Glass beads from Mutamba: patterns of consumption in thirteenth-century southern Africa

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Abstract

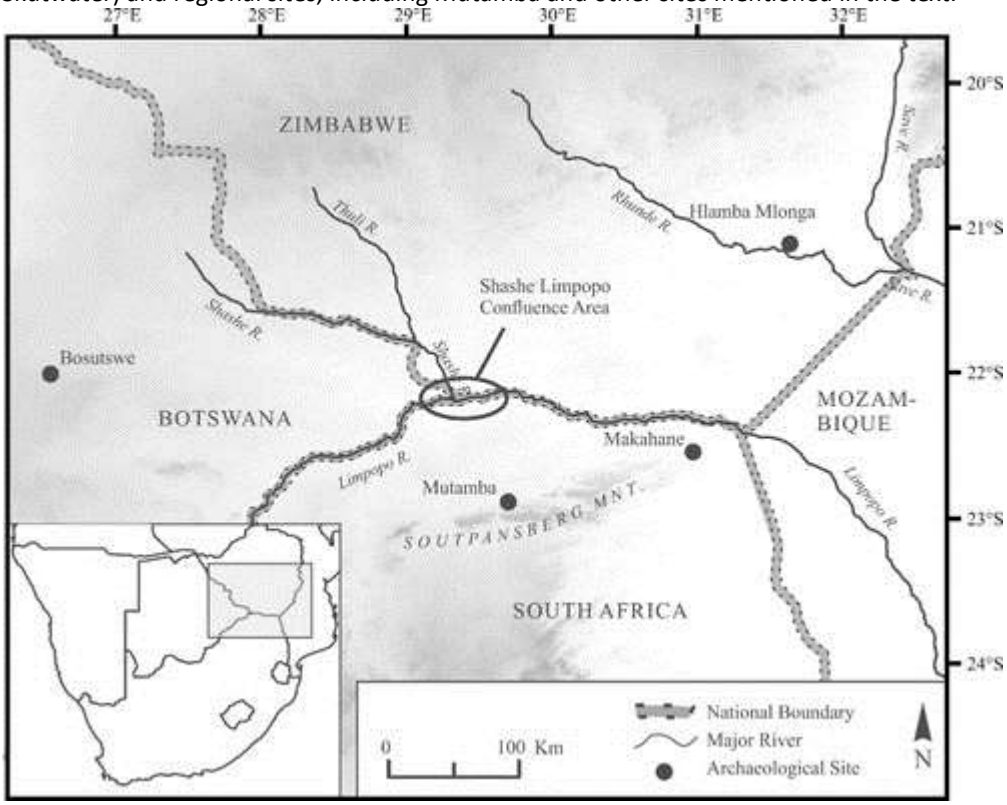
Mutamba is a settlement located on the northern slopes of the Soutpansberg in South Africa. Radiocarbon and material culture suggest contemporaneity with regional developments of social complexity primarily concentrated in the Shashe-Limpopo Confluence Area around the important site of Mapungubwe. The spatial location of Mutamba on the apparent political and economic periphery of Mapungubwe means that it is well suited to investigate patterns of distribution between centres of political influence and their larger hinterlands. It is proposed that trade goods followed variable patterns of distribution and consumption shaped by patterns in taste preference. In addition, this study suggests that, far from being deprived of trade goods, hinterland communities actively participated in regional networks of trade and exchange.

Keywords: Glass beads, Mapungubwe, trade, periphery, hinterland, political economy, social complexity

Introduction

The southern African Middle Iron Age — dating to between roughly AD 900 and AD 1300 — was a period when exotic trade goods from the Indian Ocean World first appear in appreciable quantities on sites in the interior of this part of Africa. Metals (especially gold), as well as produce from hunting (e.g. ivory and skins), were exported in return for finished products from the Near East, South and Southeast Asia. Glass beads, in particular, were a much sought-after trade item in southern Africa. In northern South Africa, this trade was closely linked to the rapid increase in social, economic and political complexity in the Shashe-Limpopo River Confluence Area (SLCA), where the borders of modern-day Botswana, Zimbabwe and South Africa converge. Here, within a period of roughly 400 years, a succession of large communities — first at Schroda (Hanisch 1980, then at K2 (Bambandyanalo) and finally at Mapungubwe (Fouché 1937) — dominated the political landscape (Huffman 2007; but see also Chirikure *et al*. 2013). Glass trade beads feature prominently at these sites as exotic trade items. This paper, though, focuses on a small hinterland site known as Mutamba (Loubser), located in northern South Africa approximately 80 km from Mapungubwe (Figure 1), as a means to explore the regional distribution of glass beads during this period.

Figure 1. Location of the Shashe-Limpopo Confluence Area (with sites K2, Leokwe, Mapungubwe, Schroda and Skutwater) and regional sites, including Mutamba and other sites mentioned in the text.



The Shashe-Limpopo River Confluence Area is of primary significance in a southern African context since it is here that social complexity first becomes apparent archaeologically. Social complexity in the region is primarily associated with the site of Mapungubwe (*c*. AD 1220–1290), although this process is already apparent during the preceding K2 period (*c*. AD 1000–1220). Early signs of increasing complexity at the settlement of K2 include rapid population growth, increased trade activities and the expansion of political authority. The process of social stratification seems to have culminated around AD 1220 when most of the population relocated from K2 to Mapungubwe Hill, around 1 km away. Here, élite members of society settled on an elevated hilltop while commoners lived around its base. This physical separation of social classes (evident for the first time here in southern Africa) was further reinforced by differential access to and use of material objects. Some scholars (e.g. Huffman 1982, 1986; Calabrese 2000, 2007) argue that élites controlled the redistribution of exotic trade items — a process that effectively formed the base of political and economic power in the region. Political power and social status, it would seem, had become intricately tied to the control of trade by augmenting more traditional forms of power and wealth.

Understandably, much of the research and discussion concerning the SLCA has tended to focus on the major sites and their role in the development of social and political complexity. The relative lack of regional studies means that it has always been unclear how the SLCA as a political and economic centre interacted with its hinterland, by which I mean here those communities located outside the SLCA, but articulated with it politically, economically or socially. Thus, the hinterland of the SLCA would include the area north of the Soutpansberg in South Africa, as well as southeastern Botswana and southwestern Zimbabwe. The

relationship between the major settlements in the SLCA and those smaller hinterland communities is rarely stated. Their absence in the larger meta-narrative of increased complexity can easily be construed as a general lack of socio-economic influence and power coupled with dependence on the SLCA for finished items of value. Superficially, then, the situation would seem to resemble World Systems and Dependency models of an inert periphery counterpoised to a dynamic political centre (cf. Wallerstein 1974). Prior to the recent excavations at Mutamba, this seemed, indeed, to have been the case for sites in the northern Soutpansberg. Earlier excavations did not find any trace of contact with the Mapungubwe centre, apart from a shared ceramic style (Loubser). However, the Mutamba data, as well as those from other sites located outside the SLCA, make it increasingly clear that hinterland communities did have access to exotic trade items typically associated with élite status in the SLCA. Since the Mapungubwe world was evidently not organised along core-dependency models, it is worth considering how the consumption of goods — as seen in distribution patterns — differed between the SLCA and its greater hinterland.

While a whole swathe of goods was potentially traded and exchanged between Mapungubwe and other sites, this paper specifically focuses on the glass beads from Mutamba. The 348 beads from this site are, like all other glass beads in the southern African interior, ultimately of foreign manufacture (Robertshaw *et al*. 2010; Wood 2011). They arrived via long distance trade routes that connected South and Southeast Asia to the East African coastline. Here, they were traded via overland routes, which often underpinned the political and economic power of local élites in the African interior. Studies from across the globe have long attested to the role of trade items in expanding and maintaining political power (e.g. Renfrew and Shennan; Brumfiel and Earle; Earle1987: 294–297; McIntosh 1999). As a result, glass beads are well suited to inferring patterns of (re)distribution between the SLCA and its hinterland. When framed within a local context, the Mutamba glass bead assemblage suggests that, far from being deprived of trade goods, hinterland communities actively participated in regional networks of trade and exchange.

Background

Mutamba is located on a foothill of the northern slopes of the Soutpansberg, an east-west running mountain range in the northern part of South Africa's Limpopo Province. The settlement is considered to be relatively small for its period, with an approximate extent of 1.2 ha (Figure 2). It sits in a saddle of a low ridge, bordered on the east by the Mutamba stream. The site is clearly visible through a dense growth of *Cenchrus* sp. grass that thrives on the nitrate-rich soils of the archaeological deposits. Mutamba's main occupation was clearly linked to Mapungubwe in the SLCA, as can be seen in its shared ceramic style and trade items and as is confirmed through radiocarbon dating (Figure 3 and Table 1).

Figure 2. Plan of Mutamba indicating the location of the excavated areas.

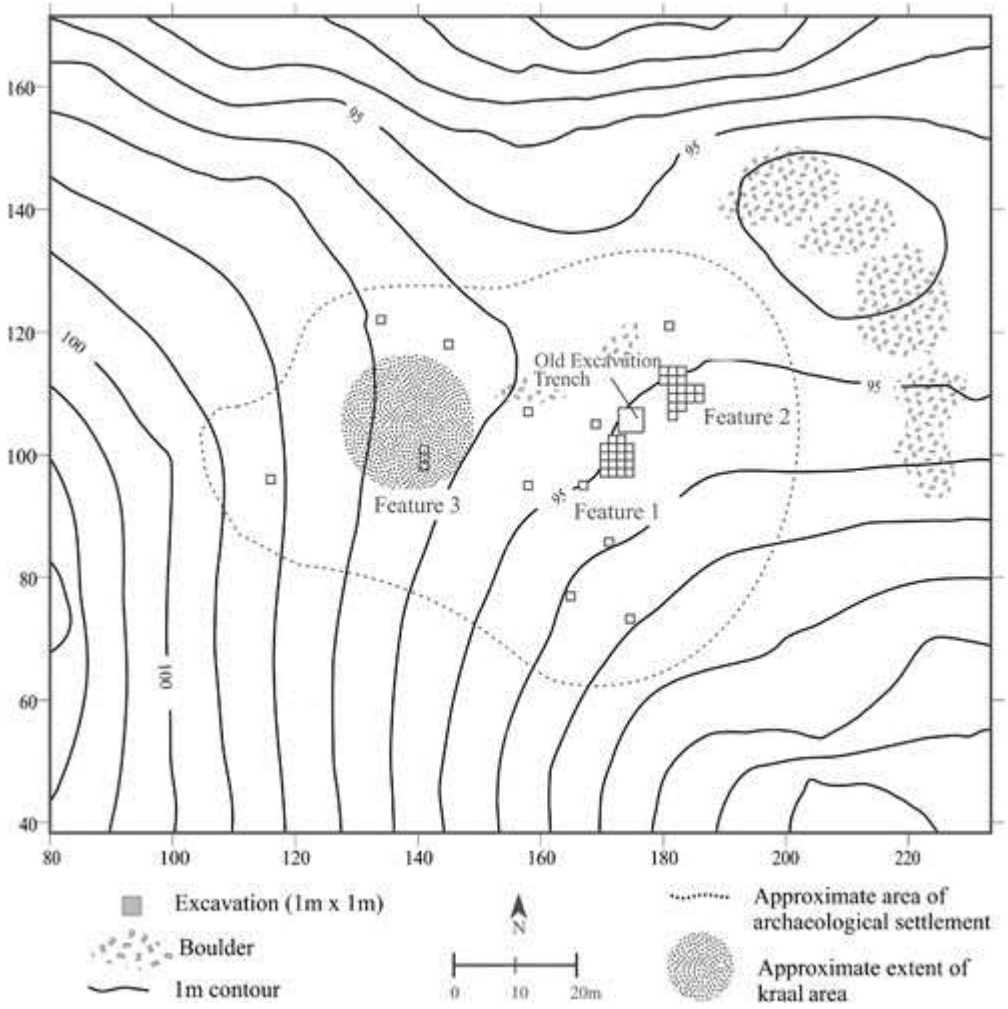
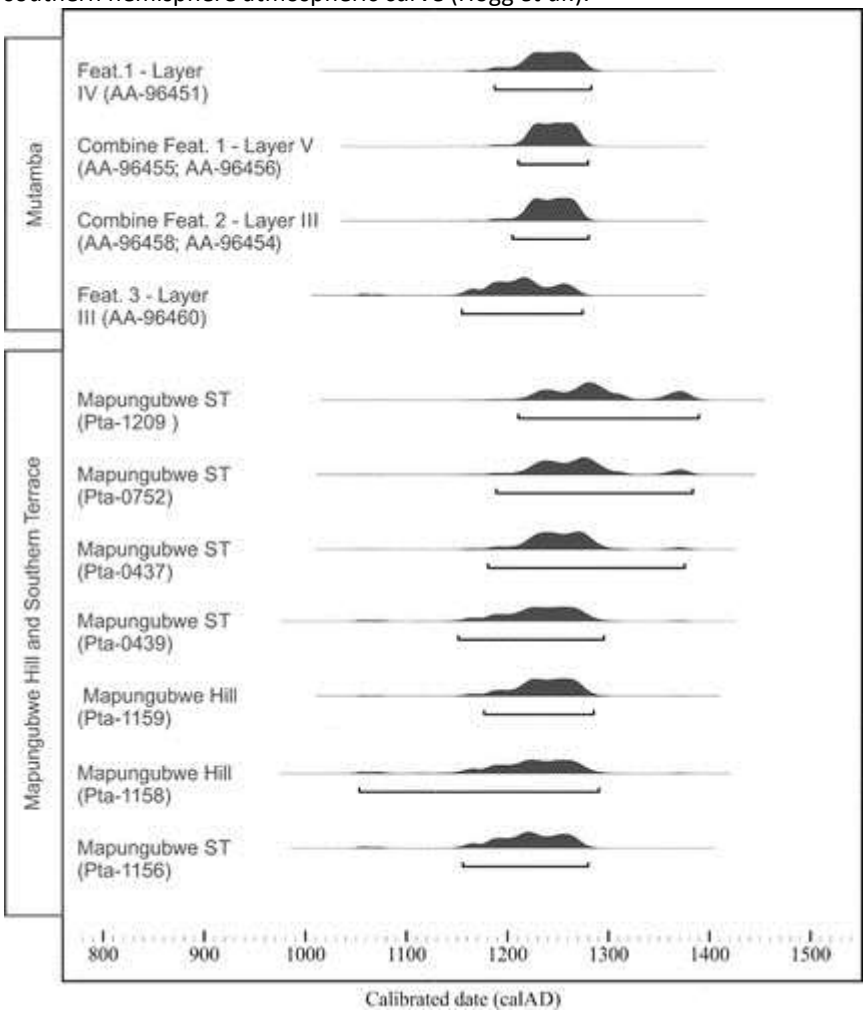


Table 1. Radiocarbon dates from the excavations undertaken at Mutamba in 2010–2011. Generated by OxCal v4.2.3 (Bronk Ramsey 2009; 2013) using the Southern hemisphere atmospheric curve (Hogg *et al*.).

Feature	Laboratory number	Locus	Layer	Radiocarbon age BP	Context description	Calibrated 2-sigma range cal. AD	Combined date
1	AA-96452	2095	III	692 ± 35	Gravel floor surface	1287–1393	
	AA-96451	2178	IV	834 ± 35	Pit fill	1187–1283	
	AA-96455	2042	V	862 ± 35	Clay floor surface	1161–1275	1211–1280
	AA-96456	2042	V	692 ± 35	Clay floor surface	1287–1393	
	AA-96457	2040	V	803 ± 35	Dung-smeared courtyard floor	1212–1296	
2	AA-96458	2011	III	842 ± 35	General midden-like material	1182–1280	1205–1280
	AA-96454	2044	IV	832 ± 35	Burnt hut remains	1184–1285	
	AA-96453	2077	IV	960 ± 35	Burnt hut remains	1034–1202	
	AA-96459	1176	IV	955 ± 35	Clay floor surface	1039–1206	1047–1178
3	AA-96460	1043	III	873 ± 35	Layer of burnt dung and ash	1155–1274	

Figure 3. Selected radiocarbon dates from Mutamba plotted with selected dates from the occupation of Mapungubwe Hill and Southern Terrace areas. Generated by OxCal v4.2.3 (Bronk Ramsey 2009,2013) using the southern hemisphere atmospheric curve (Hogg *et al*.).



Its location on the northern slopes of the Soutpansberg places Mutamba on the margins of the Mapungubwe sphere of influence. The Soutpansberg range, although only 30 km at its widest, can rise to over 1000 m over a distance of less than 5 km. It thus creates a significant physical barrier, cut only by a few river valleys that provide natural inroads into the mountains. This natural impediment to movement also seems to have defined social boundaries, at least in the early second millennium AD: although northern foothill settlements, like Mutamba, Prince's Hill and Vhunyela, are spatially much closer to communities of the southern slopes (all associated with Eiland ceramics), their material culture mostly resembles that of sites in the SLCA, more than 80 km away (Antonites 2012).

Excavations and sampling at Mutamba

Excavations at Mutamba were conducted during 2010 and 2011. This research expanded on earlier test excavations by Loubser (1991). The first phase of the renewed research concentrated on excavating several 1 x 1 m test units across the site. These units were selected through stratified random sampling (Orton 2000; Banning 2002: 115) with the specific aim of retrieving a representative sample of material culture. The second phase of excavations horizontally expanded three areas where the test units uncovered architectural

features. Feature 1 is a series of hut floors and midden-like deposits on the saddle part of the site. It was excavated in a contiguous 18 m^2 area and contained five stratigraphic layers. Feature 2 was a 17 m^2 excavation that exposed a fragmented floor, as well as the burnt *daga* overburden of the original clay hut. Feature 3 was a 3 x 1 m unit excavated in an area where the original test unit revealed a layer of burnt cattle dung. It contained three layers and was identified as a stock enclosure (or kraal).

During excavation, flotation samples (each measuring ten litres) were collected from each context at a 1 x 1 m resolution; deposits that were particularly rich in material were sampled in total. The data from this sampling strategy yielded a wealth of micro-artefacts and, in particular, 332 glass beads. Individual glass beads from this period — typically less than 3.5 mm in diameter, corroded and/or covered in dirt — are notoriously difficult to identify when they are not part of larger finds such as necklaces, burial goods or caches. The fact that over 95% of the glass beads from Mutamba were recovered from the heavy fraction of flotation samples highlights the potential of this method for extracting more detailed information from archaeological sites of this period. The number of glass beads is particularly relevant if one considers that earlier excavations of the same site — but without micro-sampling — failed to uncover any glass beads at all (Loubser 1991).

Radiocarbon dates from Feature 1, 2 and 3 provided a two standard deviation range from the late eleventh through to the early fourteenth centuries (Figure 2 and Table 1; see Antonites 2012 for additional dates and discussion). However, material culture from the site — in particular beads (see below) and ceramic stylistic data — was subsequently able to refine this range to the mid-thirteenth century.

Glass beads in the Shashe-Limpopo Confluence Area

Glass beads have long been used to infer trade while also serving as chronological markers (Van Riet-Lowe 1937, 1955; Schofield 1938). Continued research has resulted in increasingly refined classification schemes based on their morphological and chemical characteristics (Davison; Saitowitz 1996; Wood 2000, 2005, 2009, 2011; Robertshaw *et al*. 2010). For comparative purposes, the classification and methodology presented here closely follows Wood's (2011) example for southern African glass beads. This is currently the most widely accepted bead classification scheme in the region. Using primarily morphological features, she defined several bead series. More recently, these have been shown to be directly related to chemical composition and place of manufacture (Robertshaw *et al*. 2010).

A relatively refined temporal resolution means that separate series are associated with distinct cultural periods of the SLCA. The earliest period is marked by the importation of beads that belong to the Zhizo Series from the eighth to the mid-tenth centuries. By the mid-tenth century, two closely related bead series — the K2 Indo-Pacific Series and the East Coast Indo-Pacific Series — replaced the Zhizo beads. By AD 1250 — more or less coinciding with the move of the settlement of K2 to Mapungubwe — beads from the Mapungubwe Oblate Series became the dominant bead type. Towards the end of Mapungubwe's occupation, beads from the Zimbabwe Series also started to appear. This series is a continuation of the Mapungubwe Series, which it resembles both morphologically and chemically, but with differences in size and colour (Wood 2009).

The Mutamba bead collection

At the broadest level, the Mutamba beads can be grouped according to their method of manufacture, distinguishing between drawn and wound beads.

Drawn beads

Drawn beads are made through a process in which a perforated glass tube is cut into individual bead lengths (Wood 2009: 220). The Mutamba assemblage includes 342 drawn glass beads with oblates the most common shape (Table 2). Sizes were almost universally within the small or minute categories with only eight medium beads (Table 3). Almost three quarters of the beads were categorised as short. When combined with standard length beads, these beads comprised almost 97% of the entire assemblage (Table 4). These length ranges are typical for most thirteenth-century assemblages in southern Africa (Wood 2005: 140–143). More specifically though, the outright dominance of small and minute beads is characteristic of the Mapungubwe Oblate Series (Wood 2011: 76).

Table 2. Distribution of glass bead shapes in the Mutamba assemblage (cf. Wood 2005).

Shape	N	%
Cylinder	103	30
Oblate	217	64
Tube	19	6

Table 3. Distribution of size categories in the Mutamba glass bead assemblage (cf. Wood 2005).

Size	N	%
Minute (< 2.5 mm)	159	48.8
Small (2.5–3.5 mm)	**159**	48.8
Medium (3.5–4.5 mm)	8	2.4

Table 4. Distribution of glass bead length categories in the Mutamba assemblage (cf. Wood 2005).

Ratio	Definition	N	%
Short	Length ≥1/5 and <4/5 Diameter	243	73.4
Standard	Length ≥4/5 and <1 1/5 Diameter	79	23.0
Long	Length ≥ 1 1/5 and <2 Diameter	13	3.6

Six colour categories were recorded, with black by far the most numerous, followed by blue-green and brownish-red. Blue, yellow and green beads occur in much smaller quantities (Table 5). Compared to assemblages from Mapungubwe, the main difference is the absence of plum and orange colours in the Mutamba assemblage. These colours are, however, rare even in the much larger assemblages from the SLCA (Wood 2011).

Table 5. Distribution of bead colours in the Mutamba glass bead assemblage (cf. Wood 2005).

Colour	N	%
Black	213	65.3
Blue	2	0.6
Blue-green	56	17.2
Brownish-red	38	11.7
Green	11	3.4
Yellow	6	1.8

Black beads

Opaque black oblate beads were by far the most common bead type at Mutamba (N = 213). These beads were the dominant type in all stratigraphic layers (Table 6). Sizes tended to vary between minute and small, although two medium examples were also recorded. Shapes are mostly oblate, although a few cylinders and tubes are also present.

Table 6. Mutamba: distribution of bead colours per feature and stratigraphic layer of Features 1, 2 and 3.

Feature	Level	Black	Blue	Blue-green	Brownish-red	Green	Yellow	Total
1	I	14	–	2	3	–	–	19
	II	18	–	8	3	–	–	29
	III	44	–	10	9	4	1	68
	IV	12	1	3	3	–	1	20
	V	14	1	5	7	2	1	30
2	I	–	–	–	–	–	–	–
	II	9	–	2	1	–	1	13
	III	13	–	6	1	–	–	20
	IV	54	–	10	4	4	1	74
3	I	–	–	–	–	–	–	–
	II	1	–	–	–	–	–	1
	III	3	3	2	–	–	–	8

In general, black beads do not occur in the eleventh-century K2 Indo-Pacific Series and are rare in the fifteenth-century Khami Indo-Pacific Series (Wood 2009: 223). They do occur, however, in the East Coast Indo-Pacific, as well as the Zimbabwe Series. Distinguishing Mapungubwe Oblate black beads from black beads of these other two series is difficult to perform on an individual bead level (cf. Wood 2009: 223). However, taking the rest of the material assemblage into account, most black beads are considered part of the Mapungubwe Series, but with some individual beads potentially belonging to the East Coast Indo-Pacific Series or the Zimbabwe Series.

A large proportion of the black beads in the Mutamba assemblage were corroded and heavily patinated. In her description of the beads from Hlamba Mlonga (Thorp 2009), a thirteenth-century site in Zimbabwe, Wood (2009: 223) mentions that these ‘devitrified’

black beads often 'appear to be white (or somewhat golden when wet)'. This corrosion seems to be restricted to black beads from the Mapungubwe Oblate and Zimbabwe bead series (Wood 2011: 76). The corrosion observed in these beads may be chemically related to low levels of sodium oxide (Na_2O) (Robertshaw *et al*. 2010: 1907). The corrosion observed in the Mutamba assemblage provides further evidence that the assemblage forms part of the Mapungubwe Oblate Series.

Blue-green beads

The next most common category from Mutamba was blue-green translucent beads (N = 56), small to minute in size and either oblate or cylindrical in shape. Blue-green hues typically tended to be on the greener side, but also included turquoise and blue hues. All the blue-green beads, save one opaque example, were translucent.

Blue-green beads from the Mapungubwe Oblate Series typically tend to be opaque. On the other hand, beads from the K2 Indo-Pacific series are transparent to translucent and often tubular in shape (Wood 2009: 222), while those from the Zimbabwe Series are also translucent, but larger in size (Wood 2011: 77). At Mutamba, blue-green beads occur in all the strata from Feature 1, but are clearly more prevalent in the lower levels of Feature 2 (Table 6). Therefore, given their stratigraphic distribution, bead shape, diaphaneity and typically small to minute size, it is likely that at least some of the Mutamba blue-green beads could belong to the K2 Indo-Pacific series.

Brownish-red beads

Around 10% of the Mutamba beads were opaque brownish-red (N=38). These beads are mostly oblate and cylindrical in shape and range between small and minute in size. All these beads are opaque except for two opaque-translucent examples. Brownish-red beads from the East Coast Indo-Pacific Series characterise late K2 and early Mapungubwe assemblages (Wood 2011). However, they also occur in later assemblages with the Zimbabwe Series (Wood 2009: 222). As seen in Table 6, brownish-red beads occur in all the strata from Feature 1, with slightly higher numbers lower down. In Feature 2, only four of these beads were found, all associated with the earliest strata. The brownish-red beads from Mutamba therefore probably belong to the site's earliest occupation phase, which radiocarbon dates place in the mid- to late twelfth century. Alternatively, some could represent early examples of the Zimbabwe Series.

Other colours

Green and yellow beads occur in small quantities at Mutamba. These colours only accounted for 4% of the entire bead assemblage and were restricted to Layers III to V in Features 1 and 2. Three yellow beads were also found closer to the surface in Layer II. Both the yellow and green beads tended to cluster on the translucent end of the scale. Cobalt blue beads were rare, with only two examples –— one opaque and one transparent. The latter probably belongs to the Mapungubwe Oblate Series (cf. Wood 2009: 223). The one opaque blue bead from Mutamba may be intrusive, as it seems uncharacteristically 'modern' in relation to other beads from the site. In addition, opaque blue beads did not

appear in southern Africa until the Khami Indo-Pacific Series of the fifteenth century (Wood 2011).

At the assemblage level, the drawn beads from Mutamba have their closest association with the Mapungubwe Oblate Series. The dominance of black beads in all stratigraphic layers and the mostly oblate shapes most clearly suggest this association. Some beads, notably the tubular transparent blue-greens and some of the brownish-reds, may be part of the earlier K2 and East Coast Indo-Pacific Series. This conclusion fits with the late twelfth- to mid-thirteenth-century radiocarbon dates for the main occupation of Mutamba, as well as the Mapungubwe ceramic stylistic types found there.

Wound beads

In addition to the dominant drawn bead assemblage, four wound beads were found at Mutamba. In southern Africa's interior, such beads are much rarer than their drawn counterparts. Wound beads from the Mapungubwe period are typically oblate to spherical in shape –— save one example of a bi-cone wound bead –— and measure in the range of 11.5 mm x 8 mm (Wood 2005: 58). Each wound bead was formed individually by first dipping a mandrel into molten glass and winding it until the desired bead size had been achieved. The hot malleable glass was then shaped by marvering, i.e. by rolling it on a flat surface (Wood 2005: 30). Wood (2009: 220) believes that because wound beads take more effort and time to make –— each bead needing to be singly formed by hand –— they may have been more valuable than the mass-produced drawn beads.

The four Mutamba wound beads were all recovered from midden contexts and broken in half, which perhaps suggests the reason for their initial discard. All four were translucent-opaque spheres. Two are blue-green (B157, B159), one yellow-green (B160) and another (B158) blue-green with pale-yellow to yellowish-brown striations (Figure 4). It seems that the two colours of the latter are a result of differential fading of the glass, rather than the use of different coloured glasses in the winding process. All four beads have similar dimensions, with diameters of between 7.1 and 7.9 mm and lengths varying between 6.5 and 8.6 mm (Table 7). One bead (B157) was eroded and patinated with a white crust, similar to that on some of the black beads from the Mapungubwe Oblate Series. I consider the significance of these wound beads in more detail below.

Figure 4. Wound glass beads from Mutamba. From left to right: B157 to B160.

Table 7. Wound beads from Mutamba.

Catalogue number	Shape	Diameter	Length	Weight (g)	Diaphaneity	Colour
B157	Sphere	7.94	7.71	0.299	Translucent-opaque	Blue-green
B158	Sphere	7.67	7.39	0.318	Translucent-opaque	Blue-green
B159	Sphere	7.11	8.61	0.238	Translucent-opaque	Blue-green
B160	Sphere	7.77	6.56	0.227	Translucent-opaque	Blue-green

Regional distribution of glass beads

During the Mapungubwe period exotic items are differentially distributed on élite sites in the Shashe-Limpopo Confluence Area. This pattern is particularly evident in the distribution of glass beads at Mapungubwe itself. The approximately 105,000 glass beads from the hilltop area stand in marked contrast to the approximately 500 beads from the contemporary levels on the lower status Southern Terrace (Wood 2005: 139). Many of the beads from the Hill were part of élite burials –— either worn as adornment or found in caches of grave goods –— and clearly demonstrate the wealth and abundant access to glass beads by the higher status residents of this part of the site (Fouché 1937: 126). Although it is impossible to calculate the number of beads per cubic metre of deposit from the available information, Saitowitz (1996: 201) counted 26,000 glass beads from one grave alone. Many other burials in the same area were also associated with thousands of beads (Saitowitz 1996: 101–102). It seems likely that this is only a fraction of the actual number of beads encountered during excavations, since the early excavators of the site found that collecting the tiny glass beads was too time-consuming to pursue (Fouché 1937: 5).

Bead quantities from Mapungubwe Hill dwarf those from all other sites in southern Africa up to the thirteenth century. However, these figures are difficult to relate directly to those from other sites in the region since much of the Mapungubwe data are missing or incomplete and as yet, there is no indication of the total number of beads from K2 and Mapungubwe (see also Wood 2005: 127). The more detailed excavations by Meyer (1998) of units K8 and F4 on the Southern Terrace at Mapungubwe therefore at least provide a point of reference for one area of the site, although even here some layers have missing bead data (see Wood 2005: 138).

Comparing bead usage and availability at a regional scale is also difficult since sampling and recovery techniques all influence bead numbers. The small number of excavated and sufficiently published Mapungubwe period settlements further complicates direct regional comparisons. Nevertheless, density (bead numbers per volume of excavated soil) does provide tentative values for comparisons between sites from this period. While the data for density calculations from élite areas of Mapungubwe are absent, we can draw some inferences from the non-élite areas of the Southern Terrace and commoner sites in the region. This small comparison shows that the highest density of beads was found on Mapungubwe's Southern Terrace (Table 10). Meyer (1998) identified four ‘Main Occupation Levels’ at Mapungubwe, of which Occupation Phase 1 and Phase 2 (as defined by Meyer 1980: 50) are associated with the consolidation of political power and élite settlement on Mapungubwe Hill. The glass bead density for these layers (with volumes calculated from stratigraphic and plan drawings in Meyer 1998) suggest that K8 Occupation Level 1 had

around 29.6 beads per m^3, while Occupation Level 2 numbered 8.4 per m^3 (refer to Wood 2005 for bead counts per layer). At F4, Occupation Phase 1 included around 59.9 beads per m^3 while Phase 2 had 7.8 beads per m^3. Both excavations at the Southern Terrace of Mapungubwe, therefore, show a similar increase in bead numbers in the last phase of occupation. The bead density of Mapungubwe stands in stark contrast to the situation at non-élite sites in the SLCA, such as Skutwater and Leokwe A. Here, densities between about three and six beads per m^3 are the norm (Table 10; this does not include the additional 1351 beads from the Skutwater burials). One can therefore tentatively conclude that even the lower status areas of Mapungubwe, such as the Southern Terrace, still contain more beads per cubic metre than do non-élite sites located elsewhere in the Shashe-Limpopo Confluence Area.

Compared to these non-élite sites in the SLCA, Mutamba had a higher frequency of beads, with around 12 per cubic metre. This could, however, be a direct result of widely differing sampling and recovery strategies. Most beads from Mutamba were recovered from flotation samples and none of the other sites employed this recovery method. It is probable, therefore, that, when compared to Mutamba, glass beads at other sites may be under-represented. The number of beads from Mutamba, therefore, probably reflects numbers close to those from sites in the SLCA.

Bead distribution at Mutamba

Bead distribution at the site level also provides some points for comparison. At larger sites like Mapungubwe and Bosutswe (see Denbow *et al*. 2008) bead distribution suggests definite patterns of spatial and contextual differences. The clearest example is the number and density of glass beads on Mapungubwe Hill contrasted to commoner areas of the site. Similarly, some burials are associated with far higher numbers of beads than others are. The inference is that glass beads are associated with displays of social status, potentially serving as ‘cultural diacritics’ or social status cues (cf. Barth 1969: 14; Wobst 1977 Wobst, H.M. 1977: 328). It follows, then, that glass bead distribution patterns can provide evidence for social differences at the site level.

The spatial data from Mutamba show that there is little distinction in the spatial and contextual distribution of glass beads on the site. Of a total of 285 excavated loci, more than half of the contexts (N = 135) contained glass beads, no doubt due to the success of the flotation process in recovering small finds. The distribution of glass beads per excavated context indicates that general midden contexts contained the majority of the beads (Table 8). This may be because small beads were susceptible to being swept up and deposited with other household trash. The fact that the second highest bead count came from deposits in contact with floor surfaces lends some support to this interpretation. Spatially, the data indicate a uniform dispersal pattern across the site: no areas at Mutamba showed significantly higher concentrations of glass beads. Unfortunately, local examples of spatially representative and well-contextualised bead assemblages from smaller sites are rare, thus making regional comparisons tentative. However, the Mutamba data suggest that social distance, or at least the signalling thereof, was relatively unpronounced at smaller sites. Indeed, it is likely that all households at sites like Mutamba had relatively similar levels of access to traded items like glass beads.

Table 8. Mutamba: number of glass beads per excavated context

Context description	Black	Blue-green	Brownish-red	Green	Yellow	Blue	Indeterminate	Total
Midden	71	21	7	4	–	–	7	110
Floor contact (material on floor surface)	45	10	7	5	3	–	2	72
Unvitrified dung and ash	13	7	9	1	–	2	1	33
Excavated surface collection	19	4	4	–	–	–	2	29
Burnt hut remains	19	4	1	1	1		1	27
General archaeological deposit	17	3	5	–	1	–	–	26
Pit fill: ash	8	3	3	–	–	–	–	14
Surface outside structure	5	2	2	–	–	–	–	9
Gravel floor	4	2	–	–	–	–	1	7
Decomposing bedrock with artefacts	1	1	–	–	1	–	–	4
Sterile	1	1	–	–	–	–	–	2
Rocky fill	–	1	–	–	–	–	–	1
Long-term erosion-deposited matrix	1	–	–	–	–	–	–	1
Ashy deposit (not a clear lens or pit)	1	–	–	–	–	–	–	1
Hearth	1	–	–	–	–	–	–	1

Discussion

Analysis of the Mutamba bead assemblage suggests that most of the beads found there form part of the late twelfth to mid-thirteenth century Mapungubwe Oblate Series (Table 9). This interpretation corresponds to the radiocarbon data, which place Mutamba as contemporary with the occupation of Mapungubwe. Similarly, the density and repertoire of drawn beads at Mutamba are not dissimilar to those of commoner sites elsewhere in the Shashe-Limpopo Confluence Area, implying comparable degrees of access to trade beads. Troughs and peaks created by variability of consumer status, value, local tastes and preferences influenced the regional distribution of glass beads. While the dynamics of élite-commoner exchanges for this period are still poorly understood, it is clear that élites were at the apex of this network in the SLCA. Within the ubiquitous category of drawn beads, it seems that élites preferred black beads above other colours in the Oblate Series and that these were smaller and rounder than those of non-élite sites (Wood 2005: 141, 215, 2011: 76). However, the presence of four wound beads on Mutamba does point to some distinct differences between the distribution of goods in the SLCA and the hinterland.

Table 9. Bead Series distribution at Mutamba

		Mapungubwe Oblate Series		Indo-Pacific Series		Mapungubwe/Indo-Pacific Series?		Wound Series		Total
Feature	**Level**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1	I	16	84.2	3	15.8	0	0	0	0	19
	II	19	67.9	4	14.3	4	14.3	1	3.6	28
	III	49	75.4	12	18.5	4	6.2	0	0	65
	IV	14	73.7	5	26.3	0	0	0	0	19
	V	18	22.5	7	8.8	55	68.8	0	0	80
2	I	0	0	0	0	0	0	0	0	0
	II	11	84.6	1	7.7	0	0	1	7.7	13
	III	13	65.0	4	20	2	10	1	5.0	20
	IV	61	84.7	8	11.1	2	2.8	1	1.4	72
3	I	0	0	0	0	0	0	0	0	0
	II	1	100	0	0	0	0	0	0	1
	III	4	50	2	25.0	2	25.0	0	0	8

Table 10. Regional frequency of beads from Mapungubwe-period sites in the Shashe-Limpopo Confluence Area, southern Africa (Calabrese; Van Ewyk 1987; Meyer 1998; Wood 2005). Mapungubwe Occupation Phases are those reported by Meyer (1980: 50; cf. Meyer). At K8, Occupation Phase 1 is the combined stratigraphic layers 1–3 and Occupation Phase 2 is stratigraphic layers 4–8. At F4 Occupation Phase 1 comprises layers 1–2 and Occupation Phase 2 is layers 3–7(ii).

Site	m^3	N	Beads per m^3
Leokwe Area A	18.5	62	3.4
Skutwater	222	1250	5.6
Mutamba	28.8	346	12.0
Mapungubwe K8 Occupation Phase 1	5.48	162	29.6
Mapungubwe K8 Occupation Phase 2	15.06	126	8.4
Mapungubwe F4 Occupation Phase 1	6.69	401	59.9
Mapungubwe F4 Occupation Phase 2	14.73	116	7.8

While drawn beads are a common find at sites from the period, wound beads are much rarer. Within the SLCA, they are only known from three separate finds, all part of the larger Mapungubwe settlement. One was found on Mapungubwe Hill in association with an élite burial accompanied by a number of gold items (Gardner 1958). The other two examples both come from Mapungubwe-period graves at K2. The first example is associated with Skeleton 31, which contained one wound bead among a number of drawn beads (Van Riet-Lowe 1955). The second was an infant burial with a necklace that contained at least seven large (9.5–11 mm diameter), roughly spherical, multiple-wound blue-green beads (Steyn *et al*. 1999). In addition, this infant had 157 small, drawn, oblate glass beads (149 opaque black, seven translucent blue-green and one opaque Indian red) and one small transparent

turquoise cylinder (Wood 2000). The wound beads seem to have been strung together with the drawn beads and worn around the infant's body, arms and neck (Steyn *et al*. 1999: 104).

Besides Mutamba, other Mapungubwe-period settlements where wound beads have been found are all located well outside the SLCA and not all are necessarily associated with Mapungubwe ceramics (Huffman 2007). These sites are Bosutswe in eastern Botswana, Hlamba Mlonga in Zimbabwe and Makahane in northeastern South Africa. The two Bosutswe wound beads are blue-green oblates (Wood 2009: 221). A similar bead was found at Hlamba Mlonga, in addition to a wound, pale yellow rough sphere. The latter has not been found elsewhere in the region (Wood). Little is known about the context of the Makahane wound bead, but Saitowitz (1996) describes it as being similar to those from Mapungubwe, i.e. large blue-green and spherical.

Although rare in the southern African interior, wound beads are much more common on the East African coast and account for more than 50% of some assemblages there (Wood 2005: 222). Whether this was the case further south along Africa's Indian Ocean coast is less clear, since no port of entry has been excavated to date. Laser Ablation Inductively Coupled Plasma Mass Spectrometry Analysis (LA-ICP-MS) revealed that a number of wound beads were made of the same glass as the Mapungubwe Oblate series. These beads were possibly made in the SLCA region by reworking imported beads, a practice known from the earlier K2 period (eleventh to thirteenth centuries) (Wood 2011: 176).

The proportional rarity of wound beads in the interior of southern Africa could indicate that they were less favoured than the more typical oblates. On the other hand, their rarity may suggest that they were highly valued unique items. Value, however, is culturally constituted (Appadurai 1986; Kopytoff 1986 Kopytoff, I.) and the Mutamba glass beads must therefore be read within the context of thirteenth-century southern Africa. Beads from the interior were generally transported over long, elaborate exchange networks — often a trademark of prestige items (Renfrew 1984: 128). In addition, glass beads — most likely worn on the body as beadwork — probably played an important role in constructing individual identities and maintaining status positions. As identity markers, all beads — including wound beads — were probably socially valued, to a greater or lesser extent. Therefore, their presence at hinterland sites reflects the ability of communities like Mutamba to acquire such valued items. If, as Wood (2011: 76) suggests, they were manufactured locally from imported glass, their peripherally slanted distribution could indeed reflect the tastes and preferences of these communities.

The Mutamba bead assemblage suggests that non-élite sites cannot be grouped into a single category. Indeed, categories of élite and non-élite cannot predict differences in regional bead distribution patterns. As the Mutamba data indicate, there is an apparent difference between lower status sites in the SLCA, which were under the direct political control of the Mapungubwe centre, and those on the periphery. This difference underscores the fact that international trade goods penetrated more widely than just the élite centres in the SLCA. This is significant if one considers that earlier excavations at Mutamba and neighbouring sites failed to recover any glass beads, which could be seen to suggest little, if any, articulation with long distance trade networks. The Mutamba excavations clearly demonstrate that this was not the case. If these items were obtained through redistribution

networks originating at the centre, then it is clear that hinterland communities were probably more active in determining the parameters of exchange rather than being mere passive recipients of items filtering down a redistribution network.

Conclusion

The bead distribution at Mutamba is uniform across the site. Although this will need to be confirmed with even more extensive sampling, the uniform distribution could suggest that access to beads was not socially circumscribed at a community level. Notwithstanding the significant differences in quantities between sites in the region, it is clear that glass beads formed a significant part of regional exchange relations.

The four wound beads found at Mutamba are unusual since beads of this kind are comparatively rare in the region. Despite the long research history and extensive excavation in the Shashe-Limpopo Confluence Area, Mapungubwe remains the only settlement in the heartland where these were found. Here, these beads were recovered from graves that were associated with clear signs of wealth. In contrast, similar beads have been found on settlements outside the SLCA: Bosutswe, Hlamba Mlonga, Makahane and now Mutamba. This suggests that wound beads followed different patterns of distribution and consumption than the more ubiquitous drawn beads.

The bead data from Mutamba presented here urge archaeologists to reconsider peripheral areas during the Mapungubwe period (cf. Chirikure *et al*. 2013). Hinterlands were probably much more proactive in securing items of social value than has previously been believed. This situation stands in contrast to views that place them at the bottom of a fixed regional hierarchy. A pattern that assumes that trade goods on sites like Mutamba were filtered down from higher up the hierarchy is, therefore, probably incorrect. Instead, future research should investigate and address the variety of channels through which communities were able to acquire trade goods and how they participated in the political economy of the Mapungubwe landscape. Tracing the trade in prestige items should not just focus on the quantities or types of items, but must be sensitive to variations within these types (cf. Lesure 2004: 24). Variable levels of availability, status, value, local taste and preference all influence the distribution of trade goods. Separating these influences will, however, require the application of more contextually based approaches to the archaeology of this period.

Acknowledgements

I should like to thank Annie Antonites, Tom Huffman, Marilee Wood and an anonymous reviewer for their comments and suggestions. I should also like to acknowledge the contributions and support of the following individuals: Hector and Hazel Kincaid-Smith, Neels Kruger, Chriselle Bruwer, and the many student volunteers from Yale University and the University of Pretoria who participated in the Mutamba excavations.

This work was supported by the National Science Foundation [grant number 1058306]. Research was also made possible with funding from the MacMillan Centre for International and Area Studies at Yale, Yale University Council for Archaeological Studies and the University of Pretoria.

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