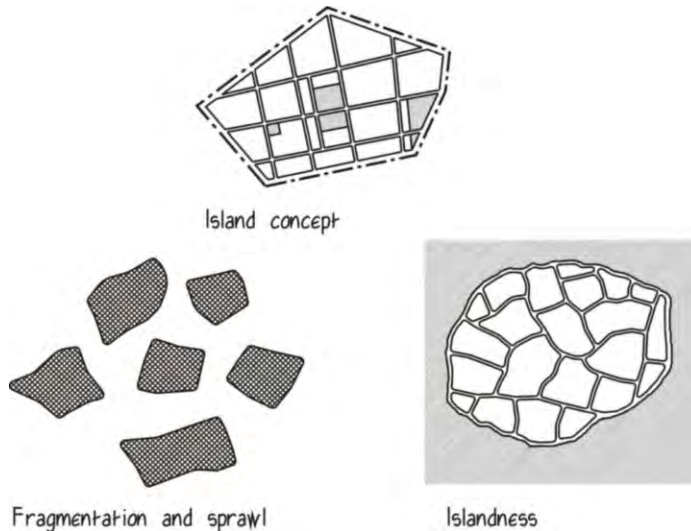


Figure 18: Islandness as an urban concept (author's drawing).

12. Conclusion

Because of their rigid boundaries and small territories, islands were subject to intensive processes of cultural encounter, political annexation and settlement, making them particularly revealing and tragic places to observe the impact of colonialism and globalisation (Sivasundaram, 2015).

This quote applies in every respect to Mombasa Island. For a tiny place of only 14.1 km², it has had a disproportionately formative impact on the geopolitical and economic history of the whole East African region.

Mombasa evolved from an early Swahili island settlement, followed by Portuguese, Omani and British colonial interventions and finally independence into the physical island city it is today. The architecture and urban forms of Mombasa and its surrounds clearly reflect all of its historical contacts and impacts. The typological diversity resulting from the convergence of indigenous, Swahili, Omani, Indian and European influences is obvious. Some typologies were of course, originally introduced by oppressive regimes that made no provision for the existing population. They have nevertheless been pragmatically absorbed into the socio-cultural milieu as part of the inherited urban morphology.

Mombasa was long a defensible site but still remains a trading centre and seat of economic power. An essential symbiosis with the hinterland that was established by the Swahilis still exists, as do the long-distance trading networks that were the *raison d'être* for the Swahilis' existence.

Mombasa's long uninterrupted urban history, its cultural and architectural diversity and relatively consistent economic prosperity are largely due to the benefits afforded by islandness, reinforced by the patterns of the monsoon, proximity to India and the Arabian

Peninsula, access to desirable products from the African interior and its locality on the sea-route to the East. Islandness allows Mombasa to function as an incubator that allows cultures to evolve – and hybridise – and physical urban forms to mature.

At various times during the last 1000 years, spanning the urbanisation of Mombasa Island, the three benefits being studied intermittently dominated (Figure 19). For all practical purposes, all three have been important, except that the benefit of defensibility is perhaps irrelevant with the long-distance weaponry of the 21st Century.

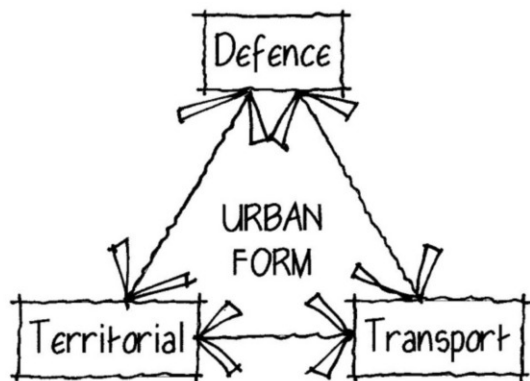


Figure 19: The benefits of islandness (author's drawing).

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