

THE ARCHAEOLOGY AND SYMBOLIC DIMENSIONS OF A THIRTEENTH CENTURY VILLAGE IN EASTERN BOTSWANA*

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ABSTRACT

Excavation results from a 13th century AD site in eastern Botswana confirm that the symbolic dimensions of southern Bantu settlement organization are archaeologically visible at the village level. The influence of this spatial patterning is illustrated by the archaeology of the major site components and the structured distribution of features, artefacts and refuse disposal within the site.

INTRODUCTION

Eastern Botswana, between the Limpopo and Shashe Rivers, is not as well known archaeologically as the adjacent parts of Zimbabwe and South Africa. On present evidence, it is believed that the agricultural occupation of this region in the first millennium AD was followed some hundreds of years later by a northward movement from the lowveld of South Africa, bringing across the Limpopo and into Zimbabwe a sequence of cultural developments which lead to the eventual rise of the Shona state (Huffman 1984).

Although this expansion is marked by the rise of long distance trade and wealth in cattle, most sites represent small mixed farming communities with indications of wider contacts limited to a few glass trade beads. The available evidence is of semi-permanent homesteads and villages with grainbin supports, storage pits, grindstones and iron hoe blades, the sites exhibiting a common preference for arable soils, with ample supplies of wood and in close proximity to reliable water (*cf.* Hanisch 1980). The characteristic accumulations of dung on these sites were once mistaken for middens, owing to the presence of bone and ceramics in an ashy matrix, but now it is apparent that they are the remains of cattle pens (Butterworth 1979; Denbow 1979; Huffman 1984).

Huffman (1984, 1986) considers the archaeological evidence to be consistent with the Southern Bantu settlement pattern described by Kuper (1980) which incorporates a central relationship between cattle and the living community and the spirit world. In this system, cattle are an integral part of the nexus of power and therefore belong to the domain of men. The men's assembly area and court is located near the cattle pen and men are buried in the pen itself. Raised grainbins are located behind huts which are arranged around the cattle pen. Although elements of the pattern have been found on many sites, the evidence is fragmentary and there is a paucity of archaeological examples which exhibit the complete pattern (but see van Waarden 1989a).

This paper presents the results of a detailed investigation at Bobonong Road, the site of a 13th century AD village which lay on the periphery of the Mapungubwe kingdom centred on the confluence of the Shashe and Limpopo Rivers (Fig. 1). Already disturbed to some extent by a track from the modern village of Molalatau to Mathathane, the site of Bobonong Road (National Museum site register 28-B1-9) was due to be largely destroyed by the construction of a new district road (van Waarden 1989b). Excavations at the site formed part of a mitigation study commissioned by the Roads Department of Botswana and reported in more detail elsewhere

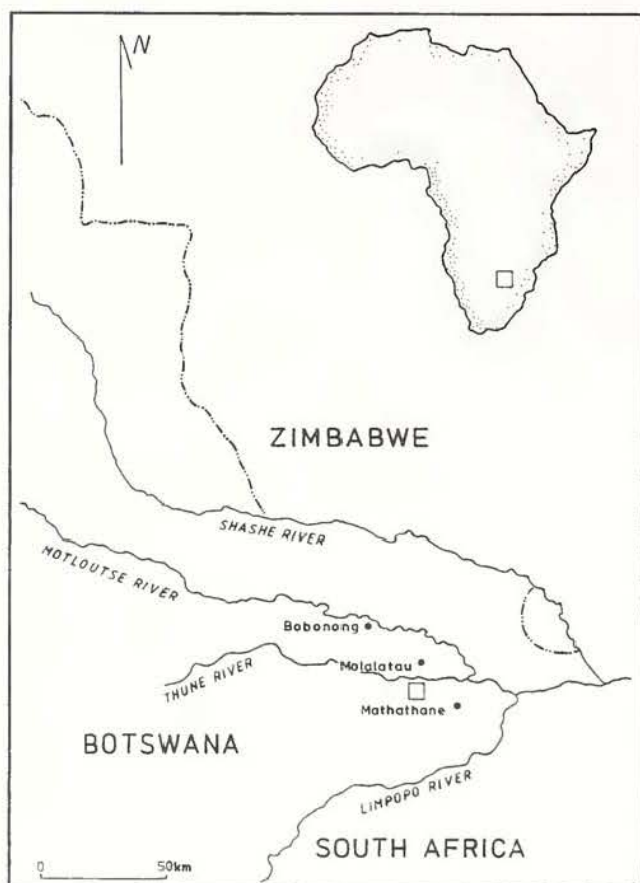


Fig. 1. The regional setting of Bobonong Road in eastern Botswana.

(Kinahan & Kinahan 1993; Hall 1993). Following a brief description of the site and its physical setting, the archaeological evidence is presented below in two sections, one dealing with the stratigraphy and dating, and a second with the description of ceramics, faunal remains and the variety of other finds which are used to place the site within a wider cultural and economic context.

APPEARANCE AND PHYSICAL SETTING

The site of Bobonong Road occupies a gentle north-facing slope on one side of a saddle between low hills in a sandstone ridge which lies about 1 km south of a deep bend in the Thune River. The surrounding landscape is broken by a number of similar outcrops, but the location of the site combines easy access to the river and to areas of relatively flat, well-drained ground suitable for cultivation. Although the site environment is typical of the eastern Kalahari hardveld as described by Thomas and Shaw (1991), few other locations in the vicinity combine all these characteristics within a relatively small area.

The Thune River, a tributary of the episodic Motloutse, is flanked by dense riparian forest with mature *Acacia* and *Combretum*. The river cuts across several bands of schist and these create large reservoirs

of water which can be reached with shallow wells. Most of the surrounding area is covered by secondary *Mopane* and *Terminalia* which has developed into an open woodland suitable for keeping cattle and goats. Wild fauna in the vicinity of the site is limited to impala and steenbuck, although elephant, lion and other species still enter the area from the neighbouring Tuli Block and probably represent the range of animal life which occurred here in the past.

On the site itself, the most visible feature was an accumulation of cattle dung more than 30 m in diameter. An area up-slope of this and approximately 40 m wide was largely free of natural rubble. The presence of numerous archaeological indications within this area, including several small stone features, suggested that it had been systematically cleared. A midden of grey ashy soil about 20 m in diameter lay at the southern end of the rubble-free area which loosely defined the extent of the site. To establish in more detail the characteristics and relationships of these visible indications a series of transects were laid out across the whole extent of the site. Trenches of three 1 m² units were excavated at staggered intervals of 3 m over the dung accumulation and the up-slope clearing, and larger excavations were made at a number of points including the midden and other localized concentrations of ceramics. In addition, numerous shovel tests and soil samples were taken to assist in defining the limits of the site components. The positions of the trenches and the inferred limits of the cattle pen as well as the midden and the area in which the huts lay are shown in Figure 2.

STRATIGRAPHY AND DATING

Test pitting revealed that the archaeological deposits at Bobonong Road were less than one metre in depth, overlying an archaeologically sterile horizon which could be differentiated into two facies, namely hill rubble (Unit 1) and coarse red decomposed rubble (Unit 2). Systematic excavations revealed a coarse granular red sand (Unit 3) which overlay these basal units and which appeared also to be archaeologically sterile, apart from some intrusive ceramics. A grey-brown soil (Unit 4) extensively overlay Unit 3 and formed the main surface horizon in the archaeologically poor areas of the site. Elsewhere on the site, a characteristic granular pink soil (Unit 5) which may have derived from dis-aggregated daga (hut daub) wall plaster or flooring was consistently associated with high concentrations of ceramics. Also overlying Unit 3 in places was a thin but conspicuous white crust (Unit 6) which appeared to be leached from overlying dung (Unit 8). The dung deposit itself was generally unmistakable, being greyish white in colour with a loose, block-like structure.

A smaller but similarly restricted deposit of midden ash (Unit 7) and a number of stone features (collectively Unit 9) cemented into the surface were contiguous with Unit 8. The surface horizon of the site was formed by a layer of greyish pink topsoil (Unit 10) which partly overlay Units 7 and 8. Unit 10 had clearly accumulated

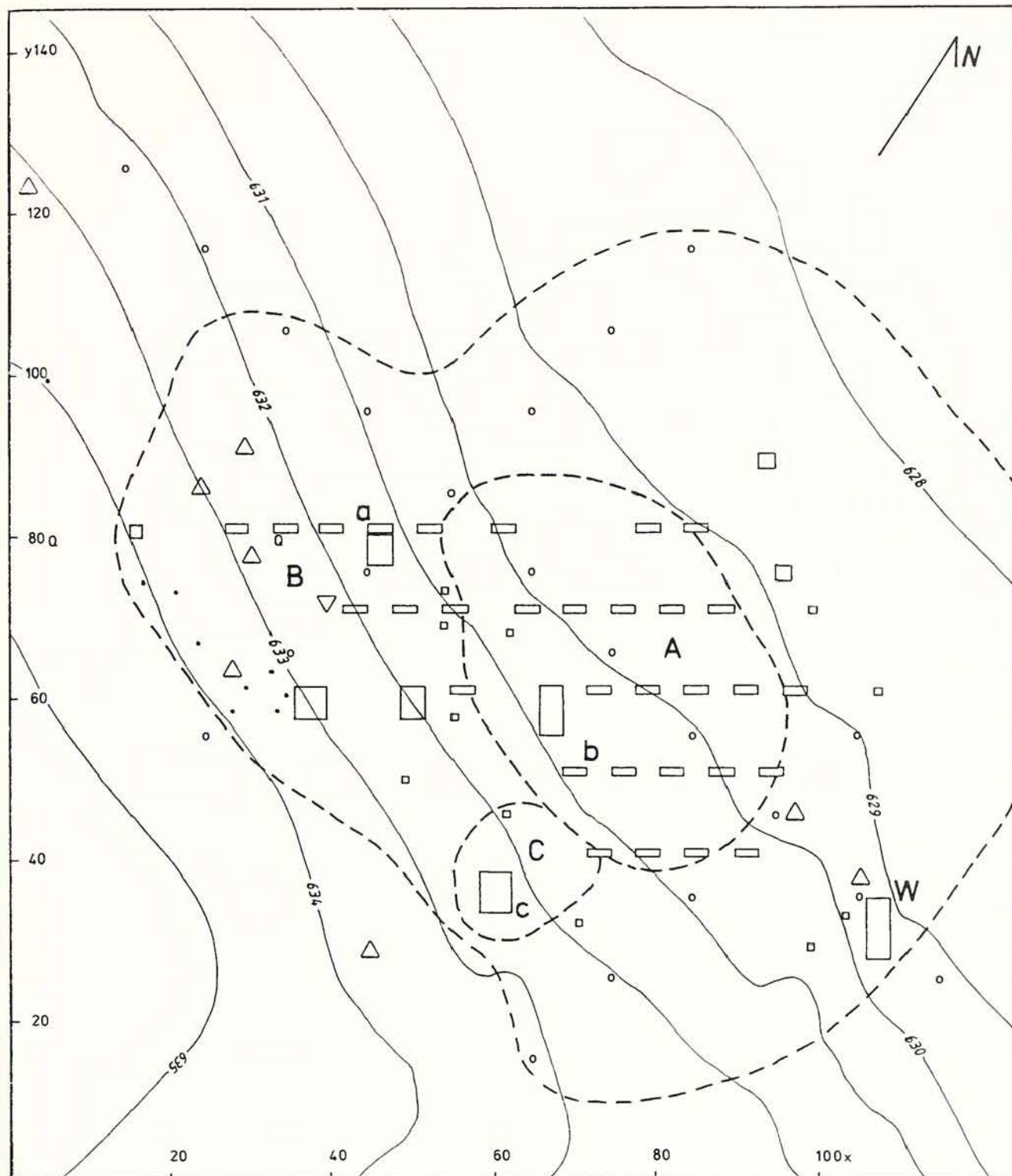


Fig. 2. Site plan and layout of excavation trenches at Bobonong Road with marginal scale is in meters. The cattle pen (A) lies within the inner circle and the outer circle marks the extent of the site clearing (B); the midden lies within the smaller circle (C) and the short length of stone walling (W) was located in the lower right trench. The inverted triangle represents the site datum point; the upright triangles represent stone features presumed to be grainbin supports; dots are stone pestles and Q is a quernstone. Open circles are soil sample points. Stratigraphic sections of the trenches marked (a), (b) and (c) are shown in Figure 3.

in the process of pedogenesis since the abandonment of the site. The occupation of the site was therefore represented by two sets of deposits, comprising both primary accumulations (Units 7, 8 and 9) and derived accumulations (Units 4, 5 and 6). These units incompletely over-

lay natural soil and rubble horizons present on the hillside when the site was occupied for the first time (Units 1, 2 and 3).

Several illustrative examples of stratigraphic relationships at Bobonong Road are shown in Figure 3, together

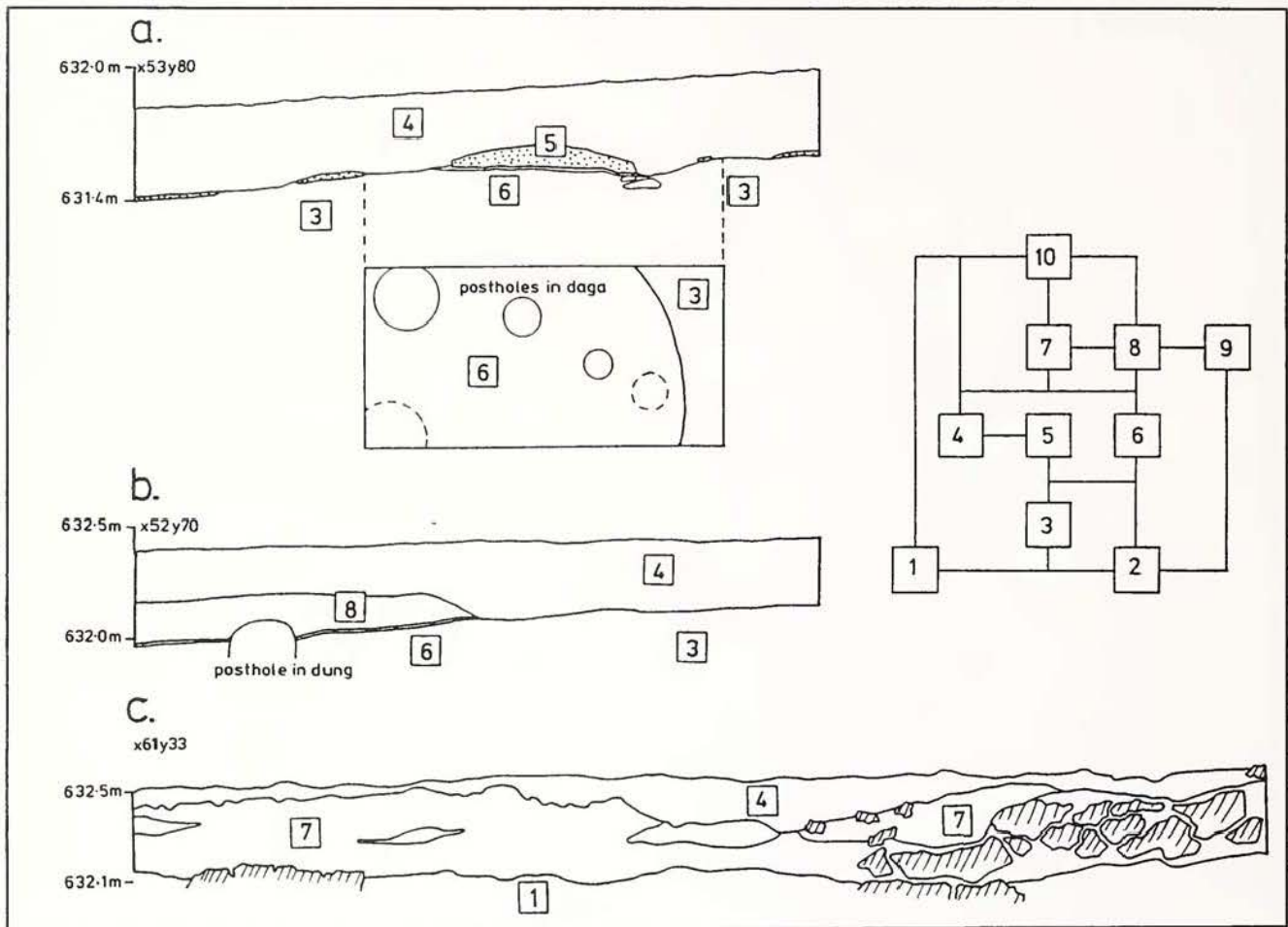


Fig. 3. Harris matrix of stratigraphic relationships at Bobonong Road, and selected stratigraphic profiles, showing (a) hut post holes in daga at x53y80; (b) cattle pen post hole in dung deposit at x52y70; and (c) main characteristics of the midden deposit, as at x61y33.

with a Harris matrix summarizing the full range of relationships observed at the site. The trench section from position x53 y80 (Fig. 3a) shows a compact mass of hut daga resting on basal sands with an interleaving white crust. This horizon probably represents the occupation surface which was subsequently covered by an homogenous layer of grey brown soil eroded from the upper slopes of the hill side. The plan view of the daga mass shows a clearly defined kerb-like edge, as well as several post holes and a moulded hollow, all features consistent with the construction of a wattle and daga hut. In most of the trenches it was not possible to identify such structures with certainty and much of the granular pink deposit would be at best only derived from dis-aggregated daga.

The section from position x52 y70 (Fig. 3b) shows the same overburden of homogenous grey brown soil as the previous example, in this case on the edge of the dung accumulation which rests on basal sands with an interleaving white crust. The section also shows a post hole which presumably belonged to the fence of the cattle pen. This suggests that upright posts were used, rather than a barrier of cut thornbush, although a combination of the two is also likely. The post hole was filled with burnt, charcoal flecked sand which indicates that the fence, if

not the cattle pen itself, was burned to the ground. With the retaining fence removed, the dung spread down-slope from the cattle pen, as is shown by the interpolation of soil phosphate values in Figure 4.

The main concentration of stone features on the site lay on the up-slope side of the cattle pen. These features appear to have been mainly grainbin supports and were found in association with stone pestles made from dolerite cobbles. One small stone quern was also found among the stone features. These finds indicate that grainbins were positioned near the outer perimeter of the site. A short length of walling was found on the eastern side of the saddle, in association with ashy hearths and ceramics (Fig. 2). This suggests that there may have existed an arc of huts along the whole of the up-slope side of the site, on either side of the midden. The absence of grainbin structures from the area of the walling might be the result of modern earthmoving activity in the course of repair work on the track, or some spatial differentiation of activity on the site. On the other hand, the walling may be a part of a court or men's assembly area, isolated from the main concentration of huts clustered in the area to the north of the midden.

The midden was one of the richest archaeological

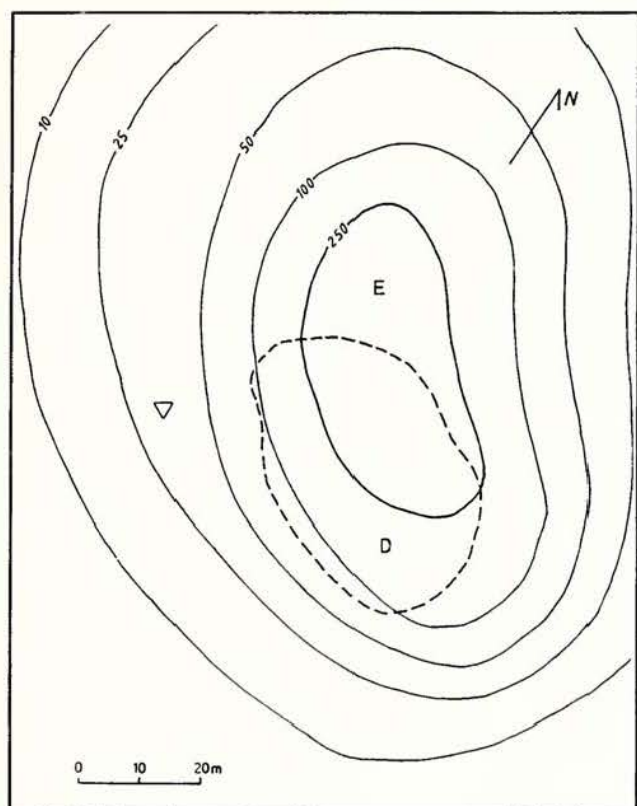


Fig. 4. Soil phosphate (mg/l PO_4^{3-}) distribution at Bobonong Road; visible dung deposit marked D and phosphate anomaly marked E, indicating position of cattle pen and down-slope leaching of dung deposit. Inverted triangle represents site datum.

features of the site and consisted of an homogenous ashy sand accumulation with minor lenses of ash and an overburden of grey brown soil (Fig. 3c). The deposit had evidently accumulated on the original surface rather than within a specially excavated pit. On the down-slope side, the midden deposit abutted the dung deposit of the cattle pen, indicating that the two had accumulated at the same time. Although the midden deposit was not easily distinguishable from the overlying grey brown soil, it contained a far higher concentration of archaeological material including ceramics, faunal remains and other finds. Since the midden was basically unstratified, and apparently coeval with the cattle pen a charcoal sample from the midden dated to 810 ± 70 BP (Beta 62740), calibrated to AD 1269 with a one sigma range of AD 1220 - AD 1291 (Talma & Vogel 1993), was taken to represent the age of the site occupation as a whole. This date places the site in the Mapungubwe phase of the Leopard's Kopje Tradition (Maggs 1984:347).

DESCRIPTION OF FINDS

Ceramic vessels were the most abundant and most generally distributed of the archaeological finds at Bobonong Road. Sherds totalling 152 kg were recovered from the site, with decorated or otherwise diagnostic sherds representing a maximum estimate of 159 vessels.

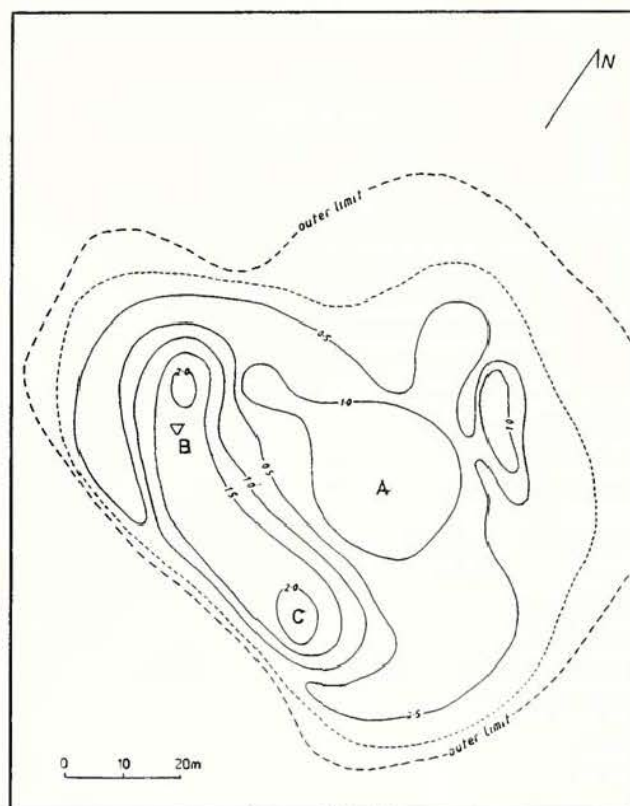


Fig. 5. Ceramic mass (kg/m^3) contour model showing major site components at Bobonong Road; cattle pen marked A, hut area B, and midden C. Inverted triangle represents site datum.

Finds from the area of the huts comprised altogether 103 vessels, as compared to the cattle pen and midden with 40 and 16 vessels respectively. This uneven distribution is clearly illustrated by the mass contour plan of the site in Figure 5 which identifies two high mass areas at the points of an arc overlooking the cattle pen. The plan shows that the main areas of residence and refuse disposal identified from the stratigraphy of the site are also defined by the distribution of ceramics. Furthermore, the fact that the cattle pen is also visible as a moderate concentration implies that if there had been huts on the eastern side of the site these would be indicated by higher concentrations of ceramics even if no daga structures were visible. The distribution of ceramics therefore confirms the stratigraphic evidence concerning the layout of the site.

From the sample of ceramics a total of 27 vessel profiles could be reconstructed and assigned to four broad shape classes. Tall necked globular pots predominated with sixteen vessels, and there were in addition eight open bowls, two constricted bowls, and a single beaker. Ten of the globular pots were recovered in the vicinity of the hut floors and related remains, while four came from the cattle pen and two from the midden. Five of the open bowls came from the hut area and three from the midden. One constricted bowl came from the cattle pen and the other from the hut area, where the beaker was also found.

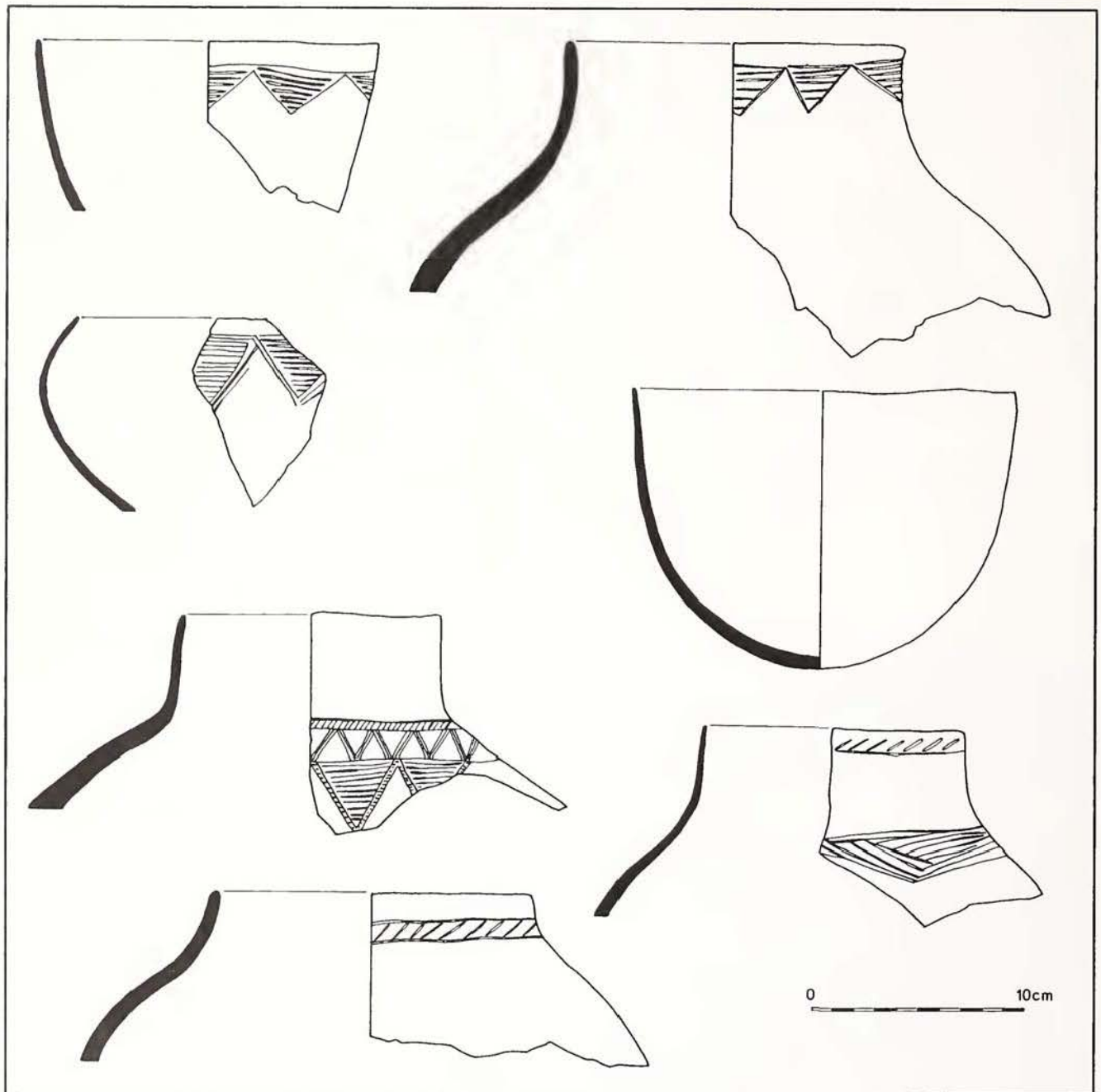


Fig. 6. The ceramic assemblage from Bobonong Road.

The reconstructed sample is biased in favour of vessels found largely complete, or those represented by sherds with textural decoration or burnishing. Sharp stylus incision was evidently the main technique of textural decoration and most decoration was placed either in or below the neck; alternatively, as a band above the main point of inflection on the constricted bowls, or as a band below the rim on the open bowls. The most common decoration motifs on the globular pots were either a band of pendant triangles filled with parallel incisions, or two parallel incisions with oblique incisions between. The triangles could be located just below the rim or in the inflection of the neck and could occur either singly, in combination, or in more elaborate, tiered repetition. Upright triangles were comparatively rare.

Figure 6 illustrates a range of ceramic vessels from Bobonong Road and shows that several of the decoration motifs found on the necked pots also occurred in the other shape classes. For example, the simple band of pendant triangles found among these pots also occurs among the constricted bowls and the open bowls. A double-incised border on pendant triangles occurs among both necked pots and open bowls, while upright triangles occur on necked pots and constricted bowls. Parallel incisions with oblique incised strokes occur among both necked pots and beakers. This distribution of motifs indicates a unity of decoration within the assemblage as a whole, although it is clear that the necked pots were the most diverse class and included the full decoration repertoire of the assemblage.

In general, the assemblage is characteristic of the Bambandyanalo phase of Leopard's Kopje which Hanisch (1980:276) has described as comprising pots with incised decoration under the rim, in the neck and on the shoulder; bowls with incision under the rim or on the shoulder; beakers with incision under the rim or at the base; and beaker bowls with incision at the base. In this sense, the Bobonong Road assemblage is similar to that of Mtanye, a Bambandyanalo assemblage described by Huffman (1984). However, although the Bobonong Road assemblage is smaller and probably for that reason lacking some of the Mtanye decoration affiliate sets, it contains some affiliate sets that are not listed by Huffman as part of the general Bambandyanalo repertoire found at Mtanye, K2 and Pont Drift. These affiliate sets include the tiered pendant triangles on necked pots and the upright cross-hatched triangles on the constricted bowls. Such differences may indicate a transitional Mapungubwe status for the Bobonong Road assemblage.

At Bobonong Road, ceramic figurines were found to be concentrated in the vicinity of the huts, particularly in those trenches where large quantities of ceramics were found. As such the figurines were associated with the huts rather than the cattle pen, where only three of the fragments were found. Three other fragments recovered from the midden therefore probably represent refuse from the huts. The fragments found at the site appear to be mainly of human rather than animal figurines, although only two were unequivocal in this respect, having buttocks in one instance and the scars of appliqué buttocks in the other. The latter example also had a slightly protuberant navel with sharp stylus decoration which probably represents cicatrized patterns on the human female body. Three other pieces having a basically spatular shape might represent the heads of these or similar figurines, one having punctate decoration. In addition, there were eight fragments of figurine legs, three showing vestigial feet. The more complete leg fragments were of similar diameter to the thighs of the pelvis fragments and might therefore belong to the same or similar figurines. From this evidence it appears that female figurines emphasized the pelvis rather than the torso, that heads and feet were reduced and arms entirely absent. This is essentially the pattern observed by Huffman (1974:64-65) at the Leopard's Kopje name site and more broadly confirmed by Matenga (1993: 89-102).

Miscellaneous small finds at Bobonong Road included metal objects and evidence of metal-working, as well as beads of shell and glass, and some worked bone. Stone objects included small grindstones or pestles, and some flaked and polished pieces. The miscellaneous finds are summarized in Table 1.

Fragments of fired clay showing traces of light glazing were recovered from the hut trenches and the midden. It was not however possible to determine whether these and other items related to metal-working represented fragments of furnace wall or tuyère, or if they were related to copper rather than iron-working. Indeed, the very small number of fragments suggested that no metal was produced on the site and that these had

been brought in from elsewhere. Although small amounts of slag-like cinders would have been associated with a smithy, or forge, surface glaze on one of the fired clay fragments points to a temperature in excess of 960°C, much higher than the working temperature of a forge (cf. Van der Merwe 1978).

Several short lengths of spiral-wound copper were recovered from the midden, fortuitously preserved in the ashy deposit. Copper wire about 1,5 mm in diameter had been beaten flat and thin, so that the edges were quite sharp, a procedure which would have entailed some annealing to reduce the brittleness of the material. To make what was evidently a bangle, the flattened wire would have been wound over a core of grass or animal hair about 4 mm in diameter. No trace of the actual core was found however. Apart from the copper, one fragment of iron was recovered from the midden. Evidently the tip of a spear or knife blade, the piece of iron was roughly triangular in shape, measuring 70 mm in length and 27 mm at its widest, but so heavily encrusted with carbonate cemented sand that it was not possible to view the original surface of the artefact.

Fragments of glass beads were recovered from three different excavation trenches in the residential area of the site. These represented an estimated four beads, all of the opaque turquoise simple wound variety (cf. Van der Sleen 1967), and similar to those recovered by Hanisch (1980) from the Bambandyanalo site of Pont Drift. Locally manufactured beads of *Achatina* land snail and of ostrich eggshell were also recovered from the midden deposit. Under low magnification, the 77 land snail beads were easily distinguished by their slightly opalescent appearance. In contrast, the six beads of ostrich eggshell were somewhat chalky in appearance and noticeably thicker in relation to their diameter than those made from the land snail shell. Two bone awls or points recovered from the midden might represent the sort of tool used in the manufacture of the beads, although the larger of the two was 67 mm in length and had a small eye at the butt end, such as might be expected in a leather-working needle.

Among the stone artefacts found on the site, fist-sized dolerite pestles were predominant, all 18 examples being associated with the outer margin of the huts in the near vicinity of the suspected grainbin supports. This would indicate that milling and storage of grain were both carried out in this part of the site. Two further pestles recovered from the huts were about half fist-sized, and their highly polished surfaces suggested that they may have been used in the preparation of hides or the powdering of cosmetic substances. A crayon of haematite was found on the surface of the ground in the vicinity of the huts. Informal flaked stone artefacts recovered from the cattle pen trenches and the midden excavation may be associated with an earlier Stone Age occupation of the Bobonong Road hill side although this is not stratigraphically demonstrated.

Both human and animal remains were recovered from the Bobonong Road excavations. The human remains occurred as scattered finds in the excavation trenches

Table 1. Small finds from Bobonong Road

Item	Area			Total
	Pen	Huts	Midden	
Figurines	4	7	6	17
Furnace fragments		2	1	3
Slag fragments			3	3
Copper wire			1	1
Iron point			1	1
Glass beads		4		4
Snail shell beads			77	77
Ostrich eggshell beads			6	6
Bone awls & points			2	2
Small rubbers		2		2
Grain pestles		18		18
Flaked stone	2		1	3
Haematite crayon		1		1

through the cattle pen, and while it was obvious that the burials had been deliberately placed in or below the dung deposit, subsequent disturbance by vehicle traffic had destroyed much of the bone. The pieces recovered included some cranial fragments, left and right proximal femurs, some phalanges and the iliac portion of a pelvis. It was not possible to establish how many separate burials were involved, although all of the material was recovered from the up-slope part of the cattle pen adjacent to the midden and might therefore represent one burial.

A detailed analysis of the animal remains, comprising a total of 468 diagnostic skeletal parts, has been presented elsewhere (Hall 1993) and those observations are summarized here for the purposes of comparison with other evidence from the site. Sheep/goat (*Ovis/Capra*) and cattle (*Bos taurus*) dominate the faunal sample from Bobonong Road with totals of 26 and 23 individuals respectively. The presence of bones from all skeletal zones of both bovid size classes II (sheep/goat) and IV (cattle) (*cf.* Brain 1974) indicates that these domesticates were slaughtered in the village. Other taxa including hare, tortoise, guineafowl and small carnivores are of minimal importance. It is an unconfirmed possibility that domestic fowl (*Gallus gallus*) were present on this site as on others elsewhere in the region (Clutton-Brock 1993). Although livestock production may have been so successful that there was little reliance on wild game, the absence of wild bovids is surprising, given the high numbers of impala (*Aepyceros melampus*) found in the area today (*pers. observ.*). However, this may reflect a local range extension consequent to the reduction of other species during the last century, as suggested by Thomas and Shaw (1991:216, *citing* Campbell 1981).

The bulk of the faunal remains, as can be expected, came from the midden (61,5%) followed by the huts and the cattle pen, with 23,7% and 14,7% respectively. The contribution of the midden would increase proportionately if the calculations were adjusted for bone occurrence per unit volume of excavated deposit. When the distribution of the bone is considered, sheep/goat remains predominate in the midden and the hut area, while the

reverse obtains in the sample from the cattle pen, where 86% of the cranial sample and 78% of the post-cranial bone is attributable to cattle. As Hall (1993) points out, even though the bone sample from the cattle pen is small, and the more abundant species on the site (sheep/goat) would therefore be expected to predominate, the reverse is the case. While these figures could be explained by different preservational circumstances in different areas of the site favouring the larger bone fragments of cattle over sheep/goat, it is as likely they reflect intentional patterns in the disposal of bone from slaughtered cattle.

Almost 50% of the sheep/goat were slaughtered in their second year (following Schmid 1972), and most were apparently slaughtered by their fourth year (Hall 1993). This suggests take-off of prime breeding animals rather than immatures, a somewhat anomalous pattern given that one norm for optimal herd management is to cull redundant males early on in their life and males and females at the other end of the age scale, when both in turn become reproductively redundant. The Bobonong Road slaughter pattern is nonetheless comparable to other Iron Age faunal assemblages from Botswana (Welbourne 1975; Turner 1987a, 1987b) and it is therefore possible that in these circumstances a large proportion of the young adult animals were castrated males rather than breeding stock. Estimates for the age at death of cattle indicate that relatively young as well as old animals were slaughtered but the sample size is too small for detailed interpretation.

DISCUSSION

The survey and excavation of stratigraphic features at Bobonong Road indicate a general layout in which the cattle pen, originally some 30 m in diameter and circular in shape, occupied the central position on the site. The midden deposit lay immediately up-slope and adjacent to the cattle pen. Surrounding these two clearly defined features was a clearing, up to 40 m wide, containing the huts and other related features such as grainbin supports. There is no clear indication of the spacing between the huts, and it is uncertain whether there were huts on both sides of the cattle pen, almost encircling it, or on only the up-slope side, ending at the midden. The stratigraphy of the site indicated a single occupation component which was dated to the second half of the thirteenth century AD on the basis of charcoal recovered from the midden excavation. This date, places the site in the Mapungubwe phase of the Leopard's Kopje Tradition (Maggs 1984), although the ceramic assemblage more closely resembles the earlier Bambandyanalo phase as described by Hanisch (1980). The presence of glass trade beads on the site likewise reflects the integration of Bobonong Road within the regional economy and settlement hierarchy, rather than long distance trade contacts between the site and the outside world. The beads and other evidence of trade also reflect the changing conditions at the turn of the first millennium, when the first indications of state formation begin to appear in the archaeological record of the Limpopo-Shashe region.

The evidence from the site confirms Huffman's (1984) expectations for the archaeological characteristics of Southern Bantu site layout, although the full extent of the area occupied by the huts is not clear. However, the relationship between the huts and cattle pen is confirmed, as is the concomitant segregation of male and female, or high and low status areas. For example, while cattle bones were found to be concentrated in the cattle pen deposits along with human remains, grain storage and milling artefacts were concentrated at the rear of the huts. Consistent with these gender and status distinctions was the disposal of small stock remains in the midden rather than the cattle pen, and the fact that clay figurines representing women were primarily found near the huts. While the midden and cattle pen were the most obvious archaeological features of the site, the bulk of the ceramics were found in association with the far less visible hut remains. These observations clearly illustrate not only the degree to which the symbolic precepts of Southern Bantu social organization determined the structured use of space at Bobonong Road, but their fundamental relevance for archaeological investigations.

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