The Archaeology of Leshongwane Site in Eastern Botswana

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Abstract

This paper presents some preliminary results of an on-going research at Leshongwane Iron Age site located in eastern Botswana, near the copper-nickel mining town of Selibe-Phikwe. Except from skeletal and sporadic archaeological impact assessment reports, in particular those from the construction of the nearby Letsibogo Dam project, there is very little known about this site. Since 2009 the Archaeology Unit at the University of Botswana, through the assistance of the African Archaeology Network (AAN) has been conducting fieldwork research which has yielded promising results to contribute to the debates related to Iron Age populations in Southern Africa. Different methodological approaches have been used to explore the site's environmental settings, chronostratigraphic and cultural sequences of occupational periods as well as the spatial distribution of the archaeological features. Even though these results are still preliminary, it is evident that we are dealing with a site that has attracted humanity for settlement at different times from Middle Stone Age period to the entire spectrum of the Iron Age period, to Zimbabwe and Sotho-Tswana to the present.

Introduction

The archaeological site of Leshongwane (also known as Mothudi, see Figure 1), north of Selibe-Phikwe, is within the broader Shashe-Limpopo Basin. The site first appeared in National Museum archaeological records in 1986 when van Waarden and Smith recorded a ruin which they named 'Mothudi Ruin' (van Waarden 1986). Van Lundert (1990) also recorded another ruin about 500m to the north of 'Mothudi Ruin' and named it Leshongwane. However, it has since been established from topographical maps that Leshongwane is the name of the hill outcrops that house these enclosures, and it is the name used by the local community for the hills. Mothudi, on the other hand is not locally known and it has since emerged that the site was called Mothudi because of a nearby farm that was owned by a certain Mothudi (personal communication with van Waarden 2011). This is part of the reason we adopt the name Leshongwane as a local name for the site in this paper. Leshongwane is documented as a Zimbabwe Period site because of the presence of elaborate stone walls which have been quarried and shaped into blocks and then laid into straight course and even faces (van Waarden 1988). Even the location on a hilltop and the granite raw materials used for the construction of the walls fits well within the architectural construction associated with the Zimbabwe Culture. However, the ruins are not as extensive and elaborate as those of Great Zimbabwe but comparatively larger in extent than any of the recorded Zimbabwe Culture ruins in Botswana including the Domboshaba ruins in north-east of Botswana.

Although focus has been on the highly visible monumental stone walls, recent field studies undertaken at the site have clearly shown that this site was continuously occupied from Middle Stone Age to Late Stone Age (Peter 2010), and through the entire spectrum of the Iron Age period to the present (Mothulatshipi 2010 and Thabeng 2011). The results presented here are based on archaeological evidence obtained from two extensive field schools between 2009 and 2011, organised by the Archaeology Unit, University of Botswana and partly funded by the Swedish International Cooperation, Department for Research Cooperation (Sida/SAREC) through the African Archaeology Network (AAN) project.

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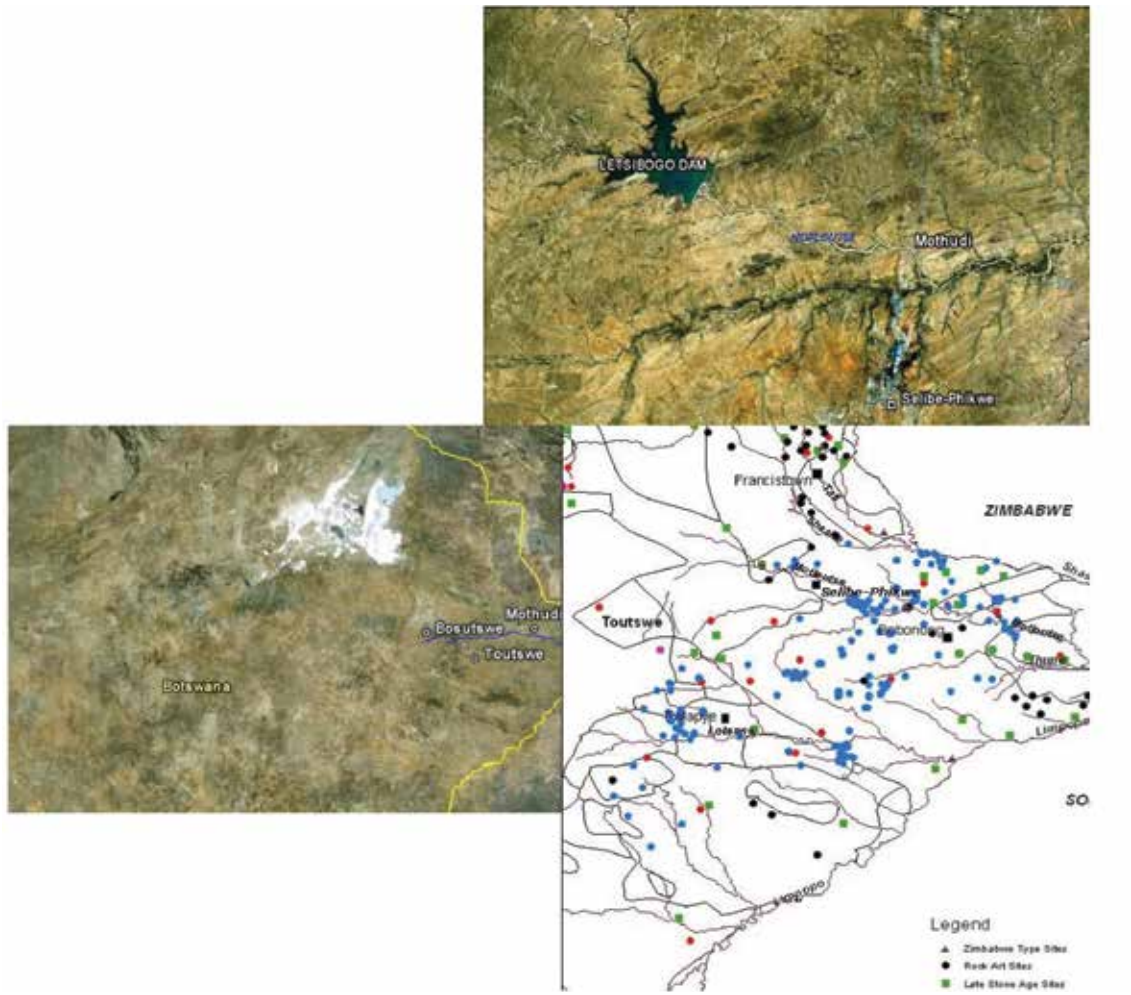
Figure 1: The location of Leshongwane and the distribution of archaeological sites in the Shashe-Limpopo Basin.



Source: **Google EarthTM**

Contextualising the Leshongwane Archaeological Site

Archaeological records attribute the settlement of Southern Africa by agro-pastoralists to as early as 200AD (Philipson 1977). These farmers are believed to have migrated from east and west central Africa to the eastern margins of South Africa where they encountered difficulties as they had reached the ecological margin of growth for millet and sorghum (van Waarden 1989). Due to increase in population which resulted in overcrowding and possibly pressure on ecological resources, some segments of the population again migrated northward and aggregated around the climatically favourable topographic unit commonly referred to as Shashe-Limpopo Basin (Tyson and Lindesay 1992; Smith 2005; Holmgren and Öberg 2006). These had concentration of sites along drainage systems and lake margins. During this period communities also expanded into the fringes of the eastern Kalahari and the Makgadikgadi lake. They traded in agricultural goods and valuable minerals which contributed to accumulation of wealth leading to the growth of political and economic centres such as Bosutwe, Toutswe and Mapungubwe.

It is therefore not incongruous to suggest that sites such as this one were influential in connecting these centres, and at times major stakeholders in the economic transactions believed to have sustained their length of existence and power in the region. Leshongwane Hills are located about 10km north of the mining town of Selibe Phikwe, and sits on the northern flood plains of Motloutse and Letlhakane Rivers. It is set within a physiographic landscape that is underlain by granite rock, which is visible as a range of boulder outcrops, aligned northeast –southwest direction over a flat plain and an active geomorphic terrain characterised by deep and fertile alluvial soil deposits. These soils support agro-pastoralist activities such as cultivation of cereal and leguminous crops, and livestock keeping due to availability of the good pasture.

However, one thing that makes this area an exception is its richness in archaeological deposits which are predominantly Iron Age material from earliest occupation. The archaeological remains range from distinctive stone walls, surface stone features that are piled with different forms and structure, daga floors and numerous potsherds some of which are diagnostic.

Methodology

In 2009 the site was extensively surveyed by a team of archaeologists, amongst them Professor Chami from the University of Dar-es-Salaam in Tanzania, Professor Pikirayi (Figure 2) and Dr Manyanga (University of Pretoria), Dr Mothulatshipi (University of Botswana), Dr Katsamudanga and Mr Chikumbirike (University of Zimbabwe) as well as Dr Mohapi (National Univeristy of Lesotho). These were accompanied by at least 2 students from each of the institution and more than 10 from the host country, Botswana. Field test-excavations were also undertaken in the valley that runs through the two outcrops and inside the one of the enclosures. This exercise resulted with an unpublished MA dissertation on the Stone Age industries by one of the student participants from University of Dar-es-Salaam (see Peter 2010).

In 2010 another field school was run by the University of Botswana where more surveying and excavations were done, including a comprehensive mapping exercise of the enclosures, and other related features was undertaken for a BA project by Thabeng (see Thabeng 2011). Mapping was conducted in order to document and study the distribution of surface materials discovered during the survey. Features were mapped using total station and Global Positioning System (GPS), and collected data was taken to the laboratory for processing and analysis through the use of computer software systems such as Automated Computer Aided Design/Drafting or AutoCAD and Geographical Information Systems (GIS). Selected excavations in the enclosures and valley area were also conducted in order to study the stratigraphic layout, and the composition of other archaeological materials like daga and stone features. A dumpy level was also used for taking excavation levels (Figure 3).

In 2011 a third archaeology field school was conducted but due to the outbreak of foot and mouth disease in the area the samples excavated could not be transported to the laboratories in Gaborone. It was during this field school that two clay quarries were identified and clay samples were collected. The idea is to use the clay samples to establish if there is any link between the ceramic sherds found in large quantities at the site with the clay sources. Some samples of clay and sherds have been taken to the Ceramic Laboratory Research at Lund University in Sweden for analysis, and the preliminary results will be discussed in Mothulatshipi and Pettersson (in press).

Figure 2:, Prof Pikirayi explaining to students the significance of the stone walling architecture at one of the enclosures during the International Field School in 2009 (Photograph by Mothulatshipi).

Figure 3: University of Botswana students using dumpy level to take excavation levels at one of the enclosures during the 2010 field school (Photograph by Mothulatshipi).

Results

Field Survey

A significant amount of archaeological remains were observed and recorded during the field surveys. These ranged from surface scatters of potsherds, lithics, metals, marine shells, spindle whorls or (loom weight!) to features such as daga remains, stone piles and enclosures, and vitrified dung. Surface survey also revealed some in situ preservation of ceramic vessels embedded in the daga features whilst in other instances the vessels were just under the rubble as if they were placed under the feature when it was constructed or before it collapsed. More were also uncovered during excavations. The paper will focus more on the stone walls, ceramic remains, daga and stone features.

Stone Enclosures

During the 2009 survey, three extensive stone walls were recorded and were accordingly named Enclosure 1, 2 and 3 in the order that they were found. Enclosure 1 was on the southern side of the hill and it is believed to be the enclosure that van Waarden (1986) recorded and called Mothudi whilst enclosure 2 was to the northern side, and just across the valley that separates the two hill outcrops. It is also believed that from the description by van Lundert (1990) enclosure 2 could possibly be what he called Leshongwane as stated above. Enclosure 3 was not in this recorded list of sites, so it was one of the newly discovered sites of the survey. Of the three structures, Enclosure 2 was the most extensive with at least seven separate compartments, clearly demarcated by walls and entrances and/or exits (Figure 4). Compared to Enclosure 1 which was also detailed in terms of compartments, Enclosure 2 had several and possibly purpose specific rooms, some with distinctive conical entrances characteristic of Great Zimbabwe architectural designs.

At Enclosure 1 (Figure 5) as already stated there is a clear indication of the division of space but it is not as extensive and well detailed as at Enclosure 2 (Figure 4). For the two enclosures the walls are still intact. The only major threat to their existence is from vegetation growth and it is hoped that with proper conservation measures in place they could last for many more generations to observe in the future. Enclosure 3 was found to be a semi-circular structure located at the far western corner of the northern hill outcrop. It did not display any specific layout compared to Enclosures 1 and 2. It could have well been used as a meeting place or where activities that needed gathering were undertaken and definitely not occupied for longer periods.

In the 2010 field school six more enclosures were recorded. Of these Enclosure 6 (see Figure 6 above) was found to be a livestock enclosure with vitrified dung, and was covered by characteristic Cenchrus ciliaris which is normally associated with animal enclosures (Denbow 1979). The entrance to the enclosure was a clearly marked pathway with stone wall on each side up to the enclosure at the top of the outcrop. To the far eastern side of the two hill outcrops was Enclosure 5, which even though smaller in size was also distinctive and could fairly rank as number 3 to Enclosure 2 and 1 in terms of significance or importance. A 1m2 test excavation in the centre of this enclosure produced diagnostic ceramic sherds of a complete vessel at about 20cm beneath the surface as shown above in Figure 7.

Figure 4: Enclosure 2 stone walling and the drawings of its spatial layout. (Drawings by Thabeng 2011).

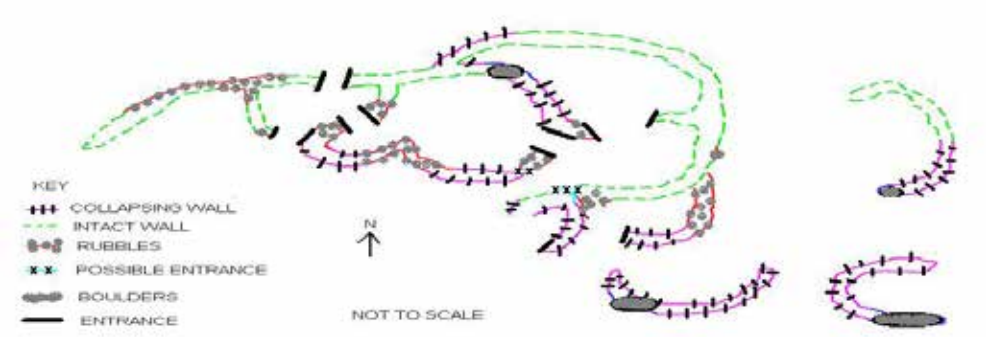


Figure 5: The drawings of Enclosure 2 spatial layout (drawings by Thabeng 2011)

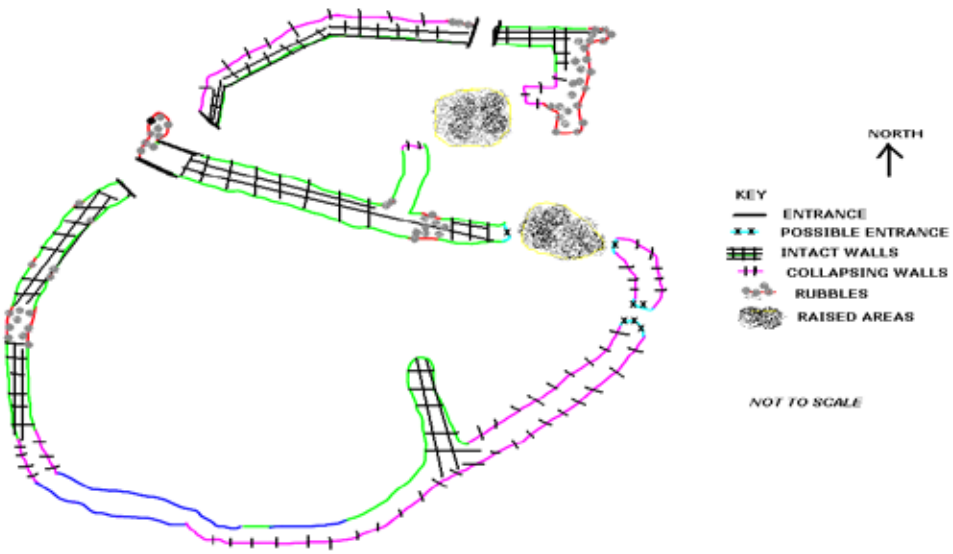


Figure 6: Stone wall enclosures at Leshongwane (after Thabeng 2011) with modification for enclosure 3 and 7 which were switched during his survey.

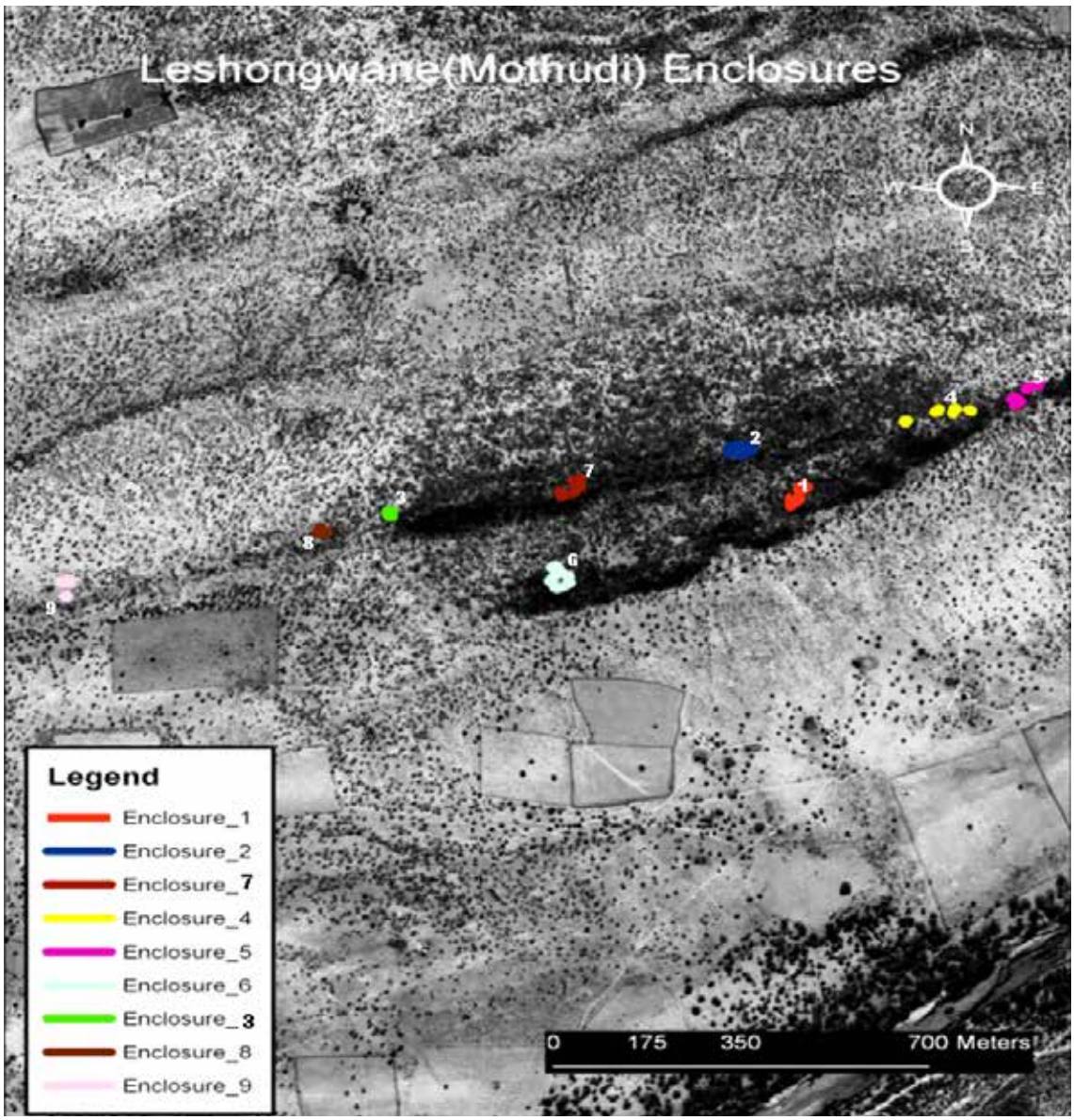
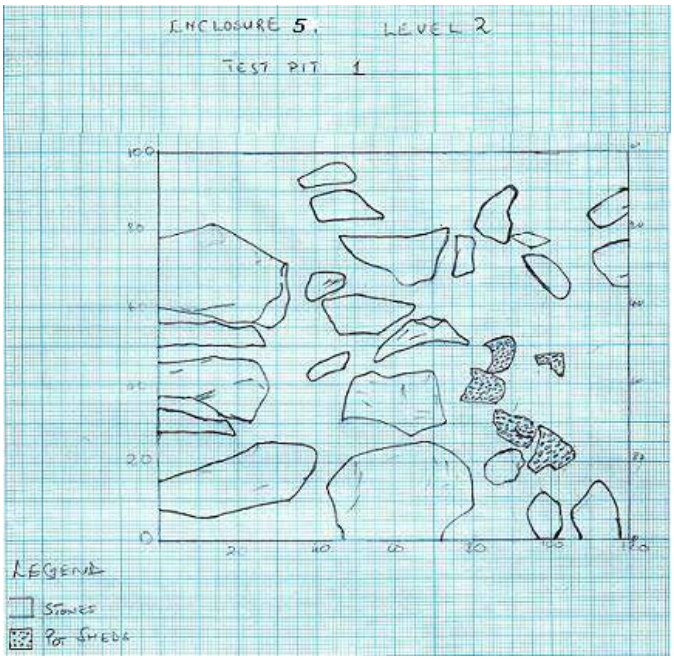


Figure 7: Test -excavation at Enclosure 5. A plan and photograph of level 2 with diagnostic sherds of a vessel.



Ceramic Remains, Daga and Stone Features

The area between the two hill outcrops, also referred to as the valley area, was found to have a distinctive pattern of human activity. On the surface there were considerable amounts of ceramic scatters which were at times preserved in situ with rim outlines or parts of vessels clearly showing in or underneath the daga rubbles (Figure 8). Some of the vessel and sherd decorative motifs were clearly defined and quite diagnostic. Almost all of the decorative styles were identified using Huffman (2007) to the Zhizo Cultural Period. The daga features were mainly circular in form with a diameter of not

more than 1.2m. It is not yet clear what the features are as they definitely do not seem to conform to what has been described by Huffman (2010) as either grain bin foundations or houses. There were no pits or thin surface layers observed beneath the thick daga pieces. The pieces had pole impressions on them, sometimes on one side whilst in some there were on both sites. Huffman further posits that the burnt thick pieces of daga are grain bin floors and indicative of severe drought, whereby farmers would burn their grain bins immediately after the rainmakers had burnt the temporary ones constructed for rain making rituals (Huffman 2010). Unlike Huffman's observation which suggests that daga features are indicative of rainmaking or drought incidences, the Leshongwane site has a large concentration of daga features in one area (the valley) which are in close proximity to each other, and in between them are numerous stone features of different sizes and forms. Therefore, it would be helpful if rainmaking sites are first located on the hilltops of Leshongwane or nearby hillocks for Huffman's thesis on El Nino, drought and grain bin burning in the area could hold.

Figure 8: Ceramic remains embedded within *daga* features. On top is a large pot (25cm in diameter) found in the middle of *daga* structure (dotted lines showing the outline of the mouth) and below is a vessel with the *daga* rubble collapsed on to it (two separate pots are visible as shown by the arrow).

As already mentioned, in between the daga features were stone features, some occurring as longitudinal piles, whilst others were circular in form. Some of the circular features had a centre stone reminiscent of what has been recorded elsewhere as grain bin stands even though in some instances there were many centre stones. In such instances, therefore, it was difficult to discern the function and/or symbolic nature of the features. Local residents were of the view that most of the stone features were burials even though an extensive excavation of two of these undertaken in 2011 field school did not produce any human remains. The excavation produced a considerable amount of archaeological remains. Most of these finds were left at the site (nearby homestead) due to the outbreak of foot and mouth disease in the area. More analysis will be conducted as soon as the materials is transported to Gaborone and faunal and floral remains will be used to provide radiocarbon dates.

Observations and Conclusion

Leshongwane has been described as Zimbabwe period site by several researchers such as Van waarden (1986), van Lundert (1990) and Van Waarden (1998), an idea influenced by the architectural styles of its walls which are similar to the ones found at Great Zimbabwe. However, on the basis of Zhizo pottery found there, Leshongwane archaeological site could have been amongst the earliest farming (Early Iron Age) settlement sites in the region (see Huffman 2007). The location of this site along Motloutse River which links the major rivers of the Shashe-Limpopo Basin supports the idea that Leshongwane could have been instrumental to the sites at the confluence and those in the interior such as Bosutswe, Toutswe and the Makgadikgadi salt pans and continued to do so during the Zimbabwe Period.

The evidence from the archaeological surveys, though requiring further analysis and dating of materials, is promising. First, the environmental location and terrain attributes within the site have been critical for attracting human occupation of the site. Secondly, archaeological evidence in the form of ceramic vessels and sherds, daga features and stone piles, stone walls and other artifactual remains such as loom weights, copper metal coils and rings, faunal and artifacts/ecofacts from fluvial environments points to the long and continuous occupation of the site and its socio-economic and socio-cultural dynamism. Certainly the occupants of Leshongwane along the Motloutse River interacted with other societies of the time some at the confluence of the Shashe and Limpopo and beyond with Limpopo River linking them with the Indian Ocean. A single bi-valve sea shell was discovered in the valley area of the site during the field survey. In the interior, the Motloutse River played a significant role in linking the Leshongwane population with other communities such as those at Bosutswe and Toutswe and the Makgadikgadi.

The stone walling architectural styles puts Leshongwane to the earliest period of such form of building techniques –Great Zimbabwe. The Great Zimbabwe populations are known to have been industrious and knowledgeable in mineral economy especially gold and copper. With the copper deposits presently exploited within the vicinity of the site, and the presence of copper ornaments amongst the excavated materials, this site would have been extremely attractive to Zimbabwe Period societies. Along the Motloutse River there are several Zimbabwe period sites such as Majande (about 25km to the east) and Majojo to the west of Leshongwane. However, these sites are attributed to the later Zimbabwe Period of Khami. Therefore, Leshongwane dates earlier and with evidence that seem to point to the fact that it was continuously occupied from Zhizo to historic times, it will be interesting to find the dates for the Great Zimbbwe occupation. It is likely that it may date earlier than Great Zimbabwe itself! This is because it is still a mystery in explaining what could have happened to the Shashe-Limpopo population at the end of Mapungubwe and at Great Zimbabwe there is no evidence of Zhizo or earlier than Mapungubwe materials.

It is therefore important that the significance of this site be acknowledged and recognized within the context of the Botswana and regional archaeology. It is likely, looking at the extent of the site and amount of archaeological evidence as well as its environmental setting (cf Mothulatshipi 2007

and Mothulatshipi 2008), that Leshongwane could have had a more significant and influential role than some of the sites we have for many years considered to have been key. For example, the Zhizho type ceramics at Leshongwane are quiet considerable and spread as compared to at the type site, Schroda (personal observation).

Finally, this site has a great potential for cultural heritage tourism. It is located in the outskirts of the ever threatened-to-collapse mining town of Selibe-Phikwe, and it is conveniently situated between the active tourism areas of the Tuli-Block and Makgadikgadi and Okavango Delta. Selibe-Phikwe Economic Development Unit (SPEDU) together with the relevant authorities of National Museum and Tourism Department should mobilize the nearby communities to develop management plans for the site and address some of the key government policy initiatives such as 'Vision 2016' and poverty eradication. The University of Botswana through projects like this one could produce detailed archaeological interpretation of the sites and assist in the setting up of a site interpretation centre or museum.

Acknowledgements

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References

Denbow, JR 1997. 'Cenchrus ciliaris: an ecological indicator of Iron Age middens using aerial photography in Eastern Botswana.' South African Journal of Science, 75, pp.405-408.

Holmgren, K. and Öberg, H 2006. ' Climate change in southern and eastern Africa during the past millenium and its implications for societal development'. Environment, Development and Sustainability 8, pp.185-195.

Huffman, TN 2007, Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa. Scottsville, University of KwaZulu-Natal Press.

Huffman, TN 2010, 'Intensive El Niño and the Iron Age of South-eastern Africa'. Journal of Archaeological Science, 37, pp.2572-2586.

Mothulatshipi, SM 2007. 'Archaeology without borders: a case for the Shashe-Limpopo Basin archaeology, eastern Botswana'. Settlements, Economies and Technology in the African Past, Studies in the African Past', 6. F Chami, G Pwiti and C Radimilahy. Dar es Salaam, Dar es Salaam University Press. 123-148.

Mothulatshipi, SM 2008. 'Landscape Archaeology of the Later Farming Communities of the Shashe-Limpopo Basin, Eastern Botswana: Land use Diversity and Human Behaviour'. Department of Archaeology. Edinburgh, University of Edinburgh. PhD Thesis.

Mothulatshipi, SM 2010. 'Preliminary results of an on-going research at Mothudi (Leshongwane), Eastern Botswana African Archaeology Network Council Meeting and Scientific Conference'. Enugu, Nigeria, 4-10 October 2010, African Archaeology Network.

Peter, K 2010. 'A study of Stone Age Industries at Mothudi, Selibe-Phikwe in eastern Botswana'. Unpublished MA Dissertation. Dar-es-Salaam, Archaeology Department, University of Dar-es-Salaam.

Phillipson, DW 1977. 'The Later Prehistory of Eastern and Southern Africa. London, Heinemann

Pikirayi, I 1997. 'Pots, People and Culture: an overview of ceramic studies in Zimbabwe'. In G Pwiti (Ed.) Caves, Monuments and Texts: Zimbabwean Archaeology Today. Uppsala, Uppsala University, pp.69-87.

Smith, JM 2005. 'Climate change and agropastoral sustainability in the Shashe/Limpopo River Basin from AD 900'. Unpublished PhD thesis,. Johannesburg, University of the Witwatersrand.

Thabeng, OL 2011. 'The Spatial Pattern of Enclosures at Leshongwane (Mothudi)'. Unpublished BA Research Project. Gaborone, Department of History, University of Botswana.

Tyson, PD and Lindesay, JA 1992. 'The climate of the last 2000 years in Southern Africa'. Holocene, 2, pp.271-278.

van Lundert HJA 1990. 'Archaeology Survey Sheet'. Unpublished Site and Monuments Records. Gaborone: Department of National Museum, Monuments and Art Gallery.

van Waarden, C 1986. 'Archaeology Survey Sheet'. Unpublished Site and Monument Records. Gaborone, Department of National Museum, Monuments and Art Gallery.

van Waarden, C 1989. 'The Granaries of Vumba: Structural Interpretation of a Khami Period Commoner Site'. Journal of Anthropological Archaeology, 8, pp.131-157.

van Waarden, C 1998. The Later Iron Age. In Lane, PJ, Reid, A and Segobye, A (eds). Ditswammung: The Archaeology of Botswana. Gaborone: Pula Press, pp.115-160.