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KAVANGO CERAMICS: THE EVIDENCE FROM VUNGU VUNGU

A.J. WOODS
Department of Archaeology
University of Leicester
Leicester LE1 7RH
England

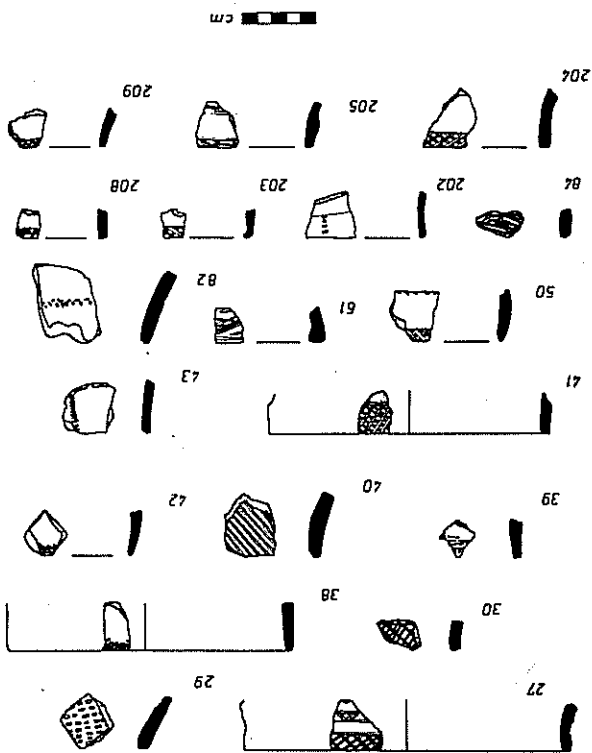
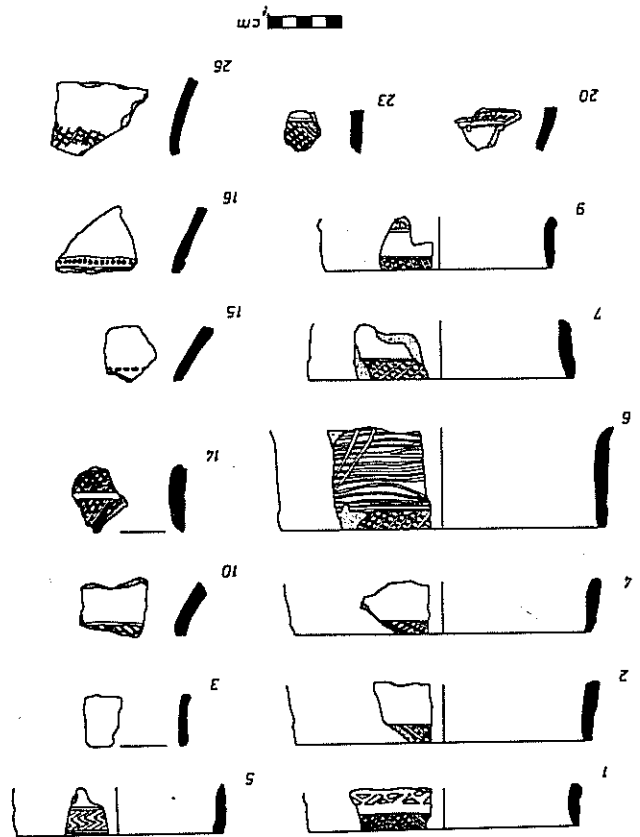
ABSTRACT

Examination of thin sections of pottery from Vungu Vungu, Kavango, has isolated three different fabrics containing grog, charcoal and bone. Comparisons with ethnographic material indicate continuity of ceramic tradition: similarities in raw materials, vessel shapes, surface treatments, and possibly in manufacturing techniques, serve to link the archaeological material with present-day ceramics.

I. INTRODUCTION

The site of Vungu Vungu (17°53' S; 19°51' E) is situated on the Kavaango River some 7 km east of Rundu, and is marked by a surface scatter of pottery and lithic material stretching for approximately 100 m along the river and some 50 m back from it. Two small areas of the site were excavated by Sandelowsky and a date of A.D. 1630±45 (Pta-236) obtained from charcoal in the artefact-bearing layer in one of the trenches (Sandelowsky 1979: 55). This layer, 10-25 cm below the surface, was stated by the excavator (*ibid.*) to be exposed on the surface in places and can thus presumably be related to the surface artefact scatter visible at present.

The material collected from Vungu Vungu, the examination of which forms the basis of this paper, was very fragmentary (Figs. 1, 2) but similar in appearance to that described and illustrated by Sandelowsky (1979: 58-9) and to the actual excavated material stored in the State Museum, Windhoek. However, Sandelowsky's statement (1979: 58) concerning the fabric of the pots, that "The paste was fine, containing no extraneous matter such as quartz grit or visible vegetable fibre", appeared to the present writer to be completely erroneous and it was therefore decided to make thin sections of a selection of the material collected in order to examine fabrics more closely, particularly with a view to



FIGURES 1 & 2. Sherds from Vungu Vungu. (Bases and undecorated sherds not illustrated.)

Surface material from this site was collected in 1981 as part of a wider project aimed at investigating the nature of archaeological and modern Kavaangoan ceramics. As part of this research, the techniques employed by some of the few remaining traditional potters resident in the area have been documented

ascertaining, if at all possible, the sources of the raw materials used. Some forty-four ceramic fragments, comprising twenty-one rims, three bases, sixteen body sherds, and four others (chiefly pieces of *tuyere*) have been sectioned and examined with a petrological microscope.

Such material is softer than other parts of bone and is more easily pulverized; it is therefore more likely to be removed by any subsequent crushing employed to render the bone a suitable size for inclusion in the potting clay. The charcoal is predominantly wood charcoal, of one or more hardwood species which it has not so far been possible to identify, but red charcoal may also be present. Such material is consistent with a local origin for the pottery. In some cases the charcoal inclusions have disappeared (presumably burned out during firing) leaving angular voids, probably caused by shrinkage of the clay during drying or of the charcoal during firing. The chunkiness and angularity of the fragments, and the fact that the shapes of many are accurately mirrored by their surrounding voids (Plate 4), indicate that they were incorporated as charcoal and not as wood which has been carbonized by the firing process. That many have not burned out provides evidence that the firing time involved was short, possibly indicating a rapid bonfire rather than a longer pit firing (Woods 1983: 12).

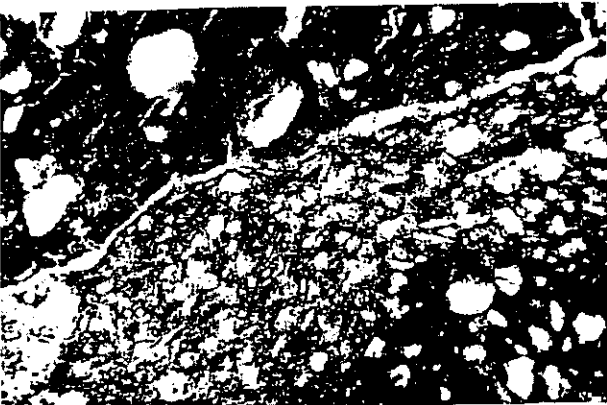


PLATE 2. Part of a large frog fragment, containing another smaller piece (top left). A shrinkage void separates the larger fragment from the matrix (bottom right). Plane polarized light, X40.

Some of the fabrics containing a large amount of quartz may be the result of the deliberate addition of sand to the potting clay, but this cannot be proved. Clay samples obtained from the Kavanago River at Hallii, Kapako, Kateri, Kadedere, and Guma all show a great diversity in the amount and degree of rounding of the quartz grains present: it is thus impossible to use quantity or shape as the criteria by which to distinguish naturally occurring quartz grains from any which might have been deliberately added.

II. CERAMIC ANALYSIS PETROGRAPHICAL EXAMINATION

Examination of the thin sections reveals three main fabric types characterized by the presence of frog (crushed ceramic) (Plates 1 & 2), charcoal (Plates 3 & 4), or bone (Plates 5 & 6) in the clay. In a few instances (for example, sherds 26, 70, 206 - see Table 1), mixtures of these materials occur but this is probably largely accidental. The basic matrix is similar in all cases, consisting of subangular to well-rounded quartz grains, generally up to 1 mm in length though larger ones do occur, in an anisotropic fired clay matrix (Plate 7). Occasional grains of feldspar, chiefly plagioclase and microcline, even rarer pyroxenes and amphiboles, and some opaque iron, are also found. All occur in similar sizes to the quartz grains and exhibit the same range of angularity/rounding. Some variations do exist in size and rounding of these mineral inclusions but there is no reason to assume that they are anything but naturally occurring in the clay.

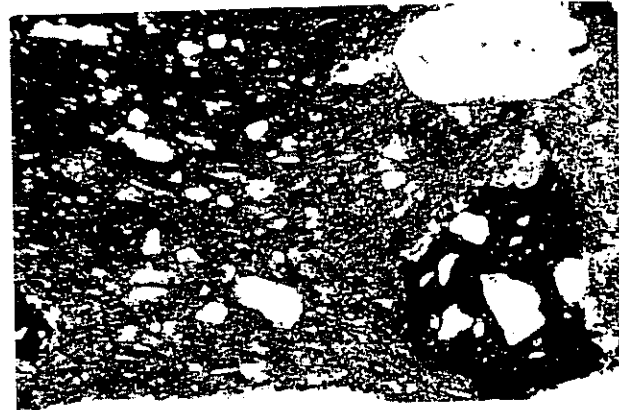


PLATE 1. Frog fragment (top left) containing quartz, and other quartz inclusions. Plane polarized light, X40.

In contrast, the frog, bone and charcoal fragments are all deliberate additions made by the potters to modify the firing or working properties of their clays, and are present in all but a few of the sherds sectioned. The frog fragments vary in size, with the largest being 6 mm long. One sherd shows evidence of recycling of materials in that one of the frog fragments in it contains two smaller frog pieces; part of one of these is shown in Plate 2. The bone was probably calcined before being added to the clay; although no definite evidence of this can be seen in thin section, the absence of any particles of

been collected (see, the examination of the excavated material, was reported by the excavator, and it is examined in a number of places, such as the paste, consisting of well-rounded quartz grains, generally up to 1 mm in length though larger ones do occur, in an anisotropic fired clay matrix (Plate 7). Occasional grains of feldspar, chiefly plagioclase and microcline, even rarer pyroxenes and amphiboles, and some opaque iron, are also found. All occur in similar sizes to the quartz grains and exhibit the same range of angularity/rounding. Some variations do exist in size and rounding of these mineral inclusions but there is no reason to assume that they are anything but naturally occurring in the clay.

the raw fragments, sixteen pieces of which a



Zambia, is covered with clay and sand of the Kalahari Basin. As this material is so widespread, however, it is virtually useless for provenance studies. The similarities shown in thin sections of the

PLATE 4. A large charcoal inclusion with surrounding void. Plane polarized light, X40.

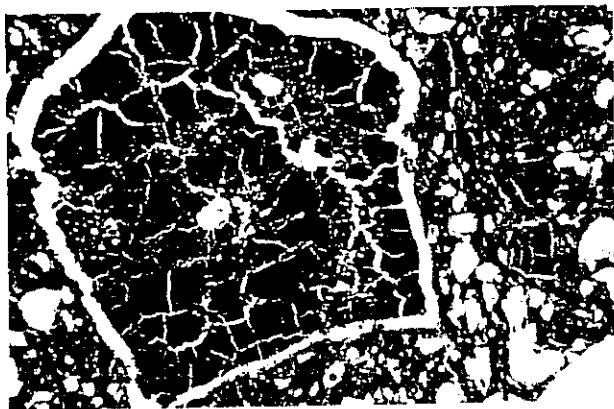
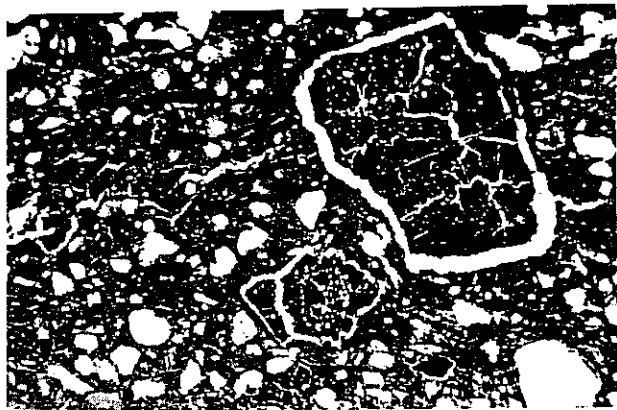


PLATE 3. Charcoal and quartz inclusions. Plane polarized light, X40.



sections has shown that all the inclusions, bone naturally occurring and deliberately added, are consistent with a local origin. In that 'local' could possibly mean anywhere along the Kavanago River.

PLATE 6. Bone and quartz. Plane polarized light, X40.

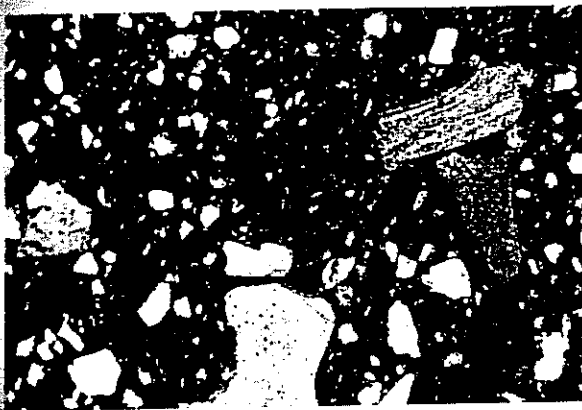
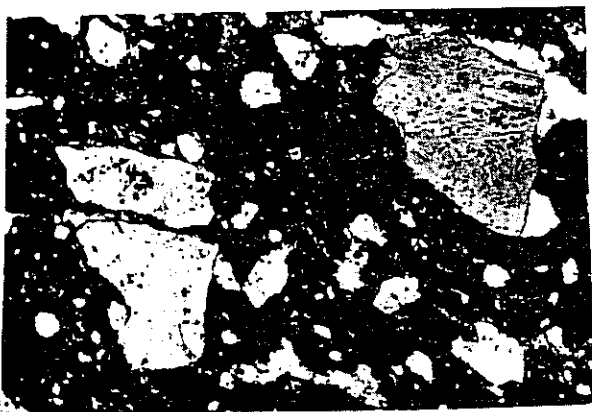


PLATE 5. Bone and quartz. Plane polarized light, X40.



The clay found in the river itself and its immediate environs is well suited to use in pottery manufacture and it seems safe to assume that in the past, as today (Lawton 1967; Otto 1978; Woods in press), it would have been the main source used for pot-making. Comparisons of thin sections of clay samples from the river (for example, Plate 8) with those of sherds from Vungu Vungu (for example, Plates 2, 3 & 7) reveal obvious similarities in the nature and shape of the naturally occurring inclusions.

sherd material from Vungu Vungu and clay samples have already been illustrated and X-ray diffraction also reveals that, as is to be expected, these clays are all similar, with the kaolinites being the predominant clay minerals, although some illite is usually also detected. Recent chemical analyses (Gihwala *et al.* in press) has indicated that clays and ceramic material from the northern part of Namibia, from Owambo to the Caprivi Strip, are so similar as to be indistinguishable from one another.

Although not establishing a definite source for the Vungu Vungu pottery, the examination of the thin

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PLATE 7.



round-based, globular pots, often with a well-defined carination, and with a short, straight or slightly everted neck, and exhibiting bands of incision, frequently cross-hatched, below the rim or on the neck, and incision or impression at the point of inflexion or just below it. These surface treatments appear to be the same for all vessel types. The most common shapes are a bowl with a slightly everted neck, for eating, called a *karonga*, various closed vessels of differing shapes, for liquids, called *kandimbe*, and a

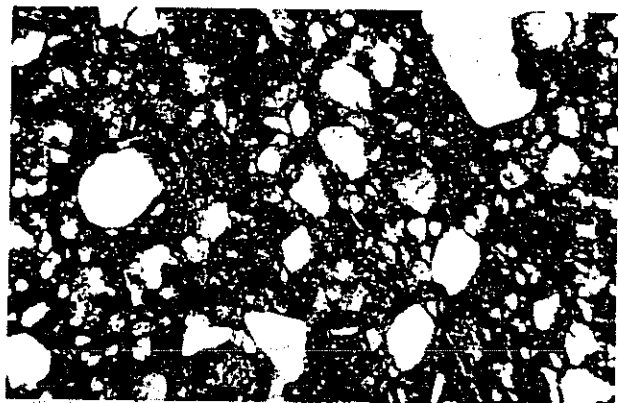


PLATE 8. Clay sample from the Kavanago River at Kadedere, containing similar quartz inclusions. Plane polarized light, X40.

beaker-like cooking pot, also with an everted neck, called *kanyungu*. In the past great confusion has been associated with the last term and it has been ascribed to so many vessels of varying shapes, sizes and functions that Lawton (1967: 302) was led to suggest that it might be a generic term. (See Woods in press, for a fuller discussion of this problem.) It is now clear, however, that the term should be limited to the shape described above and illustrated in Fig. 3. Obvious similarities can be seen between these modern vessels and those represented by the Vungu Vungu sherds.

As with the Vungu Vungu material, grog is the most frequently used opening material in present-day pottery and its use by the Kwangali (Lawton 1967: 295) the Gciriku (Otto 1978: 98; Woods in press), the Mbukushu (Otto 1978: 98), as well as by the various Angolan tribes living in Kavanago and referred to as Nyemba (Lawton 1967: 304; Otto 1978: 98; Woods in press), has been well documented. Reports also exist of the use of other materials. The writer has been informed of the use of calcined bone by Mbukushu (M. Fisch pers. comm.) and Gciriku potters, and observed the calcining of cattle bones in preparation for potting by a Gciriku potter. Otto (1978: 98) also

this is far from precise; there is, however, no evidence to indicate that the Vungu Vungu ceramic material was imported from outside this area. There appears to be no correlation at all between sherd type, surface treatment, and inclusion type (Table 1). For example, the most common and characteristic rim type (Group 2, Table 1), which has a band of cross-hatched incision immediately below the rim, occurs in all fabric types; a similar situation exists for the other sherd types.

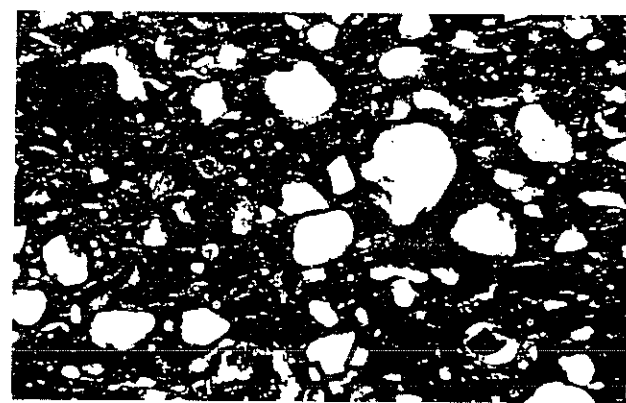


PLATE 7. Typical view of Vungu Vungu pottery, showing the usual range in size and shape of the quartz inclusions. Plane polarized light, X40.

Other problems also make it impossible to categorize the wares further. Firstly, most of the sherds are small and it is frequently not possible to determine the shape or size of the original vessel. Secondly, vessels tend to break at points of stress, such as carinations; as a result of this, decoration occurring at or near points of inflexion may have been lost, and the distinction between the groups listed in Table 1, but particularly between Groups 2 and 4, may be spurious. Thirdly, the same surface treatments appear to have been used on all vessel types regardless of their size, shape and, presumably, function.

The sherds do, however, closely resemble, in fabric and form, modern Kavanagoan ceramic material. Although ceramics are fast becoming a thing of the past in the region, being replaced by more durable enamel and plastic, some potters can still be found who produce wares comparable with the sherd material from Vungu Vungu. Typical vessel shapes are shown in Figs. 3 & 4. In general the vessels are

COMPARISONS WITH MODERN KAVANGOAN CERAMICS

Records the use of "pounded coal" by the Gciriku; the possibility exists that this could more accurately be described as charcoal.

Reports of potting techniques (Lawton 1967; Otto 1978 and in press; Woods in press) indicate that similar methods are used by all indigenous Kavango potters. The method involves the opening out of a cone of clay to which are then added rings of clay, sometimes slightly flattened before application. The rings are joined on the inside of the vessel by the use of a scraper/rib tool and on the outside by hand. Frequent use is made of a paddle to ensure proper adhesion of the rings and to expand the vessel walls. Decoration is executed before the base is finished, the latter being done by twisting off the knob of clay which is the last remnant of the original clay cone.

Little or no direct evidence of the method of manufacture is visible on the vessels and thin sections usually do not yield any further information. As the clay is worked in a very wet state, the rings are usually well joined to each other and no diagnostic fractures (Rye 1981: 67; Woods 1982: 15) can be seen either macro- or microscopically. The quartz grains so common in the clay are more or less equidimensional in shape and therefore cannot take up an alignment that may indicate the method of manufacture. In addition, even in the case of more irregularly

Pottery similar in appearance to that from Vungu has also been excavated from the upper levels at Kapako, some 25 km west of Rundu (Sandelowsky 1979). Sherds from the lower component of that site, dated to A.D. 840±50 (Pta-234) (Sandelowsky 1979: 52) are, however, different in appearance and fabric (Sandelowsky 1979: 55), as is most of the other archaeological ceramic material from Namibia (Sydow

OTHER ARCHAEOLOGICAL CERAMICS

shaped inclusions such as grog, the extensive use of paddling while the clay is still plastic further removes any trace of ring-building but does not set up the typical particle orientation usually associated with this technique (Rye 1981: 85). In short, it is difficult to ascertain how such vessels have been made. The same applies to the Vungu sherds which, in nearly all cases, show no evidence of their method of manufacture: only on one of the base sherds can the trace of a ring be seen. The wares are obviously handmade but little else can be said about them; their almost total lack of diagnostic evidence of the method of manufacture may allow them to be compared in this way with contemporary Kavangoan material but more research needs to be done on this before any definite conclusions can be drawn.

* Key
B = bone
C = charcoal
G = grog
V = voids

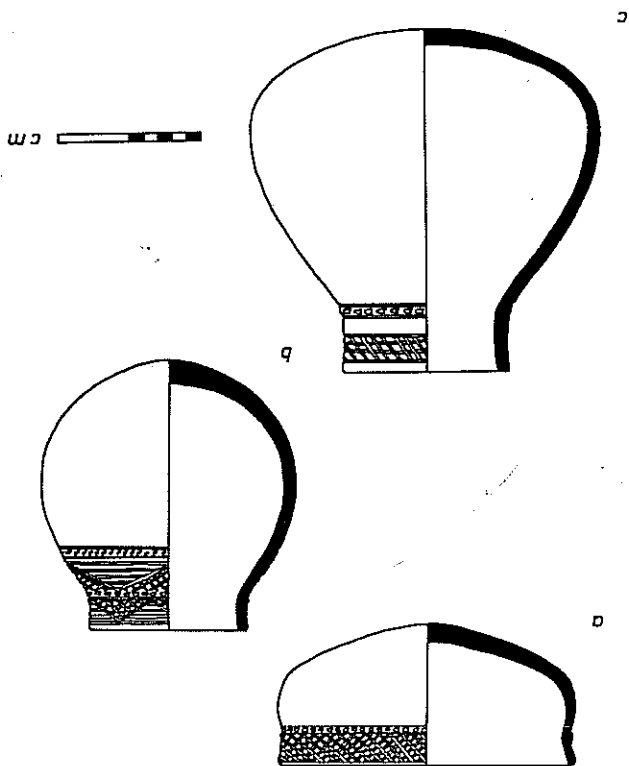
GROUP	SHERD TYPE	CHARACTERISTIC FEATURE	SHERD NUMBERS AND INCLUSION TYPE *
1	Rim	Plain	3-B
2	Rim	Inclined band immediately below rim	2-G;4-C;7-G;38-C;V;41-G;42-nil;203-G;204-G;208-G;209-G
3	Rim	Inclined band, not immediately below rim	5-C;61-C
4	Rim	Two bands of decoration	1-G;9-G;14-G;27-G;50-C;205-nil
5	Rim	All-over decoration	6-G
6	Rim	Impressed	202-G
7	Base		21-C;57-G;206-B;G
8	Neck		23-G;29-G;30-G;39-C;V;40-G;43-C;84-G
9	Shoulder		10-nil;15-G;16-nil;20-C;V;26-B;G;82-G
10	Other body sherd		70-B;C;G;71-B;102-G
11	Other		49-nil;53-G;87-G;101-G

Table 1 Vungu sherds and fabrics

The examination in thin section of a selection of the Vungu Vungu pottery has isolated three main fabric types, characterized by the presence of grog, charcoal, and bone deliberately added to clay probably obtained from the nearby Kavango River. Whilst this method has not been particularly successful in establishing a more precise source for the material, results of other analyses (for example, Gihwala *et al.* in press) indicate that even the more sophisticated techniques of trace element analysis may not yield

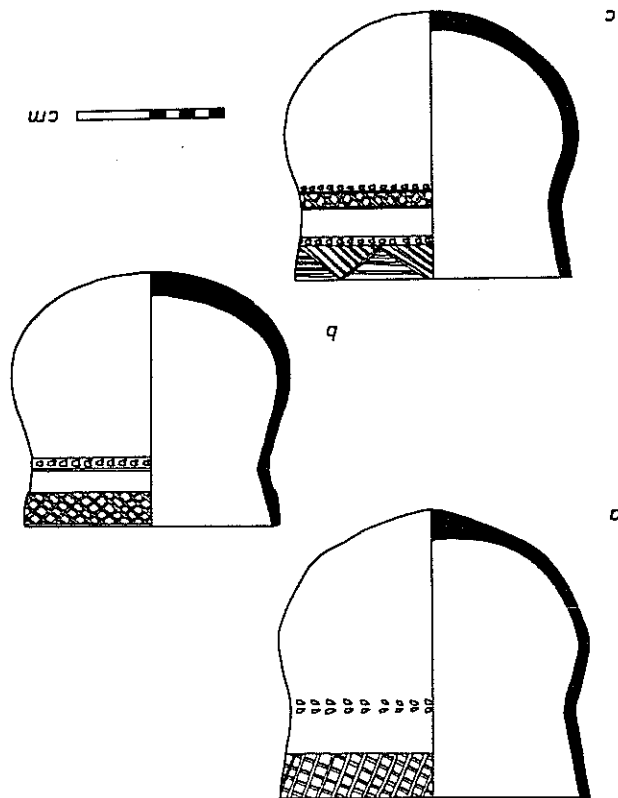
III. CONCLUSION

FIGURE 4. Modern vessels from Kavango. (a) Karonga, Gciriku. (b) Kandimbe, Gciriku. (c) Karonga, Gciriku.



Archaeological ceramics from Kavango are not plentiful but Phillipson (1974: 11) has suggested links between Early Iron Age pottery from Lubusi, Zambia and modern Mbukushu ceramics, claiming (1974: 11) that the bands of cross-hatched incision that appear on both wares are similar. He has also tried to link the Mbukushu material with his Lungwebungu tradition of northwest Zambia, largely because in both areas pottery is made by men. This latter link is possibly backed up by the Mbukushu's claim to have originated in the Kabompo River area. Phillipson's claims have been discussed in more detail elsewhere (Woods in press) but his comparisons have been made on a limited amount of material and on purely typological grounds; again, more research is needed on this aspect, but the material illustrated by Phillip-

FIGURE 3. Modern vessels from Kavango. (a) Kanyungu, Kwangali. (b) Kanyungu, Gciriku. (c) Kanyungu, Gciriku.



son (1971 *passim*, 1974, Plates 3 & 4) shows only superficial similarities to Mbukushu ceramics and does not appear to substantiate his claims. Questions of origin apart, evidence exists that similar vessels are today produced by all Kavangoan peoples who still make pottery, using similar materials and similar techniques, and that these can be linked to the, albeit scanty, Later Iron Age material from the area. Sandelowsky has even suggested that Vungu can be considered "an ancestral site of the present inhabitants of the region" (1979: 61).

1967; Rudner 1968). As far as the more recent pottery is concerned, the similarities in clay types, opening materials, surface treatments, and possibly in method of manufacture, allow such wares to be attributed to the Bantu peoples and not to their predecessors.

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IV. ACKNOWLEDGEMENTS

useful results for ceramics from northern Namibia either. The vast area covered by clay and sand of the Kalahari Basin is bound to create problems for provenance studies. Thin sections have at least established the main fabric types of the Vungu Vungu assemblage, and comparisons with modern ceramics and potting techniques have made it possible to postulate links (suggested in the past, but only on typological grounds) between the makers of the archaeological material and the present-day occupants of the region.

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