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The Beads of Bosutswe, Botswana

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The Beads of Bosutswe, Botswana

by

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Abstract

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The University of Texas at Austin, 2010

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The hilltop archaeological site, Bosutswe in Botswana had a nearly a thousand years of continuous occupation. Nearly every single strata in both precincts produced shell beads of various materials and origin. By using travelogue sources as well as more recent ethnographical sources, I focus on the possible uses and importance of beads to the people of Bosutswe and the wider southern African region. Using the excavated beads as evidence, I show how certain varieties of beads made their way to the site by way of trade routes with distant riverine areas. Also, I compare my findings with arguments claiming that different groups preferred different sizes beads; therefore, one can determine a site's ethnic makeup by this measurement alone.

Table of Contents

LIST OF TABLES	IX
LIST OF FIGURES	X
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: BACKGROUND	3
Botswana.....	3
Climate	4
Bosutswe	5
CHAPTER 3: THEORETICAL ISSUES	9
Travelogues and Silences.....	9
Identity	9
CHAPTER 4: TRAVELOGUES	13
CHAPTER 5: ETHNOGRAPHY	17
CHAPTER 6: ARCHAEOLOGY AND OES BEADS	24
CHAPTER 7: METHODOLOGY	27
Introduction.....	27
Analysis Techniques	27
Precinct	27
Unit	28
Level	29
Diameter.....	29
Bead Hole.....	29
Exterior Surface	29
Bead Material.....	30
Comments	30

CHAPTER 8: SHELL BEADS FOUND AT BOSUTSWE	31
Introduction and Bead Totals.....	31
OES Beads	32
Mussel Shell Beads	42
Achatina Beads	45
Aragonite, Bone, Slate, and Other	47
Comments	47
CHAPTER 9: DISCUSSION	48
CHAPTER 10: CONCLUSION	53
REFERENCES	56
VITA	60

List of Tables

Table 2-1. Levels from Western Precinct with corresponding dates and cultural periods (Taken from Atwood 2005).	7
Table 2-2. Levels from Central Precinct with corresponding dates and cultural periods.....	7
Table 8-1. Bead total numbers and percentages.	32

List of Figures

Figure 5-1. Weight stones for digging sticks (van Rippen 1918).	19
Figure 5-2. Woman smoothing OES beads with wooden implement (Denbow 2009).	20
Figure 5-3. Grooved stones from Bosutswe's Western Precinct (Denbow 2002).	20
Figure 5-4. Examples of OES bead belts (taken from Tanaka 1982).	22
Figure 5-5. Men displaying different uses for OES beads (taken from Comaroff et al. 2007).	22
Figure 7-1. Excavation unit layout at Bosutswe (Denbow 2008).	28
Figure 8-1. Bead and bead fragment (top and bottom, far left) with evidence of burning with other OES beads and fragments in various in different stages of production and wear.....	34
Figure 8-2. Average bead and bead hole diameters by level for the Central Precinct.	35
Figure 8-3. Average bead and bead hole diameters by level for the Western Precinct.	36
Figure 8-4. Beads above and below 6mm total diameter from two Central Precinct levels.	36
Figure 8-5. Beads above and below 6mm total diameter from two Western Precinct levels.	37
Figure 8-6. Sample of OES beads from Central Precinct, Level 9 (4E, 6S) displaying uniform size and wear.	38
Figure 8-7. Example of OES fragments from Bosutswe, Central Precinct, Level 5.	39

Figure 8-8. Burial 7 with OES beads wrapped around body (Denbow 2002).....	40
Figure 8-9. Child's OES bead necklace from Burial 7.	41
Figure 8-10. Child's OES bead waist strand from Burial 7.....	41
Figure 8-11. Mussel shell bead totals by level, Western Precinct.	42
Figure 8-12. Example of river mussel shells from the Western Precinct.	43
Figure 8-13. Other river mussel shell beads from the Western Precinct.	43
Figure 8-14. <i>Achatina</i> beads by level, Western Precinct.	45
Figure 8-15. An example of a large <i>Achatina</i> bead (bottom row, center).	46

Chapter 1: Introduction

Beads have a long history throughout the African continent. While the earliest beads are yet to be determined as more are unearthed, the oldest known beads, made from *Nassarius kraussianus* shell, come from South Africa's Blombos Cave, dating to about 75,000 BP (d' Errico 2005, Henshilwood et al. 2004, Holden 2004). Ostrich eggshell (OES) beads might have an even earlier origin. Two beads from a deposit dating as far back 110,000 years ago were discovered in Tanzania; although their early date is still in question (Holden 2004: 369). With much greater certainty, archaeologists found ostrich eggshell beads in Kenya dating back around 40,000 years BP (Henshilwood et al. 2004: 404) and in the Sudan dating back as early as 10,000 B.C. (Sciama 1998: 1). As for foreign-made decorative goods, seafaring groups from Asia and the Middle East were providing glass beads of various sizes, shapes, and colors to southern Africa as early as the 8th century A.D. (Wood 2005). By current Western standards, beads serve as little more than decoration, or are only valuable in their aesthetic appeal, but this should be seen as a relatively new status. For most of human history, spanning most parts of the inhabited globe the "use of beads is (or was) often tied to beliefs concerning both the social and cosmological order, ritual cycles related to human production and reproduction, persons' progression through systems of age-sets, their position within status hierarchies, and, above all, distinctions of gender" (Sciama 1998: 5).

This thesis focuses on the bead assemblage from Bosutswe, a hilltop site in Botswana, and their function to the people who inhabited the site, as well as, the wider population in southern African during the same time span. Excavations at Bosutswe

during 2001 and 2002 produced thousands of beads. Through analysis and discussion of the bead assemblage, I put forth evidence strengthening ideas about past trade in “exotic” materials from distant sources suggested by Denbow et al. (2008) and Atwood (2005). Additionally, the bead assemblage contains evidence for the existence of onsite OES bead production. Finally, analysis of the OES beads from Bosutswe produced results that conflict with some commonly held beliefs concerning bead size and ethnicity as outlined in most detail by Tapela (2001) and again in Reid and Segobye (2000).

The area of study for this thesis extends beyond the geographic and temporal restraints of Bosutswe. Southern Africa is a large, vaguely-defined mass of land encompassing modern-day countries that include South Africa, Botswana, Namibia, and Zimbabwe. Obviously, I cannot address the idiosyncrasies of many bead traditions within southern Africa. My intention is to move from more recent times to the distant past; from the general to the particular. Chapters 2-6 of this thesis focus on the archaeology of Bosutswe and wider Iron Age of Botswana, as well as theoretical issues, ethnography, travelogues, and the archaeology of beads in southern Africa. These sources shed light on the possible function and utility of beads to the past inhabitants of Bosutswe. Chapters 7-10 cover my methodology and the Bosutswe bead assemblage. This is followed by a discussion of my results and their relevance to other data from the site and to literature concerning the meaning attributed to beads during the prehistory of southern Africa.

Chapter 2: Background

BOTSWANA

Although archaeological research in Botswana is ever-expanding, it is still in its early stages when compared to research in many parts of the African continent. For the same reasons that Botswana escaped overbearing colonial rule, it also, until recent history, escaped much anthropological inquiry other than studies of its indigenous hunter-gatherer groups. The country was viewed as having little to offer by way of resources or regional history. Interest in the archaeology of Botswana has only gained footing since the 1970's. In reality, the archaeological record of Botswana is vast and lengthy. Certain places, as indicated by the presence of stone tools with extinct animal remains, have deposits dating back "between 2 million and 30,000 years ago" (Denbow and Thebe 2006). As research expands, archaeologists continue to find evidence that the prehistory of Botswana was just as dynamic and rich as any other country's past within the region.

The prehistory of southern Africa, like that of Europe, is broken down into chronological units, Stone Age and Iron Age, based on tool technology. While these two units have finer divisions (i.e. Early, Middle, etc.) the Later Stone Age ranges anywhere from 20, 000 plus years ago to 100 CE, and the Iron Age spans the time between 100 CE to 1810 CE. Assumed within the division is the changing of technology (stone to metal) and the appearance of Bantu-speakers who relied on an agropastoralist mode of subsistence rather than foraging. In simplistic interpretations herders/farmers used iron implements while foragers, pre- and post-Bantu settlement, used stone tools. But this

explanation is too simplistic at its core. Herding or pastoralism has more to do with social organization than technological advancements. In southern Africa stone tools continued to be used after the adoption of pastoralism (Kinahan 1996: 106). Therefore, one cannot accept a rigid division between the Stone Age and the Iron Age because stone tools continued to play a part in the lives of both Khoisan and Bantu “newcomers” well after the cut-off period.

CLIMATE

Current political boundaries in southern Africa leave Botswana in a land-locked position. It shares borders with South Africa (Southeast), Zimbabwe (Northeast), and Namibia (West and North). Botswana contains both the Okavango Delta, known for its wildlife and riverine/marsh environment, and the Kalahari Desert which covers close to 80 percent of the country (Denbow and Thebe 2006: 4). The amount and location of desert area, along with other factors limiting settlement, forces most of Botswana’s sparse population (just under 2 million people) to congregate in the country’s eastern region. Present day rainfall measurements place a high of 800 millimeters in Botswana’s far north and a low 250 millimeters in the southwest (Denbow and Thebe 2006: 5). Botswana is about 600,000 square kilometers in total area (about the same size as Texas).

The site of Bosutswe lies on the eastern edge of the Kalahari Desert (**Figure 2-1**) and currently receives somewhere around 400 millimeters of rain per year (Smithers 1971). It “lies astride a major ecotone that separates the well-drained Kalahari sands to the west from the more fertile, but poorly drained...soils to the north and east” (Denbow et al. 2008: 462).

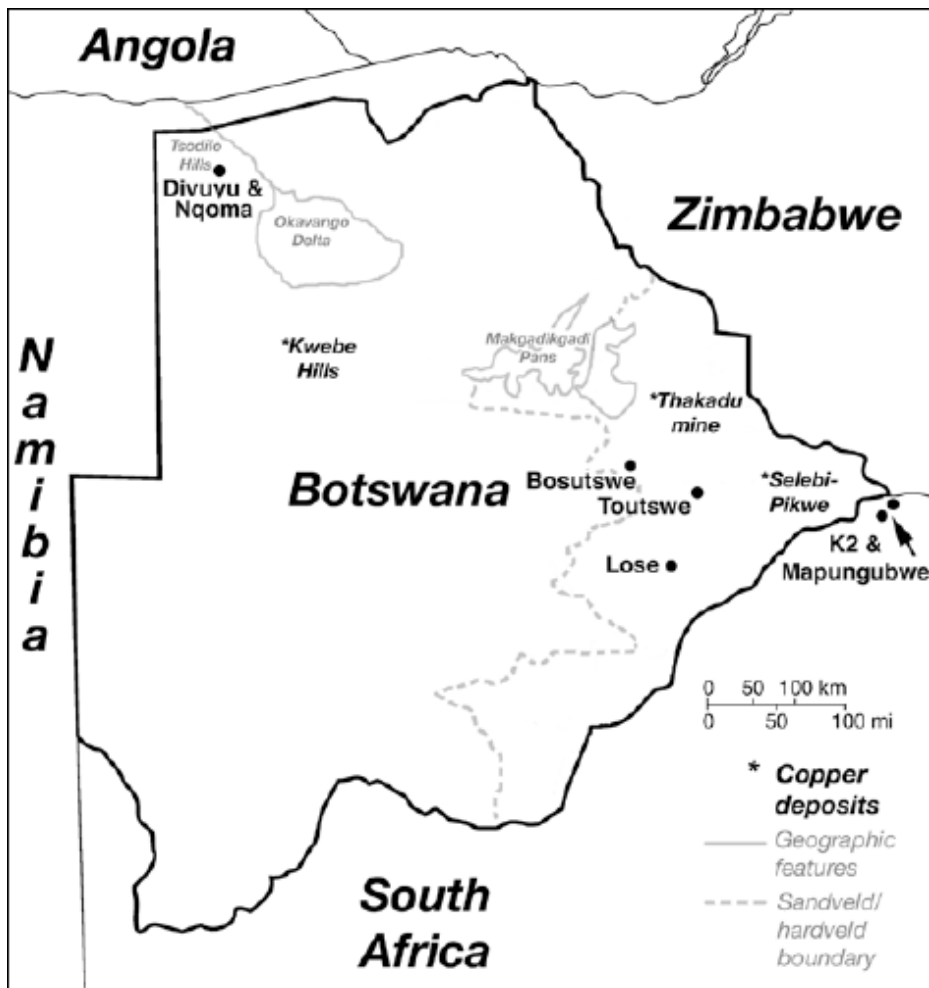


Figure 2.1. Map of Botswana and surrounding countries (Denbow and Miller 2007).

BOSUTSWE

The initial test excavations at Bosutswe were performed in 1990. Three separate excavations took place at Bosutswe between 1990 and 2002. Following the tests and mapping of various surface features (**Figure 2-2**), extensive excavations were carried out of the Central Precinct in 2001 and the Western Precinct in 2002 (Denbow 2006: personal communication, Denbow et al. 2008). The site was occupied, almost continuously, from

around 700 to 1700 CE. The stratigraphic sequences from both precincts are illustrated in **Figure 2-3** and **Figure 2-4**.

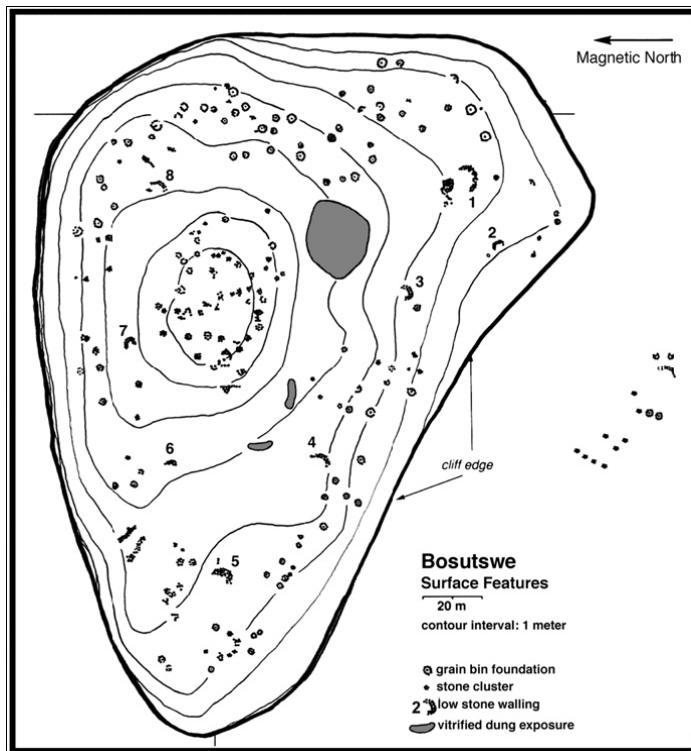


Figure 2-2. Surface features from Bosutswe (Denbow et al. 2008).

Layer	Time Period	Name
19-17	700-900	Taukome
16	Late 900's, early 1000's	
15-14	1000's	
13-10	1000's	Toutswe
9-6	1100's	
5-3	1200-1400	Lose
2-1	1400-1600	

Table 2-1. Levels from Western Precinct with corresponding dates and cultural periods
(Taken from Atwood 2005).

Layer	Time Period	Name
21-12	1150-1300	Lose
11-6	1300-1450	
6-1	1450-1600	

Table 2-2. Levels from Central Precinct with corresponding dates and cultural periods.

After 1200 CE the layout of the site went from one of multiple households spread over the entire site to one of a few clustered elite houses in the central area surrounded by workshops. This change in layout accounts for the deeper deposits in the Central Precinct as opposed to the Western Precinct (Denbow et al. 2008). The shift to more centralized elite housing also matches up with an absence of mussel shell as a bead material in this

area and the presence of bead making refuse and possible polishing stones. I will address these subjects in my discussion.

Chapter 3: Theoretical Issues

TRAVELOGUES AND SILENCES

Incorporating historical writing, in this case, the writings of colonial Europeans, into one's own research introduces unintended silences into descriptions of the past (see Trouillot 1995). European travelers in southern Africa during the 19th century had their own personal agendas and point of view. Their interpretations of behaviors, people, artwork, etc. were formed through a Western lens. Many travelers were missionaries or colonial administrators with severe distaste for anything they viewed as "exotic" (Cambell 1822, Livingstone 1959, Lichtenstein 1807). Also, European colonial writers, in their attempts to make sense of the African landscape, developed strict ethnic/racial categories. In southern Africa the categories of Kaffir, Hottentot, and Bushman were and are loaded with meanings outside of their explanatory value. Each category came with its own assumption of economy, intelligence, and demeanor. Wilmsen (1989) warns readers of the neglect of travelogues concerning the complex roles played by Khoisan (Bushmen) people in the daily lives of Africans and European colonials. For this reason I do not take all accounts as matter of fact. My goal is to parse out useful information concerning the use of beads in the economy of southern Africa before Western intrusion.

IDENTITY

The nature of identity in anthropology and archaeology still remains a topic of interest and discussion. How do people mark their identity? Who can claim group affiliation? There are many unanswered (or unanswerable) questions eating up hours of

discussion. Therefore, to address the subject of OES beads as markers of identity I position my research from the standpoint that identity is malleable and situational.

Looking at current-day construction of identity among certain people in Botswana, one finds that long-standing preconceptions do not match the reality on the ground. This point is best articulated by a quote recalled by Denbow (unpublished) from a University of Botswana student concerning the hired locals at the Bosutswe excavations.

Oh, the people here are all mixed up. I can't make any sense of this...It is not like villages in southern Botswana. There are so many different people here, all living together. I am sure some are Basarwa (Khoe), but I can't be completely sure because they all speak SeTswana. Others seem to be Kalanga, Pedi, or Tshwaping, but they are all interacting and sometimes intermarrying with one another. There is no tradition here. It's just all mixed up.

The student's frustration helps to illustrate that packaged ideas of how people are supposed to look, act, or speak fail to live up to reality. An individual creates his own sense of identity, and others project an identity onto the individual. Within these two poles, the negotiation of identity occurs.

The malleable "ethnic" makeup of certain places in southern Africa is not a new phenomenon. Livinstone (1858) acknowledged the presence of cattle herders in the Botletli River region who spoke a click language normally attributed to San hunter-gatherers. Furthermore, Kopytoff (1987) describes the settlement of Sub-Saharan Africa as a process of continual political formation, fragmentation, and reformation. His "African Frontier" is a meeting ground for different outsider groups to come together and create their own political center.

Khoisan groups provide a good basis for looking how identity is formed, changed, etc. as indicated by their beads and beadwork. Polly Wiessner (1997: 158,159) states that “style is particularly appropriate for transmitting identity because: (1) as an extension of the body it can enhance certain attributes; (2) it can present several aspects of identity at one time, which might influence or modify one another...(5) style is produced in artifacts that are often durable and replicated from generation to generation.” She goes on to outline how *!Kung* identity was asserted strongly in the beadwork seen in *hxaro* trade systems during the 1970s as compared to her later work with indigenous groups in the 1990s. She sees this pushing of identity as a reaction to threats of land-snatching by the South African Government and Herero herders (Wiessner 1997: 164). This intensification of identity marking only mellowed after these specific threats were addressed to some extent. Also, she posits that, in the face of changing economic conditions, Khoisan women manufacture more detailed and elaborate beadwork “to keep up their traditional ties which assure their social and economic support in the face of change” (Wiessner 1984: 198). Whatever the root cause may be, the assertion of a particular identity through the style of certain trade items is not constant. What one sees here is Khoisan groups utilizing and strengthening a particular identity to assert their presence and cohesiveness back on to those who might try to take advantage of or neglect them.

One also finds the assertion of a particular identity for political purposes in Spencer Wells’ documentary *Journey of Man* (2003). As he tracks down the closest relatives to the “first man” to come out of Africa, Wells chooses to visit and conduct a DNA analysis of a group of Khoisan in a Namibian village. As he arrives unannounced

people are lounging, working, playing, in various forms of Western dress. His translator even wears a Los Angeles Dodgers baseball cap. As the scene cuts, the filmmaker brings the viewer to a different world. Men and women alike have traded their cotton t-shirts and shorts for animal skins and heavily beaded headbands, necklaces, and belts. This display is a calculated effort to show the viewing audience what Khoisan identity looks like. The San play into essentialist roles in the hopes to attract attention to their social and political causes.

The difficulty in dealing with identity's fluid nature in the present day is only surpassed by the difficulty in archaeology of trying to say something definitive about identity with artifacts alone. Stephen Plog (1983: 128) asserts that "views concerning the complexity of the relationship between stylistic variation and social, religious, economic, and demographic factors often have been simplistic." Therefore, for the purposes of this thesis, simple ideas of OES beadwork directly representing group identity or affiliation will be met with extreme caution.

Chapter 4: Travelogues

Southern Africa is the setting for many travelogues from the 18th and 19th centuries. Although they serve as vital sources of information on the region and its peoples before “scientific” anthropological studies were conducted, one must remain aware of the silences, biases, and embellishments contained within their pages. My goal is to use travelogues as one source of evidence or information among many. The works that I discuss have no references to actual bead production. Beads are only noted in descriptions of particular persons and as important items in bartering situations between Europeans and Africans and between Africans themselves.

Throughout the two volumes, spanning 1841-1856, of David Livingstone’s compiled letters (1959), he treats beads as a form of money. He states that in his dealings with the Bechuanas (Tswana) that “beads are invaluable, money being of very little use and rather a losing concern...and they always prefer a few beads” (Livingstone 1959 (1): 41). In keeping with this theme of “beads as money”, Livingstone speaks of using beads for anything from enticing people to speak with him to procuring simple milk rations (1959 (1): 48, 49). During an expedition in 1853, Livingstone ran into hungry men at a stockade begging for beads to trade for corn (Schapera 1963: 15). He was even aware that different beads had different value, and sought to procure those trade beads that were most valuable. Livingstone went so far as to draw pictures for his family to illustrate exactly which size and shape of bead was most useful for him (1959 (1): 151). At other times, he states that he can use large quantities of any kind of bead (Livingstone 1959 (2): 73). A particular transaction between Chief, Kame and a lesser tribal leader, Sechele, is

described in detail by Livingstone. He states in his letter that the chief paid Sechele in sacks of beads for the land he took from him during a war (Livingstone 1959 (2): 44). Livingstone, judging by his letters, was only interested in beads as a source of money or as a bargaining tool. His ability to tap into local trade of luxury goods by way of a cheap commodity by European standards allowed Livingstone to sit in a position of power. It is important to keep in mind that Livingstone did not introduce groups such as the Tswana to beads as a trade or luxury items. Instead, he took advantage of a tradition that preceeded his arrival in southern Africa by over a millennia.

Just as Livingstone viewed beads as a form of currency between himself and the various groups he encountered, John Campbell, another 19th Century missionary in southern Africa, found beads to be a primary, universal means of payment. He used beads as a part of ritual gift giving during his travels. For example, Campbell gave beads along with a number of other gifts to a king named Mateebe saying that “without which all would have been considered as trifles” (Campbell 1822: 66). In his experience, all of the African leadership expected a gift of a few beads upon arrival (Campbell 1822: 163). But the gift of beads was not something exclusively relegated to transactions between European explorers and African royalty. Campbell discovered that missionaries were forced to use beads to bribe the younger generations of Africans into coming to school (Campbell 1822: 74). Also, the indigenous people of southern Africa used beads as a form of currency between themselves. Campbell states before leaving on an extended trip, “Several Matchappees expressed a desire to go on the Marootze journey, to exchange beads with that people for iron, under the protection of our muskets” (Campbell

1822: 115). In fact, European participation in indigenous market and trade systems did not come without a cost. After having an ox killed by lions, Campbell speaks of his intention to purchase another from a neighboring group. Upon this revelation, a man named Munameets expresses his concern that the convoy “would spoil the market, for we should give them too many beads” (Campbell 1822: 143). Again, European success in colonial Africa relied on the ability to tap into and, in some cases, control local economic systems.

Two other travelogue sources go beyond just talking about beads in an economic sense. Writing early in the 19th century, William Burchell speaks of people wearing OES beads in his account *Travels in the Interior of Southern Africa* (1967). In his writings he states that OES beads are worn by both sexes of Bachapins as a mark of distinction (Burchell 1967 (2): 569). Also, he notes OES bead girdles on Hottentot women and describes them in detail. Burchell states that “the ostrich-shell girdle is an article of very ingenious manufacture, and is formed of small pieces of the egg-shell, cut exactly circular and of a uniform diameter” (1967 (1): 396). He goes on to state that “the number of pieces of shell required for such an ornament is very great; and the value of the girdle is therefore considerable” (Burchell 1967 (1): 397). One cannot help but recognize a trend of “valuable” OES belts or girdles in existence throughout southern African history. Burchell’s girdles were possibly inherited through family lines, like Carey’s maternity belts (see **Chapter 5**), due to their value and their attachment to personal histories or memory. These types of OES belts are mentioned once more by Thomas Baines (1864: 163) in his encounter with Damara women during his journey from coastal South Africa

to Victoria Falls. In his description of “Kaffir” women in the fields, Gen. Sir Arthur Cunynghame (1879) speaks of girdles or aprons decorated with beadwork.

I should note, as in **Chapter 3**, that the aforementioned historical accounts contain very real underlying problems. Edwin Wilmsen (1989) outlines a few pitfalls of the travelogue as a genre, one such problem being Wilmsen’s idea of the “ephemeral Bushmen” who never receive any agency if they noted at all (1989: 116). The above accounts do not even mention indigenous groups as present in any overt way in the landscape. Wilmsen notes that Khoisan peoples played a vital role in trade caravans during the colonial period. Khoisan groups served as guides and active traders in OES beads, ivory, and salt (Wilmsen 1989: 117-119; Wilmsen 2003: 338). Yet 19th century travelogues and diaries rarely mention beads as coming from anywhere but Europeans, illustrating in ethnocentric fashion the trivialization of indigenous economic activity in colonial encounters. That being said, Europeans writers of travelogues unknowingly provide evidence of a wide-spread tradition of bead exchange in southern Africa.

Chapter 5: Ethnography

We find many references to OES beads in ethnographic sources. Some of the topics addressed by anthropologists concerning beads are technology, gender, trade, and social function. Ethnographic sources covering a wide-range of time and location place women at the helm of bead artisanship (see Carey 1998; Mertens 1966; Schapera 1930; and Wiessner 1984). Although it appears to be the case that men never make beads, this is not a complete truth. Lidia Sciamma (1998: 5, 6) notes that bead material can dictate whether or not the beads are made by men or women. In her experience “it is usually women who create beads from substances deemed relatively ‘soft’, like clay, seeds or ostrich egg-shells, while the men cut hard stones, or they prepare the kiln and melt down the glass.” While noting Sciamma’s sexual division of labor by bead type, one might associate prehistoric OES bead production with women, though this is not a secure assumption for past societies where the social and economic parameters of their production might easily have been different.

The technology behind the production of OES beads is of relatively simple when compared to the complex, intricate designs into which a good portion of the beads are incorporated. A quick internet search provides photos from sites promoting tourism in southern African and online commerce (see Women’s Work 2008). The basic toolkit consists of a wooden hand drill with a metal tip, a fracturing device, such as a metal or stone pick or awl, and a grooved piece of stone for smoothing the rough edges into almost perfect symmetry. Representations of the Khoisan bead industry are common in ethnography. One finds only subtle variations in the process from one account to another.

For example, Carey (1998: 84) states that indigenous “women make ostrich eggshell beads by trimming the pieces into small rounds with their teeth, piercing them with a needle or a sharp thorn, then threading them on a sinew string, and filing and polishing them with a stone into smooth disks.” Writing almost 70 years earlier, Schapera (1930: 66) describes the manufacturing process for Khoisan OES beads in Botswana as follows:

They are made by the women. The eggshell is broken into small pieces which are softened in water and pierced with a small stone or iron borer. They are then threaded on to a strip of sinew and the rough edges chipped off with a horn. Soft bark fibre is next twisted between the beads, making the chain very taut, and the edges are finally rubbed smooth with a soft stone.

For situations in which metal drilling implements or adequate stone were not available, other drilling and smoothing techniques using wooden implements were likely utilized. In his discussion of various “Bushman” implements, van Rippen (1918), outlines the process for drilling stone weights for digging sticks that were used to procure tubers by the Khoisan in South Africa. He states that “the hole was made by working both sides and the drill had been of wood, with water and sand to form the cutting material,” and “as the stick would wear away, the hole would get narrower” (van Rippen 1918: 79). Photographs of the stone weights closely resemble OES beads (see **Figure 5-1**). Additionally, **Figure 5-2** shows a present-day bead maker using a grooved section of wood for the bead smoothing process.

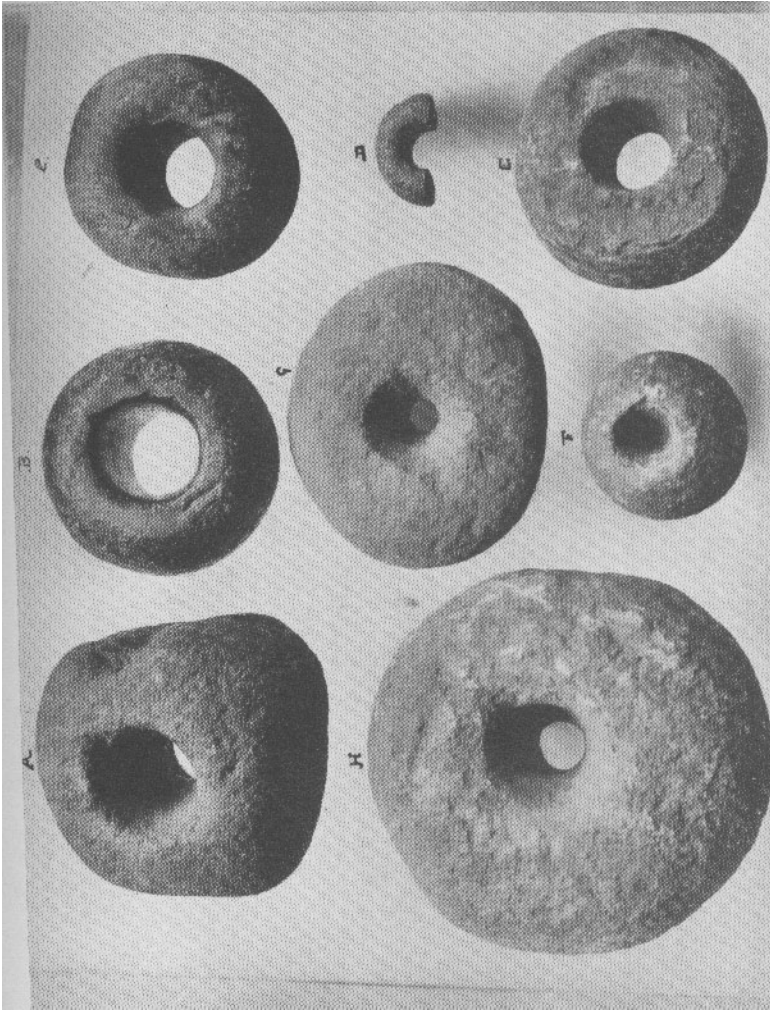


Figure 5-1. Weight stones for digging sticks (van Rippen 1918).



Figure 5-2. Woman smoothing OES beads with wooden implement (Denbow 2009).

Excavations at Bosutswe produced evidence of onsite OES bead production. Level 5 (Lose) from the site's Central Precinct contained 298 fragments of unfinished OES shell (see **Chapter 7**). These fragments represent either a cache of rough bead forms for future bead making sessions or the debris from such a session, itself. Also, smoothing stones were found in the site's Western Precinct Lose (1200-1400 CE) levels (see **Figure 5-3**).



Figure 5-3. Grooved stones from Bosutswe's Western Precinct (Denbow 2002).

The eventual outcome of the bead making and working processes varies from place to place. Groups utilize OES beads for a variety of decorative, social, economic, and spiritual purposes. For example, sometimes young Zulu and Xhosa men obtain various beaded ornaments from young women who find them attractive (Carey 1998: 89). This occurrence serves a dual function of letting the young man know who his admirers and possible suitors are; having a multiplicity of beaded accoutrements can also make him attractive to other young women. Polly Weissner (1984, 1985, 1997, 1998), looks in depth at beads, beadwork, and style in long-distance *hxaro* trade systems among the *!Kung*. In her definition, *hxaro* trade systems are “far-reaching networks of socially defined kinship, activated by partnerships of delayed, reciprocal exchange” that “gave *Ju’hoansi* access to the resources of people in other *n!ore...*” (Wiessner 1997: 161). Isaac Schapera (1930) talks about multiple uses (economic and decorative) for OES beads in his ethnography, *The Khoisan Peoples of South Africa*. In his account, OES beads are one of the standard commodities in all of all trade between Khoisan and Bantu groups. OES beads were often used to acquire tobacco, which he considers another standard item (Schapera 1930: 66, 146). Also, he notes the popularity of OES beaded belts among Khoisan and Hottentot women (Schapera 1930: 65, 68). This way of mounting beads was practiced by Bantu groups in more recent times as well. A passed-on tradition of using beaded strips to bind the stomachs of new mothers after childbirth is noted in Carey’s work (1998: 90). Further examples are represented in **Figure 5-4** and **Figure 5-5**.

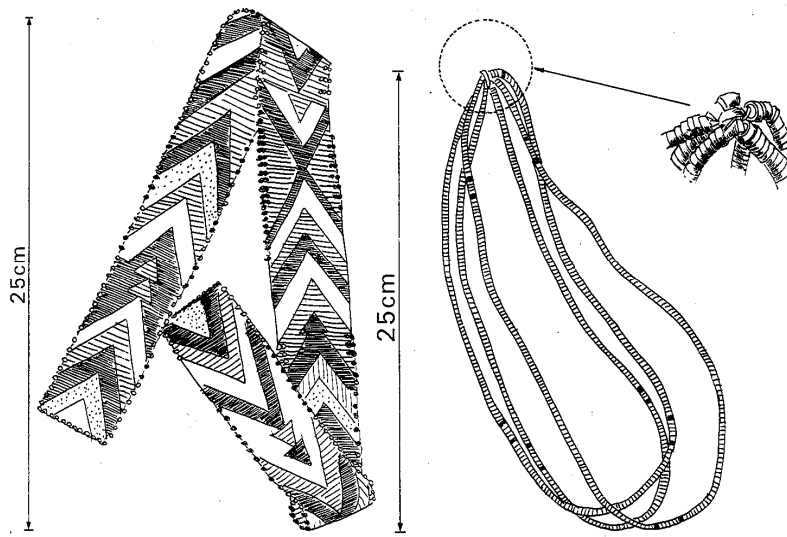


Figure 5-4. Examples of OES bead belts (taken from Tanaka 1982).



Figure 5-5. Men displaying different uses for OES beads (taken from Comaroff et al. 2007).

Ostrich eggshell beads are also tied to traditional religious beliefs in southern Africa. Maria Schoeman (2006) consistently found OES beads as possible offerings in past and present places associated with rain-control within the Shashe-Limpopo confluence region. To this day, many groups in southern Africa carry on traditions of manufacturing and adornment using OES beads, and do so for a multiplicity of reasons. Such traditions of use are not static; their roots extend back many millennia. Bosutswe's prehistoric bead assemblage contains clues concerning the use and importance of beads in the traditions, economic or otherwise, of interacting groups in southern Africa.

Chapter 6: Archaeology and OES Beads

At this point it is necessary to take to the archaeological record and examine some of the current theories about what OES beads can tell us in the context of southern Africa. In the case of the Leokwe Hill site in South Africa, it has been suggested that beads were used to indicate status differences between two different areas of the site. The presence of more ostrich eggshell and glass beads in one particular area, along with differences in ceramics, are interpreted as signs of status differentiation among elites living on the hilltop and lower status individuals living below (Calabrese 2000: 202). Again, when looking at Late Stone Age sites on the Southern and Western Cape in South Africa as compared to southeastern Cape sites, completely different types of shell beads were used for adornment. It is suggested that these “differences in personal decoration that may have indicated and maintained social identities and, perhaps, have been deliberately chosen with these aims in mind” (Mitchell 1996: 47).

In Botswana, Archaeologists routinely find OES beads (amongst others) and possible bead making tools at both Late Stone Age (LSA) and Iron Age Sites. As far as LSA sites within the country are concerned, OES beads or bead makings implements were found at Tsodilo Shelter, Mantenge Shelter, and Tuli Lodge (Walker 1994). These sites stretch from the eastern most point of Botswana to almost its extreme northwestern border. Like Bosutswe, an OES bead necklace was found as a grave offering in the burial of a woman at the Iron Age site at Modipe Hill (Owens 1995; Pearson 1995). This woman’s grave, like that of an infant burial discussed later in this thesis, was the only

one, among four, to contain grave goods of any kind. One must conclude that this woman's grave goods represented her status among her community.

Building upon studies that view beads as status or ethnic markers in a wider, general sense, I would like to explore two articles that make the claim that "beads equal people." I will take issue later with some of the inferences and assertions of these two articles, while exploring in depth the evidence they use to reach their eventual conclusions. Milton C. Tapela (2001) addresses three different hypotheses concerning differences in OES bead size among hunter-gatherer groups and Iron Age Bantu pastoralist groups. Tapela associates a preference for smaller-sized beads with the hunter-gatherers; pastoralists, he says, favored larger-sized beads. This view is echoed in studies by Jacobson (1987), Mitchell (1996), Reid and Sebgoby (2000), and, more importantly for the purposes of this thesis, Kandel and Conard (2005). Tapela's three hypotheses are as follows: 1) prehistoric hunter-gatherers and herders have similar bead assemblages; 2) hunter-gathers and herders both made beads but they were of different sizes; and 3) hunter-gatherers made all of the beads and traded the larger ones to herder groups (Tapela 2001:60,66). The hypothesis favored by Tapela is that both groups were involved with bead manufacture with hunters making small beads while herders made larger ones. He concludes that bead size indicates whether an archaeologist is dealing with a hunter-gatherer or herder site (Tapela 2001:62).

The second article is authored by Andrew W. Kandel and Nicholas Conard (2005). In it, Kandel and Conard look at what assemblages of ostrich eggshell beads at the Geelbek Dunes in South Africa can say about a site's formation and occupation. They

maintain that one can tell the duration of occupation by looking at beads. Where there is a diversity of forms in the bead makeup, representing the different stages of production, they argue that a longer term, more intensive occupation occurred. While speculative, I have no problems with this assertion at its base. They further suggest that a chronological sequence can be built for a site through beads based on the assumption that large beads in the assemblage indicate agro-pastoralists and smaller beads indicate hunter-gathers. For this to hold true, one should see a progressive movement in bead size from smaller to larger as the earlier hunter-gather population was displaced by encroaching agro-pastoralists, though the authors conclude that “the chronology of small vs. large beads cannot be viewed as universal” (Conard et al. 2005: 1720). Even with this disclaimer they still, like Tapela, assume that only hunter-gatherers were involved in the manufacture of smaller-sized beads. In support of their position they point out that after agro-pastoralist groups moved into the area, bead sizes grew in diameter. Finally, they posit that in contexts where women were absent, assuming that that they made the beads, then one should find OES beads only in their finished form (Conard et al. 2005: 1713).

Chapter 7: Methodology

INTRODUCTION

The purpose of this thesis is to utilize the beads found during the 2001 and 2002 field seasons at Bosutswe (see **Figure 7-1**) with ethnographic works and firsthand accounts of colonial explorers to address issues surrounding trade and identity in southern Africa. Every level of the excavations contained varying amounts of beads or evidence of their manufacture. When possible, I performed a full analysis of each bead and entered the data into an Excel spreadsheet. The data in this thesis represents the analysis of over 1,700 individual beads, roughs, and/or fragments.

ANALYSIS TECHNIQUES

For each bead I address a set group of attributes: precinct, excavation unit, depth below surface, bead diameter, hole diameter (if available), drilling method, surface attributes, bead material, and any other notable attributes. I took each measurement in millimeters (mm) using a ScienceTech Instruments LPG200 digital gauge. All bead materials and physical attributes were deciphered with the aid of a GemOro 20-power jeweler's loop.

Precinct

Beads came from one of two excavation precincts at Bosutswe, the Central Precinct at the hill's summit and the Western Precinct. Deposits from the Central Precinct cover the time period from approximately 1150 to 1600 CE, but the fill at the Central Precinct only matches that of the Western Precinct in time in the upper 50 centimeters

(cm). Deposits from the Western Precinct, while more compact, cover the time period between 700 to 1600 CE (Denbow et al. 2008: 466).

Unit

Each bead was assigned a unit by the excavation team. This unit represents the horizontal provenience of each bead from Bosutswe in respect to the datum.

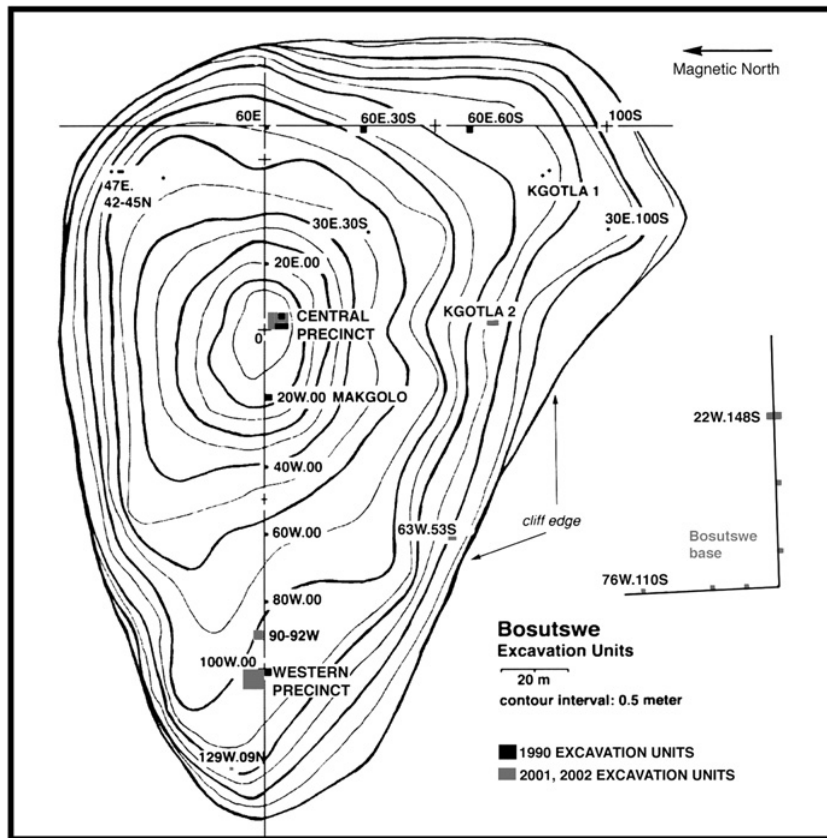


Figure 7-1. Excavation unit layout at Bosutswe (Denbow 2008).

Level

The level of each bead corresponds to the distance in cm below surface at which the bead was found. Because Bosutswe was excavated in arbitrary 10 cm levels, the bead level is represented in a 10 cm window (e.g. 100-110).

Diameter

I took two diameter measurements for each bead when possible. The first measurement represents the diameter of the entire bead. The second measurement corresponds to the diameter of the bead's hole. I measured both diameters in millimeter (mm) increments.

Bead Hole

Beads with holes display one of three drilling techniques by the original manufacturer. Straight holes do not show evidence of drilling from either side. I will address whether straight holes were intentional or the byproduct of wear in a later section. In addition to straight holes, the beads possess both holes drilled from a single side and holes drilled from both sides.

Exterior Surface

The exterior surface of each bead falls into one of three categories: polished, smooth, or jagged. Polished beads have an even, uniform outer ridge. Smooth beads have a ridge-surface that is not uniform in texture but smooth to the touch. Jagged beads have a saw-like jagged surface. I took jagged beads to a further level of analysis to determine

whether or not they were drilled or un-drilled rough-outs, meaning a bead in the early stages of production.

Bead Material

I determined the bead material or type by observation alone. Therefore, outside of visual bead-typing, I did no other testing, chemical or otherwise, to determine the bead material. Each bead from Bosutswe was placed into one of eight categories of bead material: Ostrich Eggshell (*Struthio camelus*), Land Snail (*Achitinidae*), River Mussel (*Mutelidae*), Other Mussel, Aragonite (a form of Calcium Carbonate), Bone, Slate, or Other/Cannot be Determined.

Comments

The final column of my spreadsheet was reserved for any additional defining characteristics of the bead that I deemed noteworthy.

The goal of my analysis and classification system is to break down bead characteristics into manageable units that reveal various patterns within the assemblage. Furthermore, I use the various data sets to address the findings concerning bead size and type of other archaeological studies.

Chapter 8: Shell Beads Found at Bosutswe

INTRODUCTION AND BEAD TOTALS

Various types of beads were found at Bosutswe during the 2001 and 2002 field seasons. My analysis covers 1,791 beads, bead fragments, and roughs/debitage. The total number of beads for the entire site is unknown at this point. The analyzed beads were discovered in excavation units from Bosutswe's Western and Central Precincts. Overall, OES beads, representing 84.31% of the entire analyzed assemblage, are the most numerous (see **Table 8-1** for overall numbers and percentages) and provide the data for the bulk of the data utilized in this thesis. Mussel shell beads, though not great in number (7.48% of the entire assemblage), provide important information when compared to other excavation data. Levels 11-15 in the Western Precinct contained 94 of the 124 total mussel shell beads, providing compelling evidence for trade connections with riverine areas northeast of Bosutswe in the Boteti River region. Due to the difficulty of precisely distinguish between possible marine shell beads from highly polished/worn river mussel beads by sight alone, I use the category of "Other Mussel" to describe those beads that were not easily identified during my analysis, but I do not separate the two categories in my statistical analysis. *Achatina* beads follow a similar spatial and temporal pattern to mussel shell beads with 45 of the 81 total *Achatina* beads occurring in Levels 11-15 in the Western Precinct. The evidence clearly points to a cultural taste for beads made from materials that were not readily available onsite. Other bead materials are too few in number to mention other than referencing to their presence or absence.

Bead Material	Total Number	Percentage
Ostrich Eggshell	1,510	84.31%
<i>Achatina</i>	81	4.52%
River Mussel	112	6.25%
Other Mussel	22	1.23%
Aragonite	1	0.06%
Bone	1	0.06%
Slate	45	2.51%
Other/Cannot Identify	19	1.06%

Table 8-1. Bead total numbers and percentages.

OES Beads

Finished OES beads or OES roughs dominate the assemblage at all levels, representing just over 84% of all beads analyzed. Bead and bead-hole diameter, drilling technique, and external finish vary spatially and temporally with only a few minor consistencies or notable trends. One such trend is that drilling techniques are noticeably different between the two precincts. Over 90% of OES beads in the Western Precinct show evidence of drilling in the form of tapering from one or two sides, with the majority (67.19%) having been drilled from both sides of the bead. In the Central Precinct things look much different. About 74% show evidence of drilling from one or two sides with the majority (43%) only displaying tapering on one side and 26.22% have no tapering at all. Due to the greater age of the Western Precinct's deposits, this trend does not surprise me

for two reasons. First, as time passed, drilling techniques were refined and the beadmakers' toolkits most likely became more efficient due to an increase in the availability of iron or other metal implements. Second, as mentioned below, beads that were passed down through generations are likely to exhibit more internal and external polish from extended contact with the skin and string material.

Another trend is that small (less than 6mm total diameter) beads with a high amount of polish tend to have larger holes. I believe that this inverse relationship is the result of long-term wear and possible curation through multiple generations. Additionally, 39 beads displayed more wear/polish on one or two sides possibly from sustained contact with the skin. This wear pattern resembles that of two bronze helixes from Bosutswe found in the top level of the Western Precinct (Denbow and Miller 2007: 36). OES bead and bead hole diameters are discussed more below. Twenty one OES beads show evidence of having been exposed to fire due to their black color (see **Figure 8-1**). Two different levels from the Central Precinct (Level 9 and Level 5) stand out as unique in the assemblage and warrant further discussion.



Figure 8-1. Bead and bead fragment (top and bottom, far left) with evidence of burning with other OES beads and fragments in various in different stages of production and wear.

Following Tapela (2001), I have set the boundary for small and large beads at 6mm total diameter and 2mm hole-diameter. Judging from my sample, these measurements, especially the 6mm total diameter threshold, suffice as a middle line between large and small beads, although average OES bead diameter measurements from the deeper levels of the Central Precinct (**Figure 8-2**) and nearly all levels of the Western Precinct (**Figure 8-3**) test these arbitrary numbers. Strictly following Tapela's boundaries is of limited use outside of comparisons between our findings. His great leap comes in his attempt to say something about culture based mainly on OES bead size. At every level from both precincts, there are a multitude of exceptions to these arbitrary dividing lines. Although bead diameter averages appear to get larger over time in the Western Precinct, the average OES bead size consistently stays above 6mm, only dipping below at two

points. In the Central Precinct the average bead size decreases over time. Once again, I return to the fact that the complete time frame in the Central Precinct matches up with only the top five layers of the Western Precinct's deposits. Looking at **Figure 8-2** and **Figure 8-3**, one sees a decline in average bead size happening during the Lose period (approximately 1150-1600 CE) in both precincts.

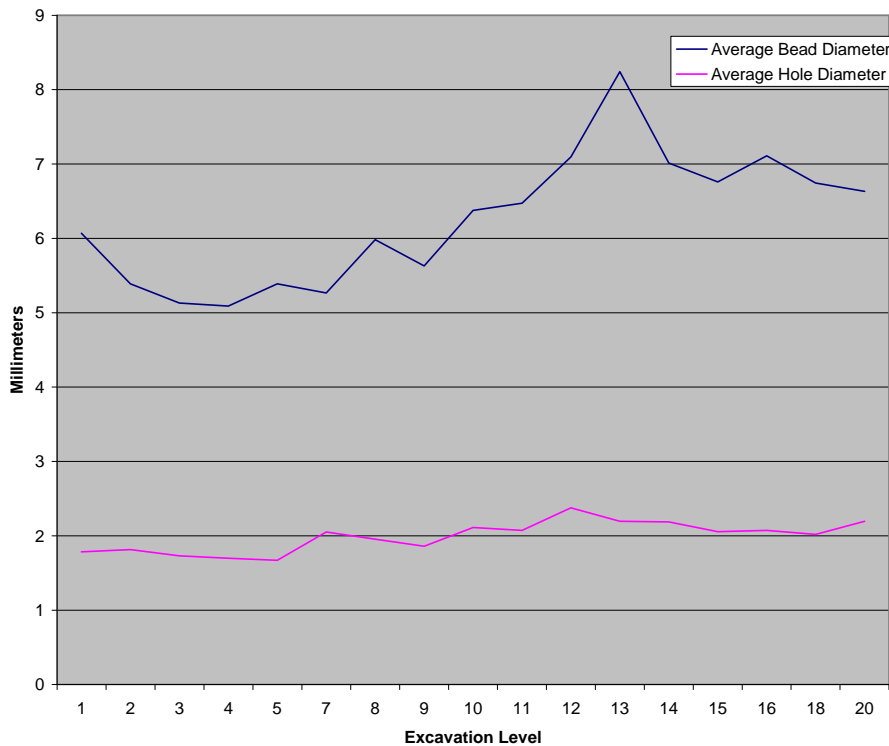


Figure 8-2. Average bead and bead hole diameters by level for the Central Precinct.

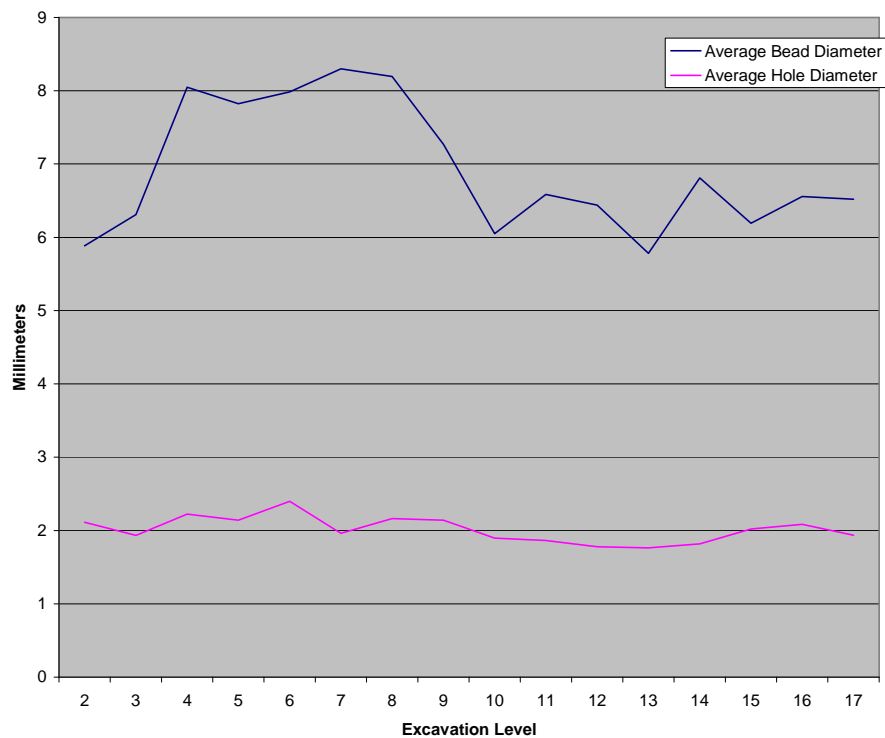


Figure 8-3. Average bead and bead hole diameters by level for the Western Precinct.

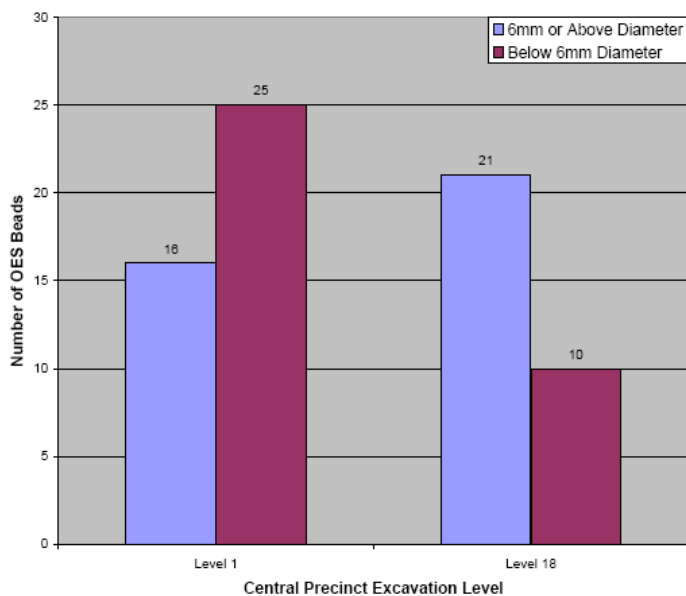


Figure 8-4. Beads above and below 6mm total diameter from two Central Precinct levels.

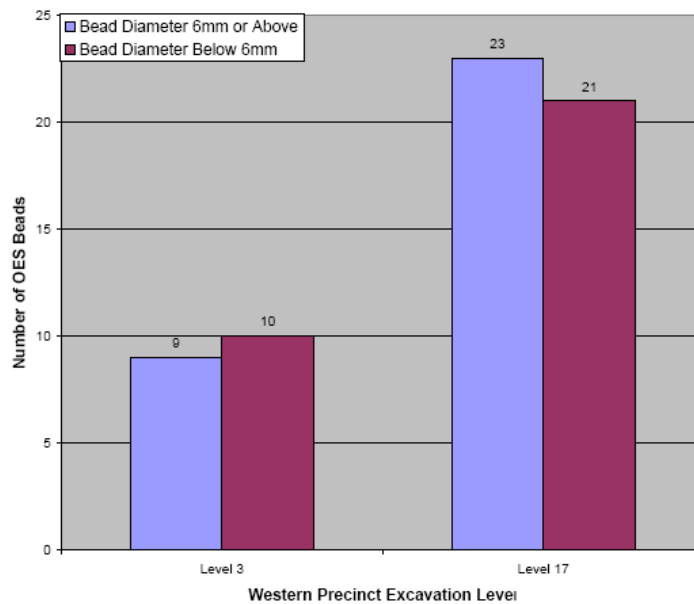


Figure 8-5. Beads above and below 6mm total diameter from two Western Precinct levels.

Level 9 (4E, 6S) contained 136 finished OES beads from a concentrated area within the larger excavation unit, with only two beads exceeding 6 mm and seven beads falling below 5mm in diameter (**Figure 8-6**). Also, all of the OES beads from Level 9 (4E, 6S) have a polished finish. Due to their concentration within a single unit, I believe these beads were either in one continuous strand at one time, or, at least, they were made at the same time at another location and brought into the site together. I base my assumption that these uniform beads were made elsewhere on lack of additional evidence (e.g. shell fragments, smoothing stones, etc.) for onsite bead production within the same strata in the Central Precinct.

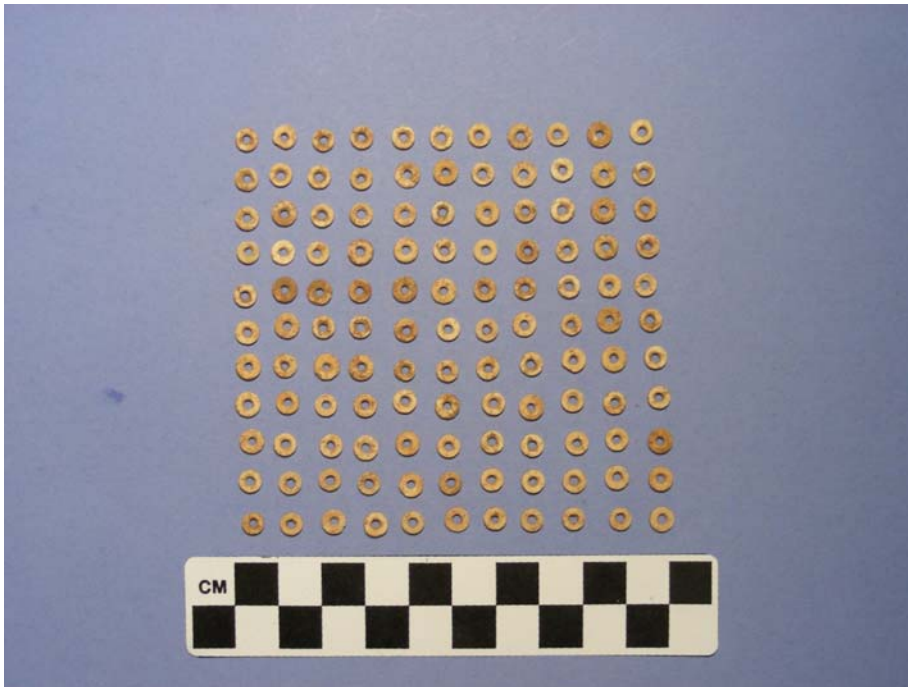


Figure 8-6. Sample of OES beads from Central Precinct, Level 9 (4E, 6S) displaying uniform size and wear.

Level 5 in the Central Precinct, dating to the 1400s CE, produced the only evidence for onsite bead production at Bosutswe outside of the abovementioned polishing stones from the top levels of the Western Precinct and the occasional rough or fragment at other levels. A total of 298 OES roughs/fragments along with 23 complete beads came from this locale. The sudden appearance of hundreds of roughs provides further evidence that the Central Precinct was the site of workshop activities as well as elite housing as stated by Denbow (2008).



Figure 8-7. Example of OES fragments from Bosutswe, Central Precinct, Level 5.

No OES or other beads apart from two strands from Burial 7, were clearly associated with the burial of an individual. These strands were not part of my formal analysis, but they merit mention due to their unique nature. The OES bead strands were found in from a child's burial from Level 12 in the Western Precinct (see **Figure 8-8**). One strand was wrapped around the neck of the infant (**Figure 8-9**) while the other strand was wrapped around the waist three times (**Figure 8-10**). The necklace alone consists of 127 OES beads, a number that is nearly quadrupled in the waist strand.



Figure 8-8. Burial 7 with OES beads wrapped around body (Denbow 2002).



Figure 8-9. Child's OES bead necklace from Burial 7.



Figure 8-10. Child's OES bead waist strand from Burial 7.

Mussel Shell Beads

Mussel shell beads only make up 7.48% of the total number of analyzed beads, but their presence almost is almost exclusive to Levels 11-15 (94 of 134 total) in the Western Precinct, with Levels 12 and 14 containing the most mussel shell beads (**Figure 8-11**). These numbers closely match the trends discovered by Atwood (2005) concerning other water-bound species from the northeast such as lechwe and sitatunga which also likely derive from the Boteti River system that forms a watered corridor crossing the Kalahari from west to east.

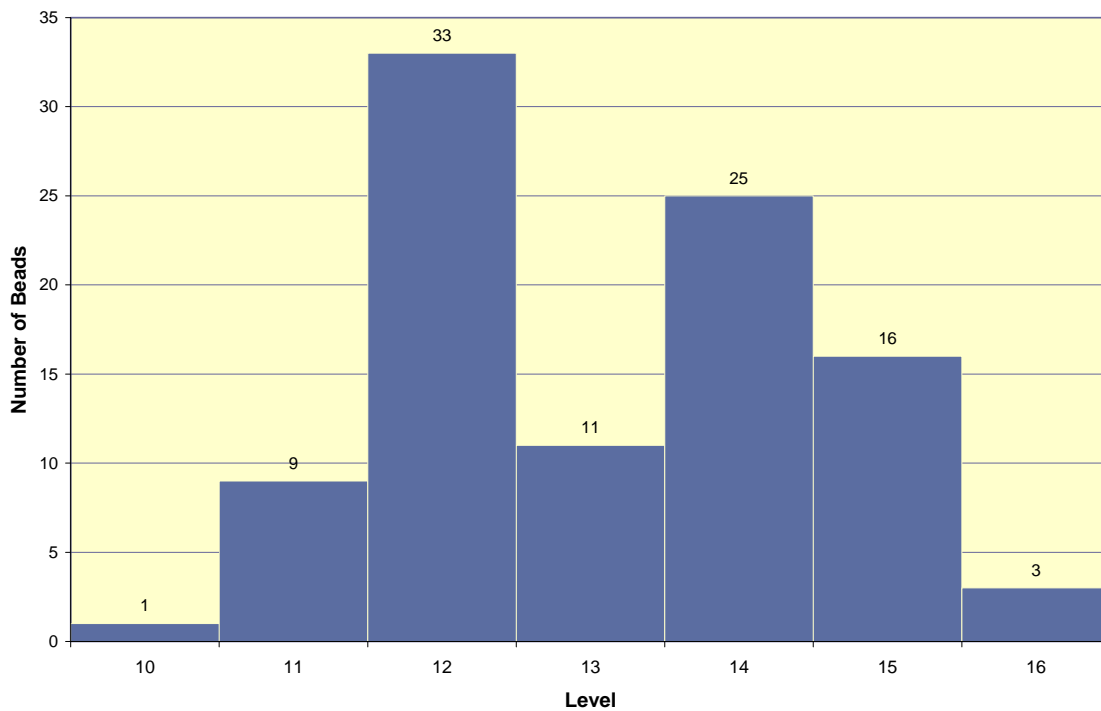


Figure 8-11. Mussel shell bead totals by level, Western Precinct.



Figure 8-12. Example of river mussel shells from the Western Precinct.



Figure 8-13. Other river mussel shell beads from the Western Precinct.

Unlike OES beads, the holes in mussel shell beads are almost exclusively straight with no tapering. In the Western Precinct, 70% of all mussel shell beads have straight holes. In the Central Precinct, 95.83% of the beads have straight holes. Comparing these percentages back to those of OES beads, I conclude that the drilling techniques must have been different for mussel shell beads. Because mussel shell is a more brittle material than OES, my claim is not farfetched. One would need a much sharper, finer implement to create the hole without fracturing the rough.

Mussel shell beads also tend to have a polished or at least smooth exterior surface. In the Western Precinct, 58.18% of all of the mussel shell beads have a polished finish, with another 31.82% having a smooth surface. Much like the numbers for drilling techniques, the percentage for mussel shell beads with a polished finish jumps when one looks at the Central Precinct. Over 87% of all mussel shell beads from the Central precinct have a polished finish. Coming back to an earlier point, it is possible that these beads were quite valuable to the people of Bosutswe due to their remote origins. By the time these beads made it to the time period covered by both the Western and Central Precincts, they could have been passed down through multiple generations. This situation seems all the more possible when one takes into account that the greatest number of mussel shell beads with the highest amount of differentiation were found in much earlier contexts.

Achatina Beads

Achatina shell beads, like mussel shell beads, were most abundant (55.56% of the entire *Achatina* sample) in Levels 11-17 in the Western Precinct. Various types of *Achatina* (land snails) occur all over Africa. In fact the deserts of Botswana are home to five distinct species of *Achatina* (Raut and Barker 2002: 56), but the absence of notable numbers of these beads at Bosutswe outside of the aforementioned levels, along with the presence of only one piece of unworked shell in my collection, leads me to believe that these beads were mostly traded in from other areas. If this is the case, then the height of *Achatina* bead popularity at Bosutswe matches the same time period when other “exotic” goods (mussel shell beads and non-local game) were desired (**Figure 8-14**).

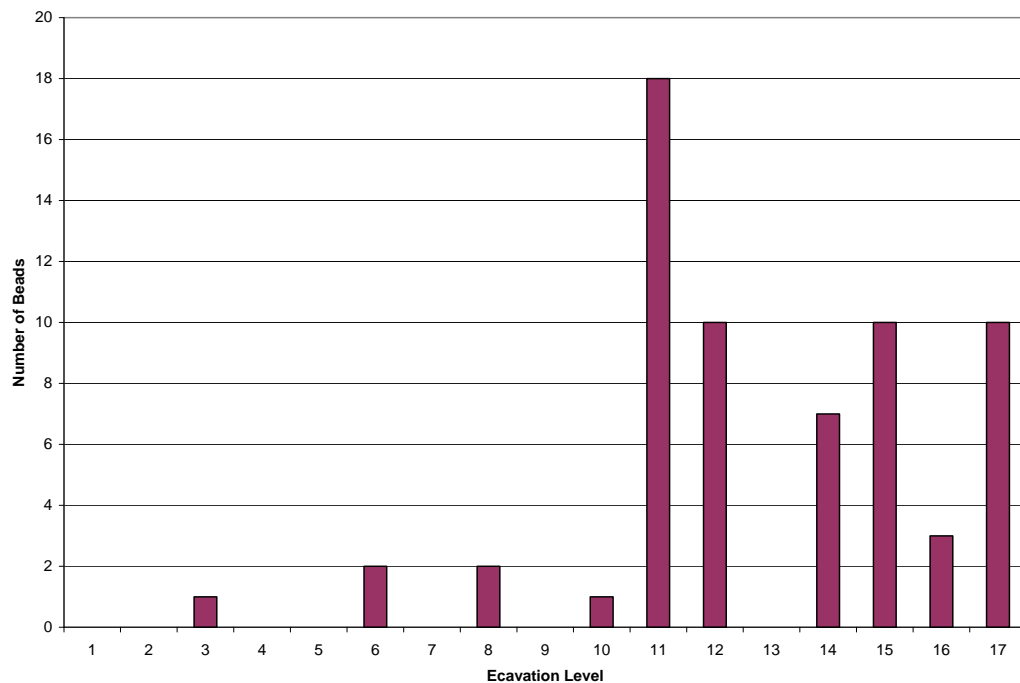


Figure 8-14. *Achatina* beads by level, Western Precinct.



Figure 8-15. An example of a large *Achatina* bead (bottom row, center).

Although the height popularity of *Achatina* beads was contemporaneous with that of mussel shell beads, there are some differences in their manufacturing techniques. In the Western Precinct, 56.25% of *Achatina* beads have straight holes without any tapering. Another 32.81% have tapering on just one side. In the Central Precinct 70.69 % of the beads have straight holes.

A major difference between the mussel shell and *Achatina* bead assemblages lies in the finishing of their exterior surfaces. In the Western Precinct with its older deposits, 82.81% of the *Achatina* beads have a polished exterior as opposed to the Central Precinct where only 58.82% are polished. These percentages are almost inverted from the numbers for OES and mussel shell beads. Like the mussel shell beads, the overwhelming majority (64) of the 81 total *Achatina* beads came from the Western Precinct, but they are also the most polished. I attribute this possibly to the nature of *Achatina* shell as a bead material.

It could be the case that *Achatina* shell corrodes or becomes more brittle around the edges over time. I say this because although the earlier Western Precinct deposits have more polished beads, the average thickness is reduced and the average bead hole size increases by the time one reaches the time period covered by the Central Precinct deposits.

Aragonite, Bone, Slate, and Other

With only one possible aragonite bead and one possible bone bead, these two categories will not receive any further attention. Without further testing, I cannot be sure that these classifications are even correct. I identified 45 beads as slate. I am dubious of this number for a couple of reasons: 1) slate and burned OES could look similar in small objects like beads; and 2) without some sort of chemical testing or a highly trained eye one cannot be certain that the material is actually slate. The beads that fall into the Other/Cannot Identify category do so because of their extreme corrosion or decay causing them to be too brittle to handle properly or identify in any way.

COMMENTS

Now that I have covered the bead data, it is necessary to move into a discussion and synopsis of my results in comparison to the theory about OES bead size equaling people of Tapela (2001) and Kandel and Conard (2005) amongst others. I will also compare my results with the data from Bosutswe's faunal remains as stated by Atwood (2005). Finally, I plan to say something about curation or heirlooming and the multi-generational use of valued objects.

Chapter 9: Discussion

First of all, every level of excavation has produced OES beads of various sizes, not just the larger agro-pastoralist beads of Tapela, Conard , and Kandel. Complete OES beads ranging from 3mm to 9mm are found in every unit and level with no clear patterning in time or provenance. To complicate things further, there are units that produce OES beads in all phases of production, and in varying sizes. Therefore, any chronology or attempt to identify who lives at the site based on bead size alone fails at Bosutswe. Additionally, one sees a trend that meshes with the idea of beaded ornaments being valuable and passed along to different generations. Many of the smallest OES beads have the largest hole diameters, thinnest walls, and are the most uniform and polished. This suggests that they were worn for a long period of time. I would suggest that these beads were curated and worn by multiple generations before being lost to the soil. For example, a present-day analog would be that in some southern African Bantu groups mothers remove their beaded adornments at the time of their husband's death and pass them along to their daughters (Carey 1998: 90). The act of passing along valuables to younger generations appears to stretch back into African Prehistory. The Central Precinct shows a clear trend of declining average bead diameter as one moves to the surface. One must not forget that the greater numbers of small beads in the upper levels does not necessarily indicate that curation was only a trend in more recent times. Smaller beads were found in the lower levels as well. A possible reason for the discrepancy could be that smaller beads are more fragile than their larger counterparts; therefore, they are more susceptible to being crushed and becoming unidentifiable in the surrounding matrix.

Many of the archaeologists currently working in southern Africa fail to acknowledge the role of many artifacts as heirlooms for future generations. One possible reason could be that curated items would test the utility of tight-knit stylistic chronologies based on bead size. Therefore, explanations concerning the ethnic or cultural makeup of a site's inhabitants centered on the style of items like beads become less stable or matter-of-fact. The situation becomes even less clear when one factors in the presence of long distance trade and the possibility of a multi-ethnic population. Beads, I believe, hold much information about the people of Bosutswe, but other lines of evidence must be considered before one says anything definitive about their identity.

Judging from ethnographic evidence from southern Africa, women were likely the primary makers of OES beads, I understand the thinking behind Kandel and Conard's claim that sites without debris from the bead making process most likely did not have women, but I am skeptical of their claim. They assume that bead production was exclusively the domain of women and that all groups produced their own beads, ignoring the possibility of external trade or even gendered bead materials. Considering the fact that glass beads were traded into southern Africa from Asia and the Middle East via the East African coast for hundreds of years (Wood 2005), trade in beads of all types was a lucrative endeavor within the African subcontinent. It is possible that sites without signs of bead production relied on trade relationships with other groups that were able to exert a sort of monopoly, either due to access to the necessary resources or to their greater sociopolitical position within a sphere of influence. Also, if beads were a prized, yet ubiquitous, commodity, then it would be easy for certain groups to rely on outsiders to

provide them with finished beads in exchange for other readily available trade items. Wilmsen (1989; and 2003) outlines this very situation in his description of colonial trade caravans. When considering the bead assemblage at Bosutswe, the presence of mussel shell and thick-shelled *Achatina* appoint to distant origins for popular and possibly prestigious bead materials. The decline over time in numbers of river mussel beads could thus indicate a shift over time in trade routes or trading partners for the inhabitants of Bosutswe.

Furthermore, assumptions concerning the sex of the bead makers are entirely based upon ethnographic analogs. While is certainly the case in the present that women in Botswana are the primary source of worked OES beads (see Sciama 1998 and Carey 1998), this defined role may not have been as defined or as rigid in the past. Much more archaeological evidence is needed before any claims concerning the sex of the bead makers from Bosutswe could be substantiated.

The common idea that hunter-gatherer groups preferred “small” OES beads, and their agropastoralist neighbors preferred beads of a larger size is, in my opinion, an interpretation rooted in much broader “traditionalist” arguments in the Kalahari Debate (see Lee 1979,1992; Smith and Lee 1997; Solway and Lee 1990). These authors believe that archaeology and history prove that Bantu and San groups lived in isolated, or at least culturally bounded, social and economic spheres throughout most their coexistence in southern Africa. Among traditionalist ideas is the belief that common interaction among the San and Tswana only occurred after the late 19th century. Even then, this interaction is thought not to have had much of an impact on the cultures of either group, and any

blurring of ethnic divisions is a phenomenon of the more recent past. Tapela (2001) falls in step with traditionalist views by making distinct, arbitrary divisions in the OES bead culture of San and Bantu groups by ignoring sites, such as Bosutswe, with clear evidence that bead sizes and materials fluctuated through time for a number of reasons. There is no inherent evidence that race or ethnicity had anything to do with the size of beads, particularly OES beads, coming out of the ground.

My own findings and those of Atwood (2005), Denbow et al. (2008), and Denbow and Miller (2007), show clear evidence that the inhabitants of Bosutswe, from early on, were part of a much wider sphere of trade and social interaction. Therefore, I am inclined to side with arguments that emphasize a cultural exchange of ideas and materials between San and Bantu groups over a much greater time-depth (see Denbow 1986; Denbow and Wilmsen 1986; Wilmsen 1989; Wilmsen 2003; and Wilmsen and Denbow 1990). At Bosutswe, bead materials came into the site from riverine areas and areas high in limestone or calcrete that could support the growth of large *Achatina* shells. As previously stated, the same Botete River region that was the likely source for river mussel beads may also have been the origin of the faunal remains of nonlocal, water-bound species at Bosutswe. In addition, coming back to Tapela (2001), more small OES beads were concentrated in the younger Central Precinct levels that also contained evidence for onsite bead production (i.e. shell debris, roughs, uniform beads, and smoothing stones). Apart from the time period covered by the bead production levels in the Central Precinct (CE 1450-1650), most of the beads of all types could have been traded into the site from outside groups. This, in addition to wear on the beads due to curation or heirlooming, is

perhaps the most likely cause of variations in materials, sizes, smoothing and drilling techniques.

My point is not to discredit authors with different ideas, but to illustrate the problems inherent in essentializing groups as isolated or removed entities with little contact amongst each other, or depicting them as strictly adhering to closed or stereotyped racial or ethnic identities. Throughout the prehistory of Africa groups have traded and interacted with each other. Long-utilized trade routes were adopted by Europeans during their explorations and colonizing efforts. In the Kalahari, various “depots” served as the home of Bantu groups, San, and Herero (Wilmsen 2003). Although European presence greatly reshaped all of Africa, relationships between various groups have their roots deeper in prehistory. European economics was not the entire reason that southern Africans of varied backgrounds came together to trade. If anything, the varied material culture from Bosutswe possibly originates from multiple traditions, including those living at the site and those living at a distance.

Chapter 10: Conclusion

Currently, many Westerners view African beadwork as “high art” that expresses deep-seated cultural traditions (see Labelle 2005). Polly Wiessner (1997) posits that beads and beadwork among southern African Khoisan are a way to exhibit cultural similarity or difference and to maintain distant social ties through reciprocal gift giving. People have used beads in Africa for various reasons over their estimated 75,000-year history. Beads are easy to transport, and can be made from a number of materials. Throughout the near 1,000-year occupation of Bosutswe, beads were an important item to its inhabitants.

Beads or bead materials were found in nearly every level of excavation for both the Western and Central Precincts, although the assemblage changes in nature through time. Ostrich eggshell beads of various sizes and styles are ubiquitous through all levels and units across the site, possibly due to the availability of ostrich eggs both locally and throughout the area. This is not to say that OES beads had little meaning or value for much effort was expended in their production and mounting. The infant burial wrapped in strands of beads, and the evidence that OES beads were passed down through generations of wearers, shows that these were important and valued items to the people who owned them. Currently in Botswana, Batswana and tourists alike purchase strands of OES beads at shops or from craft workers.

The spot concentration of most mussel and *Achatina* shell beads in the earlier levels at the site tells a different story. It provides evidence of cultural interaction, at least through trade, with distant peoples who had access to novel raw materials. These beads’

connections to far away groups, especially along waterways in the Kalahari sandveld, and their restricted numbers, could have imbued them with considerable value. The disappearance of river mussel beads in the later levels is something warranting further investigation.

For now, the evidence is as follows: 1) there is no correlation between the size of the OES beads from Bosutswe and the ethnic makeup of the population. Average bead size and hole diameter decrease over time in the Central Precinct, going against the idea that earlier sites should have smaller beads. Again, I credit this trend to the fact that people were curating beads through generations of inhabitants. This shows the value of beads in a wider socioeconomic sphere. To say that all small beads are to be associated with Khoisan bead makers, falls flat in the context of Bosutswe; 2) for a period of time, beads made of foreign materials were popular among certain people of Bosutswe. This evidence follows suit with the evidence from the faunal remains of water-bound species in the same area, providing evidence of at least one trade contact in the Botete River region.

Although my analysis was thorough, more research into the bead assemblage is a must. As mentioned earlier, sourcing the origin of the bead materials could provide clues as to who was making what type of bead. Sourcing would be difficult for OES beads. It is possible that strontium isotope testing could reveal whether the eggs were laid on the sandveld or hardveld. This, in turn, might provide evidence about which groups harvested the eggs or made the beads. Again, sourcing other types of beads would be a challenging endeavor, but patterns and possible trade routes might be parsed out through careful site-

by-site comparisons of bead assemblages. Lastly, by comparing the bead assemblage with existing and new spatial evidence from Bosutswe, one might be able to see differential access to certain bead types, sizes, or numbers. There is much to come.

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