Archaeological Investigation at Kilwa Kivinje: A 19TH Century Coastal Caravan Terminusin Southern Tanzania

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Abstract

The settlement history of Kilwa Kivinje, a port on the nineteenth-century caravan trade in South-eastern Tanzania, is partially known. Despite the town's proximity to the well-documented, long inhabited and previously more powerful city of Kilwa Kisiwani, little is known about its history, especially for the period pre-dating the nineteenth century. This is mainly because the history of this coastal town has traditionally been dominated by oral literary accounts, to the neglect of archaeological data. The study presented here engaged archaeological techniques to access and reveal the deeply buried history of the town and nearby settlements, which could otherwise not have been accessed through conventional written sources. The main objective was to establish the cultural sequence and assess its spatio-temporal changes until the 19th century period of the Indian Ocean interregional trade connection. Excavations revealed the presence of archaeological deposits that pre-and-postdate the 19th century; thus, allowing the establishment of the origin, nature and development of Kilwa Kivinje town settlement and its vicinity. Major findings show the presence of earliest settlements at the periphery of Kilwa Kivinje, namely; Kisangi Ugoga and Kiwavi, dating back to the 'Swahili' centuries period, while Kilwa Kivinje town settlement itself appeared later during the 'Post Swahili' period.

Key words: Kilwa Kivinje, Cultural sequence, 'Swahili period', 'Post-Swahili period', Periphery settlements.

Background

The settlement history of Kilwa Kivinje, a 19th century coastal caravan terminus, in southern Tanzania is only partially known. Despite having attracted significant scholarly attention (e.g. Freeman-Grenville 1962, 1967a, 1967b; Sutton 1966; Nicholls 1971; Sheriff 1987; Mihanjo *et.al* 2003), it is only from the mid- 19th century onward that this town's history is better known; the period that coincides with the construction of most remarkable buildings in this town, such as the customs house, the fort and the Boma. Similar to several other coastal settlements in East Africa, scholars writing the history of Kilwa Kivinje have persistently relied upon the European accounts compiled from the mid- 19th century. Conversely, little is known about Kilwa Kivinje for the period pre dating the 19th century. One of the reasons is the reluctance by scholars to engage archaeological techniques in their work that could have helped them to access and reveal the deeply buried history of the town, which could otherwise not be accessed through conventional written and oral historical sources.

The current generation of archaeologists working along the East African coast (e.g. Chami 1994; 2005; Fleisher and La Violette 1999a; La Violette 2004) have also noted that ideological and methodological problems have suppressed efforts that employed archaeological means to reveal the deep past of coastal settlements. A frequently cited example has been that of early foreign archaeologists, who worked at several sites along the East African coast (e.g. Kirkman 1959; Chittick 1974) who paid more attention to large and more visible built monumental ruins, such as mosques, palaces or stone houses, than on less-obvious buried archaeological remains (Fleisher and La Violette 1999b; Chami 2004; La Violette 2004). The early researchers, reportedly, relied heavily on the ancient written accounts (for example, the compilation by Freeman-Grenville [1962]) to aid their interpretations. Such attempts contributed not only in bringing bias, for example, of associating most of the East African coastal urban settlements to 'outsiders' (e.g. Kirkmann 1959; Chittick 1974), but also down-played the role of Africans in the emergence of coastal urban complexities (La Violette 2004). However, more recently, a young generation of African archaeologists (e.g. Chami 1994, 1998, 1999; Ntandu 2005; Sasi 2006; Ombori and Mabulla 2013) have begun

to interrogate this approach by targeting non- monumental sites, thus revealing archaeological evidences suggestive of indigenous role in the emergence of coastal urban complexities in the region.

Against this background, this study was designed to investigate the settlement history of Kilwa Kivinje, for the period pre dating the 19th century, since this is a historically less known period. The main objective was to establish the cultural sequence of this town and nearby settlements, and to assess its spatio-temporal changes until the 19th century period of the Indian Ocean interregional trade connection.

Kilwa Kivinje in Historical Context

Kilwa Kivinje, literally meaning 'Kilwa of the Casuarina trees', is among several historic town settlements, along the coast of East Africa, whose origins are said to date back to the 18th and 19th centuries AD (URT 2006). Kilwa Kivinje is located at the northern part of Kilwa peninsula, about 30 km by the new road or 20 km by the old road, North of Kilwa Masoko (Figure 2). Like other coastal, historic urban settlements, such as Bagamoyo, Saadani, Pangani and other such towns, Kilwa Kivinje is reported to have emerged as a port town, out of the lucrative slave and ivory trade that flourished along the coast of East Africa during the nineteenth century (Freeman-Grenville 1962; Nicholls 1971; URT 2005; Mapunda 2007). It is well-documented that Kilwa Kivinje was a major transit port for the southern caravan route, serving in that capacity a wide hinterland, including what is today southern Tanzania, northern Mozambique, the whole of Malawi and northern Zambia (Nicholls 1971). Furthermore, it is consistently reported that the growth of Kilwa Kivinje was stimulated by the decline of the two formerly prosperous city-states of Kilwa Kisiwani and Songo Mnara (African Urban Heritage Foundation Ltd 2004), and that by the 1840s Kilwa Kivinje was already the most important port and trading centre in the region, having absorbed many of the inhabitants of the two collapsed city islands (African Urban Heritage Foundation Ltd 2004).

Figure 1: The map of eastern African coast showing the location of Kilwa Archipelago

Chittick (1969) briefly mentions the original inhabitants of Kilwa Kivinje, based on the translation of the Kivinje chronicle, composed in Velten's (1907) book. Without specifying the dates and origin, the Kivinje chronicle mentions two tribes of (Wa)ngware and (Wa)bumura, as the original inhabitants of Kilwa Kivinje, with their initial village settlements (built in small huts of millet stems) located at Mijengera (about 5km North of the present town of Kilwa Kivinje and about the mouth of the River Matandu (Figure 2). The chronicle indicates that there was no '*boma'* by the time this initial settlement was established because the country was at peace, as there were no wars(*ibid*.). Furthermore, the same chronicle states that there were no trading activities because there were not many people to carry it on, and that this settlement had no sultans (Chittick 1969: 154). Oral tradition consistently states that three other families from Unyanja (Lake Nyasa zone) namely, the Mkwinda, the Mpangapanga and the Mroka, were the next group of people to arrive at Kilwa Kivinje. One family settled at Mnago, another at Mgongeni, and the other at Matandu. Although oral tradition is silent on when these families arrived at Kilwa Kivinje, this paper hypothesises that it could have been during the period when caravan trade had just started, since it is well-known that this trade drew groups of participants from as far as the Lake Nyasa zone and beyond (Alpers 1975; Mihanjo 1999; Mapunda 2004). This is further confirmed by ongoing archaeological research in the hinterland, southern Tanzania, by T. Biginagwa and B. Mapunda (forthcoming), as indicated by pottery and trade glass beads showing coastal - interior connectivity.

As mentioned above, the growth and expansion of Kilwa Kivinje has also been strongly linked with the decline of the previous more powerful city state of Kilwa (Figure 2). Alpers (1967) and Chittick (1969) reported that in the beginning of the 19th century, Oman took control of Kilwa Kisiwani and Yusuf bin Hassan became the sultan in charge. After his death in the 1820s, arguments for the succession led to the detention in Muscat of one of the contenders, Muhammad Ibn Sultan (Alpers 1967; Chittick 1969). After his liberation, Muhammad proclaimed himself the first sultan of Kilwa Kivinje, which was already an important and economically promising village. It is also argued that the decline of Kilwa Kisiwani was partly contributed by the greed of the Sultan, who charged numerous taxes to the inhabitants, such as for land and all goods imported to the island; a situation

that could have forced a significant number of its inhabitants to leave and find their fortunes elsewhere on mainland (Gray 1951).

It has also been argued that more noticeably critical factor for the decline of human population at Kilwa Kisiwani was the pillaging of this island by *Sakalavas* pirates from Madagascar, in 1822 (Nicholls 1971). This episode forced families to leave the island, some moving to Kilwa Kivinje (Nicholls 1971). While the outlined cultural disasters were in operation at Kilwa Kisiwani, the geographical potential of Kilwa Kivinje had already been realised, especially for attracting the destination of ivory, copal and slave caravans from the interior (Alpers 1975). One of these potentials was the presence of River Matandu (at about 5km North of Kivinje town) with its source at about 250 km inland exactly in the direction of Lake Nyasa, where most slaves and ivory were collected during the 19th century (Mihanjo 1999; Mapunda 2004; Biginagwa and Mapunda forthcoming). As elsewhere in the region, this river allowed the caravans to easily find water and food from communities situated along it (Farler 1882; Gray 1958).

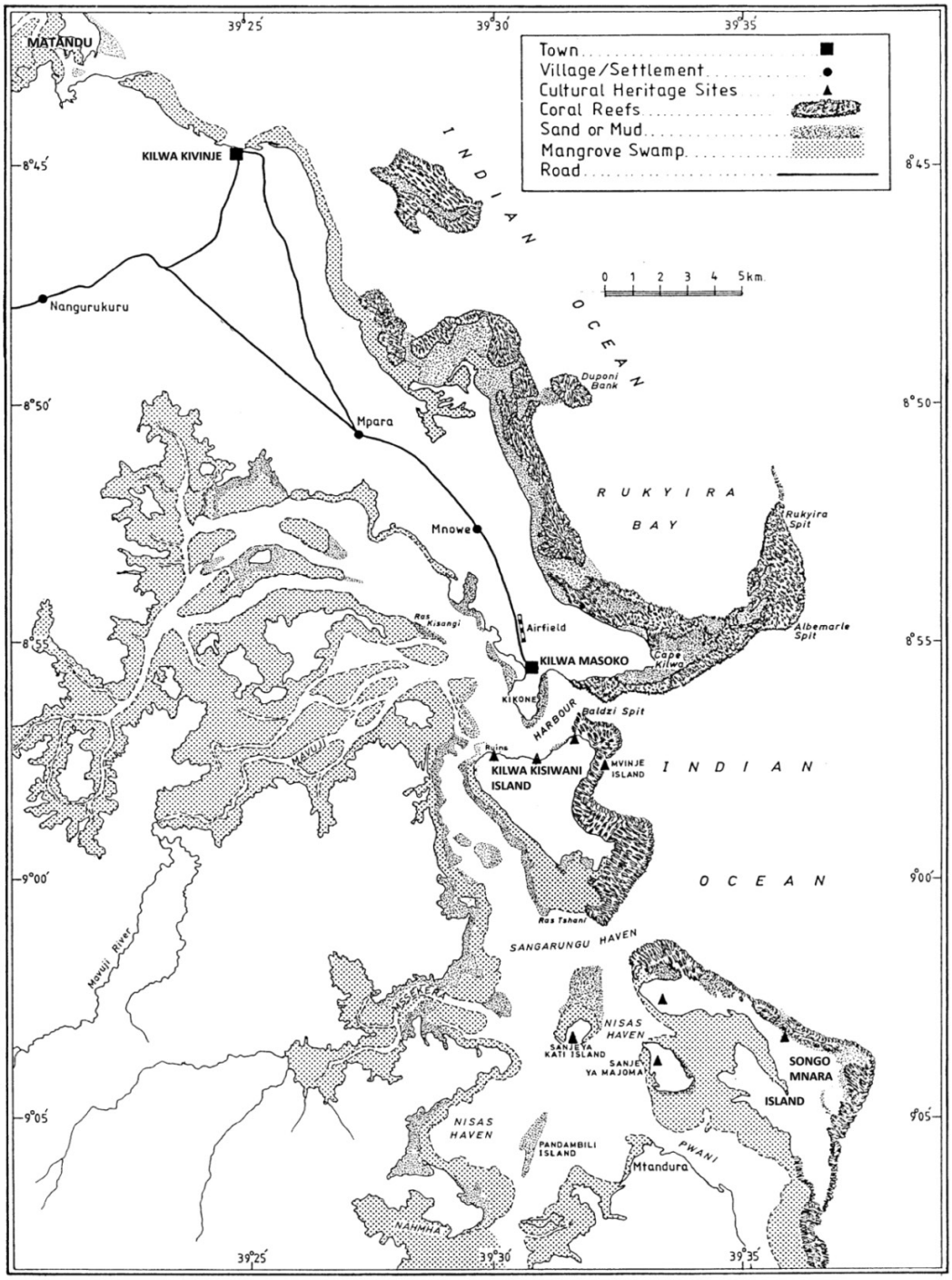


Figure 2: The map of Kilwa Archipelago, showing the location of Kilwa Kivinje and other cultural heritage sites and places mentioned in this paper (Source: URT 2005)

The 19th century European accounts (e.g. Burton 1859; Krapf 1860; Berlioux 1870; Johnson 1925) indicate that ivory and slave trade played a crucial role in the growth of Kilwa Kivinje. *Krapf (1860), for example, estimated the population of Kilwa Kivinje to have had reached 15,000 inhabitants in 1844, and that just after four years [1848] the population had reached 50,000 people. Berlioux (1870) described Kilwa Kivinje as 'a new city that* presented a miserable aspect, since it consisted only of huts protected by a fort, but with plantations of coconut palms surrounding it with greenery'. The surrounding areas of the 19th century Kilwa Kivinje are described as fertile and densely populated, and that trade in the port was very important (Nicholls 1971), underlining observations made in 1873, by an anonymous visitor that "Kilwa Kivinje was the hot bed of the slave traffic on the coast" …and… "a very important city (which) may be more prosperous than Zanzibar" (Sutton 1966).

Kilwa Kivinje was the departure point for the caravans to Unyanja (Lake Nyasa zone) and Zambia. Led by the Arab, the Yao and the Bisa, the caravans left Kivinje in March and came back in November (Krapf 1860). They spent almost thirty days to reach Lake Nyasa and from there they sometimes continued to Zambia and/or went south to Mozambique (Lyne 1905). Towards the end of the 19th century, Eustace, a British naval officer, reported that along the caravan routes, there spread out a series of small stone forts, which were used by caravans to camp at night (Freeman-Grenville 1967a). As Kilwa Kivinje became the most important port in eastern Africa, the caravans from the interior brought back mainly slaves and ivory, but also rice, copal and tobacco; all these for export to Zanzibar (Sherrif 1987). The figures for slaves brought to Kilwa Kivinje vary from 10,000 to 20,000 individuals per year, and these were exported mainly to Zanzibar. According to an English consul in Zanzibar, the customs in Zanzibar registered 19,000 slaves per year, coming essentially from Kilwa Kivinje (Berlioux 1870). In 1840s, there were forty caravans in a year each with approximately 8,000 to 10,000 slaves and about 4,000 to 5,000 elephant tusks (Nicholls 1971). From 1862 to 1867, a total of 97,203 slaves had already been exported from Kilwa Kivinje, among whom 76,703 were deported to Zanzibar (Lyne 1905).

In 1873, slave trade, which was the backbone of the town's economy, was declared illegal and in 1889, all slaves at Kilwa Kivinje were set free (Nicholls 1971). The

beneficiaries of slave trafficking, including the governors of the town, resisted this decision. Historical accounts indicate that stopping slave trade was not an easy task, partly due to the shallowness of the Kilwa Kivinje port, which posed difficulties to British anti-slavery ships from accessing this town (Nicholls 1971). Moreover, besides the difficulties of controlling its port, Kilwa Kivinje had the advantage of being far from Zanzibar, and so the Arab boats could pass on the East side of the island to escape the English or the sultan police and join the Arabian Peninsula (Nicholls 1971). However, in 1876, the sultan of Zanzibar sent orders to the governor of Kilwa Kivinje, by then Said bin Abdullah, to stop and arrest those who were still involved in slave trafficking (Nicholls 1971). In spite of the ban on slave trade, Kilwa Kivinje remained an important trading centre. Many carriers from the interior continued to arrive, especially as the city gained its fame for importing rubber from the interior (Freeman-Grenville 1962; Nicholls 1971; Alpers 1975).

The later history of Kilwa Kivinje concerns the establishment of colonial rule in the region, and subsequent rebellions against it by local communities (Iliffe 1979; Sunseri 2003). However, it was until 1891 when the German colonial administration was established in the region, and the first governor installed at the town of Kilwa Kivinje, which became the administrative centre for the entire southern province - today covering the regions of Lindi and Mtwara (Iliffe 1979; URT 2005). Since then, several buildings, including the administration and colonial residence were erected in the town, taking the traditional shape, like numerous coastal cities, such as Dar es Salaam, Bagamoyo and Pangani (Garlake 1966; Bowen 1984). The German buildings were built in local construction techniques, using coral stones and coral lime mortar, with floors supported by mangrove beams (Garlake 1966; Bowen 1984). The Germans also introduced some European elements on these buildings, including metal beams, square wooden beams and wooden floors - allowing more spacious rooms, better lighted, better aerated and more open verandas (Garlake 1966; Bowen 1984). Some elements of the Swahili architecture, such as flat roofs (although these have been covered today with iron sheets) and merlons, which were used for decorating the roofs, were also retained in the architecture of the town. Added to the list, are carved doors or Zanzibar and Indian models less ornamented. These doors are wider and are

covered by crossbars, and decorated with metal buttons (Pierre Blanchard, pers. comm. 2012).

As stated in the background section, it is notable from the short history presented here, that the period postdating the caravan trade is relatively well-known compared to the period pre dating the 19th century. This study was an attempt to uncover that deep, buried history of the town by using archaeological methods and techniques as outlined in subsequent sections.

Field Work

Fieldwork was in two seasons: from July to September, 2012 and in September, 2013. The first two weeks of July 2012 were spent collecting oral historical information about the settlement history of Kilwa Kivinje from local people. Whereas the initial focus of this study was on Kilwa Kivinje town settlement only, oral historical information indicated that there were abandoned villages, namely; Kisangi Ugoga and Kiwavi (Figure 3) that are believed to have had been the earliest settlements before Kilwa Kivinje (also see Burton 1859). This new information necessitated the inclusion of these two abandoned villages in this study, in order to acquire a broader and clearer picture of the settlement history in this general area. Consequently, the last two weeks of July 2012 were spent conducting archaeological surveys in those areas mentioned as having been the location of earliest settlement. Two months of excavation, August and September 2012 followed; starting at Kisangi Ugoga, then at Kiwavi, and finally at Kilwa Kivinje town. The second field session, September 2013, was spent preparing maps and consulting local elders to seek clarifications on issues pertaining to cultural practices, production and uses of some material culture that were recovered during the 2012 field session. Additionally, the local people were also interviewed on various issues concerning the southern caravan trade.

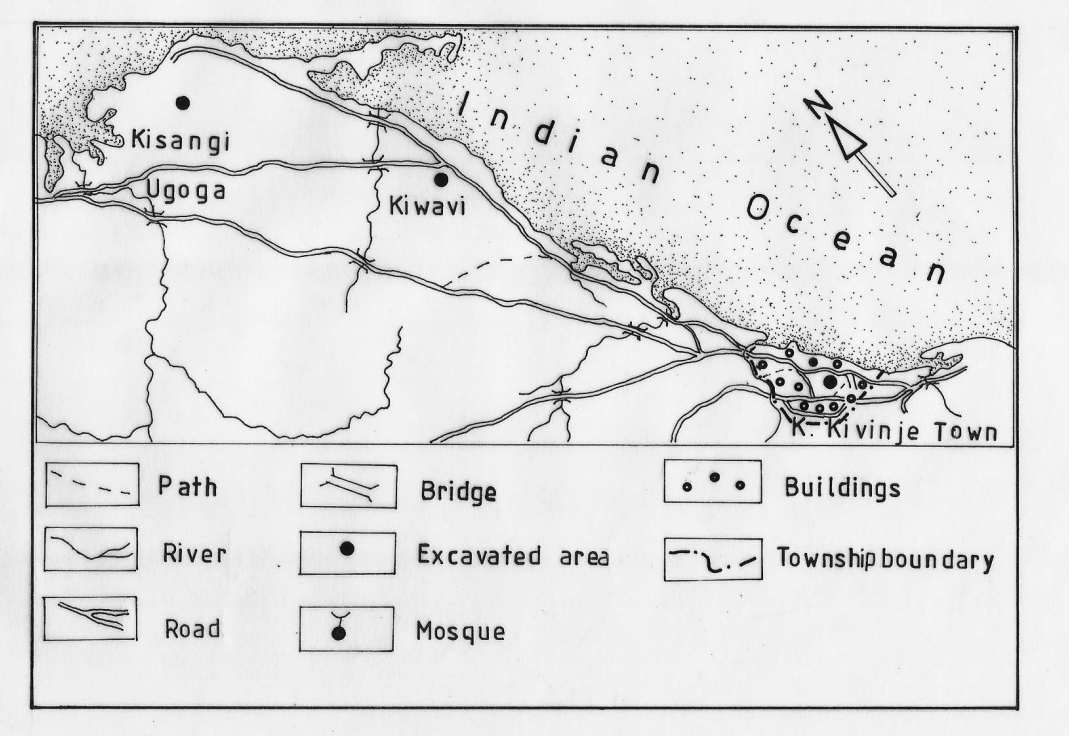


Figure 3: The location of Kilwa Kivinje town in relation to periphery settlements of Kisangi Ugoga and Kiwavi; all three areas excavated in this project

Excavation at Kisangi Ugoga and Kiwavi

Four trenches were excavated at Kisangi Ugoga and Kiwavi; the two abandoned villages are referred in this article as '*the periphery settlements*'. One trench, measuring 2x4 m, was excavated at Kisangi Ugoga (about 5 km North of Kilwa Kivinje town) and three trenches each measuring 2x2 m were excavated at Kiwavi (about 2.5 km North of Kilwa Kivinje town; Figure 3). Excavations followed arbitrary levels of 10 cm and deposits were dry sieved through a 5 mm wire mesh screen.

Excavation Trench 1 (Kisangi Ugoga)

This 2x4 m excavation trench targeted an area with visible higher concentration of archaeological scatters. It was excavated to a sterile level at a depth of 80 cm below modern ground surface. The first two levels (0–20 cm) had dark brown clay soil representing post-abandonment disturbed topsoil. The deposit of this level yielded a mixture of fragmented cultural materials, notably local pottery. The rest of the entire

depth of this trench, from level 3 (20–30 cm) to level 8 (70–80 cm), was dominated by loose light brown fine clay soil, which was easy to excavate and sieve. Except level 8, which marked the end of excavation for being sterile, all other levels produced a variety of cultural materials with dominance of local pottery. Large potsherds were noted from deep levels of this trench and could represent large storage vessels. Over 72% of the diagnostic potsherds from this trench belong to the *Swahili Tradition* (Figure 4) and these came mainly from level 3 to 7. Imported pottery and glass beads seemed to be a later introduction at this settlement since their appearance end in middle levels. Table 1 presents artefact totals per level of this excavation trench.

Levels	*Local Pottery*	*Imported Pottery*	*Glass Beads*	*Mammal Bones*	*Fish Bones*	*Sea Shells*	*Metal Objects*	*Others*
1	312	2	136	6	3			
2	835	3	145	5	42		1	
3	256	6	91	14	39			
4	269		31	9	73	2		
5	519		7	20	24		1	
6	342			12	4	1		
7	99							1 spindle whorl
8								
Total	**2633**	**11**	**410**	**66**	**185**	**3**	**2**	**1**

Table 1: Artefact totals, excavation trench 1 (Kisangi Ugoga)

Excavation Trench 2 (Kiwavi)

Six levels were encountered in this 2x2 m excavation trench and the final depth reached was 60 cm below ground surface. Level 1 (0–10 cm) was dominated by plant roots and the soil was dark, mixed with ash pockets. This level produced local and imported pottery, the only three imported glass beads of the entire trench, as well as faunal remains. Level 2 (10–20 cm), level 3 (20–30 cm) and level 4 (30–40 cm) were all dominated by dark brown silt clay soil. A decreasing amount of local and imported pottery from this level – downward, was noted. Both level 5 (40–50 cm) and level 6 (50–60 cm) had fine white beach sand. Whereas level 5 yielded local pottery only, nothing was recovered from level 6, thus marked the end of excavation. Generally, faunal remains recovered from this trench were in a good preservation condition.

Table 2 presents artefact totals per level of this excavation unit.

Levels	*Local Pottery*	*Imported Pottery*	*Glass Beads*	*Mammal Bones*	*Fish Bones*	*Sea Shells*
1	154	14	3	4	8	
2	186	7		23	36	
3	109	1		14	27	1
4	92			5	9	
5	63					
6						
Total	**604**	**22**	**3**	**46**	**80**	**1**

Table 2: Artefact totals, excavation trench 2 (Kiwavi)

Excavation Trench 3 (Kiwavi)

This excavation trench measured 2x2 m and targeted an area of higher concentration of archaeological scatters, notably local pottery. Eight levels were excavated to the final depth at 80 cm where the sterile deposit was hit. Level 1 (0–10 cm) had dark brown silt clay soil, representing the latest post-abandoned lithology. This deposit was dominated by local pottery and a few European imports, as well as faunal remains and rusted metal objects. Whereas a slow decreasing of local pottery was noted from level 2 (10–20 cm) downward, imported pottery and glass beads were on increase, until where they stopped in level 3 (20–30 cm) and level 5 (40–50 cm), respectively. Level 5 (40–50 cm), which had light brown silt clay soil, yielded a few local potteries and it marked the end of European glass beads. The deposit in level 6 (50–60 cm) was similar to that in level 5 and it yielded local pottery and a single rodent bone that could have died naturally at the site. Both levels 7 (60–70 cm) and 8 (70–80 cm) were dominated by white sand beach; but it was only level 7 that yielded only local pottery. Table 3 below presents artefact totals per level of this excavation trench.

Levels	*Local Pottery*	*Imported Pottery*	*Glass Beads*	*Mammal Bones*	*Fish Bones*	*Sea Shells*	*Metal Objects*
1	116	3	9	6	12		3
2	112	4	18	11	24	1	2
3	97	7	30	7	18		
4	31		31	5	9	2	1
5	20		4	4	2	3	
6	13			1			
7	14				1		
8							
Total	**403**	**14**	**92**	**34**	**66**	**6**	**6**

Table 3: Artefact totals, excavation trench 3 (Kiwavi)

Excavation Trench 4 (Kiwavi)

This 2x2 m excavation trench was established where archaeological scatters were not visible on the ground surface. This turned out to be the only shallow excavation unit dug in this project, with only five levels (including a sterile) encountered. Whereas the first two top levels (0–20 cm) were dominated by dark brown silt clay, the rest of the entire depth of this trench was dominated by white beach sand. Generally, local pottery dominated the cultural material of this excavation trench; followed by imported pottery and glass beads, which all seem to have been introduced later in this settlement, since their appearance end in level 3. Table 4 presents artefact totals per level of this excavation trench.

Levels	*Local Pottery*	*Imported Pottery*	*Glass Beads*	*Mammal Bones*	*Fish Bones*	*Sea Shells*	*Others*
1	210	12	2		7	1	
2	196	6	4	4	2		
3	69	2	7	1	1		
4	7					2	spindle whorl 1
5	0	0	0	0	0	0	
Total	**482**	**20**	**13**	**5**	**10**	**3**	

Table 4: Artefact totals, excavation unit 4 (Kiwavi)

Excavation at Kilwa Kivinje Town Settlement

Other four trenches each measuring 1x1 m were dug at different locations within the town of Kilwa Kivinje (Figure 3). Two trenches were dug at Kisangi Mjini, one at Mgongeni and one at Magengeni streets. Owners of the plots influenced the location and sizes of trenches, most of them permitting very small excavation units, fearing destruction that could be caused by excavation. Excavations followed arbitrary levels of 20 cm and deposits were dry sieved through a 5 mm wire mesh screen.

Excavation Trench 5 (Kisangi Mjini Street)

This trench was located adjacent to an abandoned, collapsed building. Eight levels were excavated to the final depth of 160 cm below modern ground surface. Level 1 (0–20 cm) was mainly a rubble fill, with rooty topsoil in between. This was not sieved, as it was sterile, apart from rubble that could not go through the sieve. Level 2 (20–40 cm) had dark brown loose silt clay, indicating properties of post-abandoned topsoil. A small amount of fragmented cultural materials were recovered from this level, including imported pottery, glass beads and bottle. Level 3 was dug between 40–60 cm and its lithology was dark brown with higher concentration of tiny charcoal fragments and ash pockets; the latter possibly representing a midden fire set during the occupation of this settlement. The debris included both local and imported pottery, beads and faunal remains. The soil in level 4 (60–80 cm) was fine grained and greyish, containing a variety of cultural materials, including local and imported pottery, glass beads, glass bottles as well as faunal remains. This level recorded an increasing amount of imported glass beads and pottery; possibly an indicator of increasing popularity and/or access of the imports by inhabitants.

Level 5 (80–100 cm) had brownish fine lithology and it yielded large quantities of both local and imported pottery. European glass beads ended in this level. Level 6 (100–120 cm) had similar lithology as level 5. The amount of local pottery decreased in this level and had no imported pottery. Mammal and fish bones, albeit a few, were also recovered, although they were in a very poor condition. Level 7 (120–140 cm) had pale brown silt clay containing a few undiagnostic heavily worn and fragmented local pottery, as well as fish bones. Level 8 (140–160 cm) was natural greyish beach sand and it did not contain any cultural material. Table 5 presents the types and amount of cultural materials recovered from this excavation trench per levels.

Levels	*Local Pottery*	*Imported Pottery*	*Glass Beads*	*Glass*	*Mammal Bones*	*Fish Bones*	*Sea Shells*	*Metal Objects*
1								
2	58	7	2	2	7	9		1
3	42	12	7	1	6	10		2
4	23	14	9		3	7	2	
5	54	7	1		3	14	2	
6	19	2			6	3		
7	9					2		
8								
Total	**205**	**42**	**19**	**3**	**25**	**45**	**4**	**3**

Table 5: Artefact totals, excavation trench 5 (Kisangi Mjini)

Excavation Trench 6 (Kisangi Mjini Street)

This was located at the centre of a stone-wall enclosed house and was excavated to the sterile level (level 10) at the depth of 200 cm. The first two top layers (0–40 cm) represented recently disturbed dark brown topsoil, mixed with rubbles, probably from a slow continuing falling nearby house wall. Cultural materials from this level were more fragmented, possibly due to post-abandoned human activities. Level 3 (40–60 cm) had soil with coarse particles and was dark brown. This level yielded a variety of cultural materials, including local and imported pottery, glass beads, mammal and fish bones, marine shells and rusted metal objects. The same types of cultural materials continued in level 4 (60–80 cm) with the exception that the amount of European glass beads increased dramatically, while imported pottery decreased. The same soil characteristics as well as the types of cultural materials continued to dominate in level 5 (80–100 cm), which had some plant roots traversing in all directions of the trench. Level 6 (100–120 cm) had dark fine clay soil mixed with ashes. This level registered a dramatic decrease of imported pottery, but the amount of glass beads remained relatively stable. Level 7 had dark grey wet clay soil and it spanned 120–140 cm. The general decrease of cultural materials, including local and imported pottery was noted. Level 8 (140–160 cm) continued to be wet but the soil colour turned into greyish brown. Plant roots traversed in all directions of the trench in this level. Whereas local pottery continued to appear in this level, no imported material was recovered. A few faunal remains and metal objects, one being a knife and the rest being nails, probably used for nautical construction, were recovered. Below level eight was level 9 (160–180 cm), which had wet grey clay soil. This level represented the earliest deposit, and the only cultural materials obtained were undiagnostic fragmented pieces of local pottery. Similarly, level 10 (180–200cm) had wet pale-greyish soil and did not contain any cultural materials; thus representing natural deposition. Table 6 presents all cultural materials recovered from this trench.

Levels	*Local Pottery*	*Imported Pottery*	*Glass Beads*	*Glass*	*Mammal Bones*	*Fish Bones*	*Sea Shells*	*Metal Objects*
1	66	11	8		5	10		5
2	74	50	70	1	4	12	2	12
3	20	62	17		7	9	5	10
4	37	10	50		4	32	20	9
5	44	50	20	1	5	17	5	4
6	60	18	22		4	4	3	2
7	37	12	14		4	3	2	
8	44				3	5	2	2
9	21							
10								
Total	**403**	**213**	**201**	**2**	**36**	**92**	**39**	**43**

Table 6: Artefact totals, excavation trench 6 (Kisangi Mjini)

Excavation Trench 7 (Mgongeni Street)

This trench was located in front of what used to be a customs house during the height of the caravan trade in the 19th century. Seven levels were encountered to the final depth of 140 cm. All six levels produced cultural materials except the final level, 7 (120–140 cm), which marked the sterile point. The stratigraphy of this trench had the first two top levels (0–40 cm)which seems not natural in this area the rest of the entire depth of the trench was characterised by grey wet fine sand. The cultural materials in this trench ceased in level 6, with only two potsherds recovered. Like other trenches local pottery dominated the cultural materials collected. Additionally, imported pottery and glass beads seem to have been introduced later since their appearance ended in the middle levels 4 and 3, . Table 7 presents the cultural materials recovered from this excavation unit.

Excavation Levels	*Local Pottery*	*Imported Pottery*	*Glass Beads*	*Glass*	*Mammal Bones*	*Fish Bones*	*Sea Shells*	*Metal Objects*
1	10	4		2	2	3		3
2	15	10	2	2	7	3		2
3	32	22	3		10	4		
4	19	15			2	5	2	
5	24				3	2	4	
6	2						1	
7								
Total	**102**	**51**	**5**	**4**	**24**	**17**	**7**	**5**

Table 7: Artefact totals, excavation trench 7 (Mgongeni)

Excavation Trench 8 (Magengeni Street)

This trench was set a few meters from the foundation of a collapsed building. Seven levels were excavated to the final depth at 140 cm. Level 1 (0–20 cm) had loose pale grey silty clay mixed with rubbles of coral stones; the latter possibly originating from the nearby collapsed building. Cultural materials from this level were few, the majority came from the lower 10 cm. Level 2 (20–40 cm) had greyish brown soil of coarse texture. Whereas local pottery and faunal remains continued to dominate, imported pottery and glass beads started to appear. The same soil colour and material types continued in level 3 (40–60 cm). Level 4 spanned 60-80 cm below ground surface and had compact, dark brown silt clay mixed with charcoal fragments. An increase of local pottery, almost over twice of that recovered in level 4 was recorded. Only a single glass bead was recovered from this level, but no imported pottery. Other cultural materials recovered were faunal remains, seashells and metal objects. Level 5 (80–100 cm) had similar soil characteristics to level 4. A general reduction of local pottery in this level was noticed, as well as a complete absence of imports. Both fish and mammal bones continued to appear in this level, as well as metal objects. Level 6 (100–120 cm) had fine wet light brown sand in a mixture of tiny charcoal fragments. This level yielded only five pieces of local pottery and two fragmented

mammal bones. Level 7 (120–140 cm) marked the end of excavation, as it was sterile.. The lithology in this level was similar to that of level 6, but with plenty of roots of coconut trees. Table 8 presents cultural materials recovered from this trench.

Levels	*Local Pottery*	*Imported Pottery*	*Glass Beads*	*Glass*	*Mammal Bones*	*Fish Bones*	*Sea Shells*	*Metal Objects*
1	19		1	1	12	23	1	7
2	15	2	2	1	6	14	1	2
3	16	2	4		10	7	2	3
4	39		1		8	17	2	5
5	19				6	21		4
6	5				2			
7								
Total	**109**	**4**	**8**	**2**	**44**	**82**	**6**	**21**

Table 8: Artefact totals, excavation trench 8 (Magengeni)

Cultural Sequences

Excavation at the studied settlements revealed the stratigraphic units and finds that allow for the reconstruction of cultural sequences. However, it should be noted that in the absence of radiocarbon dates, a tentative relative chronology is proposed on the basis of pottery evidence and trade glass beads. Pottery and glass beads have been widely used by archaeologists working on the East African coast for relative dating (e.g. Chittick 1974; Horton 1984; Chami 1994; Helm 2000; Croucher 2006; Wynne-Jones 2009; Pawlowicz 2011; Biginagwa 2012) to delineate cultural sequences at several sites in the region. Consequently, the occupational history of Kilwa Kivinje and the periphery settlements of Kisangi Ugoga and Kiwavi, can thus be classified into two cultural periods: the *Swahili* (the earliest) and *PostSwahili* (the later) periods.

Period I: The Swahili Tradition (SW)

It is reported that the appearance of the Swahili ware pottery (SW), also known as *'Neck Punctuated'* Chami 1998) coincides with the period of the erection of early Swahili stone towns along the coast of East Africa (Gibbs (1962). This tradition has a wider geographical distribution along the coast of East Africa (Chami 1994; Helm 2000; Fleisher 2003; Croucher 2006). Chami (1998) noted that this cultural tradition was realised first on the northern coast of East Africa, around the eleventh century and it matured there until the beginning of the fourteenth century AD, when it started to spread to the southern coast, as far as Madagascar. Consequently, Chami argues that the Swahili ware of the southern coast of East Africa is relatively younger to that of the northern coast.

The Swahili ware pottery of this project was found in a higher concentration (97%) at the periphery settlements of Kisangi Ugoga and Kiwavi, rather than at Kilwa Kivinje town (3%). At these periphery settlements, the Swahili ware pottery appeared in the lower levels of the excavation units. Vessels of this pottery tradition include carinated bowls, carinated cooking pots and necked jars. These vessels bear various decorative treatments of incision (for example zigzags, parallels, hatches, bands of diagonal and arc lines), and impressions (for example punctates, stabs of nail and finger); these placed around the carination (for carinated vessels) and on the region between the neck and the rim (for necked jars; see Figure 4). Other cultural materials recovered diagnostic of this period include a few blue and white Chinese ceramic; potsherds of Islamic ware (possibly *sgraffiato* monochrome), spindle whorls and glass beads. These imports, therefore, suggest a trade connection through the Indian Ocean among the people of China, Near East, Europe and the Swahili inhabitants of Kisangi Ugoga and Kiwavi.

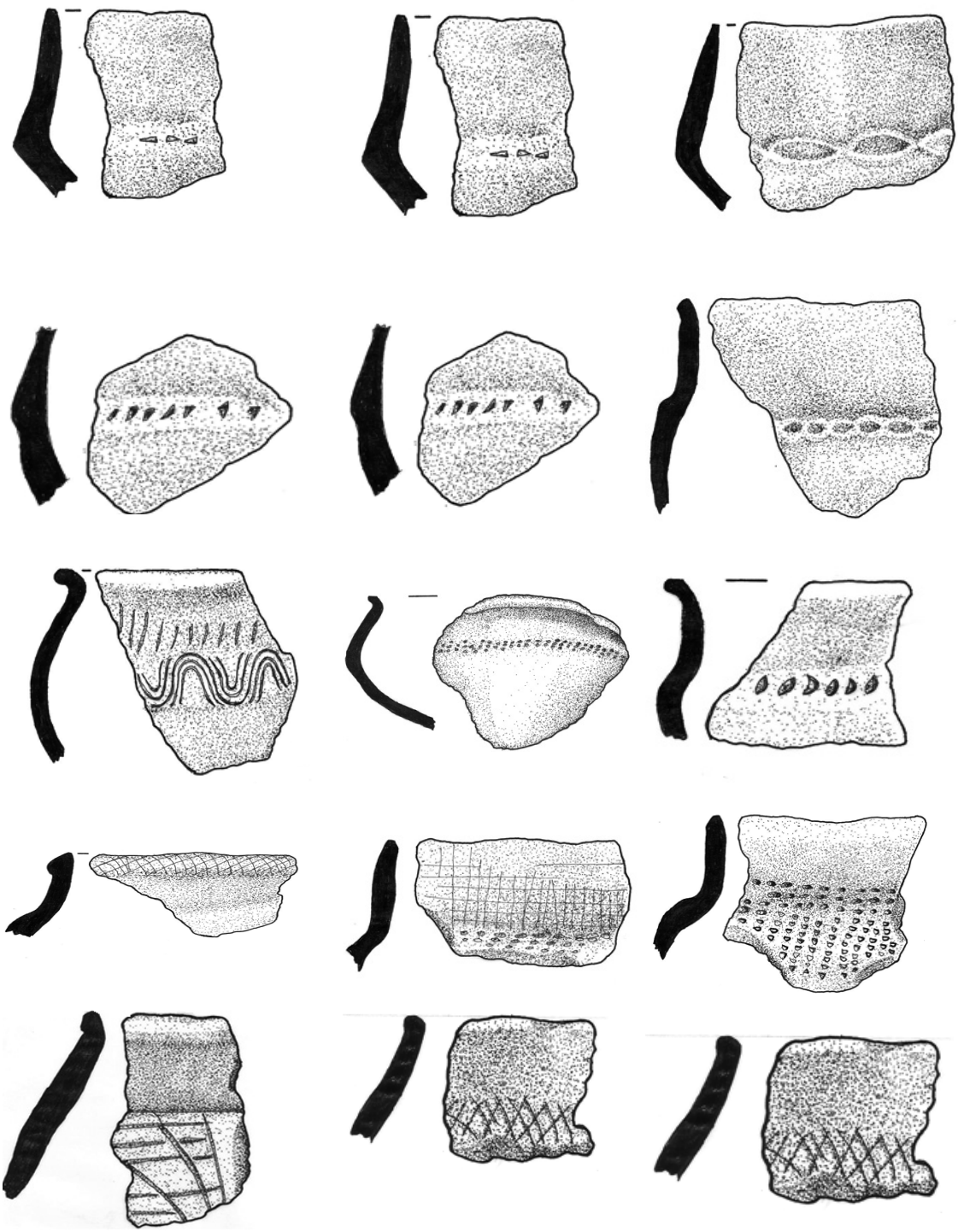


Figure 4: The 'Swahili'/'Kitchen' Ware Pottery of the current project

As mentioned above, the Swahili ware has a wider geographical distribution on the coast of East Africa. Similar materials have been recovered from Kilwa Kisiwani, and classified under *periods II – IV,* dating between the late 12th and 16th centuries AD (Chittick 1974). At Mbwa Maji, the Swahili ware has been relatively dated between 13th and 16th Centuries AD (Ombori and Mabulla 2013), while at Vumba Kuu this has been dated between 14thand 16th centuries (Wynne-Jones 2009). With all these dates in place, and following Chami's (1998) suggestion that this pottery tradition appeared very late in the southern coast of East Africa, it is logical to assume that the Swahili ware pottery at the periphery settlements of Kisangi Ugoga and Kiwavi relatively date to the period stretching from the 13th to the late 16th century AD.

Period II: The Post Swahili Tradition (PS)

Scholars have widely established that the Post-Swahili period dates from about AD 1,600 onwards (Chami 1998; Walz 2010). Archaeologists working in the region (e.g. Kwekason 2002; Walz 2010) have noted that several communities of the Swahili period declined from around the 16th century, due to a combination of natural and cultural factors. These included the 'Little Ice Age' (1500–1750 CE), climatic uncertainty, coupled with environmental and social changes along the coast (spurred by heightened competition among Swahili city-states and Portuguese incursion) that dispersed population away. It is also well argued that these communities flourished again from the late 18th to 19th centuries (Freeman-Grenville 1962; Moon 2005; Walz 2010). Archaeologically, this is manifested by increasing number of sites and diverse imported cultural material (Walz 2010). Therefore, the finds of this study suggest that Kilwa Kivinje town settlement could have emerged and flourished during this period, which is referred to as *Post Swahili* (PS) period. The Post Swahili pottery tradition dominated at Kilwa Kivinje town settlement, at 78% (of all the diagnostic potsherds) against 22% from the periphery settlements of Kisangi Ugoga and Kiwavi. The dominant vessels of this tradition are carinated bowls and cooking pots that are decorated with 'arc' motifs. These range from one to five incised or punctuated arcs around the carination (Figure 5).

As mentioned earlier, the Post Swahili period is marked by increased diverse of imported cultural materials. This is true, and well reflected, at both studied settlements of this project. As presented above, large quantities of glass beads

(n=751) were recovered from these settlements (Figure 6). A majority of the recovered beads are well known to have been manufactured in Europe (Venice, Bohemia and Amsterdam) from the 16th to the 20th century AD (Kimura and Shenkere 2009; Prestholdt 2004; De Corse *et al.* 2003) and imported into East Africa, especially during the 19th century, when the caravan trade had expanded and consolidated (Biginagwa 2012). A majority of these beads (96%) are hand drawn, while a few (4%) are wound. Inhabitants of both settlements preferred mainly four bead colours, namely; white, blue, yellow and red, since beads of these colours occur consistently in all excavation units across the studied settlements.

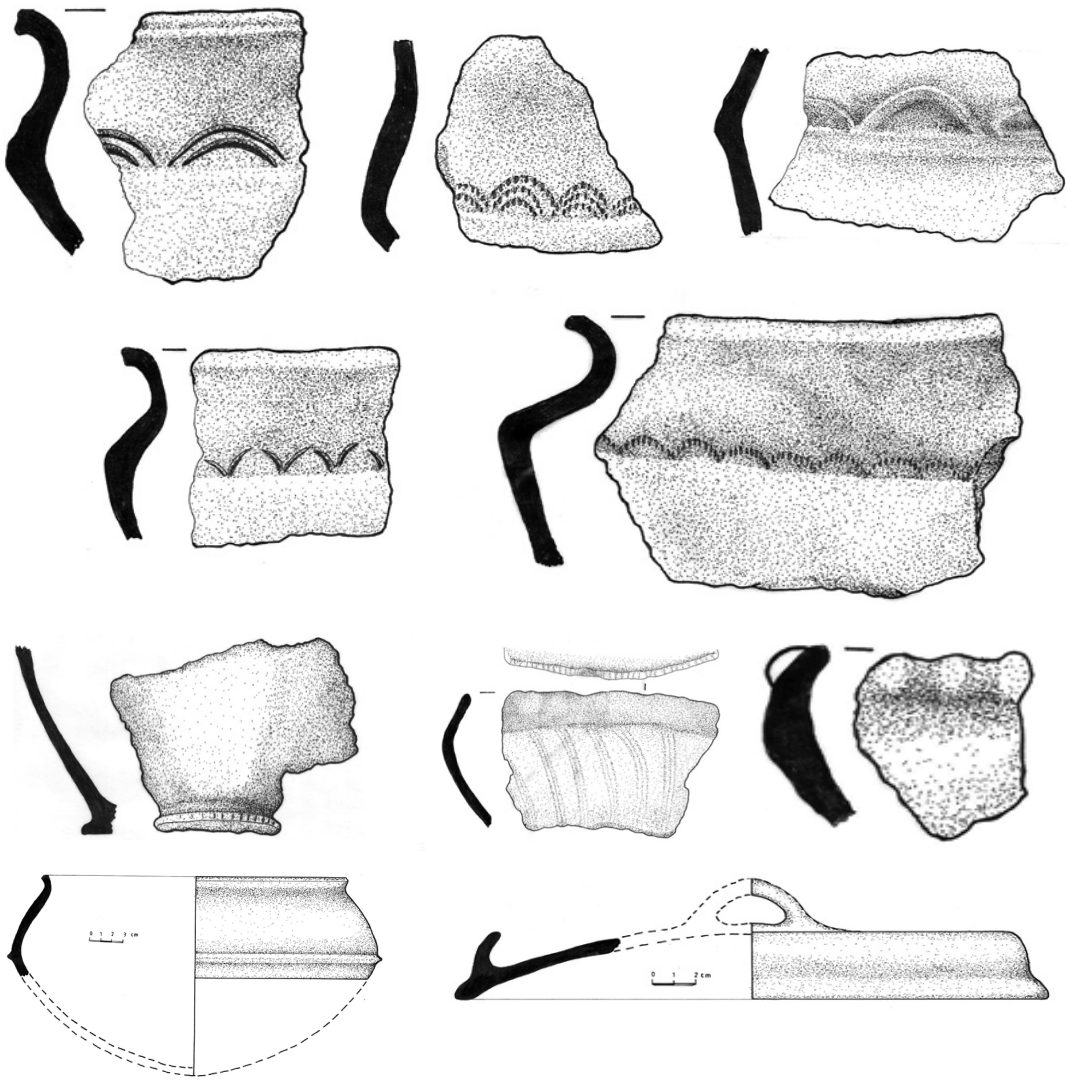


Figure 5: *The 'Post-Swahili' Pottery Tradition of the current project*

Imported pottery (n=334) is another interesting item that marks the Post Swahili phase in the studied settlements, especially Kilwa Kivinje town, where they dominated at 80% against 20% from the periphery settlements. These are European pottery (n=199), Indian red earthenware (n=98) and the Chinese porcelain (n=37). The European pottery, a majority being large and small bowls (53%), followed by teacups (19%), serving platters (11%) and saucers (9%), display clear glaze overlying painted and printed decorations of bright pink, blue and sometimes black bands around the edges in varying thickness (Figure 6). Some of the recovered European potsherds display maker's marks *"OPAQUE DE SARREGUEMINES"* (Figure 6), thus locating some of these pottery as having been manufactured in Lorraine, North-eastern France (www.porcelainmarksandmore.com).

As for Indian red earthenware, the majority (89%) were found at Kilwa Kivinje town and only 10.2% from the periphery settlements. While it is difficult to discern the vessel forms from the recovered potsherds, Croucher's work on the nineteenth-century Zanzibar plantation reports similar type of ceramics, suggesting these to have been *mitungi* used as water storage jars (2006:316). Whereas Chami is of the view that this type of ceramic was made in India during the eighteenth and nineteenth centuries (pers.com. 2013), Croucher (2006) sees the possibility of some of these to have been made by Indians in Zanzibar during the nineteenth century. Finally, the Chinese pottery forms the minority of the imported ceramics (11%) with the highest concentration (78.3%) found at Kilwa Kivinje town settlement against 21% from Kisangi Ugoga and Kiwavi. This blue and white hard vitrified paste and cobalt blue glaze earthenware (Figure 6) has been recorded from other sites along the East African coast, including at Kilwa Kisiwani (e.g. Chittick 1974), Shanga (e.g. Horton 1996) and Zanzibar (e.g. Clark and Horton 1985; Fleisher 2003; Croucher 2006) where they have been dated between the 16th and the 17th centuries.

Miscellaneous Cultural Materials

Other cultural materials obtained from the studied settlements include corroded metal objects (n=80), slag (n=6), cowrie shells (n=18), spindle whorls (n=2), broken glass bottles (n=9) and copal gum. Forty-nine (49) metal objects were

nails, of which a majority (n=38) resemble those used nowadays for nautical construction (Figure 7). The remaining, (11) are carpentry nails. Other identified metals include knives (n=2), fish hooks (n=2), a padlock and a coin. The rest 10 metal pieces could not be identified. Iron slag recovered from Kiwavi site could be the by-product of iron smithing (Edwinus Lyaya, pers. comm. 2014). When the recovered slag is considered along with spindle whorls, it clearly suggests that craft industry was taking place at the periphery settlements of Kisangi Ugoga and Kiwavi. Among the likely locally produced items from metal works would include knives and those big nails used for nautical construction. Elsewhere in northern Kenya coast, Horton (1996) recovered similar spindle whorls from the fifteenth to sixteenth century contexts and he associated them with the presence of textile industry at those particular sites where they were recovered.

European pottery

European pottery bearing maker's marks

Chinese pottery

Indian pottery

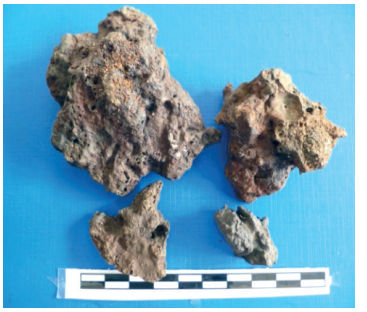
European glass beads

Figure 6*: A variety of imported cultural material discussed in this paper*

The cowry shells recovered are milky in colour (Figure 7) and these have been identified to belong to *Cypraea* spp. (Poutiers 1998), which is ubiquitous along the coast of East Africa. When Burton journeyed East Africa in the mid-nineteenth century, he noted cowry shells having been traded, taken from the East African coast to the interior, where they were used as currency, as well as for ornamentation (1859; also see Pallaver 2009). The glass bottles recovered could have been among the European imports at these settlements, especially towards the end of the nineteenth century. Miller and Sullivan (2000) note that the 1880s and the 1890s were the periods of revolution in glass technology in Europe, with the development of several glass production machines for export. Glass-bottled perfume is among the well-documented imports during this period (Croucher 2006). Figure 7 shows a variety of the miscellaneous objects described above.

Cowry shells

Spindle whorl



Slag

Knives

Fishing hook and a needle

Nails

Copal gum

Figure 7: *Miscellaneous objects discussed in this paper*

Faunal Remains

The amount and distribution of bones recovered from each excavation unit, both terrestrial and fish fauna, are presented together with other finds in Tables 1 to 8. Of 857 faunal specimens that were maximally identified (NISP), 42.5%(n=365) comes from Kilwa Kivinje town settlement and the remaining 57.4% (n=492) from periphery settlements of Kisangi Ugoga and Kiwavi. The most notable feature in the faunal assemblage is the dominance of fish at both settlements, constituting over 64% at each settlement (Kivinje town and the periphery). No attempt was made to identify fish species represented in the fish fauna, not only because this was not the scope of the current study, but also because fish faunal were mostly represented by vertebrae, which are generally difficult to use in identifying fish species (Prendergast and Lane 2010; Biginagwa 2012). Fish would have been locally caught from the Indian Ocean, given the closeness of these settlements to the Indian Ocean.

Table 9 presents the Number of Identified Specimens (NISP) of terrestrial fauna and their identification into specific taxa, by settlement. Taken together, the

figures suggest that over 99% are domesticates. As they display evidence of cutting and burning marks, no doubt that these animal remains represent human food refuses. Chicken forms the largest group of domesticates by 60%; followed by caprines at 22.8%; and then cattle, 4.6%. The remaining 3.9% is rodents and 2.5% is taxonomically unidentified specimens. The spatial distribution of caprines and cattle suggests that these were consumed more at Kilwa Kivinje town settlement than at the periphery settlements of Kisangi Ugoga and Kiwavi. While caprines were consistently available in those layers that produced faunal remains, cattle bones, albeit a few, were recovered only from top levels, in depths ranging from 0 – 30 cm. This could suggest that cattle were a later introduction at this settlement. Additionally, this analysis revealed that even at Kilwa Kivinje town settlement where cattle and caprines dominate, their elements and body parts representation are more restricted. 'Low utility' parts or elements such as mandible, maxillae, teeth, horn corn, eye sockets, metapodials and phalanges are extremely under represented or missing, while 'high utility' parts or elements such us upper limbs and scapulae are well-represented. This pattern instructs that cattle and caprines were acquired secondarily for consumption, possibly through exchange rather than being herded at this settlement.

Taxon	Kivinje Town all excavation units	Periphery Settlement, all excavation units	Total
Chicken	63	122	185
Caprines	51	13	64
Cattle	11	2	13
Rodent	4	7	11
Unidentified	0	7	7
TOTAL	159	151	280

Table 9: Taxonomic/ NISP distribution of terrestrial faunal

Discussion

Archaeological finds and their spatial-temporal distribution suggest two cultural traditions evident in the occupational history of the studied settlements. These are the *Swahili Tradition* (the earliest) and the *Post-Swahili Tradition* (the latest). Cultural materials, thus, suggest that the periphery settlements of Kisangi Ugoga and Kiwavi were occupied much earlier than Kilwa Kivinje town, since local pottery of the Swahili tradition dating from the thirteenth to the late sixteenth century AD dominated at these settlements. Inhabitants of the two periphery settlements constructed and lived in wattle-and-daub houses; the evidence for this being the presence of small-circular raised areas that look like severely eroded house floors, noted during archaeological survey. The absence of ruined coral stone houses would also suggest that coral masonry was not yet introduced in the periphery settlement, although it was already widely-spread along the coast of East Africa by this time.

Inhabitants of Kisangi Ugoga and Kiwavi were fishers, possibly farmers and maybe craftsmen, as demonstrated by faunal remains, metallurgical relics of smithing, and spindle whorls (the latter an indicator of textile industry). These people had economic and cultural links or affiliation with the inhabitants of Kilwa Kisiwani during the Swahili period, as suggested by similarity in local pottery and imports of the period (compare the findings of this report and that by Chittick 1974). It is instructive, therefore, to establish that inhabitants of Kisangi Ugoga and Kiwavi obtained their imports from or through Kilwa Kisiwani, the island city-state that was more economically powerful along the coast of East Africa during the Swahili period. It should also be born in mind that by this time, Kilwa Kivinje town settlement had not yet emerged. The periphery settlements of Kisangi Ugoga and Kiwavi would have started to decline slowly from the late sixteenth century onward, possibly due to natural and cultural factors outlined above; but not necessarily that they were abandoned or declined completely, since cultural materials of the ensuing phase (Post Swahili) are evident.

Kilwa Kivinje town settlement possibly emerged in the eighteenth century, and flourished more to its peak during the nineteenth century. In the same period, the periphery settlements of Kisangi Ugoga and Kiwavi could have revived, as is archaeologically manifested by increased production of local pottery, as well as increased amounts of imports, notably European pottery and trade glass beads. These materials dominated the upper levels of excavation units. Because by this time (18th/19thcentury) Kilwa Kisiwani was already declining, major imports to the region could have come through a newly established port of Kilwa Kivinje.

At Kilwa Kivinje, a group of elites, comprising of Arabs, Indians and the Swahili, had already established themselves, serving as commercial intermediary between the interior mainland and the capitalist industrialising West. This group of elites acted as conveyor belt by transmitting the demands of the latter for African luxuries and key raw materials. Obviously, trading activities at Kilwa Kivinje generated a significant amount of wealth to the elites, as the coral stone buildings, still seen in town to date, manifest this. The consequences of this trade had also far reaching effects to communities in the interior, and it is only more recently when archaeological works (e.g. Mapunda 2004; Biginagwa and Mapunda forthcoming) have begun to reveal the tangible evidence of the ways the general lives of local people were negatively altered, following their incorporation into the Indian Ocean capitalist network during the nineteenth century.

Conclusion

In his paper, *The Longue Duréé of Zanzibar and Western Indian Ocean Seaboard,* published in 2009, Felix Chami wrote that the period from AD 1500 – 1850 "can formally be placed in the historical period, and hence there is little contribution [to understand this period] from archaeological work…" (Chami 2009: 166). This statement seems to suggest that our knowledge about the past is more 'comprehensive' for the period after the invention of writing tradition [also labelled as "historical" period] than the period prior to that [labelled "prehistoric" period], and hence archaeological efforts placed to 'historical' period is wastage of resources. This statement, by itself, is not true, and indeed, it promotes the 'arbitrary' division of intellectual labour in searching for our pastinto "historical" and "prehistoric" periods (Reid and Lane 2004; Schmidt 2006, 2013; Biginagwa

2014). Our knowledge concerning the emergence, growth, functions and even collapse of our 'historic' settlements is quite scratchy, and it will remain so if we think documentary sources are exhaustive. Definitely, this perception may as well explain why the historic town of Kilwa Kivinje has never received archaeological attention prior to this study. The research findings reported in this paper were an attempt to address this problem.

This article has attempted to archaeologically reveal the deep buried settlement history of Kilwa Kivinje and its vicinity. Now it is well known that prior to the emergence of Kilwa Kivinje, there were ancient settlements, namely; Kisangi Ugoga and Kiwavi (and probably several others that we could not identify) in the vicinity of the present-day town of Kilwa Kivinje. These settlements were found during the *Swahili period* from around thirteenth century AD, and existed until around the sixteenth or early seventeenth centuries AD, when they declined. These settlements revived in the eighteenth and/or nineteenth centuries AD, the period known as *Post-Swahili*. This was the time when Kilwa Kivinje also emerged and became an important port on the nineteenth-century caravan trade, in what is today South-eastern Tanzania. Cultural materials recovered from Kisangi Ugoga and Kiwavi, and those reported from Kilwa Kisiwani, suggest a presence of cultural affiliation and trade connections between these settlements. Likewise, cultural materials found at Kilwa Kivinje, and those from Kisangi Ugoga and Kiwavi, suggest interactions and affiliations between these settlements. In due regard, that widely painted picture that Kilwa Kivinje town settlement could have emerged only after the decline of Kilwa Kisiwani should now be revisited and consider the role that 'other' ancient non-monumental invisible settlements could have equally played.

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