



The Early Iron Age on Mafia island and its relationship with the mainland

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The Early Iron Age on Mafia island and its
relationship with the mainland

F.A. Chami

Introduction

This paper describes the results of an archaeological survey on Mafia island undertaken in July and August 1997 to search in particular for sites of early farming communities, that is of the earlier part of the Iron Age in the first millennium AD. This survey was planned in the context of recent research on that period conducted in the coastal region of Tanzania, from Dar es Salaam southwards to the Rufiji estuary (fig. 1 with inset). In previous expeditions a number of sites had been located on the mainland and also on the nearer islands of Kwale, off Kisiju, and Koma, fifteen kilometres to the south. Archaeologically these sites belong to two broad groups, some with pottery of the Early Iron Age (EIA or 'EIW') styles, the others with the succeeding 'triangular incised ware' (TIW, also known as 'Tana tradition' or TT).¹ On the inshore islands of Kwale and Koma, however, only EIA pottery was noted. Some of these sites have been excavated, and radiocarbon dates obtained (Chami and Msemwa 1997a, 1997b; Chami and Mapunda 1998).

The regional cultural sequence during the first and early second millennia AD is based on the following contextual pottery seriation (see Chami 1998) - EIA, 1st to 6th centuries; TIW, 6th to 10th centuries; Plain Ware (PW), 10th to 13th centuries; and Neck Punctating or 'Swahili' ware (NP/SW), 13th to 15th centuries.

Within the Early Iron Age, moreover, it is no longer appropriate to lump all occurrences close to the coast as 'Kwale' (after the type-site in the hills behind Mombasa: Soper 1967). Our recent studies have identified, at least for the Rufiji region, three sequential ceramic phases in this EIA tradition, namely Limbo, 2nd century BC to 3rd AD; Kwale (proper), 3rd to 5th centuries AD; and Mwangia, 6th century. (See figure 3 below for representative examples of each phase in this region.) The Mwangia phase overlaps with the early part

Notwithstanding the author's normal preference (Chami 1994, 1995 etc) for the term 'early ironworking' (EIW) over the more commonly understood EIA, the latter is used in this article, as the main concern is with settlement and its chronology in the Iron Age, rather than with iron technology.

For discussion of the distribution and significance of TT/TIW, see Azania 29/30 (1994/95), pp. 227-62.

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of the TIW tradition, of which two phases have been recognised (Chami 1994). One purpose of examining Mafia island was to determine whether the Early Iron Age people of this region had travelled across the open sea further than Koma, which is itself ten kilometres offshore. The Mafia channel would have required a longer crossing, although, by skirting the edges of the Rufiji delta and its mangrove swamps and navigating past the intervening coral islands, one could probably reach Kisimani Mafia, the island's south-western point, without losing sight of land.

The survey

The last serious archaeological work on Mafia was that of Neville Chittick in 1957 and 1964. He concentrated on the Islamic site with stone ruins on the shore of Kisimani Mafia.²

The 1997 expedition reported here was preceded by a cursory tour in 1995 (by the author and Dr P Msemwa). One aim was to study the prevailing method of sailing across the Mafia channel and to consider its bearing on crossings in the Early Iron Age (Chami and Msemwa 1997b). On this occasion the site of Kisimani Mafia was visited and found to be on the verge of complete destruction by wave action, the situation being more extreme than in Chittick's time. A close inspection of the near-shore strip from Kisimani Mafia north-eastwards to Kilindoni yielded two sherds of Early Iron Age pottery on the beach. This interesting discovery encouraged us to plan a longer archaeological examination of the southern part of Mafia, together with the adjacent islands of Kua, Juani and Jibondo (fig. 1). This was accordingly accomplished in 1997. The strategy, concentrating on the south of Mafia, especially its south-western projection and the smaller islands, was influenced not only by the previous discoveries and the existence there of sites with stone ruins of the 11 th to 15th centuries, but also by our observation that boats sailing northward from Kilwa or southward from the Kisiju littoral would naturally have landed on that part.

The survey, conducted over nearly three weeks, employed the transect method already used on the mainland (Chami 1994, 20-29; Chami and Mapunda 1997). Access to the edge of the Mtoni marine terrace (cf. Chami 1994,37-39), which was a principal objective of this survey, was difficult in many places on Mafia owing to dense thicket. Where the terrace is settled, clearance and footpaths have induced water erosion exposing the subsurface layers. Such problems of access can sometimes be sidestepped by surveying along roads, especially if they are unpaved and deeply cut into the soil (cf. Bower, 1986, 27). The main survey work was therefore conducted on the open areas of the Mtoni terrace and along the village roads and tracks of Kilindoni town, Mlongo (in Dundani), Mwera, Mtenga (in Kiegeani) and Utende (fig.1). The whole of Jibondo island was surveyed. Several sites of the EIA and later periods were found. Many of the latter have pottery similar to that of Kisimani Mafia and fitting into PW and SW phases of the sequence outlined above. Chittick (1974) dated PW in effect to the 12th-13th centuries and SW to the 14th-15th centuries - although one would now be inclined to push the former back to the 11 th century in the light of new chronological pointers at Kilwa and

2 Chittick (1961) for report on 1957 excavations. Those of 1964 are mentioned summarily in the annual reports of the Tanganyika Antiquities Department and the British Institute in Eastern Africa for that year; they are alluded to in the Kilwa excavation report (Chittick 1974).

The PW and SW sites, besides Kisimani Mafia, are mainly around Mlongo and Ngombeni (Vunjanazi) coconut plantations and on the islands of Chole, Kua and Jibondo.

Miongo 7°57'S, 39°38'E. This is located on a terrace similar to that of Mtoni on the mainland littoral (Chami 1994, 37). Below this is the beach terrace which consists of sand deposited by the south-west winds in the later part of the first millennium AD. The site was protected in a small bay now forming a basin of sandy soil planted with coconuts. From that side of the island one would observe ships plying to the Rufiji delta or passing along the Mafia-Rufiji channel. Kwale potsherds were seen eroding from a road-cutting revealing a two-metre section of the terrace. The excavations conducted at this site in 1997 are described below.

Kitoni 7°59'S, 39°40'E. It seems that a major part of this site, on the elevated platform of the Mtoni terrace (in the eastern part of Mwera area), has been lost by wave erosion. The area faces the island of Jibondo to the south-west (fig.1). Accessibility to the site by sea is dangerous because of the coral reef. Kwale potsherds were seen eroding from a road-cutting and also from a wave-cut cliff. The site extends along the road for about 500 metres.

Mtenga 7°58'S, 39°41'E. This site lies about three kilometres inland from the last (in Kiegeani) and fifty metres above sea level, on red lateritic soils drained by streams feeding into a permanent river-cum-marsh. This lateritic soil has been exploited to pave the road between Kilindoni and Utende, this activity revealing the archaeological remains. Potsherds belonging apparently to all three phases of the EIA tradition - Limbo, Kwale and Mwangia - were seen eroding from the road where the gravel from the site had been used. Many more were observed from the disturbed areas of the site. The site was found to cover a large area, of which only a small portion has been destroyed so far; it thus has potential for archaeological investigation, which ought not to be delayed. This may be the only existing area on the island with lateritic soils.

Kinasi 7°59'S, 39°42'E. This is on the south shore of the island near the Kinasi hotel at Utende, where a few potsherds of Kwale type were seen eroding from a path which cuts across the sloping edge of the Mtoni terrace, as well as on the surface in upcast from trenches dug for a sewage system. However, test excavation nearby did not recover any more EIA materials.

This area of Utende is the obvious one from which to cross from Mafia to the smaller islands of Chole, Juani, Kua and Jibondo (fig. 1); and this situation may help explain the archaeological site.

Kisimajumbe 7°59'S, 39°47'E. This site on Juani lies right by the primary school and a rainwater reservoir. A concentration of Kwale potsherds was seen exposed on a footpath leading to the reservoir. More were seen in a garden of sweet potatoes.

Jibondo 8°05'S, 39°41'E. Scattered Kwale potsherds were seen eroding from the coral cliffs near the present-day harbour on this island. The main site seems to be under the modern village, and material of all periods has been collected. On the western part of the northern shore, where there are post- 13th century monuments, Kwale sherds were seen eroding from the lowest cultural deposit.

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Early Iron Age on Mafia island
Excavation of Mlongo

Two cuttings, measuring 3 by 2 and 2 by 2 metres, were excavated about a hundred metres west of the existing modern mosque (fig.2, marked as A and B), on either side of the road-cutting, where sherds of Kwale type had been noticed. The excavation demonstrated that the site was occupied in the EIA, nearly 500 sherds of this period being recovered mostly at a depth of 55-70 cm. In the top 40 cm, mostly of cutting B, and separated by a sterile layer from the EIA materials, were recovered 55 sherds of PW type, similar to those from Kisimani Mafia dated to the early second millennium.

The sandy nature of the soil has ensured the preservation of iron objects, including two pieces of iron chain and two of granular slag. Fragments of glassy objects were also found. At first these were thought to be remains of glass-making, but further examination suggests that they could result from some other high-firing activity on a fine sandy area, such as iron smelting.

Also of interest was the discovery of coconut flowers and petals in the EIA layer of both cuttings. These have been kindly examined at Uppsala by Professor M. Adebisi Sowunmi, a palynologist from the Department of Archaeology of Ibadan University. A sample was also submitted for dating at the Tandem Laboratory of Uppsala University. The result (Ua-12713) shows these coconut flowers to be recent if not modern, indicating that such minute vegetable remains are apt to move through these sandy soils.

An Early Iron Age date for this artefact-bearing layer is confirmed however by a

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3 (i) Limbo phase EJA4 potsherds from Mkukutu-Kibiti about thirty kilometres inland from Kikale

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(ii) Kwale phase EIA potsherds from Mlongo (Dundani) Mafia island

(iii) Mwangia phase EIA potsherds from Mwangia-Kibiti (on mainland)

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separate radiocarbon test on a charcoal sample (Ua-12714: 1740±60BP), the result about the third century AD being very consistent with those for Kwale EIA pottery on the mainland.

Discussion

This initial research endeavour on Mafia shows that this island had been settled by Early Iron Age (EIA) communities in the early centuries AD. The surface finds at Mtenga indicate that this settlement may have spanned all three phases of the regional EIA. Although no food evidence was recovered in the limited excavation at Mlongo, it is presumed that these people exploited marine resources, especially those of the coral reef, as well as the agricultural potential of the island. There are also suggestions of iron-working, notably the slag and vitrified sand found at Mlongo; such an industry would have utilised suitable laterites on the island, like that recognised at Mtenga. These indications are important since it seems unlikely that a permanent community on Mafia at that period could have managed without its own iron industry, cultural connections with the mainland population notwithstanding.

This archaeological evidence of a settled island community in the early centuries AD raises questions about the types and sizes of boats which were used and of their rigging

- assuming that they were sailed and not merely paddled. The subject needs to be considered in the context of the first-century AD document, *The Periplus of the Erythraean Sea*, with its clear allusions to sewn boats at the harbour of Rhapta, situated somewhere around this latitude on the mainland shore, and also on the island of Menuthias. (See Casson's edition and translation, 1989). The latter is normally assumed to be Pemba or Zanzibar (since the description of the Azanian coast works from north to south and no other island is mentioned hereabouts), but it has been speculated that it could be cognate with Mafia, or 'Manfla' as the name of this island is sometimes rendered. That apart, the existence of settled and presumably agricultural populations on this island and on the mainland coast opposite at this time demands a reconsideration of the cultural and economic situation in Azania at the time of the Periplus and of the trade conducted by sea with southern Arabia and, beyond that, with Egypt and the Roman Empire.

The radiocarbon result from the EIA layer in the excavation at Mlongo, falling about the third century AD, agrees well with those from Kwale island and a number of mainland sites between Kisiju and the Rufiji (Chami and Msemwa 1997a, b; Chami and Mapunda 1997), as well as the Kwale type-site. Moreover, at Limbo, about 20 km inland of Kisiju, what appears to be the earliest phase of this regional EIA has yielded results in the final centuries BC (Chami and Msemwa 1997b; cf. Chami 1992). This suggests that the EIA was established in this region by the time of the Periplus and the trade which it describes. The provisional recognition of this Limbo phase of EIA on Mafia, in the surface collection at Mtenga, may be very significant therefore.

The essential criteria used to separate the Limbo and Kwale phases of the regional EIA pottery are the presence in the latter of upturned bowls whose inside has a sharp angle between rim and body, and also of decoration in false-chevron relief.

This is quite a dramatic change that occurs around the third century AD. At the same time finely executed punctates, hatches, stamps and mild bevelling or flutes on the rim become more pronounced. The short-lived Mwangia phase, about the 6th century AD, retained remnant features of the upturned bowls but lost the false-chevron relief motif. (Figure 3 illustrates these phases and the contrasts.) On the other larger islands off the East African coast, namely Pemba and Zanzibar,

Chami

evidence of settlement during the Early Iron Age has been barely recognised, the usual assumption being that regular occupation belongs to the period of TIW/TT pottery in the middle or later centuries of the first millennium AD. Nevertheless, at Unguja Ukuu, on the south-western shore of Zanzibar island, the lowest levels contain undoubted EIA sherds (author's personal examination of excavated finds in 1991), as well as some imported sherds which appear to be early 'Sassanian-Islamic', very plausibly of the preIslamic phase. A dating about the fifth or sixth century is indicated by other sherds probably of Egyptian derivation, the so-called 'African Red Slip ware' of the late Roman Empire (Umu 1996). It needs to be noted that these imports in the oldest layers at Unguja Ukuu do not belong to the period of the Periplus; they are several centuries later, and are later too than the EIA occupation reported above at Miongo on Mafia.

The author and his colleagues have recently discovered an underground limestone cave at Pate a few kilometres northwest of Unguja Ukuu. The cave, 10 metres below the surface, has two chambers found to contain quantities of SW pottery. The excavation of one of the chambers uncovered a cultural sequence beginning from the Late Stone Age (now dated to the last century BC) to the SW cultural tradition of the 14th - 15th century. A shallow layer overlying that of the LSA horizon was found to have EIA potsherds associated with many TIW sherds and several sherds of imported wares similar to those found at Hafun associated with the early Roman trade network (Smith and Wright 1988). A bead of early Roman period associated with microliths, shell beads, and bone tools including harpoons was also recovered. A full report on this site will be published in due course.

It is worth recording in this context the discovery on the mainland site of MkukutuKibiti (Chami and Mapunda 1998, Chami 1999), to the north of the Rufiji and thirty kilometres inland, of four glass beads which appear to derive from Egypt or the eastern Mediterranean during the early Roman Empire. They were excavated from a layer containing EJA pottery of the Limbo phase. One of these beads, a segmented gold/ silver-in-glass example, was probably manufactured in Rhodes between the second century BC and the second century AD (Boon 1977; Guido 1978, 93; Dubin 1987, 54, 332, 339). The other three are blue and are probably similarly of eastern Mediterranean provenance and early Roman Empire date (for parallels, see Dubin 1987, 56, pl.46). One is a round light-blue example, apparently wound, with a large perforation. The others appear to be drawn beads; they are dark-blue and smaller, gadroonic in shape with a narrow perforation. For the succeeding period, moreover, beads of glass and carnelian, as well as sherds of glass and of green- and blue-glazed pottery, have

been recovered at Misasa, a site in the same district with TIW pottery, radiocarbon-dated about the sixth century AD (Chami 1994, 64).

One striking archaeological contrast between Mafia and both Zanzibar and Pemba islands, as well as the mainland opposite the Zanzibar channel and south as far as the Rufiji, is the virtual absence on Mafia of sites with pottery of the TIW tradition assuming that the findings to date are reasonably representative. The same absence of TIW holds for Koma and Kwale islands. Although some of the pottery from Chittick's excavations at Kisimani Mafia may belong or relate to a late phase of this tradition about the 11th/12th centuries (Chittick 1961, fig. 7, 8a, 10 b,c), the early and main phase of TIW has not been identified on the island. On present evidence, therefore, it is possible that, after several centuries of Early Iron Age settlement, Mafia was deserted around the sixth century and not reinhabited until the eleventh, the latter being the time of intensification of maritime trade on the southern Swahili coast and of the rise of the Kilwa sultanate with which Mafia was closely associated (Sutton 1993).

Early Iron Age on Mafia island

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F.A. CHAMI

The Early Iron Age on Mafia island and its relationship
 with the mainland

1

TERTIA BARNETT

Quiha Rock Shelter, Ethiopia: Implications for domestication

11

D.N. EDWARDS

Meroitic ceramic chronology: Exploring the Meroe West cemeteries	25
RICHARD REID	
War and militarism in pre-colonial Buganda	45
E. LAMBOURN	
The decoration of Fakhr-al-Din Mosque in Mogadishu and other pieces of Gujarati marble carving on the East African coast	61
J. FLEISHER and A. LAVIOLETTE	
Elusive wattle-and-daub: Finding the hidden majority in the archaeology of the Swahili	87
Notes	
Digo settlements in Tanzania and the kaya question	by G. Philip Clarke
109	
Engaruka: Additional observations on fields, furrows and enclosures	by J.E.G. Sutton
114	
Recent archaeological investigation along the Sondu Miriu river, Kenya	by Isaya Onjala et al.
116	
Review Articles	
'Myth's History or History's Myth? Christopher Wrigley and the history of Obuganda', Kingshi and State: The Buganda Dynasty	
by Christopher Wrigley (David L. Schoenbrun).	123
'Age and Ethnography', Conflict, Age and Power in North East Africa	
edited by Esei Kurimoto and Simon Simonse (Richard Waller).	135
Reviews	
Iron Technology in East Africa: Symbolism, Science and Archaeology	
by P.R. Schmidt (Rachel MacLean).	145
Lamu: History, Society and Family in an East African Port City	
by Patricia W Romero (Justin Willis).	146
An African Classical Age	by Christopher Ehret (Paul Lane).
147	
A Green Place, a Good Place. Agrarian Change, Gender, and Social Identity in the Great Lakes Region to the Fifteenth Century	by David L. Schoenbrun (Justin Willis).
150	
Other titles received	152