

The late Holocene Stone Age of the Maremani Nature Reserve: foragers, herders and farmers

by

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1. Introduction

The last 2000 years of the Later Stone Age (LSA) in southern Africa are of particular interest, and contemporaneous assemblages contain a great deal of material diversity and variability (Hobart 2004; Sadr 2013). One region with a particularly unique LSA record dating to this period is the Mapungubwe landscape. It was here that the incumbent foraging community witnessed and took part in farmer state development from AD 900 onwards, affecting massive change in their cultural record. About 80km east, one finds the Tshirundu Hills, and foragers here also interacted with farmers as well as herders, which most likely influenced their cultural record. The importance of the Tshirundu area and its Stone Age occupants is due to its spatial relationship with Mapungubwe; it links the early second millennium farmer capital to the Indian Ocean coastal trading area, facilitating exchange and contributing to increases in social complexity, economic power and political authority. Thus, the Tshirundu Hills region played a vital role in the establishment of Mapungubwe c. AD 1250, and yet, to date, its Stone Age occupants have been completely ignored by archaeologists. It is the goal of this project to rectify this and archaeologically represent the indigenous foraging people who once occupied this influential landscape by studying their occupation and cultural sequence and focussing on their interactions with incoming farmers.

2. Archaeological background of the extended region

This study focusses on the Tshirundu Hills in the Maremani Nature Reserve, immediately east of Musina (Figure 1). At present, there has been no study of the foraging occupants on the landscape, let alone their relationship with incoming herder and farmer communities. Thus, we cannot say with any certainty what may have occurred in this region and the only comparison we have is with the nearby Mapungubwe landscape, approximately 80km west, briefly summarised below.

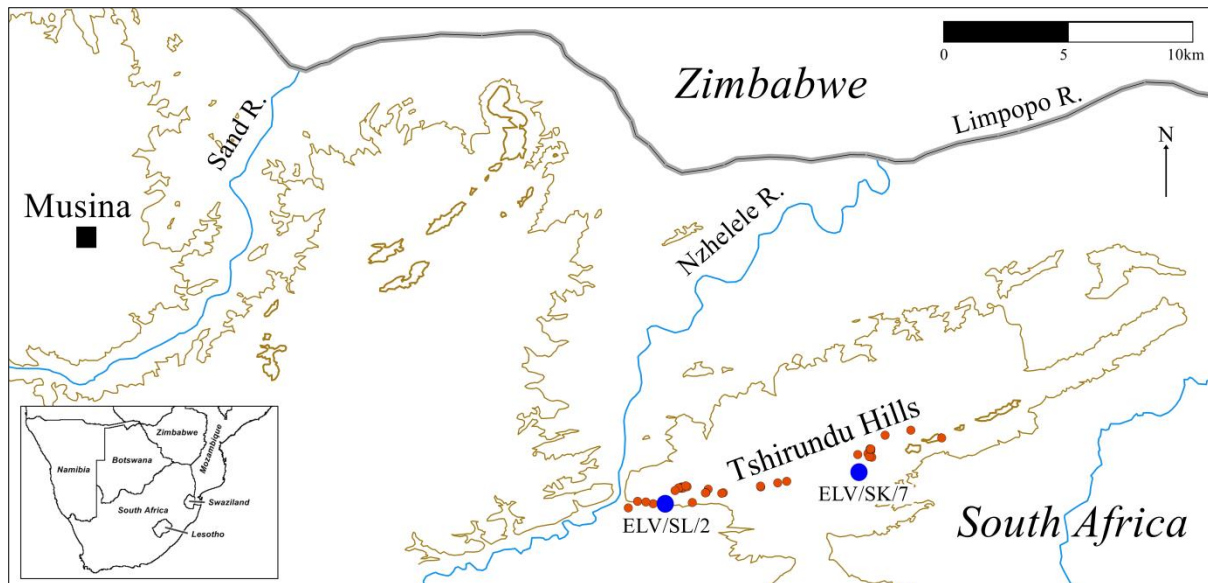


Figure 1: The Tshirundu Hills with identified rock art sites and the two proposed study sites.

There have been a series of LSA excavations in the Mapungubwe area, each with a unique archaeological record (Figure 2 for site locations). At Little Muck Shelter changes in the LSA assemblage, which includes an increase in stone scrapers, bone points, ostrich eggshell beads and evidence of their manufacture, and an increase in faunal species, correspond with the appearance of farmer ceramics at the site (Hall & Smith 2000). Similarly, from the onset of contact at Balerno Shelters 2 and 3 and Tshisiku Shelter (van Doornum 2005), the frequency and density of LSA artefacts increases along with scraping tools. This same trend was recorded at Balerno Main Shelter (van Doornum 2008), but this site exhibits a greater degree of material continuity in the LSA sequence, possibly, as van Doornum (2008) suggests, because the site was isolated (>3km from any homestead) and used as a refuge or aggregation camp. In northeastern Botswana, Dzombo Shelter shows an unusual pattern in that before AD 900, scrapers dominate the assemblage, but thereafter, until about AD 1100, backed tools dominate and then again scrapers until the site was abandoned (Forssman in press). Mafunyane Shelter, near Dzombo, was occupied by foragers, indicated by the extensive LSA record, and based on the appearance of a Bambata sherd in the terminal levels this began in the first centuries AD (see Walker 1994) until possibly AD 1300. Associated with the LSA tools are metal prills, partially made metal tools, a crucible, tuyère piece and a figurine all within an ashy, hearth-like deposit, found associated with sharpening grooves and pounding hollows in the rockshelter, suggesting that smithing occurred at the site and that foragers took part in these activities (Forssman 2014). At another nearby site, João Shelter, foragers began living with farmers and started abandoning their hunting and gathering lifeways from AD 1000 (Forssman 2014). The combined LSA picture is particularly diverse, with a range of outcomes spread across the landscape, many of which are related to the relationship that existed between foragers, herders and farmers.

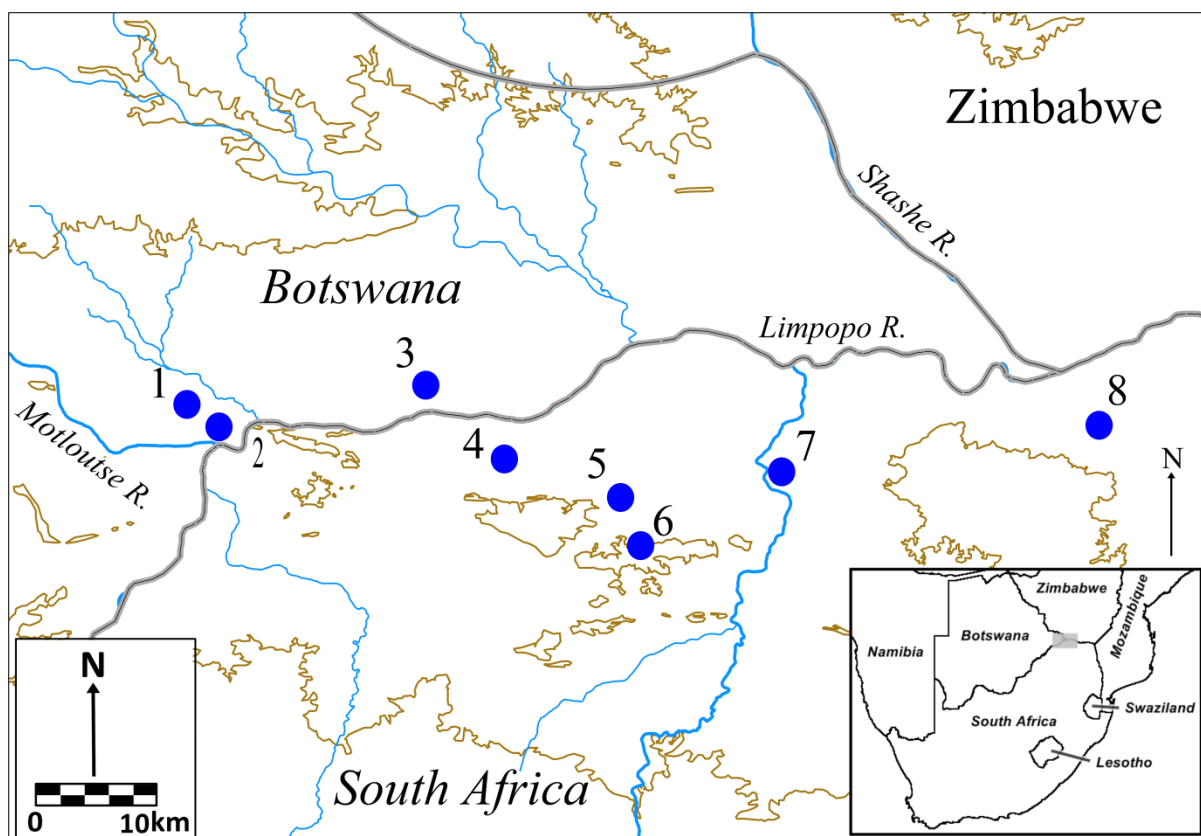


Figure 2: The Greater Mapungubwe Landscape with sites mentioned in the text: 1, Dzombo Shelter; 2, João Shelter; 3, Mafunyane Shelter; 4, Tshisiku Shelter; 5, Balerno Main Shelter; 6 Balerno Shelters 2 and 3; 7, Little Muck Shelter and 8, Mapungubwe.

3. Problem identification

At present we have an extremely biased view of foragers living in northern South Africa, with archaeological research being exclusively performed in the Mapungubwe area. The Tshirundu Hills, however, played an important part in the formation of the Mapungubwe state since it is situated within the trade corridor used to obtain goods from the Indian Ocean (see Huffman 2000). The way in which foragers interacted with farmers, engaged with their economy and ultimately either abandoned the area or assimilated into a farming system is unknown primarily since no research has been conducted in this region. In addition, based on surveys performed by Ed Eastwood (pers. comm.) in the area, the occurrence of Khoekhoen rock art indicates that herders were also present. Thus, we are dealing with a landscape occupied by different groups, with incongruent lifeways and beliefs, interacting on a regular basis and initiating change within one another's culture. The extent of these interactions and changes is not known but the historic absence of both foragers and herders in the region suggests that they abandoned the area prior to the arrival of Europeans.

The following problems have been identified and will be addressed in this project:

- No LSA study has been performed in the region and as such we do not know anything of forager lifeways or their material record.

- Herders and farmers both settled in the region and began interacting with foragers, yet we do not know what these relationships led to.
- Forager and herder rock art is present in a number of rockshelters, suggesting both ethnic groups used the area on a regular basis and for ritual purposes, indicate an intense occupation history of the region, and yet we do not know the chronology of this occupation phase.
- By the European arrival, no foragers or herders were recorded living in the area and in the extended region foragers are known to have lived in homesteads as farmers (e.g. Elton 1872). Whether the same occurred in the Tshirundu Hills and surrounds is unknown but it seems possible that it was these interactions that led to the disappearance of the foraging culture.
- The Tshirundu Hills are situated along the Mapungubwe trade corridor and foragers living here may have facilitated the transportation of trade goods, thus partaking in state development – archaeological research in this area, coupled with the findings from the Mapungubwe landscape, are required.

4. Research aims

The aims of this research are to address each of the problems listed above, but more specifically to:

- Develop a LSA occupation sequence for the Tshirundu Hills and surrounds.
- Study changes in LSA material culture from before 2000 years ago and during the succeeding contact period.
- Determine the role of foragers in the local farming economy, and how this relates to state development.

5. Research sites

Eastwood identified 41 rock art sites, most of which were visited by myself, Dr Antonites and Dr Ashely during a preliminary field inspection in May 2014. We concluded that in order to begin a LSA project in the region, one would first need to develop a cultural sequence spanning the mid- to late Holocene period. With this in mind, I selected two sites that I felt had a sufficiently deep deposit that would likely contain a lengthy occupation sequence and also contained a mixture of cultural material on the surface (e.g. ceramics, glass beads and iron), and presumably below, suggesting that the foragers occupying the site were regularly interacting with herders and farmers.

This permit application requests permission to excavate the sites Skirbeek 7 and Solitude 2 located in the Tshirundu Hills of the Maremani Nature Reserve.

Skirbeek 7 (ELV/SK/7)

-22.47888333 S 30.36255 E

The rockshelter (length = 30m; depth = 4m; width = 3m) was identified by Eastwood and is situated in a freestanding koppie within the Tshirunudu Hills. Eastwood recorded 28 cupules at the site and three finger lines (made by herders) although we were unable to relocate the painted lines. Of interest are the cultural remains found on the surface. We were able to identify a large assemblage of stone tools, the most ubiquitous find, distributed across the floor of the rockshelter. In addition, faunal remains were noted, glass beads and various decorated ceramic sherds also identified (Appendix). Noteworthy finds are a Mzonjani ceramic sherd and later Zhizo piece, indicating a chronology stretching from the first few centuries AD until at least AD 1000 (see Huffman 2007 for dates). No surface disturbances were recorded although the local anti-poaching unit camp in the vicinity of the site, which might lead to some damage.

Solitude 2 (ELV/SL/2)

-22.4932 S 30.27585 E

Eastwood recorded a substantial deposit at Solitude 2, which is a very large rockshelter (length = 20m; width = 8m; height = 2m) located on the southern slopes of the Tshirundu Hills. He identified a series of artefacts on the surface, namely a large stone tool assemblage, ceramic sherds, grindstone and soapstone fragments as well as a walled recess inside the rockshelter. Rock art in the form of cupules (n = 2), two sets of finger lines and a circle motif and handprint were also identified, and likely produced by herders. We did not have time to visit the Solitude sites during our preliminary inspection but it is clear from Eastwood's records that the site contains an impressive LSA assemblage that most likely spans more than 2000 years.

The deep deposit and the numerous artefacts of various techno-complexes supports the preliminary conclusion that both Skirbeek 7 and Solitude 2 were occupied intensely over the last 2000 years and likely significantly earlier as well. The presence of forager, herder and farmer material remains and artwork indicate that the sites are ideal candidates for this project. Thus, they will allow us to study both the forager occupation history of the region as well as the way in which the rockshelter's occupants interacted with neighbouring herder and farmer communities, who may also have resided in the rockshelters at some point. As such, Skirbeek 7 and Solitude 2 will allow us to achieve each of the aims and address the various problems identified in this project.

6. Methodology

Both rockshelters will be excavated using standard archaeological procedures designed to integrate various components of the site in order to study the settlement organisation and occupation history. A grid will be superimposed over each rockshelter's floor and squares will be selected based on the depth of the deposit, the presence of artefacts and the square's location relative to features within the site. Excavations will be conducted within 1x1m squares and in stratigraphic units maintaining spits of 30mm where possible.

The artefact assemblage will be separated in the laboratory into its separate components (e.g. stone tools, bone points, ceramics, beads, fauna etc.) and analysed accordingly. The goal of the analysis

will be to typologically categories the artefacts; determine each assemblage's attributes and characteristics; perform a macro-analysis involving the use of microscopes and macro-photography on formal stone and bone tools to identify diagnostic impact fractures; perform a soil analysis to assess the various geoarchaeological processes operating at the site; radiocarbon dating on charcoal samples and perform a material-spatial analysis to determine different occupational zones at the site. During the course of the project, and depending on the finds, different analytical techniques may be included.

Using these techniques it will be possible to achieve the aims of this project:

1. A detailed typological study is required to assess the composition of the artefact assemblage and the various attributes. Being able to track change in stone tool production and use over time is essential as well as establishing the chronological appearance of ceramics, glass beads and other farmer associated items at the sites. Thus, radiocarbon dating a series of samples from various stratigraphic layers and at differing depths is vital to study changing material and cultural traditions.
2. Tracing the change in use and function of artefacts will help identify a shift in forager behaviour, which can be explicitly related to interactions with herders and farmers.
3. Studying the faunal assemblage and recording shifts in forager subsistence patterns could indicate a declining resource base, broad spectrum exploitation or the introduction of domesticates, all of which relate to interaction.
4. Recording changes in artefact density, relative to depositional cycles (soil analysis), is important in understanding occupation intensity and the rate of material change over time.
5. Recording and dating the appearance and change in frequency of farmer-related artefacts links foragers to trade and exchange with farmers and by extension the increasing wealth reserves in the area and development of the Mapungubwe state.

All archaeological finds and the data pertaining to this study will be compiled in a report and a copy will be submitted to the South African Heritage and Resource Agency (SAHRA) and all practices will comply with heritage legislation. All of the recovered artefacts will be curated according to best practice and stored at the Polokwane Museum (storage permission requested by formal email, 20/09/2014).

7. Work plan

Sep 2014	Preparation for fieldwork and preliminary field inspection (funding pending)	Forssman
Oct 2014	Excavation of Skirbeek 7	Forssman, University of Pretoria students
Oct 2014 – Apr 2015	Analysis of excavated finds and digital production of field records	Forssman
May 2015	Excavation of Solitude 2	Forssman, University of Pretoria students
Jun – Aug 2015	Analysis of excavated finds and digital production of field records	Forssman
May – Oct 2015	Preparation of primary publication (LSA sequence and regional comparisons) and technical reports	Forssman

8. Relevant fieldwork experience

In January of 2014 I completed my PhD (University of Oxford) on forager/farmer interactions on the Greater Mapungubwe Landscape (Forssman 2014). To do so I performed a regional study excavating seven forager sites distributed across the landscape and which occurred in different contexts from one another. My study area was eastern Botswana in the Northern Tuli Game Reserve approximately 90km west of the Maremani Nature Reserve. I therefore have ample experience excavating in the area and analysing and studying the local LSA sequence. This project, as such, is very much related to my PhD research and so can be seen as an extension of these ideas and the theoretical and methodological structure of my doctoral project.

9. Final remarks

Skirbeek 7 and Solitude 2 will offer greater insights into forager lifeways on a landscape currently completely understudied from a Stone Age perspective. The lack of attention paid towards this region is concerning. Eastwood's rock art survey quite clearly demonstrates the rich forager occupation of the region and its spatial relationship with Mapungubwe places this area directly in the trade corridor, thus linked to the rise of the Mapungubwe state. The occupation of the Tshirundu Hills and surrounds by foragers, herders and farmers would have resulted in a complex web of interactions between these three ethnic groups, resulting in the abandonment of the Stone Age techno-complex. Therefore, this project will for the first time track change in the LSA sequence of the Tshirundu region, explore the set of interactions and the respective outcomes that occurred here and develop a holistic understanding of developments in the Stone Age way of life around the development of the Mapungubwe state.

10. References

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11. Appendix

As mentioned above, Solitude 2 was not visited during our preliminary field inspection and as such no images of the site are in our possession. The images below are all from Skirbeek 7.



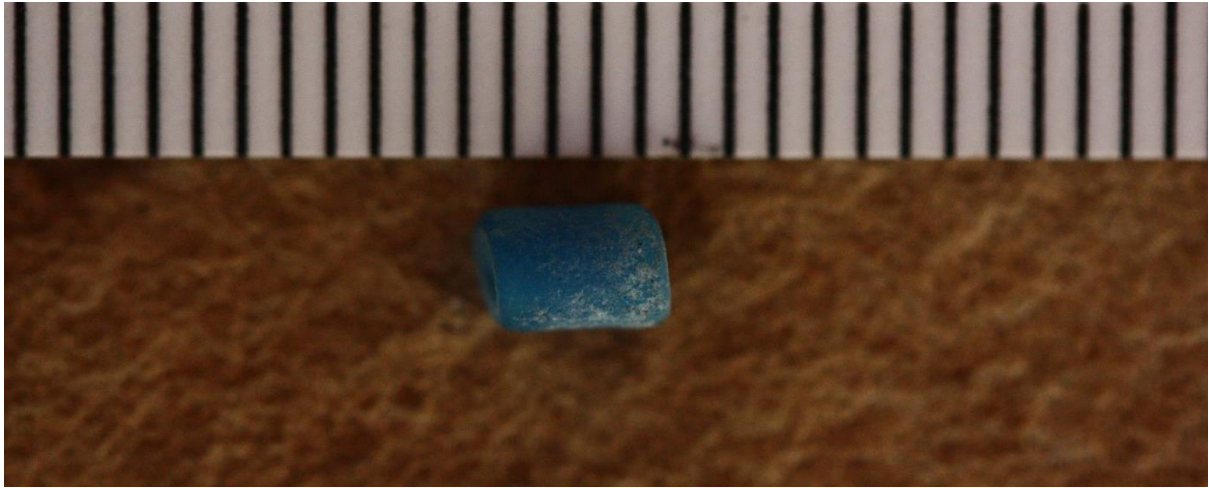
Appendix 1: A view of Skirbeek 7. Note: Dr Antonites on the right is in the main portion of the rockshelter where the excavations are likely to be focussed.



Appendix 2: A view of the lower portion of the rockshelter (not seen in the previous picture) in which ceramics and glass beads were identified.



Appendix 3: An Early Iron Age ceramic sherd, possibly Mzonjani, found in the lower portion of the rockshelter.



Appendix 4: A glass trade bead found in the lower portion of the rockshelter.



Appendix 5: Cupules, grooves and grinding hollows associated with various tasks, ritual activities and also which possibly contain spiritual symbolic meanings.