

## AN IVORY TRUMPET FROM SOFALA, MOZAMBIQUE

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**M**usical instruments are rarely found in African Iron Age sites where the conditions of preservation are usually poor. The ivory trumpet which forms the subject of this paper is therefore of unusual interest, for it is the first such find in an archaeological context south of the Zambezi.

The trumpet was found in association with the ruins of the Portuguese fort at Sofala, some 75 miles south of Beira on the Mozambique coast. Sofala was an important trading centre for many centuries of the African Iron Age. Trade routes from the gold and ivory regions of the Rhodesian interior converged on the Sofala region, one of the southernmost outposts of the East Coast trade. The exact date at which Sofala itself was first occupied is unknown, but Arab traders are said to have discovered the gold trade of Sofala by the tenth century A.D. (Freeman-Grenville 1962:15). This trade, and that of ivory and base metals, prospered in Moslem hands, and reached its peak in the fifteenth century. The Portuguese annexed Sofala in 1505 and founded a settlement on the north side of the estuary. This small village—it was little more when compared with the large towns of the East Coast—was occupied continuously until the middle of the nineteenth century, when the bay began to silt up as a result of a change in the course of the river. The height of its prosperity was in the sixteenth and seventeenth centuries, when the Portuguese were receiving some 51,000 pounds of ivory and 12,500 miticals of gold annually, not counting the large quantities of gold and ivory which were secretly smuggled by Moslem traders (Axelson 1960:1).

Little remains of the Portuguese settlement today. Most of the stone from the fortress was removed to Beira to construct the cathedral there; only a few blocks remain, washed by the waters of the Indian Ocean, for the site now lies well below the high-water level. The outline of the fort can be traced at low-water spring tides, when the walls are marked by lines of rubble and midden debris. Pottery, imported china, beads, elephant tusks, fishing weights, human bones, and other traces of human activity are scattered throughout the ruins and along the high-water mark for several hundred yards on either side of the fort. Surface collections from the site have now yielded a considerable quantity of cultural material, but unfortunately, owing to the waterlogged situation of the site, excavations are quite impossible without enormous expenditure on shuttering and breakwater works.

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Imported china and porcelain from the site has been dated by one of us (J. K.) to between the late sixteenth and early nineteenth centuries, and the glass beads from Sofala fort belong to much the same period.

#### DESCRIPTION OF THE TRUMPET

The musical instrument, made from an elephant tusk, which can be tentatively identified by one of us (J. K.) as an mbiu or proclamation trumpet (Fig. 1), was found by Mr. Brian Christie of Salisbury in the southwestern part of the fort, associated with wall foundations, imported china, and locally made pottery. When the mbiu was discovered, the head was projecting from the sand, and the trumpet was recovered in several pieces. There can be no doubt, however, that the figurine which forms the head of the trumpet was part of the instrument, for it broke away after discovery and fitted neatly into place in the laboratory.



Figure 1. The Sofala mbiu. The horn is 19.0 in. (487 cm.) long. (Photo: C. S. Holliday)

Unfortunately, the circumstances of discovery and the constant movement of the sea do not permit us to date the trumpet with any accuracy. In all probability, however, it dates to the period of occupation of the Sofala fort from the sixteenth century onwards.

The locally-made wares found with the trumpet are mostly undecorated, with occasional polychrome sherds and a preponderance of necked vessels. It is at present impossible to assign the material to any local Iron Age group or to modern peoples living in the area, but the closest parallels to the ware lie with Zimbabwe Class IV pottery from Mashonaland (Summers, Robinson and Whitty 1961:204). These affinities cannot be regarded as being significant at this stage in research but are hardly surprising, since it is known that there was contact between Sofala and the Mashonaland plateau throughout most of the second millennium A.D. (Fagan 1966:90-94).

The reconstruction and preservation of the mbiu required much



time and patience, and we are grateful to Mr. C. S. Holliday for his skillful work on the specimen. After soaking the fragments in fresh water for several weeks to remove the salt from the ivory, the pieces were placed in a bath of diluted carbolic acid which killed off fungus growths. The carbolic acid was then washed off in fresh water and the horn treated in successive baths of alcohol, starting with a low concentration and progressing to a pure alcohol solution, to remove the water. Next, the alcohol was replaced with commercial thinners (Amyl Acetate), after which the tusk was treated with four successive baths of a high concentration of Glyptal cement mixed with Amyl Acetate in a vacuum chamber. The specimen was kept in the chamber until no bubbles were seen to be coming from the ivory, when the fragments were removed and surface washed in Amyl Acetate and left to dry. Finally, the pieces of the tusk were assembled and the original shape of the horn reconstructed.

The horn is fashioned from the mid-part of a sizeable elephant tusk, with the mouthpiece of the instrument on one side of the trumpet, 11.9 in. (29.9 cm.) from the end. For over two-thirds of its length, the tusk has been carefully carved and scraped to thin down the walls of the instrument, giving a pleasing shape for the player's hands. The naturally hollow interior of the tusk has been enlarged in the region of the mouthpiece, the edges of which are flared to form a comfortable recess for the mouth. Above the mouthpiece, a collar has been formed by careful carving and smoothing of the ivory. The remainder of the *mbiu* has been formed into what may be interpreted as a stylised human figure (Fig. 2). Four notches have been cut into the ivory at 45 degrees to each other, the notches meeting in the middle, thereby forming a hollow, circumscribed by four arches of ivory. The neck of the figure is represented



Figure 2. The human figure on the *mbiu*. Length: 5.2 in. (13.2 cm.). (Photo: C. S. Holliday)

by another collar, which passes directly into a human head with an egg-like shape and stylised features.

The mouth and ears of the figure are represented by simple notches or cuts made in the ivory, whilst the eyes are shown by two double circle-dot signs inscribed in the ivory with a compass. A cruciform motif in the same style adorns the top of the head. The circle-dot technique of decoration has a well-defined distribution in Africa and is thought to have a ritual meaning (Segy 1953).

There is good reason to believe that the body of the trumpet was sheathed, at least in part, with metal. Six rivet holes occur near the mouth of the mbiu and traces of a dark, discoloured band can be discerned over a zone of about 2.3 in. (5.7 cm.) from the end, as if a collar of some metal had been attached to the tusk. In addition, there are minute traces of metal adhering to other parts of the body, which might be further evidence of sheathing. These, however, are too small for chemical analysis. On the left-hand side of the tusk, looking from the top, a second hole, whose significance eludes us, lies 0.5 in. (1.3 cm.) to the right of the main rivet attachment. It is impossible to say what metal was used for sheathing the horn, but either gold or brass could have been used for the purpose. Another possibility is hide, but this would not survive in the archaeological record.

Circle-dot drilled decoration is also found on the main part of the horn. Three cruciform motifs, made by double lines of circular drilling, lie along the top of the body whilst the sides bear pairs of a double, opposed circle-segment motif in the same technique. On both sides, the decoration extends under the discoloured band, as if it was executed before the metal was added. The underside of the body bears two squares of circle-dot decoration.

The player of the instrument probably suspended it by a carrying cord. Experiments suggest that it was attached to the neck of the human figure at one end and, perhaps, to a looped rivet on the upper side of the band, by the end, at the other. The mbiu is 19.0 in. (48.7 cm.) long, the length of the human head and notched portion being 5.2 in. (13.2 cm.), while the orifice has a vertical diameter of 3.5 in. (8.9 cm.).

#### DISCUSSION

Although side-blown trumpets are common amongst the tribes of south central Africa, no specimens in ivory similar to the Sofala mbiu have been found on archaeological sites in the Interior. The ivory human figurine found at the Khami Ruins near Bulawayo (Robinson 1959:Pl. V) in Rhodesia has a similar shaped head, but the details of the features and general workmanship are quite different. Unlike the Sofala implement, the Khami figure formed the head of a ceremonial staff. Its age is unknown.



If ivory trumpets are unknown in the Iron Age sites of the Interior, they do occur in East Coast sites and are also well known from historical records.

On the Arab coast of East Africa two types of musical horn are known: the siwa, or ceremonial horn, and the mbiu, or proclamation horn. Both are blown through an aperture in the side.

The siwa measured four or five feet long and were made of ivory or brass. The two finest examples are the carved ivory Horn of Pate and the brass Horn of Lamu, both in the Regional Agent's house at Lamu, Kenya (Kirkman 1964). The ivory horn was made at the end of the seventeenth century: the story is told in the History of Pate (Freeman-Grenville 1962:7). The brass horn originally belonged to Mudiwo, a village on the mainland near the town of Luziwa (Hickens 1938). Its date is unknown, but, from the place in the manuscript where it is mentioned, it may have been captured a little before the time of the Pate expedition against Mombasa in the middle of the eighteenth century. Ceremonial horns are mentioned by the Portuguese (Ravenstein 1898). They were blown at weddings, circumcision feasts and on all important occasions, and are frequently referred to in Swahili poetry of the late eighteenth and nineteenth centuries.

The mbiu were shorter and more portable, about two feet six inches long, and often performed the minor official function of announcing the arrival of a great man. They must have been much more numerous but did not receive the same attention in records. An mbiu appears to be carved on the inner face of the pillar tomb at Chwaka on Pemba Island, known as the "Harouni tomb" (Pearce 1920), which is believed to be fifteenth or sixteenth century. In the museum at Fort Jesus, Mombasa, there is a fine example in buffalo horn and wood, inlaid in mother-of-pearl and plated with brass (Fig. 3). This bears an inscription in Swahili, translated as follows:

Nabahani,  
The Sultan is coming to meet you  
He is the lord of men.

The Nabahani were the rulers of Pate from the beginning of the thirteenth to the middle of the nineteenth century, and subsequently the rulers of Witu until the extinction of the sultanate. The horn was acquired at Pate and is probably nineteenth century. There are few points of similarity between the Sofala specimen and that from Pate.

Two wooden horns which belonged to the Mwenye Mkuu, the last representative of the old line of rulers of Zanzibar who died in the middle of the nineteenth century, are believed to be in the museum at Zanzibar. Similar horns are found in many parts of Africa and may be regarded as at least a long-naturalised African cultural feature. They may even have reached the coast from the hinterland and not have been introduced by the Arab immigrants.



Figure 3. The mbilu from Pate. (Photo: James Kirkman)

This paper is intended to be a record of the discovery, preservation, and archaeological significance of the Sofala trumpet. The authors are not qualified to comment on the significance of the instrument to the history of African art, but hope that some of their art historian colleagues will find time to write a commentary on this aspect of the discovery.

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We are grateful to Mr. Brian Christie of Salisbury for allowing us to study the specimen, and to Mr. C. S. Holliday for carrying out the delicate work of preservation. He was responsible for Figures 1 and 2. Mr. Roger Summers kindly provided details of the Khami figurine.

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## A BRIEF LIST OF 16MM SOUND MOTION PICTURE FILMS ON FOLK MUSIC AND FOLK DANCE WITH RENTAL DISTRIBUTORS

African musicians. 14 1/2 min, b&w, 1957.

Production director: Gérard de Boë. Distributors: Brandon; Indiana.  
Music of the Congo.

African village. 17 min, color, 1960.

Produced by Theodore Holcomb. Released by New York University Film Library.

A settlement of the Kissi tribe in Guinea, with authentic music.

The Apache Indian. 11 min, color, 1945.

Produced by Coronet. Distributor: Indiana.

Life, industries, and dance ceremonies of the Apache Indians.

The banjo. 15 min, b&w, 1958.

Produced by University of Michigan TV. Distributor: Michigan.

Arkansas-born Ed Banghart explains Southern banjo playing, with four songs.

Bayanihan. 55 min, color, 1962.

Produced and distributed by Robert Snyder. Directed and written by Allegra F. Snyder.

Demonstration of a variety of Filipino dances by the Bayanihan group.

Billy the Kid. 3 min, b&w, 1954.

Distributor: Brandon.

Oscar Brand sings with guitar; shadowgraph dramatization.

Blind Gary Davis. 11 min, b&w, 1964.

Directed by Harold Becker. Distributor: Contemporary.

Features two songs by the Harlem street-singer and preacher, against the background of his home and neighborhood.

The blues. 21 min, color, 1963.

Produced, directed, and photographed by Samuel B. Charters. Distributor: Brandon.

Includes J. D. Short, Pink Anderson, Furry Lewis, Baby Tate, Memphis Willie B., Gus Cannon, and Sleepy John Estes.

Canals. Towpath west. 17 min, color, b&w, 1963.

Produced by Indiana University. Directed by Bruce R. Buckley. Distributor: Indiana.

A typical journey along the B&O Canal. Background music by Bruce R. Buckley and Joseph C. Hickerson.

Cattle ranch. 20 min, color, 1961.

Produced by the National Film Board of Canada. Directed by Guy L. Coté. Distributors: Contemporary; Indiana.

Life on a Canadian cattle ranch. Background music played and sung by Pete Seeger.