An Assessment the Myth for the Existence of Underground Slave Tunnel from Ngome Kongwe to Indian Ocean in Bagamoyo Historic Town

Sasi E Gibinagwe

Abstract

This article reports the findings from archaeological surveys and excavations resulting from the archaeological field school undertaken from July to August, 2011 at "Ngome Kongwe" (Old fort) in Bagamoyo. The field school which involved students and staff from the University of Dar es Salaam, intended to investigate whether there is an underground tunnel from Ngome Kongwe (Old Fort) to the Indian Ocean, as has been alleged by oral traditions. In addition to surveys and excavations, the author also consulted indigenous people and used documentary source to demonstrate the correctness or incorrectness of such declaration. Furthermore, in August 2013, geophysical investigation was undertaken using magnetometer and electrical resistance meter intending to achieve the same objective. So far, the findings attest that there was no underground tunnel through which slaves were taken from Ngome Kongwe to the Indian Ocean, before they sailed to Zanzibar slave market. However, the findings demonstrate that, possibly the slave and ivory trade route passed through Ngome Kongwe, on surface transport to the dhows in Indian Ocean which took them to Zanzibar.

KEY WORDS: Slavery, slave and ivory trade, slave and ivory trade route, Bagamoyo.

Background Information

For quite a long time, oral tradition and some writings (e.g. *www.planetware.com*) have maintained that there was an underground tunnel at Ngome Kongwe through which slaves were passed to the dhows in Indian Ocean, before being sailed to Zanzibar. This is a popularly known tradition around Bagamoyo town and far

beyond. However, there has been no investigation concerning this alleged slave tunnel. Using multiple sources of data, this paper evaluates this popular belief.

This is the first work ever to investigate the truth concerning the supposedly underground slave tunnel from "Ngome Kongwe" to the Ocean in Bagamoyo. Bagamoyo is located along the coast of East Africa, about $6^0$26' 11" S and Longitude 38^0 53' 27" E. The town of Bagamoyo is about 65 km North of Dar es Salaam and about 40 km West of Zanzibar. In 1840, Seyyid Said, the Sultan of Oman moved his capital from Muscat to Zanzibar (Alpers, 1975; Lovejoy, 2000; Nwulia, 1975; Sheriff, 1987). The move was due to the Sultan's interests in the exploitation of resources of the area. In turn, the move encouraged the expansion of the slave and ivory trade. The expansion of trade in the period between 1840 and 1890 made Bagamoyo the main entreport of the slave and ivory trade on the mainland (Alpers, 1975; Mturi, 1982). In 1888, the sultan of Zanzibar, Sayyid Khalifa, signed a treaty with the *Deutsch Ost-Africa Gesellschaft* (German East African Company), leasing the company the ten mile wide strip of the East African coast for 50 years, with rights to all duties and tolls (Mturi, 1982). The company made Bagamoyo the centre of its operations. However, this did not last long, as within a short period of time, there was a war between the company and local people (Alpers, 1969; Mturi, 1982). This war which was known as the Bushiri uprising spread to almost all areas from Pangani to Kilwa (Mturi, 1982). Accordingly, the German government intervened to help the company which proved unable to contain the war. The war ended on 15th December, 1889, with the capture and killing of Bushiri who was the military chief (Alpers, 1969; 1975; Mturi, 1982; Sheriff, 1987). Thereafter, in 1890, the sultan ceded the littoral to the German government and Bagamoyo was made the capital city, before moving to Dar es Salaam in April, 1891 (Alpers, 1975; Mturi, 1982).

The town of Bagamoyo is endowed with cultural heritage resources, the most outstanding of these are African, Arabic and German historical buildings. One of these buildings is "Ngome Kongwe" which is the Swahili word for Old Fort (Fig 1). "Ngome Kongwe" was built in 1860, by an Arab businessman, Suleiman Abdallah Marhabi, and it was later taken by Sultan Baraghash (Mturi, 1982). It is believed that this fort was used as a temporary camp for slaves while waiting to board the dhows ready for export to Zanzibar slave market where they were

sold as commodities (Mturi, 1982). In 1890, the fort was taken by the Germans, as a part of the 10 mile coastal strip that was bought from the Arabs, so as to increase access to the Indian Ocean (Mturi, 1982; Sherrif, 1987). German colonialists used the fort as a military base, before it was taken by the British colonialists who used the same building as a prison (Alpers, 1969; 1975; Marsh, 1965; Mturi, 1982; Sherrif, 1987).

Fig 1: A geophysical map showing the town of Bagamoyo and the location of Ngome Kongwe

Geology of the Area

The geology of Bagamoyo is mainly composed of Pleistocene and Holocene sediments of which limestone and sand are the dominant formations. The top soil is mainly sand, but at some areas limestone outcrops are present. The area is one of little relief and very poor outcrops, the available outcrops are underlain by beach sands within the shoe of Indian Ocean. The study area is located in the Bagamoyo sand promontory unit (Figure 2).

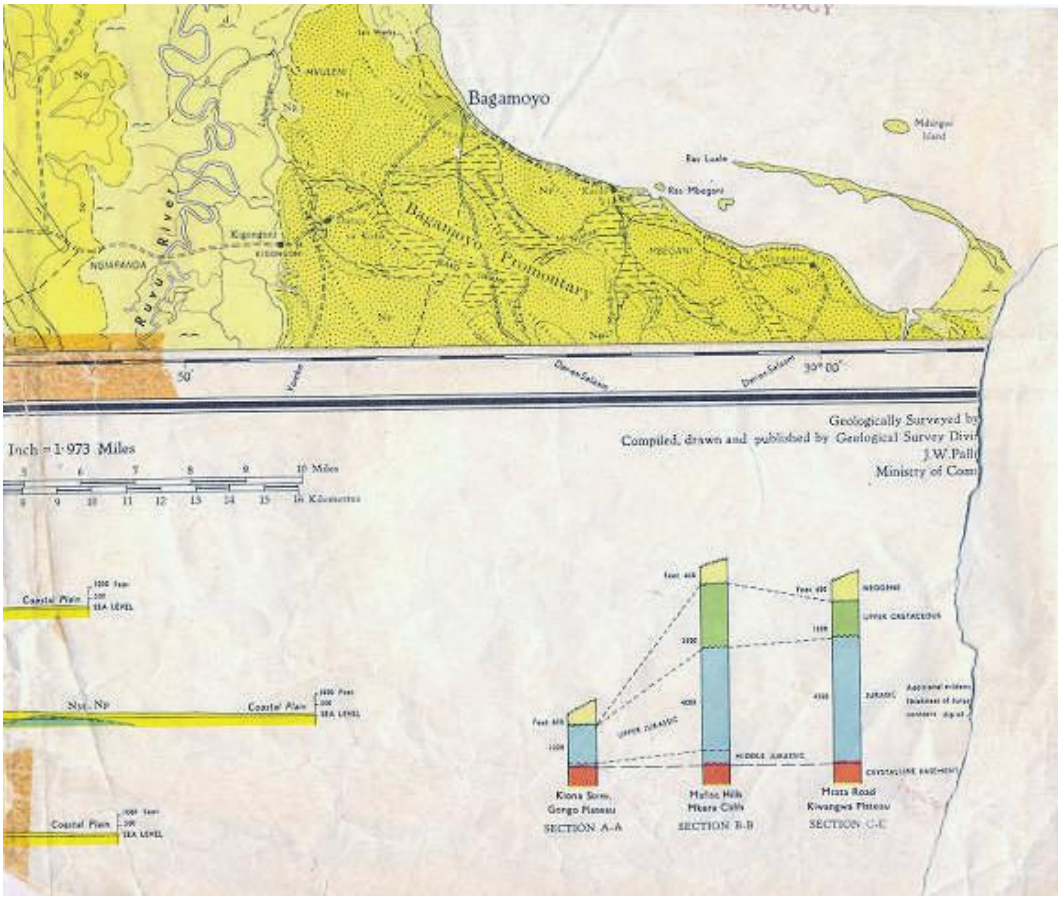

Fig. 2: Geological Map of Bagamoyo
(Part of Quarter Degree Sheet (QDS) 168 – Bagamoyo)

Hydrology and Hydrogeology of the Area

The area has a coastal warm and humid climate, with the average temperature range between 22°C to 33°C. Humidity is usually high, nearly 98-100% during the rainy season. Annual rainfall ranges between 1000 and 1400 mm. The heavy rainfall is from Mid-March to May, and the dry season is usually from June to September. The period from late October to December receives moderate rainfall in some parts of Bagamoyo District (TMA, 2006).

The dominant water bearing formations in most coastal areas of Tanzania are the unconsolidated sand and gravels. Hydro-geologically, higher yields are expected in Quaternary and Neogene coastal aquifers, while low groundwater yields are

observed in Jurassic and Cretaceous aquifers. Quaternary aquifers may make up to about 100 liters/min, Neogene aquifers account to about 25 liters/min while aquifers in Jurassic and Cretaceous formations yield to about 10 liters/min. However, narrowing down to project site in Bagamoyo, we find that hydrogeologically, the formations of the surrounding landscape are characterized by limestone, sand, clays and gravels.

Slave and ivory trade in East Africa

Before the commencement of slave and ivory trade in East Africa, slavery had already existed in many parts of the world (Beachey, 1976; Lovejoy, 2000; Kopytoff, 1982). For instance, in societies such as China, India, Persia, Mesopotamia, Egypt, Greece and Rome, slavery was recognized as a necessary part of their life (Sheriff, 1987; Marsh, 1965, Beachey, 1976). In some parts of Africa, slavery existed even before any slave raider set foot on the continent (Kusimba, 2004). Kusimba (2004) points out that slavery and slave trade were conducted along with ivory, gold and other commodities, and can be traced back to more than two millennia in Africa, but the exact date has not been specified. In his book, *From a Slave Port to a Tourist Destination*, Mapunda avows that:

> The origins of slave trade extend far back in human history, and neither archaeologists nor historians have yet pinpointed the exact beginning of this, what has come to be identified as the most inhumane commercial transaction ever experienced by humankind (Mapunda, 2007:6).

In East Africa, Arab traders were the most rigorous outsiders who conducted slave and ivory trade. Arabs were Muslims and the Koran strongly forbids any Muslim to enslave a fellow Muslim (Marsh, 1965; Alpers, 1967; Beachey, 1976; Sherrif, 1987). For that reason, they had to trace slaves outside their countries. As a result, slaves were sourced in place like Zanzibar, about 2,720 km to Aden or Mombasa about 4,000 km to Bombay (Marsh, 1965). Before the establishment of the Suez Canal, the shortest sea route from Europe to East Africa was over 12,800 km (Marsh, 1965:1). Accordingly, due to the geographical position and the nature of the monsoon winds, which is believed to be known to Eastern seafarers long before it was known to Europeans, East Africa became their source of slaves and ivory (Marsh, 1965; Rodney, 1967; 1976).

The trade expanded drastically in response to the emerging global economy in the eighteenth and nineteenth centuries that raised demand for ivory, driven by the nascent industrial revolution (Beachey 1967; Sheriff 1987; Alpers 1992). The demand for ivory grew as ivory came to be used for more industrially produced goods, such as combs, piano keys and billiard balls. In the early nineteenth century, it became possible to cut ivory mechanically and East African 'soft' ivory was preferred (Beachey 1967; Sheriff 1987; Alpers 1992). The growth of the plantation system along the East African coast, and the demand for slaves for use on the date plantations of Oman and in the various sugar islands, (mostly French) of the Indian Ocean, led to a major increase in the volume of the Indian Ocean slave trade. The French established plantations on the Mascarene Islands, Mauritius and Reunion, which are located some 1,280 km East of Madagascar (Cooper, 1977). Due to these large established plantations, by the end of the last quarter of the eighteenth century, the French demand for slaves was considerable (Cooper, 1977; Sherrif, 1987). As a result, Kilwa and Zanzibar became major outlets for these trades and caravan routes in the interior focused on Kilwa, Bagamoyo and Pangani.

Slaves and elephant tusks collected from the interior by caravans organized at the coast, were exchanged with ready-made imported manufactured goods such as cotton cloth, glass beads, gunpowder and muskets, brass wire, and other metal objects (Koponen 1988). The most famous slaves and ivory traders in East Africa was Hemed bin Mohammed Murjeby, most notoriously remembered by his nickname *Tippu Tip*. By the 1870s, Tippu Tip had carved out a trading empire beyond Lake Tanganyika, in the Democratic Republic of Congo, and in the Western and Central parts of Tanzania.

Slave and ivory trade route in Bagamoyo

As noted earlier, Bagamoyo was the main transit port of East Coast of Africa for slaves and ivory destined for Zanzibar, the commercial and political hub in the nineteenth century. Nevertheless, towards the end of the nineteenth century, Bagamoyo became a slave destination, following strict patrols by anti-slave trade ships in the Indian Ocean (Mapunda, 2007). In general, the town served as the

main harbour and terminus of the Central Slave and Ivory Trade Route, as well as the starting and ending point of trade caravans in the modern day Tanzania mainland (Antiquities Division, 2009; Mapunda, 2007).

Until the end of the nineteenth century, East Africa was disrupted by ivory and slave traders, who caused widespread insecurity, fear, famine and diseases that precipitated the collapse of farming and pastoral systems in the area (Kusimba, 1999). In hunting for slaves and elephant tusks, several routes emerged, linking the coast and the interior (Figure 1). In East Africa, the main caravans moved to the interior during the first half of the nineteenth century, when Sayyid Said moved his capital to Zanzibar (Alpers, 1975; Mturi, 1982; Marsh, 1965; Sherrif, 1987). Although some caravans were going from the interior North-westwards across the desert, and others northwards along the Nile to Khartoum, the main caravans lay across the modern day Tanzania mainland (Marsh, 1965; Sherrif, 1987).

There were three main routes in Tanzania mainland, namely; the southern, northern and central (Figure 3). To the South, there was a route from Kilwa towards Lake Nyasa, all the way to Malawi, Zambia and other parts of central and southern Africa (Cooper, 1977; Marsh, 1965). To the North, there was another route which started from Pangani, heading inland via Kilimanjaro towards Lake Victoria (Figure 2 and 3). One branch of the northern route went to Nairobi and Mombasa (Figure, 2). Apart from the southern and northern routes, there was the central route, starting from Bagamoyo on the mainland, opposite Zanzibar Island, and went up to Ujiji, Kigoma, covering about 1300 km (Antiquities Division, 2009). From Ujiji to Bagamoyo (Pwani Region), the route passed through present day Tabora, Singida, Dodoma, and Morogoro regions (Antiquities Division, 2009; Marsh, 1965, Sherrif, 1987).

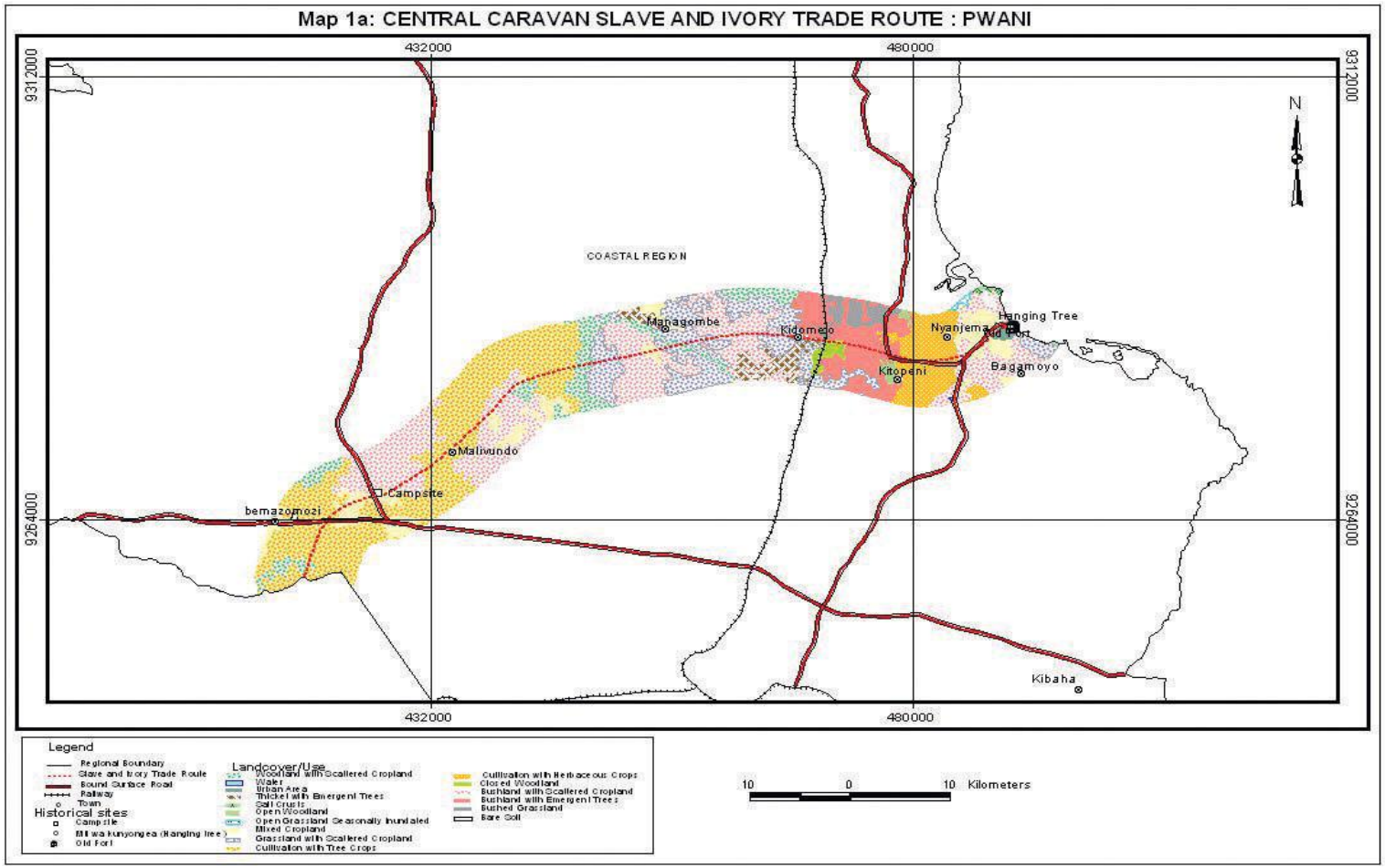

Figure 3: A map showing Central Slave and Ivory Trade Route in Pwani region (After Antiquities Division, 2009)

Figure 4: Ngome Kongwe in 2011

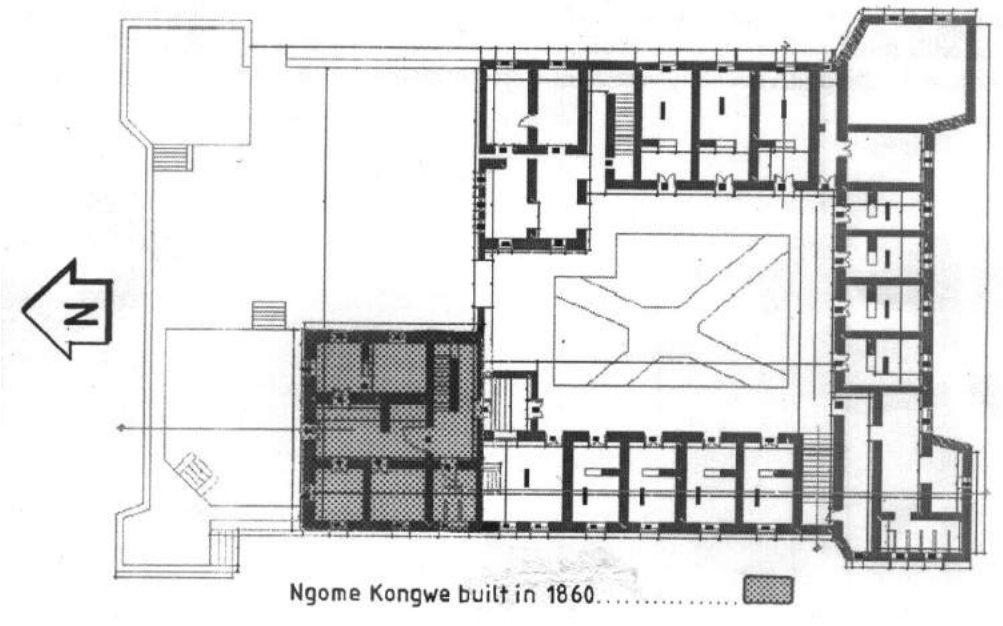

Figure 5: The current ground floor of Ngome Kongwe

Figure 6: Ngome Kongwe in 1890 (courtesy of Bagamoyo Roman Catholic Museum)

Slave and ivory trade route from Morogoro entered Coast region through various places until it reaches Ngome Kongwe (Figure 4 and 5). Of interest, oral traditions report that there was an underground tunnel from Ngome Kongwe to the Indian Ocean (Figure 6). It has been proposed that slaves from Ngome Kongwe to the Ocean were passing through this tunnel (Kauzeni, per.com, 2010).

Research methods

Research methods involved systematic and random survey, as well as, test excavations. The systematic surveys were conducted from the eastern part of Ngome Kongwe to BADECO, covering about 200 meters square. This was possible because the field school involved undergraduate university students and instructors from the University of Dar es Salaam. Also, the surveyed landscape that surrounds Ngome Kongwe has no thick forest. Unexpectedly, we encountered very few archaeological remains from field survey. The materials recovered include Swahili and Post-Portuguese pottery, named by Chami (2001) as Post-Swahili (PS) pottery (Figure 7), however, places with modest representation of cultural remains were sampled for test excavations.

Figure 7: Trench 5, at Ngome Kongwe

Excavation aimed to establish reliable cultural chronology and evidence for human activities in the past (Renfrew and Bahn, 2008: 107). Five trenches of $2m^2$ were excavated about 15 meters away and parallel to the Eastern wall of Ngome Kongwe. The first trench went down to 220 cm below the surface, the rest of the trenches reached sterile levels in between 190 cm and 240 cm below surface (Figure 7). These excavations aimed to cover the complete length of the Eastern side that features the Indian Ocean in order to investigate the merit and demerit of the current myth for the existence of an underground tunnel linking Ngome Kongwe and Indian Ocean. Excavation followed arbitrary level of 10 cm split, and it was carefully taken to map out *in-situ* materials. In almost all trenches, top levels up to about 30 cm deep were composed of post-Portuguese pottery tradition radiocarbon dated between 1500 AD and 1850 AD (Chami 2001). The post-Portuguese potteries were found associated with imported cultural materials, such as European beads, ceramics and a coin of East Africa German Company (Figure 8, 9 and 10). Previous researches in Bagamoyo maintain that this pottery tradition has been found in several places, such as, Kaole and in the cliff East of the football ground in Bagamoyo, touching the road passing Art College to Kaole (Chami *et al*. 2004: 33).

It is also important to note that other findings recovered from all excavated trenches include beads, glass, bones, shells and metal objects (Table 1). The beads collected are all of European style and they spread over many parts of the continents, from eighteenth to nineteenth century (Dubin, 1987; Kinahan, 2000). Initial analysis of bones and shells propose that they belong to fish, cattle and ovicaprids. Pieces of metals recovered from this investigation probably were parts of chains and yokes (Figure 10) used to tie slaves, forbidding them to run away during the exercise of marching from one point to another.

Figure 8: The 19th century pottery from Ngome Kongwe

Trench	Level	Local Ceramic	Bones	Metal	Imported Ceramic	Shells	Glass	Beads	Lithics
1	1	12	-	-	5	9	8	15	-
	2	89	7	17	2	18	1	2	2
	3	10	16	-	-	41	-	-	-
	4	15	-	3	1	-	2	-	-
	5	22	4	-	-	-	-	-	-
	6	3	-	-	-	-	-	-	-
	7	13	-	10	4	14	7	-	37
	8	7	8	-	-	19	-	-	-
	9	21	15	16	2	11	7	2	-
	10	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-
2	1	57	1	-	-	11	-	6	-
	2	18	1	1	11	21	-	5	-
	3	73	5	9	-	52	2	-	-
	4	-	-	5	5	3	3	-	-
	5	57	3	-	-	12	-	4	-
	6	9	-	-	-	4	-	-	-
	7	210	3	1	1	49	-	-	1
	8	-	-	1	-	2	-	-	1
	9	21	-	-	-	-	-	-	-
	10	-	-	-	-	7	-	-	1
	11	-	-	-	-	-	-	-	-
3	1	57	5	34	17	-	17	-	-
	2	41	-	1	5	5	19	-	-
	3	10	22	-	-	2	2	-	-
	4	46	21	18	10	2	-	1	1
	5	53	4	-	-	-	-	-	-
	6	-	-	-	-	-	-	-	-
	7	-	-	-	-	-	-	-	-
	8	-	-	-	-	-	-	-	-
	9	-	-	5	-	5	-	-	-
	10	-	-	-	-	3	-	-	-
	11	-	-	-	-	-	-	--	-
4	1	7	-	-	-	122	11	-	-
	2	13	-	2	-	45	4	4	-
	3	10	21	-	2	72	-	-	-
	4	79	214	18	-	27	15	53	-
	5	195	22	37	15	9	13	-	1
	6	-	-	-	-	-	-	-	-
	7	-	-	-	-	-	-	-	-
	8	-	-	-	-	-	-	-	-
	9	-	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	-	-
	11	2	5	-	1	1	-	-	-
5	1	11	4	-	-	19	-	-	
	2	10	-	-	8	10	10	-	
	3	5	-	3	2	15	-	-	
	4	24	-	-	-	7	-	-	
	5	18	3	21	10	11	-	-	
	6	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	
	9	37	19	-	11	20	28	1	
	10	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	
Total		**1,255**	**403**	**210**	**112**	**648**	**149**	**93**	**44**

Table 1: The distribution of cultural materials from excavated trenches at Ngome Kongwe

Figure 9: A bilingual coin from trench two, Mwembe Kinyonga area

Figure 10: Metal objects from Ngome Kongwe

Geophysical resistivity detection

Electrical Resistivity detection

During the survey, Electrical Resistivity Profiling technique was adopted and a total of four profiles (Figure 11) were conducted in the already pinpointed potential areas for investigation. The resistivity detection method applied Wenner Electrodes Configuration array, with electrode spacing AB/3 = 2 m for three profiles and 5 m for one profile. The equipment used was an American, AGI SuperSting R1/IP Terrameter. This method was employed in order to determine resistivity of subsurface, identify any anomalies, such as tunnels within the subsurface. Such features usually have high resistivity because they might be filled with air. The apparent resistivity values obtained were then plotted against the

corresponding distances in MS-Excel software, so as to identify the variation of resistivity data against distance. This could help indicate the location of abnormal anomalies in the subsurface.

Figure 11: Resistivity survey in progress

Magnetic detection

Two magnetic profiles were conducted in order to compare the results with the resistivity data. Magnetic field data which is measured in NanoTesla (nT) helps to delineate the subsurface bodies that respond to the induced magnetic field. This could help to find out if there are buried metallic materials. Magnetic field data for the two profiles were processed in MS-Excel and the results are presented in figure 13(a-d).

The survey was carried out by an instrument called Proton Magnetometer (Figure 12). Magnetic survey can be used to delineate the area of unconsolidated basin fill or buried foundations. Magnetic anomalies are caused by distortions of the

earth's magnetic field created by magnetic materials in the crust. Magnetic anomalies indicate the type of rocks in a very general way.

This method is used as quick mapping of fractures/joints, deep weathering and buried channel zones and foundations. The Proton Precision magnetometers measure the strength of the earth's magnetic field. Measurements were made along the straight walking line, where measurements are made at short intervals (5m). Areas with large amounts of fractures/joints, weathering and buried channel zones will have magnetic anomalies associated with them. The strength of the anomaly varies with the extent and depth of anomalous formations.

Figure 12: Magnetic survey in progress using Proton Magnetometer

Geophysical results

As mentioned earlier, archaeological surveys and excavations could not detect the supposed underground tunnel. As a result, geophysical survey was employed to find out the reality concerning existence or absence of the underground tunnel linking Ngome Kongwe and Indian Ocean. However, resistivity profiling results shows no indication of any anomaly that can be considered to be the suspected underground tunnel at the surrounding landscape (Figure 13 a-d). The trend of the resistivity data profile shows higher values of the resistivity because only shallow upper layers of the subsurface were mapped.

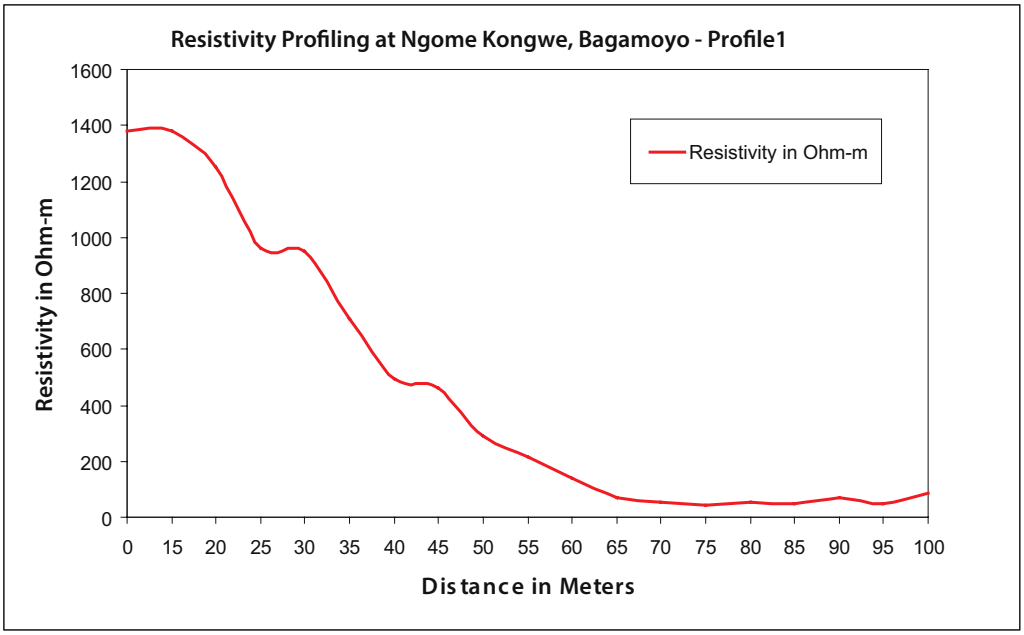

Figure 13 (a): Resistivity profile 1 at Ngome Kongwe, Bagamoyo

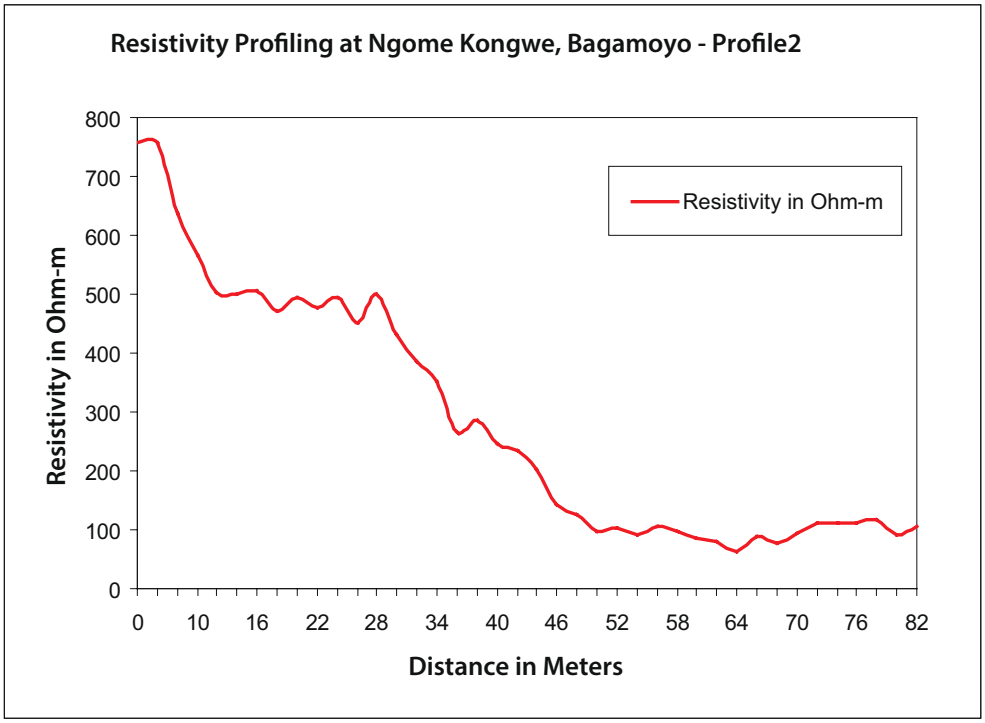

Figure 13 (b): Resistivity profile 2 at Ngome Kongwe, Bagamoyo

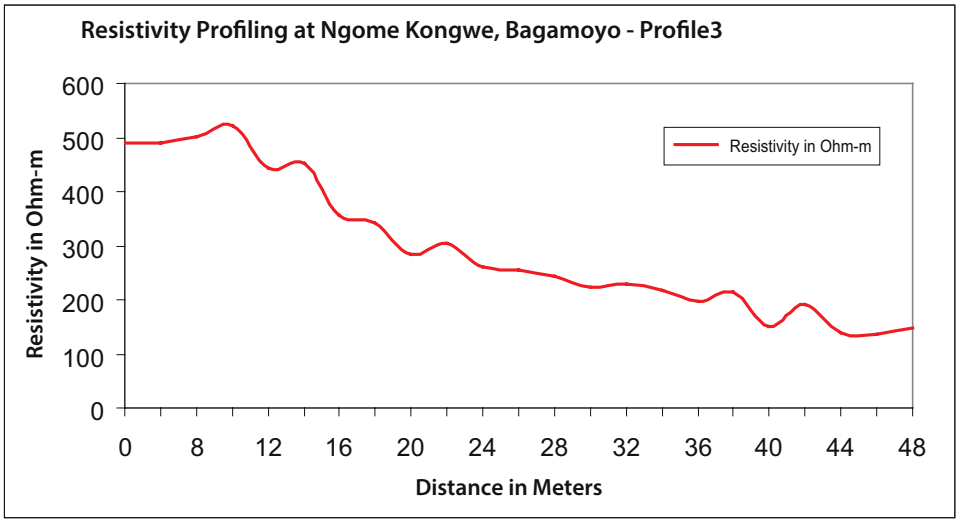

Figure 13 (c): Resistivity profile 3 at Ngome Kongwe, Bagamoyo

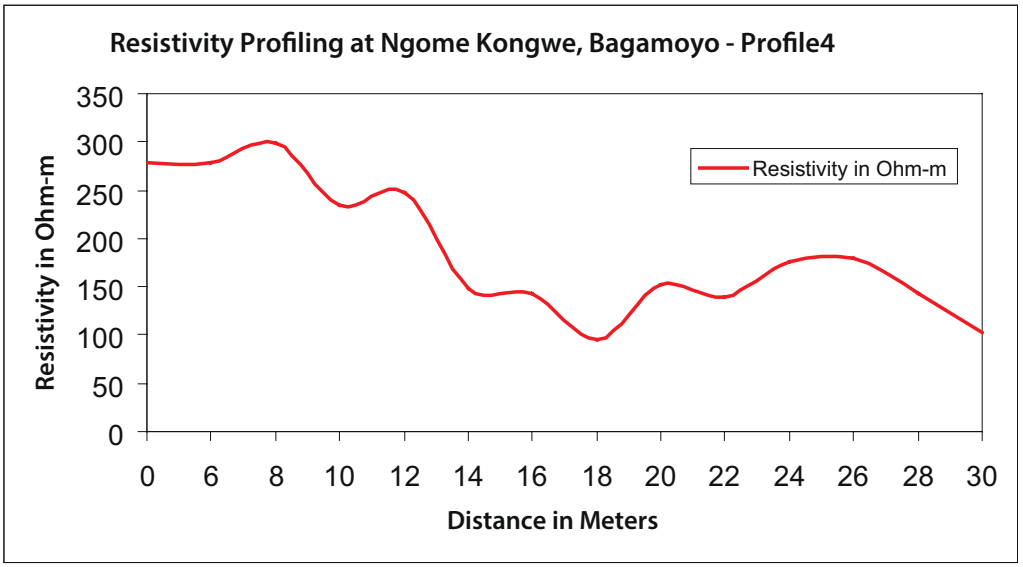

Figure 13 (d): Resistivity profile 4 at Ngome Kongwe, Bagamoyo

During the interpretation of magnetic data, we looked for the shape of the anomalies. From the shape of the anomaly, we can determine the depth below the surface, the dip, and get some idea of the dimension of the body. The geophysical and magnetic signatures were erratic, suggesting that there was no any kind of buried channel or foundations, fault or fracture. In some places, the magnetic responses were not good, a state of affairs which can be directly associated with age span of Neogene sedimentary formations. Normally, good magnetic signal occurs in aged sedimentary rocks, such as Cretaceous Chalk, Jurassic and Magnesian limestone, or Carboniferous limestone. Magnetic signatures also indicate that the thickness of the sediments of the surrounding landscape is very thin, but the thickness increases as you go far towards the North-eastern direction of the Indian Ocean (Figure 14 a and b).

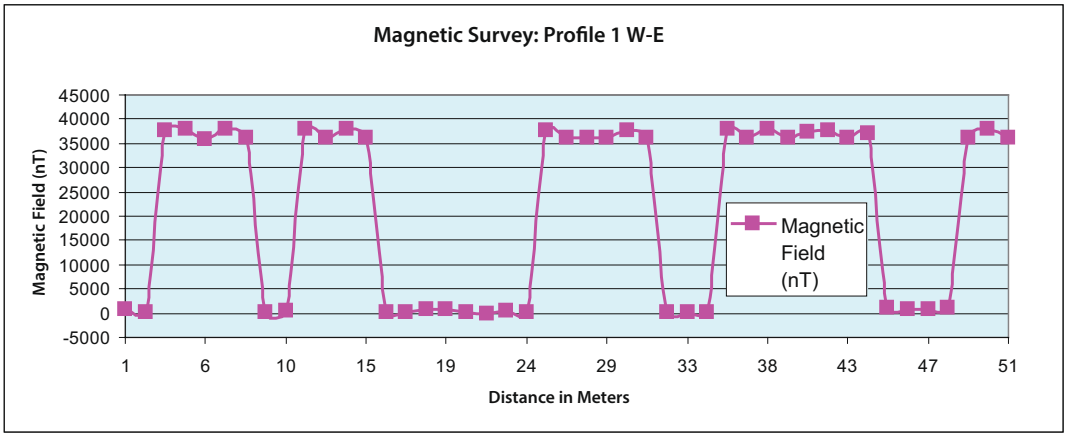

Figure 14 (a): Magnetic profile 1 at Ngome Kongwe, Bagamoyo

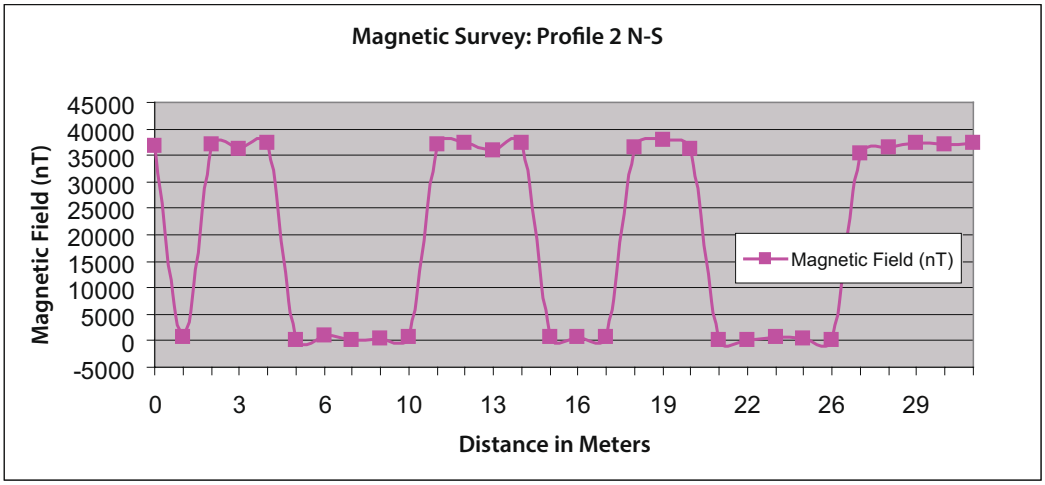

Figure 14 (b): Magnetic Profile 2 at Ngome Kongwe, Bagamoyo

Discussion

Schmidt and Waltz (2007:66) state that, "...it is when materialities and oral traditions confront and contradict historical or anthropological narratives that we make new histories." As earlier noted, the field school was looking for evidence of the alleged underground tunnel, stretching from Ngome Kongwe to the beach, through which slaves could have been transported to Zanzibar. While oral tradition and some writings (e.g. *www.planetware.com*) maintain that the tunnel existed, geophysical signatures and archaeological records stand against

such assertion. Using logic, it sounds unrealistic to conceal the last 200 meters or even less, of a slave's journey from others, after a caravan traveling over 1300 km in plain sight. Besides, in almost all five trenches, sand beach is not below one meter down. Hence, it would have been unbearable to dig such a tunnel through a depth that would progressively decrease as one approached the ocean, which lay about 200 meters away.

Besides, basing on the resistivity and magnetic survey carried out in the area, there are no indications of presence of buried tunnel or foundations.

Other interesting recovery is the coins from both surveys and excavations at Ngome Kongwe area. Orser, in his book *Historical Archaeology,* asserts that: "… objects of known age can provide accurate calendar dates for buildings, graves, stratified layers, and other features. Such items include common, everyday artifacts like dated coins, domestic table wares, objects bearing tell-tale manufactures' marks, and bottles" (Orser, 2004:124).

Besides, Renfrew and Bahn (2008:122-123) emphasize that, when two objects are found in association within the same archaeological deposit, it means that they became buried at the same time. Accordingly, ceramics, beads, glasses, metal objects, and bones found in association with coins in an undisturbed context, are of the same date as the coins. Two coins are of the twentieth century and one from previous excavation at Mwembe Kinyonga (about 70 meters East of Ngome Kongwe) is of the nineteenth century (Figure 5). It is obvious that coins had been used along the East Coast, even before the beginning of Christian era. Freeman-Grenville (1974) tells us that Egyptian coins of Alexandrian times have been found in Zanzibar. Furthermore, we have evidence indicating that before Europeans set foot in Africa, especially from the twelfth century, some coastal cities such as Kilwa, Zanzibar, and Mogadishu had been issuing coins, chiefly made of copper (Freeman-Grenville, 1974).

German East Africa Company was the first European interest to issue coinage for its Imperial Territory. It retained its coinage rights even after the takeover of German East Africa by the German government (Freeman-Grenville, 1974). It acquired the right to mint coins in 1890, and issued rupees which were equivalent to the Indian and Zanzibar rupees (Freeman-Grenville, 1974). The Indian rupee

was the dominant currency used along the East African coast in the second half of the nineteenth century, whereby it had downgraded the American gold dollar as well as the Maria Theresa dollar of 1780, which never changed its dates though minted several times (Freeman-Grenville, 1974).

The nineteenth century's bilingual (German and Arabic) coin (1892) recovered at Mwembe Kinyonga (hanging tree), about 70 meters East of Ngome Kongwe, shows clearly that it belonged to German East Africa Company, as the inscription on one side reads *Deutsch-Ostafrikanische Gesellschaft.* On the second side with Arabic inscription, which means *German Cooperation* (Alfayed, per.com, 2012),I also recovered a bilingual coin (1888) with inscription in English, reading Imperial British East Africa Company on one side, and Arabic on the other one, which means *justice* (Alfayed, per.com, 2012)at Old Port. The Imperial British East Africa Company (IBEAC) was the administrator of British East Africa, the modern day Kenya. The IBEAC obtained a concession in 1887 to administer this area from Sultan Bargash of the Sultanate of Zanzibar. The company started to experience financial difficulties in 1891, and as a result, on 1 July, 1895 the British government took over the administration of this area (Alpers, 1975).

According to oral traditions, German rule was compelled not to terminate the pre-colonial economy along the coast, which was based on slavery, predominantly by Arabs, as it would be digging their own economic grave. Basically, the Germans hesitated to disturb the slave labour in the coast, as it needed it during its establishment in Tanganyika. Construction of colonial headquarters and other infrastructure also depended on slave labour. Slaves also played a vital role in many other production sectors, when voluntary labour was not coming readily. The availability of this type of coin signifies that German rule in Tanganyika had sometimes maintained the Arab economy along the coast. This is true as Koponen (1994: 574) maintains that, "the German officials gained many of their most loyal early allies from among the coastal slave-owning class and did their best not to disturb the slave economy".

The recovery of coins and other exotic materials, such as European beads and ceramics attests that probably slave and ivory trade routes passed through Ngome Kongwe to Indian Ocean before they sailed to Zanzibar. However, this

does not mean that this route, situated where there is Bagamoyo Development Cooperation (BADECO) today, was the only outlet as the Antiquities Division (2009) proposes. Further findings from excavations carried out along the beach attest that there were several outlets to Zanzibar. These include BADECO and Old port. Moreover, local respondents posited that apart from this central route from Ujiji to Bagamoyo, there was another route which ran from Dar es Salaam to Bagamoyo. Some local people, especially from 80 years old and above, know where exactly this route passed (Mwinyi, Per.com, 2011). During the nineteenth century, slaves were marched from different parts of the modern day Tanzania mainland, to places such as Bagamoyo, Pangani, Saadani and Kilwa, where they were sailed to Zanzibar slave market. However, it should be noted that, at this juncture t, not all slaves from the interior to the coast were taken to overseas, some were reserved on the coast to be used in plantations, and as domestic slaves (Sherrif, 1987). Martin and Ryan (1977) estimate that between 1780 and 1896, some 424,100 slaves from East Africa were trans-shipped abroad to countries such as Arabia, Iran and India. Yet, in the same period, some 833,000 were retained on the East Coast of Africa (Martin and Ryan, 1977). Moreover, after the formal abolition of slave trade, the business did not stop immediately (Mapunda, 2004). Slave traders continued trading covertly and when it became impossible to sail slaves to other continents, they opted to use them along the coast of East Africa (Mapunda, 2004). The business continued for several years until it was completely stopped in the beginning of the twentieth century.

Due to trade in slaves and ivory, both long dormant towns of the coast revived and new conurbations sprung up to act as coastal entreports for developing trade with the interior (Alpers, 1969: 45). These places included the modern day Tanga, Pangani, Winde, Bagamoyo, Dar es Salaam, Mbuamaji, Kilwa Kivinje, Lindi, Mongalo and Mikindani, dating to the reign of Sultan Seyyid Said, during the great epoch of commercial activities in Zanzibar (Alpers, 1969).

Conclusion

By deploying multiple sources of data, this paper has been able to provide a critique to the popular tradition holding the existence of underground tunnel from Ngome Kongwe to Indian Ocean, which supposedly transported slaves

before they were sailed to Zanzibar slave market. On the contrary, findings from geophysical surveys, archaeological surveys and excavations, attest that even if slave and ivory trade route passed through Ngome Kongwe to Indian Ocean, slaves also walked on the surface.

Acknowledgement

I am very grateful to Mr Majura Songo and Simon Melchioly from the Department of Geology University of Dar es Salaam who assisted me to undertake geophysical survey. I also thank Prof. Innocent Pikirayi of the University of Pretoria, Prof. Bertram Mapunda and Mwalimu Musa Said of the University of Dar es Salaam for their useful comments. I am indebted to the African Archaeological Network (AAN) for funding geophysical survey undertaking.

References

Alpers, E. A. 1967. *The East African Slave Trade*. Nairobi: East African Publishing House.

Alpers, E. A. 1975. *Ivory and Slaves in East Central Africa.* Berkeley and Los Angeles: University of California.

Antiquities Division. 2009. Nomination file for the Central Slave and Ivory Trade Route to be submitted to UNESCO. Ministry of Natural Resources and Tourism.

Beachey, R. W. 1976. *A Collection of Documents on the Slave Trade of Eastern* Africa. London: Rex Collings.

Chami, F., E. Maro, J. Kessy, and S. Odunga (2004). *Historical Archaeology of Bagamoyo: Excavations at the Caravan–Serai.* Dar es Salaam: Dar es Salaam University Press.

Cooper, F. 1977. *Plantation Slavery on the East Coast of Africa*. New Haven: Yale University Press.

Deutsch, J. 2006. *Emancipation without Abolition in German East Africa c. 1884-1914.* Dar es Salaam: Mkuki na Nyota; Oxford: James Currey; Athenes: Ohio University Press.

Freeman-Grenville, G. 1962. The East African Coast: Select Documents From the First to the Earlier Nineteenth Century, Oxford University Press, Oxford. F

Iliffe, J. 1979. *A Modern History of Tanganyika*. Cambridge: Cambridge University Press.

Håkansson, N. 2004. The human ecology of world systems in East Africa: the impact of the ivory trade. *Human Ecology* 32: 561-91.

Henschel, J. 2000. *The Two Worlds: Bagamoyo and Slavery in the 19th Century*. Bagamoyo: Department of Antiquities/Catholic Museum.

Horton, M., and Middleton, J. 2000. The Swahili: The Social Landscape of a Mercantile Society, Blackwell, Oxford.

Koponen, J. 1988. *People and Production in Late Precolonial Tanzania: History and Structures.* Uppsala: Scandinavian Institute of African Studies.

Kopytoff, I. 1982. Slavery. *Annual Review of Anthropology, 11: 207-230*

Kusimba, C. M. 2004. Archaeology of slavery in East Africa. *African Archaeological Review* 21: 59-88.

Lovejoy, P. E. 2000. *Transformations in Slavery: A History of Slavery in Africa.* Cambridge: Cambridge University Press, 2nd ed.

Manning, P. 1990. Slavery and the Slave trade in colonial Africa. *Journal of African History,* 31(1) 135-40.

Mapunda, B. B. 2004. "East African Slave Trade: Unraveling Post-Abolition Slave Coverts in the Interior of Southern Tanzania". *Utafiti,* 5(1):61-76.

Mapunda, B. B. 2006. "Bagamoyo: From a Slave Port to a Tourist Destination." *The Eastern Africa Journal of Development Studies.* 1 (1): 1-19.

Martin, E. and Ryan, T. 1977. A quantitative assessment of the Arab slave trade of East Africa. Kenya Historical Review 5: 71-91.

Nwulia, D. 1975. Britain and Slavery in East African, Three Continents Press, Washington, DC.

Renfrew, C. and Bahn, P. 2008. *Archaeology: theories, methods and practice*.

London: Thames and Hudson.

Rockel, S. 2006. Forgotten caravan towns in 19th century Tanzania: Mbwamaji and Mpwapwa. *Azania* 41; 1-25.

Schmidt, P. R., & Walz, J. R. (2007). Re-presenting African pasts through historical archaeology. *American Antiquity*, 72(1), 53–70.

Sheriff, A. 1987. *Slaves, Spices and Ivory in Zanzibar.* Oxford: James Currey.

Sutton, J. 1973. Early Trade in Eastern Africa. Nairobi: East African Publishing House.

UNESCO. 2006. The Central Slave and Ivory Trade Route. UNESCO World Heritage Centre, Vol. 3.0.