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Faculty of Humanities
Department of Anthropology and Archaeology

An archaeological investigation into the social structure of a stone-walled site in the North West Province, South Africa

A dissertation submitted in fulfilment of the requirements for the degree of Magister Artium

By Jacqueline Jordaan

Supervisors

Dr Ceri Ashley & Dr Alexander Antonites

Department of Anthropology and Archaeology, University of Pretoria

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Abstract

This master's study concerns a Tswana stone-walled site in the North West Province. Within this province, the Zeerust-Rustenburg-Pilanesberg region has been of particular interest to Tswana settlement studies. In this region, the Tswana built stone-walled settlements from the mid 17th to the 19th century CE; altering their settlement style from dispersed to aggregated during this time. The aggregated settlements reflect a centralisation of socio-political authority in the region. However, prior research has focussed predominantly on these aggregated settlements, with little research conducted on small-scaled sites. To further understand the communities inhabiting this region during this time we need to look at varying scaled sites. A more nuanced view of regional interaction, group association, and identity is formed from this perspective.

This research utilises historical, ethnographic, and archaeological data to interpret a small scaled site, termed Lebenya. The historical data presents a possible identity of the past community who inhabited the site, the Phiring. However, the archaeological data could not conclusively link the site to this past group. Nonetheless, the archaeological data presents new spatial and excavated data for the region, specifically expanding the range of documented small-scaled sites.

Keywords: Tswana, stone-walled site, Swartruggens, Phiring, *Buispoort*, historical archaeology, late farming communities, Motšokwe, material culture, North West Province.

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Chapter 1 Introduction

1.1. Overview

The last 500 years in southern African has been a formative period, a time of great internal economic and political invention, as well as experimentation (Swanepoel et al. 2008: vi). This is apparent in the archaeological and historical record of the Tswana[1] in the southern African interior.

The term 'Tswana' is a relatively recent term. It emerges in the early 19th century CE, when colonists moving into the South African interior encounter a group of people who share a common language, termed Tswana (Parsons 2008:41). The term does not only reflect a linguistic boundary, but also a cultural one. It is a term used to discuss a group of people who share certain cultural and linguistic boundaries not only presently, but to some degree within the past. The Tswana are presently located in Botswana and South Africa (Morton 2013:15). Past written records depicting the location, people, and beliefs of the Tswana exist- such as those kept by early explorers and missionaries into the interior, as well as ethnographers, anthropologists and other collectors of oral records (see Breutz 1953; Campbell 1822; & Schapera 1953). However, the Tswana over this period also left archaeological traces, the most apparent being a landscape littered by stone wall settlements.

In South Africa archaeological research has linked these stone-walled settlements to various Tswana groups (Anderson 2009; Boeyens 2000, 2003; Maggs 1993; Mason 1986; Pistorius 1992), with continued developments in how these settlements are analysed and classified (e.g. Fredriksen 2007; Hall 1998a & b; Lane 2000; Reid et al. 1997; Sadr & Rodier 2012). An area of principal concern is the Zeerust-Pilanesberg-Rustenburg region, as highlighted in Figure 1.1. Located in this region are mega-sites, densely clustered aggregated stone-walled sites, with

1 Names of languages and groups are used in their root form only, without prefixes, e.g. *Sotho* not *SeSotho*. These root forms are to be used in naming the individual member of a group, the people, the language, and as adjective, e.g. a *Sotho*, the *Sotho*, *Sotho*, a *Sotho* chief (as suggested by the Inter-University Committee for African Studies in Lestrade 1937:373).

some of these sites ranging up to 3km in length (see Pistorius 1992:3). Figure 1.2 shows the distribution of aggregated settlements in the ZPR region.

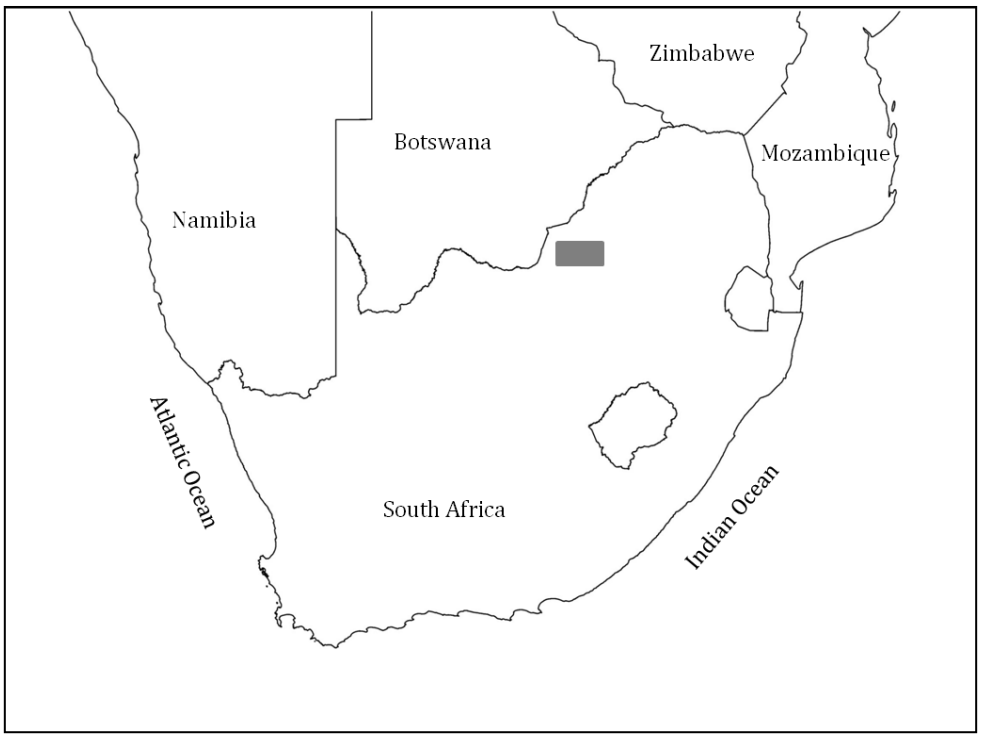


Figure 1.1 Map of South Africa with research region highlighted

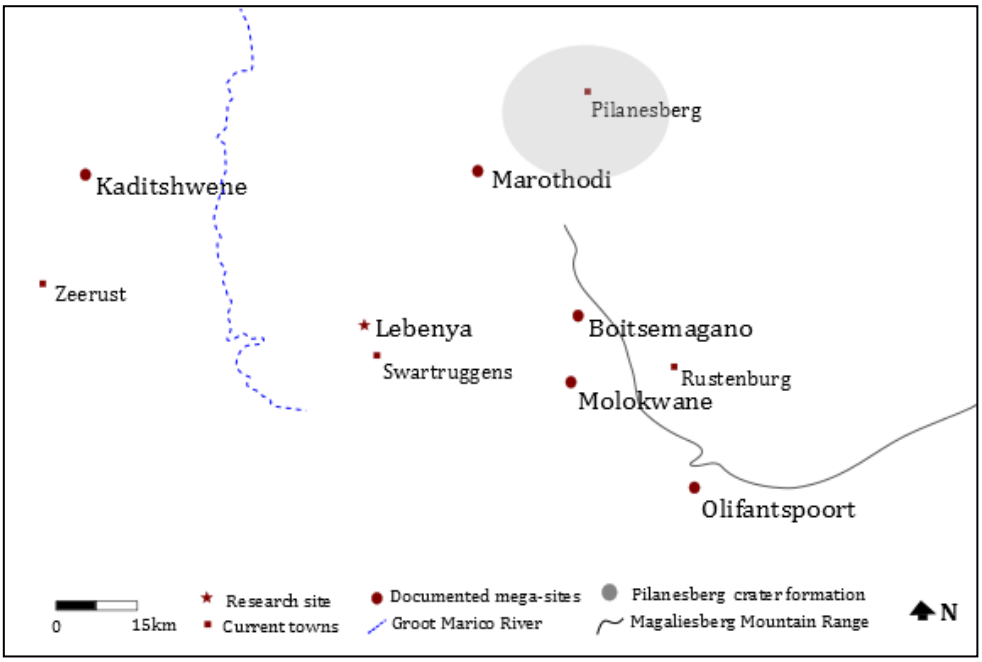


Figure 1.2 Map of the research region with documented mega-sites as well as current towns

These mega-sites track the development of Tswana political centralisation in the region till the late 18th century CE (Hall 2012:307). These mega-sites were towns containing large populations of Tswana groups. These towns, such as Molokwane and Boitsemagano, were placed in prime positions with access to premium agricultural land (Hall 2012:308).

The rise of the Tswana population, and subsequently towns, in the region has been suggested as a consequence of increasing intra-regional strife, caused by interaction with expanding colonial mercantile interests (Manson 1995; Parsons 1995). However, as stated by Hall (2012:309) this suggestion 'provides a basic causality' emphasising external factors, which does not address prior intra-regional cultural dynamics in the region. In order to understand this further, the term Tswana needs to be deconstructed. Deconstructing the homogeneity of the term 'Tswana' allows for a perspective which highlights the complex historical layering of identities in the region. A historical layering of identity which reflects the varying cultural inheritances, continuations, alterations, and interactions experienced and enacted by groups negotiating their Tswana identity within the region (Hall 2012:301).

See Figure 1.3[2] for a list of southern African Bantu[3] Language groups. These divisions denote differences in language and social organisation (Van Warmelo 1962:57). The agro-pastoralists found in the South African interior, largely fall into the Nguni or Sotho language groups. The Nguni cluster of groups is predominantly distributed below the high plateau of the interior, stretching over a belt between the Drakensberg escarpment and the sea, from Swaziland to KwaZulu-Natal and far down into the Cape Province (Van Warmelo 1962:45). The groups designated to this cluster are the Xhosa, the Swazi, the Ndebele, and the Zulu. The Sotho cluster is divided into the Southern Sotho, the Eastern Sotho, and the Tswana (aka the Western Sotho) (Van Warmelo 1962:57). Sotho-speakers live on the central plateau, to the north and west of the main Nguni groups (Kuper 1975:68).

The Nguni and Sotho share the same underlying conceptual structure, despite their language and social organisation differences (Kuper 1980:16 & 21). This shared underlying structure is what Kuper (1982) describes simplistically as patrilineal societies who exchange cattle for wives. From this underlying structure Huffman (1986c) derived the Central Cattle Pattern

[2] This figure represents a limited (and orderly) fragment of a multi-level list of group identity and membership. In reality the boundaries between groups are not so clear, this is discussed further in chapter two and three.
[3] The term is linguistic in origin, and demarks agro-pastoralists lying south of the Limpopo River (Hammond-Tooke 2004:71).

(CCP), an archaeological model which links the settlement organisation and features of sites to southern African agro-pastoralists worldview (to be discussed further in chapter three).

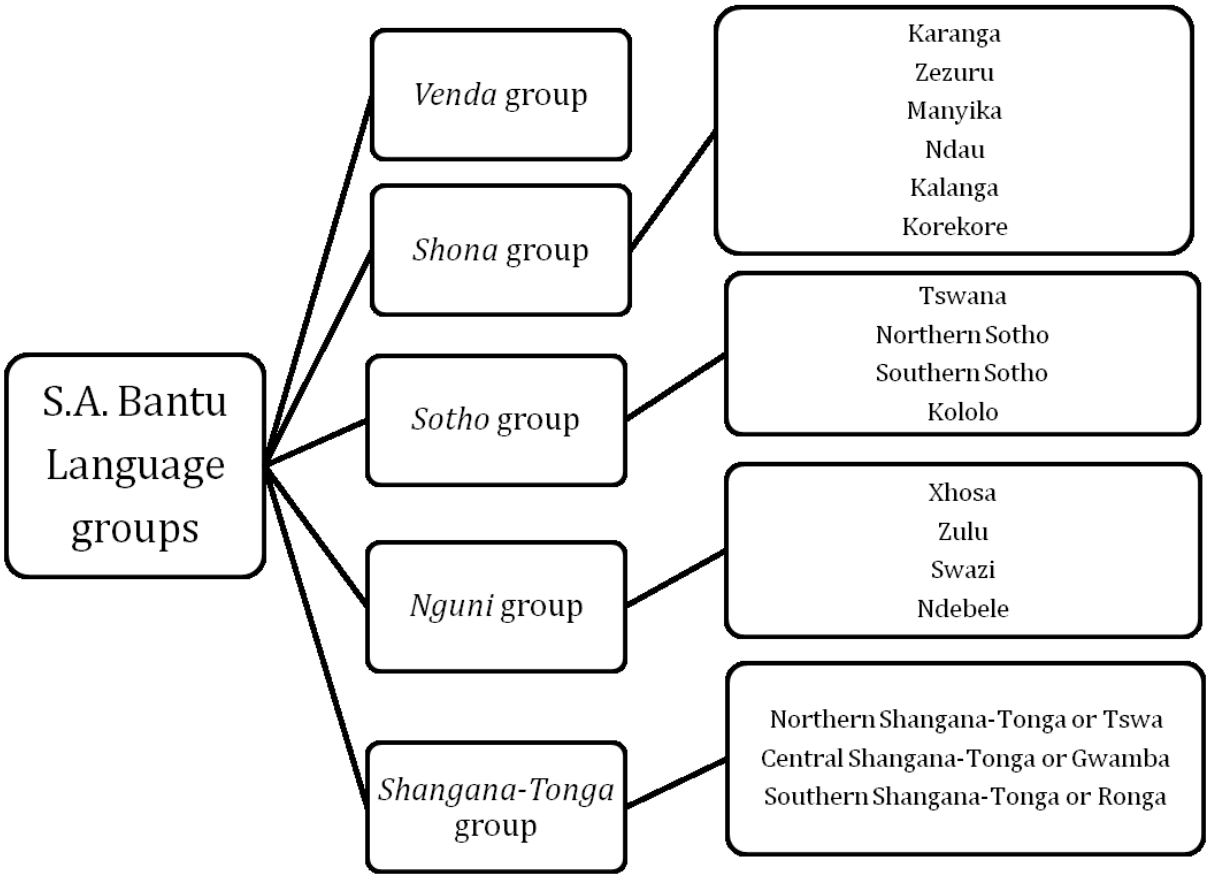


Figure 1.3 Southern African Bantu Language groups, after Lestrade (1937:374-5)

The Nguni and Sotho-Tswana are predominantly associated with different regions in the South African interior and coast (as mentioned above); however, this belies the fact that there has been movement and interaction over this landscape between the various groups. This is the scenario in the ZPR region (discussed further in chapter two). This complex layering of identities in the region questions the traditional Sotho/Nguni group divide (Hamilton & Hall 2012:289).

In this region dominated by people of a Tswana identity, there are groups which can be linked historically to Nguni-speakers with features of these former identities still materially expressed in the 19th century CE (Hall 2012:301). These marked variances in cultural backgrounds, expressed materially, have been used to elucidate socio-political and economic intra-regional

relations as shown at the site of Marothodi (Hall 2007:175 & 2012:318). Therefore, further research at the site scale is necessary to expose these identities, and connected intra-regional relations, at a time of political change and assimilation.

In order to address questions regarding intra-regional cultural dynamics researchers need to look at other settlements, such as those found in the surrounding region of the mega-sites. These sites are generally of a smaller scale. Some were inhabited prior to the development of mega-sites, while others were contemporaneous. Small-scaled sites in the region have received minimal attention in previous archaeological research agendas. From a site specific scale it is possible to investigate how the inhabitants of the site chose to materially express their identity, as well as exploring any possible relations between the inhabitants of the site and other groups in the region.

The following research at a small-scaled site in the North West province of South Africa suggests some answers to these questions.

1.2. Research objectives

This research focuses on the societal structure of a past community inhabiting a small-scaled site, termed Lebenya. The societal structure is investigated through spatial layout, excavated data, and historical (textual) evidence. Besides a site specific view, this research also explores Lebenya's connection to a wider socio-political context, i.e. its relation to mega-sites in the region, and the manner of these relations, to generate an intra-regional perspective.

The first objective concerns the site specific scale, which focuses on the spatial pattern of Lebenya in conjunction with the excavated evidence, text, and historical sources. The main research question, followed by subsidiary questions, is:

- What does the spatial layout and excavated data tell us about the societal dynamics at Lebenya? Specifically:
    - Does the spatial layout conform to other settlement layouts in the region, and what does this conformity/divergence signify in terms of social and political organisation and affiliation?
    - Using selected test-excavation to ground-truth the spatial data, what can the evidence of material culture/archaeological debris tell us about domestic and economic activities within the site?

The second objective is on an intra-regional scale. This approach focuses on Lebenya's connection to the wider landscape of mega-sites in order to identify its place in the broader socio-political context. The main research question, followed by subsidiary questions, is:

- How does Lebenya fit into the wider socio-political context and how does it compare to other sites in the area?
    - How does the spatial layout and archaeological evidence of Lebenya compare with the models developed from mega-sites? Are the same activities/structures in place in both? What is the significance of similarity/difference?
    - Using comparison of excavated and survey data with published research, can Lebenya be linked to a specific Tswana lineage and/or mega-site? What can this unique perspective, an investigation of a small site's relations to a larger network of mega-sites, provide to a discussion on the history of the area?

To surmise, the research objectives and questions for this research are focused on two scales of approach, site specific and intra-regional. These questions are addressed through the use of spatial analysis, archaeological, and historical evidence. This research attempts to identify the past people who occupied the site and their societal structure, and the group's relation to the wider socio-political context .

1.3. Dissertation outline

The dissertation contains seven chapters (including the introduction). **Chapter 2** reviews pertinent literature to this study and provides geo-environmental data regarding the study region. Furthermore, I discuss the known historical distribution of various Tswana groups within the region and their association to sites in the region. **Chapter 3** is a discussion of the theoretical premises underlying this study. It begins broadly with a discussion on the field of historical archaeology, its application in an African context, and its methodological strengths and weaknesses. This is then further applied to the South African context and the study of late farming communities. **Chapter 4** recounts the analytical and methodological procedures adopted for this study. Details regarding aerial imagery, map creation and map illustration are explained as well as analytical procedures for each artefact category. Chapters 5 and 6 present the results of the study. **Chapter 5** explores the spatial attributes of the study and presents the results of such analysis. **Chapter 6** focuses on the results from the material analysis of the excavated artefacts from Lebenya. **Chapter 7** unites the results from chapters 5 and 6. This is

synthesized into a discussion on site identity, group distribution, and regional interaction. This chapter concludes with future research directions.

Chapter 2 Literature Review

2.1. Overview

The Magaliesberg region in the early 19th century CE as described by Robert Moffat (1829 in Wallis 1945:8):

> The country through which we now passed was along a range of hills running nearly east-south-east, while the country to the north and east became more plain, beautifully studded with small chains of mountains and conical hills, along the bases of which lay the ruins of innumerable towns, some of amazing extent. The plains and valleys, of the richest soil to a great depth, had once waved with native millet and been covered with pumpkins, water melons, kidney beans and sweet reed, all of which are cultivated through the interior. The ruined towns exhibited signs of immense labour and perseverance, every fence being composed of stones, averaging five or six feet, raised apparently without either mortar, lime, or hammer.

The region is an ecologically rich and diverse habitat. The resources found within the region supported the growth of large populations, as shown by the number and size of aggregated settlements in the region. The first section of this chapter presents the geo-environmental information for the research area with specific references to the topography, rivers, climate, geology, soils, vegetation, and wildlife located within the study region. The second section of this chapter addresses the history and the archaeology of the Tswana in the region.

2.2. The study region

The area of study is the Zeerust-Pilanesberg-Rustenburg (ZPR) region, an area encapsulating the Groot Marico River to the west, the Magaliesberg range to the southeast, and the Pilanesberg volcanic complex to the north (see Figure 1.2). The research site, Lebenya, is located outside of the town Swartruggens. Figure 1.2 depicts the distribution of documented mega-sites within the region as well as the location of the research site.

The research region compromises of two biomes, the savannah and grassland biome The strip of land, interfacing the savannah biome to the south and the grassland biome to the north, provides a patchwork of areas with high ecological diversity. The ecological diversity of the area supported agriculture, herding, hunting, mining, and trading activities (Hall et al. 2008). In the

following section I discuss the various aspects of this environment which contributed to the continued habitation, over the last 500 years to present, of the region.

2.2.1. The topography and vegetation

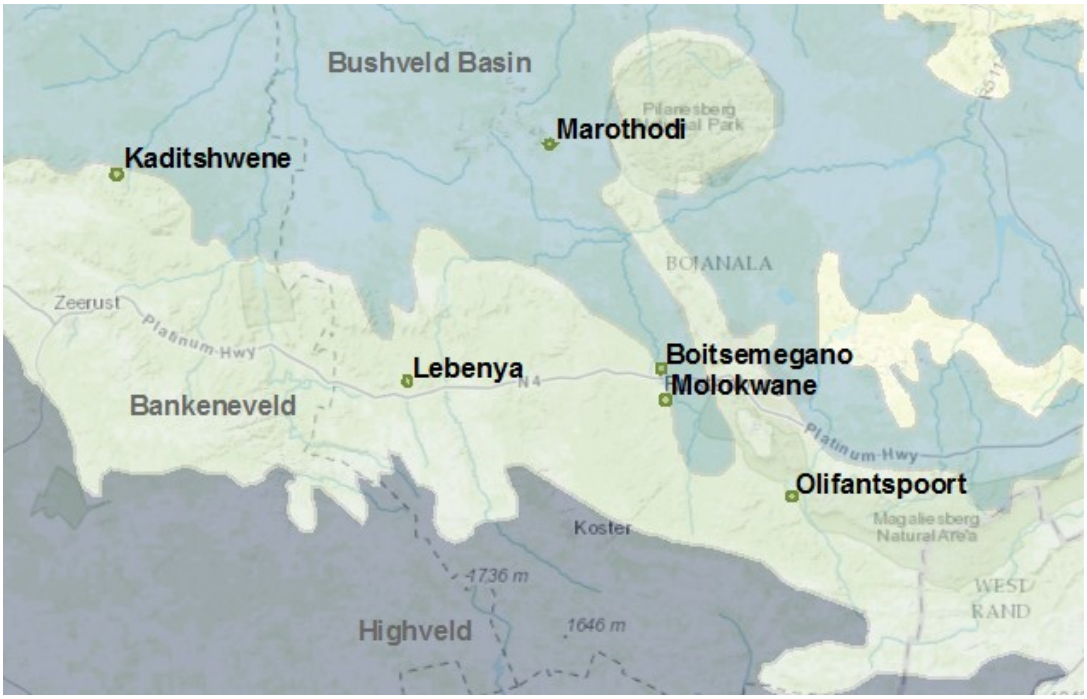


Figure 2.1 Ecological regions of the ZPR

The region exhibits variation in the topography, this is due to the transitional nature of the landscape from the grasslands of the highveld (high inland plateau, which is >1500m above sea level) to the south, and the savannah of the lowveld (low inland plateau, which is <1200m above sea level) to the north (Cowling, Richardson, & Pierce 2004:225). To the north of the research region the landscape can be characterised as bushveld, while to the south the landscape becomes more dominated by grass lands. Running parallel between these two zones is the bankenveld[4] ecological region, which consists of ridges and valleys between 1200m and 1500m above sea level (Kruger 2010:11). The location of settlements within this strip of land between the bushveld and the grasslands, as shown in Figure 2.1, provides year round grazing for

[4] The bankenveld in this region is a composite of the following vegetation units; the Gold reef mountain bushveld, the Gauteng shale mountain bushveld and the Andesite mountain bushveld; Rand Highveld Grassland; and Carletonville Dolomite Grassland (Mucina & Rutherford 2006:466-7).

livestock (Kruger 2010:5). The grasslands would have provided pastures for summer and spring grazing, while the sweet grasses of the bankenveld would have provided nutritious winter grazing.

The research site is located on a ridge at an elevation of 1380-1390m above sea level. The elevation of the ridge rises along the southwestern part. The location of the settlement on the ridge top allows for an extensive view of the surrounding landscape. The vegetation surrounding the site[5] is characterised as the Dwarsberg-Swartruggens Mountain bushveld, as shown in Figure 2.2.

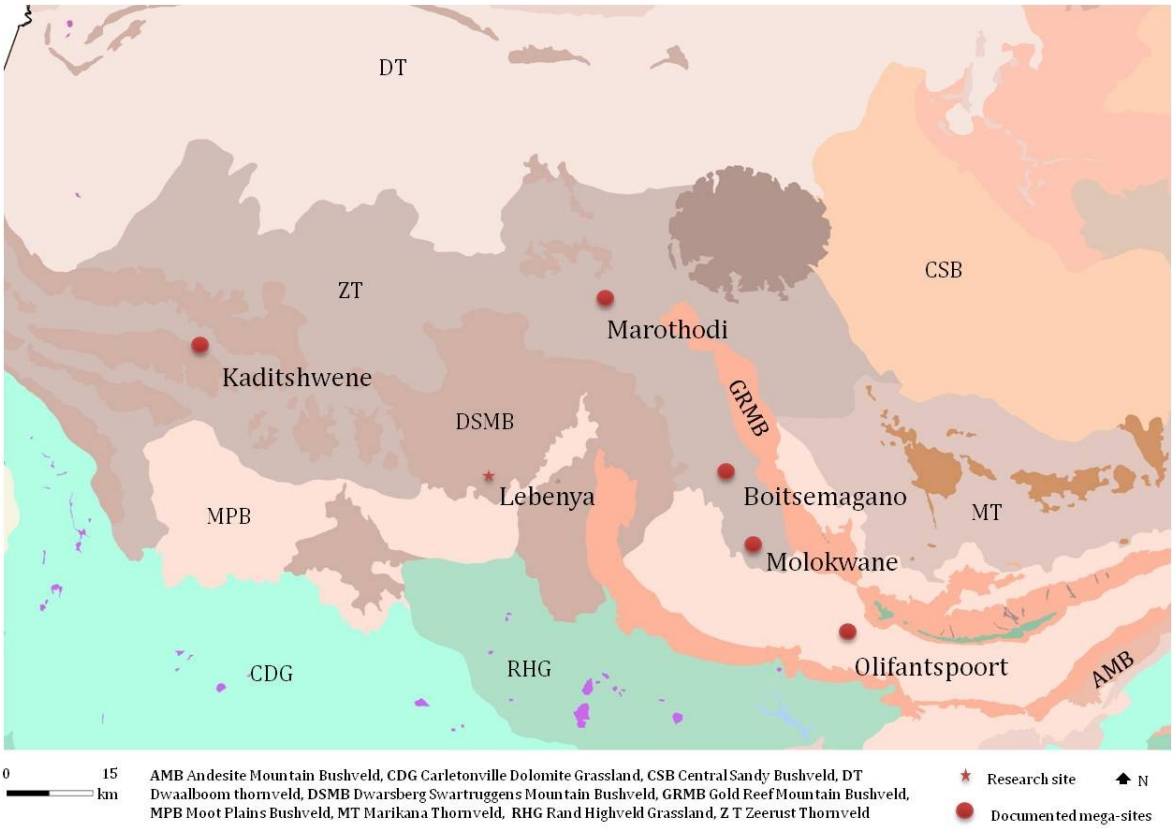


Figure 2.2 The vegetation units in the ZPR region

[5] Past human settlements do affect the vegetation within and bordering the site, this is discussed further in the methodology chapter.

2.2.2. The Geology and soils

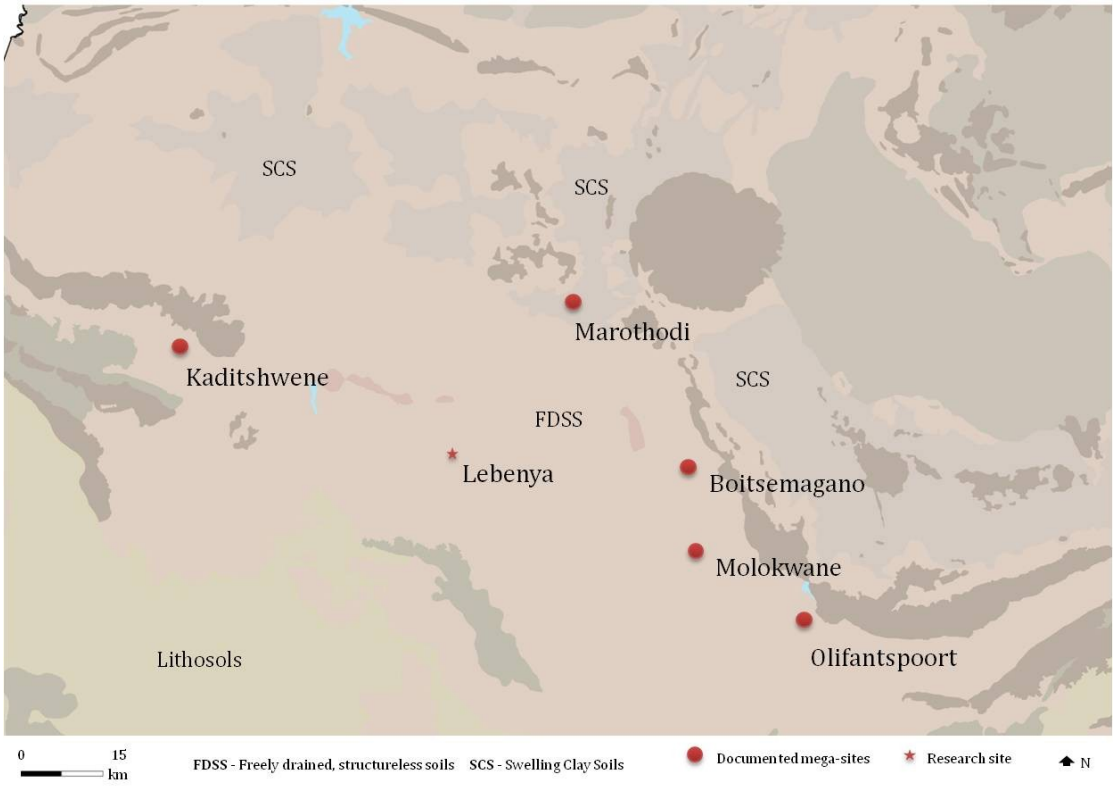


Figure 2.3 Soil types in the region, after SANBI BGIS LUDS map (2007)

The underlying geology of the region is that of the Transvaal supergroup, a deposit including dolomites and banded iron formations (Mucina & Rutherford 2006:443). The deposition of the Transvaal sequence continued for several hundred million years, amounting to a total thickness of over 20km (Mucina & Rutherford 2006:443). Around 2 060 mya the bushveld igneous complex intruded the Transvaal supergroup (Mucina & Rutherford 2006:443). The bushveld igneous complex is host to the greater part of the world's platinum group metal, vanadium, and chromium resources[6] (Mucina & Rutherford 2006:443). Due to this geology there is a mix of soil types in the region, mainly swelling clay soils and freely drained structureless soils (see Figure 2.3). The freely drained structureless soils, locally known as well-drained red loams, lack a strong texture contrast with a high base status (classification according to World Reference Base [WRB] in Mucina & Rutherford 2006:445), and are found across northwest to south east of

[6] Due to the rich resources to be mined in this region, there are mines located within the study region. The closest mine is a diamond mine, it is located on the adjacent farm to the settlement. Mining projects while critical for the development of South African industry and the economy, can negatively impact heritage sites in various ways, with the destruction of un-documented heritage the worst possible outcome.

the ZPR region. The swelling clay soils, locally known as black turf soil, occur in patches northeast of the red soil. There is also an area of lithosols soil to the south west. This mix of soils was particularly important for subsistence agriculture as risk could be spread over a variety of soils in anticipation of drought or too much rainfall (Hall et al. 2008:73).

2.2.3. Climate

The climate is that of a summer rainfall region, with very dry winters and occasional frost in low lying areas (Mucina & Rutherford 2006). Temperatures generally range from 35.2˚C in summer to -0.4˚C in winter, but varying somewhat within the different vegetation units (Mucina & Rutherford 2006). The mean annual precipitation ranges between 550mm and 650mm, but also varying somewhat within the different vegetation units (Mucina & Rutherford 2006). These conditions suit the cultivation of sorghum and millet, which were the primary cereals of cultivation prior to the introduction of maize in the region[7] (Huffman 1996).

2.2.4. Rivers

The Marico River stretches from the west to the north of the ZPR region. The Klein and Groot Marico rivers, tributaries of the Marico River, occur in the western area of the ZPR region. The Elands River stretches from northeast to south of the ZPR region (RHP 2005:14). Other tributaries of the Elands River, the Selons and Hex River, are located in the eastern section of the region (RHP 2005:14). Located near the research site is the Elands River to the east, and closer still, the Tholwane River to the west. Figure 2.4 depicts the rivers found in the region. Access to water through rivers and streams was vital for livestock keeping and human settlement in a region.

[7] Another consideration is the introduction of maize into the region. Maize requires higher rainfall than sorghum or millet crops (Hall 2007:174), and therefore a drought would have had a devastating effect on populations which relied upon this cereal. However there is not resolute evidence for the introduction of maize into the region prior to Mzilikazi's Ndebele incursion into the region. See Boeyens (2003); Hall et al. (2008:74), & Huffman (1996 & 2006) in regards to the debate surrounding the introduction of maize into the region.

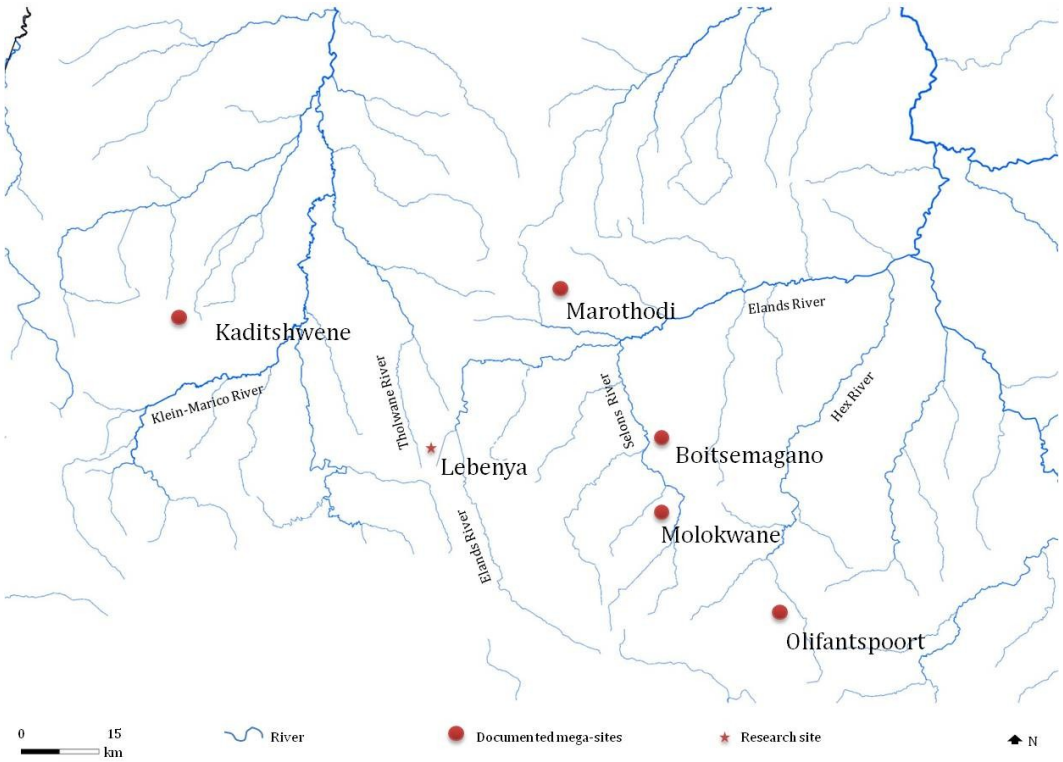


Figure 2.4 Rivers in the region, after SANBI BGIS LUDS map (2007)

2.3. Groups historically found in the ZPR region

The historical evidence for groups in the region is based on collected oral traditions, recorded observations by European missionaries, and explorers into the interior. Recorded oral traditions, in the case of the Sotho-Tswana, go back to the 14th century CE at least, although the earlier records are not more than lists of successive rulers (Boeyens & Hall 2009:462). Later accounts by Europeans venturing into the interior predominantly date from the 19th century CE onwards (Morton 2008:1). From these different observations of the past, a picture of daily life as well as group composition and structure is available. Vital to any study on the Tswana is the work of I. Schapera, a social anthropologist researching the Tswana from 1929 to the 1940s CE (Morton 2013:17). Another important source is the work of state ethnologist P.L. Breutz (1953), who recorded Tswana oral traditions in SA, providing valuable ethnographic and historical information. The work of M. Legassick (2010[8]), who recorded Sotho-Tswana histories prior to the 19th century CE, and L. Ngcongco (1979), who synthesised various works on the Tswana, are also incorporated into the following discussion.

[8] The 2010 edition is a published version of Legassick's (1969) doctoral thesis.

The written traditions, concerning the origins of the Tswana in southern Africa, suggest the Tswana[9] migrated into the region in a succession of waves (Breutz 1955; Ellenberger and Macgregor 1905; Schapera 1964; Stow 1905; in Ngcongco 1979:24). The theory asserts that the Tswana migrated south from East Africa in three series of migrations (Ngcongco 1979:24). This 'wave theory' however is contested (Ehret 1973; Legassick 1969; Parsons 1973; Phillipson 1969; Vansina 1966 in Ngcongco 1979:24). Rather, it is more realistic to consider the Tswana as migrating into the region in "small-scale scattered movements" moving slowly and gradually in various directions over a wide area (Ngcongco 1979:25). The Tswana groups migrating into the sub-Limpopo region are believed to have interacted with other groups, those of the Nguni cluster, which share similar worldviews and social organisation traits (such as polygamy and patrilineal traditions). The growth of the Tswana population most likely occurred through the absorption of other groups in the sub-Limpopo region (Ngcongco 1979:26). This process is similar to that advocated by Hall (2012) in regards to a complex 'layering' of identity amongst the historical Tswana of the ZPR region. This is discussed in further detail throughout the following sections.

2.3.1. The Tswana cluster

The Tswana are a sub-group of the Sotho cluster, as shown in Figure 1.3; however, the Tswana also represent a cluster of groups. The Tswana cluster is made up of more than eighty groups[10] (Schapera 1963:159). Due to this sizeable number the Tswana are further divided into sub-clusters, such as northern or western Tswana cluster. These sub-clusters are defined by dominant Tswana lineages. Lineages are 'ruling dynasties or branches that trace their patrilineal descent to a real or an imagined common ancestor' (Hall *et al.* 2008:57). Lineages were not socio-political actors[11], but rather units used to define chiefly genealogy and history (Hall *et al.* 2008:57). Within the region, Legassick (1969) identified four dominant lineages, these are: the Hurutshe, Kgatla, Rolong, and Fokeng. Ngcongco (1979: 28) extends the lineages, identified by Legassick (1969), to demarcate the main branches of each lineage; therefore, the dominant lineages are the Kwena-Hurutshe, Kgatla-Pedi, Rolong-Tlhaping, and Fokeng-Dighoya.

[9] Perhaps the term proto-Tswana is more accurate for a description of this group, as the Tswana is a recent (European) ascription denoting this cluster (Parsons 2008:41). However for simplicity, the term Tswana will be continued to be used in this context.
[10] Each group headed by their own chief (chiefdom)
[11] Socio-political actors were in the form of instrumental groupings

The following section briefly accounts for the branches of each lineage and their association to other groups over time.

The Hurutshe-Kwena lineage is termed the western Tswana cluster (Huffman 2007: 433). The Hurutshe and Kwena traditions both claim descent from Masilo and shared the same ruling line prior to the late 15th to early 16th century CE (Legassick 2010:20). The earliest settlement attributed to this cluster is Rathatheng, near the confluence of the Odi and Madikwe Rivers, and Mabjanamatswana, near the modern town of Brits (Legassick 2010:20). There are conflicting accounts for this split; however, the consequences of which were the wide dispersal of Kwena settlements, over the highveld up to the limits of the Kalahari on the west, and as far as the Orange River in the south (Legassick 2010:20).

This wide dispersal of the Kwena is believed to have occurred through three migrations of Kwena clusters (Legassick 2010:20). According to Legassick one Kwena-chiefdom migrated to the Brits district, another crossed the Vaal to a place called Ntsuanatsatsi (in the Free State), and the last migration, led by the Hurutshe, moved to the headwaters of the Marico River (2010:20). The Kwena that crossed the Vaal to Ntsuanatsatsi, legitimized their occupation south of the river by intermarriage with the local Fokeng habitants (Legassick 2010:22). It is believed that this led to the Tswana-isation of the Fokeng. The Fokeng are believed to be of Nguni origin (Boeyens & Hall 2009: 469; Huffman 2007: 436; Mitchell & Whitelaw 2005: 227). This is suggested by oral history and archaeological (predominantly ceramic) evidence (to be discussed further in the ceramic traditions section of this chapter). The Kwena-Fokeng migrated from the area around the 17th century CE, with some returning north of the Vaal, and others dispersing further south of the Vaal (Legassick 2010:20). In the 18th century CE the Kwena moved west from the Pretoria and Rustenburg districts across the Marico district into present-day Botswana (Legassick 2010:20).

The Rolong lineage is termed the south-western Tswana cluster (Huffman 2007: 433). The Rolong were among the earliest Tswana to establish themselves in South Africa, earlier than the Hurutshe-Kwena (Ngcongco 1979: 31). The name Rolong is after their first ruler, named 'Morolong', who ruled the group in the late 13th century CE (Ngcongco 1979: 31). The Rolong driven from the Mosega area by the Hurutshe in the 16th century CE moved southwards, settling between the Molopo and Orange Rivers (Legassick 2010:20). A group of the Rolong, during a period of famine, was compelled to eat fish (a taboo food in Tswana society) and became known as the Tlhaping (fish eaters) (Ngcongco 1979: 31). Around the mid 18th to 19th century CE, the Rolong group disintegrated (Legassick 2010:32).

The Kgatla are believed to be descendants of the Hurutshe cluster; however, the records place the origins of the Kgatla in the central highveld, near present day Pretoria and Rustenburg, an area located west of the Hurutshe (Legassick 2010:20). During the 16th and 17th century CE, the Kgatla dispersed over the area north of the Vaal and eastwards from the central highveld towards the Drakensberg (Legassick 2010:20). In the 18th century CE a segment of the Kgatla moved eastward from the Pretoria district to the Lulu Mountains, where they formed the Pedi state (Legassick 2010:20). The Kgatla lineage is designated to the western Tswana cluster[12] though this designation is not conclusive (Huffman 2007: 433 & 436). The Pedi fall within the Northern Tswana cluster (Huffman 2007: 436).

Ngcongco (1979: 28) refers to the Fokeng-Dighoya. Dighoya, also known as Dihoja or Digôja or Lihoya, is a group identity which is based on the name of a successful ruler, Sehoja, a popular ruler in the 18TH century CE (Maggs 1976b:327). However, the term has become ambiguous (Breutz 1953:217 & Maggs 1976b:327). It has been stated that the Dighoya are descended from the Rolong (Breutz 1953:217). However, it may also refer to the Kubung or the Taung (Maggs 1976b:327). The Kubung consider themselves offshoots of the Rolong (Maggs 1976b:327), and according to Breutz (1953:217) the informants for the Kubung and the Phiring assert that they together formed the Dighoya. The following section discusses specific groups found in the ZPR region, with a focus on known groups surrounding the Swartruggens region.

2.3.2. The Tswana groups in the region

Groups mentioned in the oral records within the region during the 18th and 19th century CE, are the: Fokeng, Hurutshe, Kgafela Kgatla, Kwena, Tlhako, Tlokwa, and Po (depicted in Figure 2.5). The Hurutshe settled in the Marico region from the 16th century CE and established Kaditshwene in the late 18th century CE (Boeyens 2000). The Kwena in the 18th century CE had various factions settled across a wide landscape (Legassick 2010: 20). In the ZPR region during the 18th and 19th century CE, the Kwena established the aggregated settlements of Boitsemagano and Molokwane (see Figure 1.2). Boitsemagano and Molokwane were occupied by different branches of the Kwena, respectively the Ramanamela and the Mmatau (Pistorius 1992:44). The Kgatla can be connected to the aggregated settlement named Buispoort (after which the ceramic facies is named), situated northwest from Zeerust (Boeyens 2003:63 & 70).

[12] Further research in the region has placed doubt on this designation, specifically in regards to recent ceramic studies, strengthened by the suggested Kgatla-Tlokwa connection, which creates doubt over the Tswana origin of the Kgatla (Rosenstein 2008: 50).

In 18th and early 19th century CE the Kgatla Kgafela settled in the Pilanesberg region (Morton 2008:15). The Tlokwa, Tlhako, and Po, are part of the Fokeng cluster; therefore, they do not have a clear origin (Hall et al. 2008:68; Huffman 2007:437). The archaeological and historical evidence suggests a Nguni origin (Hall et al. 2008:66). The Tlokwa are linked to various settlements found in the Pilanesberg and Rustenburg region, such as Mankwe, Pilwe, Kolontwaneng, and Marothodi (Hall et al. 2008:66). The Tlhako are not linked to any archaeology in the region; however, they do move into the region around the 18th century CE and are found to the west of the Tlokwa in the Pilanesberg region (Breutz 1953:176-177; Hall et al 2008:68). The Fokeng settled at their capital, Phokeng, in the Magaliesberg region (Morton 2013:21). They were settled at this capital for decades prior to the Pedi invasion in the late 19th century CE, and returned shortly after the invasion; they have remained in this capital ever since (2013:21). The Po group is briefly mentioned to be east of the Fokeng in the Magaliesberg area around the 18th century CE (Hall et al. 2008:72).

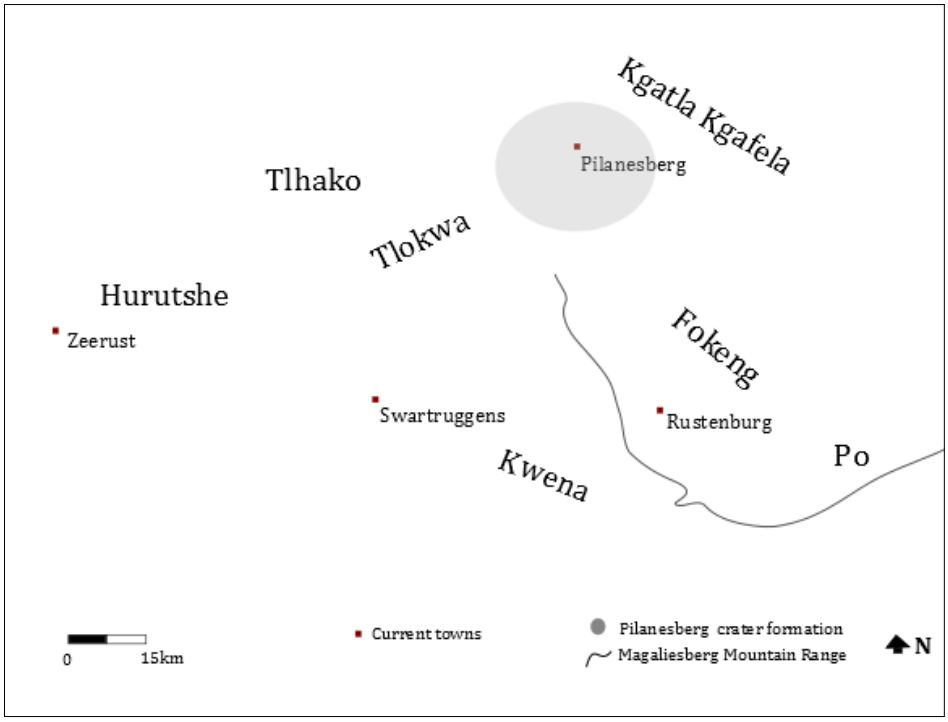


Figure 2.5 Map of known groups in the ZPR region in the 18th and 19th century CE, after Hall *et al.* (2008: Plate 1)

In the early 19th century CE a series of incursions ultimately ended Tswana political centralisation in the region. This period known as the *difaqane* (the scattering of people) is characterised by the displacement or fleeing of a majority of Tswana groups from the ZPR

region. A time characterised by colonial expansion and labour needs, as well trade and resource competition, causing conflict in, and migration from, the region (Croucamp & Roberts 2011:2). The protagonists of this period start with the Pedi incursions in the early 1820s CE followed by Sebetwane's Kololo, Mzilikazi's Ndebele, and Potgieter's Voortrekkers (Morton 2008:3). In the 1840s CE the Boer settlers made the area their principal base for further expansion into the interior (Morton 2008:3). The region was subsequently incorporated into the colonial realm, and later become a part of the South African State.

The following section uses the historical data to investigate groups located in the surrounding Swartruggens area. From this selection the possible inhabitants of the research site can be identified.

2.3.3. Groups in the Swartruggens area

The Swartruggens area falls into the Rustenburg and Pilanesberg districts, according to Breutz's (1953) classification, and he records 25 groups (including branches of a larger group) within this area. The main groups recorded in the area, in alphabetical order, are the: Fokeng, Hlubi, Hurutshe, Kgatla, Kwena, Matebele, Phalane, Phiring, Pô, Rokologadi, Taung, Tlôkwa, Tlhako, and Tlhalerwa.

The location of the site in the Swartruggens region narrows the possible identity of the inhabitants of the settlement. The only direct reference[13] to this area in the oral records is of the Taung (specifically the Bataung-ba-Mobana) (Hall et al. 2008:62). According to this information the date of the group in the region is possibly 1630-1730 CE, with the capital Rakgotletse, at farm Doornkom 896 located SE of Swartruggens, while the chief is unknown (Hall et al. 2008:62; Breutz 1953:160). Although the location is not correct, it is possible that there are other Taung settlements in the surrounding area. Breutz states that the Taung, due to famine and drought, moved to the east of the most northerly part of the Magaliesberg range, but later relocated to Rustenburg[14] and are still located in the region (1953:160-161). Breutz mentions that due to the group's relatively small size the Rustenburg Taung merged (through marriage) with the Fokeng and Kwena (1953:161). However, based on extant records, another group may also be connected with the stone wall structures found at Lebenya; this is the Kwena,

[13] The oral records detailing Sotho-Tswana groups in the Pilanesberg/Magaliesberg region was tabulated by Hall et al. (2008), including details, if known, regarding the Chief, Date, Capital, Farm/Place.
[14] Another branch of the Taung is also found in the Pilanesberg region, and is related to the Rustenburg group (Breutz 1953:161).

specifically the Modimosana Kwena. As previously mentioned, the Modimosana Kwena are linked to large stone wall sites (mega-sites) in the Rustenburg region, these sites are Molokwane and Boitsemagano (Pistorius 1992).

In order to further narrow the list, I searched for groups who were located around the Tholwane River at some stage, as shown in Figure 2.4, a stream located adjacent to the site. The Tholwane stream (spelt Thulwane on some maps, and Toelanie in Breutz 1953:499) occurs west of the settlement. Lebenya belongs to the parent farm Tolaniesfontein, and it is likely this name refers to the river. Various groups were known to be in the surrounding area of the Tholwane River, but only groups within the south eastern segment of the river were considered. This combined with a search for groups found near Swartruggens narrowed the possibilities to a list of groups, displayed in Table 2.1.

Table 2.1 Groups historically located in the surrounding area (from Breutz 1953)

TIME FRAME	GROUP	FARM	NAME OF SETTLEMENT
Prior to 16TH century CE	Hurutshe	In Swartruggens around Tholwane river	No specific name mentioned
Prior to 1816/17 CE	Lete	Between farms Turflaagte and Silwerkrans	Lotlhakane
Prior to 1780 & between 1860-1870 CE	Phiring	Nooitgedacht	Motšokwe
Early 19TH century CE	Tlokwa	Grootfontein	Kolontwane

The location of each of the following groups listed in the table, except for the Hurutshe who are not linked to a specific farm in the region, are displayed in Figure 2.6. The closest group recorded in the vicinity of the settlement are the Phiring.

Due to the recorded proximity of the Phiring to the site they are prime candidates for further investigation. The possibility of the Phiring being the past inhabitants of the site shall be discussed in the following section.

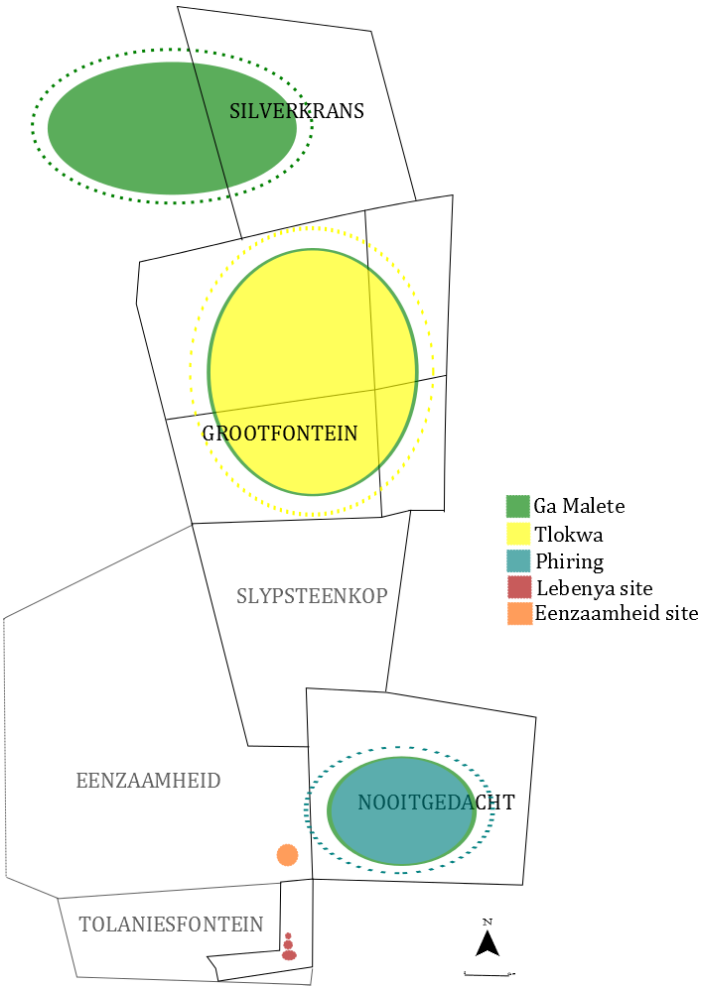


Figure 2.6 The location of various groups in the area

2.3.4. The Phiring at Nooitgedacht

The records state that the Phiring settled at Nooitgedacht sometime in the 17TH century CE, and established a capital, called Motšokwe (Breutz 1953:216). They lived at Motšokwe till 1780-1800 CE; from then on they moved places several times (moving from the Marico area to the area around Potchefstroom) (Breutz 1953:216). They trekked back to Motšokwe around 1860-1870 CE, but it seems they did not re-inhabit the settlement, because in 1870 CE the Phiring bought the farm Rietfontein, in the name of the Hermannsburg Mission (Breutz 1953:216).

According to the records, the Phiring had seven chiefs who lived and died at Motšokwe, the first chief being Phiri I (Breutz 1953:217-18). The tradition goes that under the rule of Phiri I, the people suffered a serious famine, when on the brink of starvation, they found a buck that had been killed by a hyeana, and it is believed to pay tribute to this act, they changed their totem from *Tholo* (kudu) to *Phiri* (Hyaena) (Breutz 1953:218). The Phiring are said to be offshoots of

the Hurutshe, but this appears to be true only in the sense that the majority of the Tswana originally broke off from the Hurutshe (Breutz 1953:217). As previously mentioned, the Phiring are said to be closely related to the Kubung, and are believed to form part of the Dighoya (Breutz 1953:217).

2.3.5. Finding Motšokwe

The extent of the Phiring settlement could have stretched further than Nooitgedacht, and possibly the majority of the settlement could have been located on the adjacent farms. At Marothodi, the oral records only mentioned the farm Bultfontein, when in actuality Marothodi was spread over three farms, Bultfontein, Diamant, and Vlakfontein (Boeyens & Hall 2009:464). Further, the core of Marothodi was located on the farm Vlakfontein which was not mentioned in the oral records (Boeyens & Hall 2009:464). This is however not unusual, as shown by similar circumstances surrounding the location of Kaditshwene. In the list of farms associated with the Hurutshe capital, Breutz only mentions the farm Bloemfontein, even though the central area of the settlement is bisected by a boundary fence to the farm Kleinfontein (in Boeyens & Hall 2009:466). There are several reasons for this scenario occurring, ranging from political sensitivities at the time to white owned farms, to informants using a farm as a landmark in locating the general settlement location. Therefore it can be misleading to view a site in isolation from the greater landscape of settlements. On the neighbouring farms of Lebenya, from the aerial and satellite imagery, a collection of other stone-walled sites can be identified. The stone-walled structures range from single small homesteads, to a collection of homesteads, as shown in Figure 2.7. The majority of stone wall structures are found on the farm just north of Lebenya, called Eensaamheid, as shown in Figure 2.6.

The Phiring capital Motsokwe, according to Breutz (1953:216), is located on Nooitgedacht. Currently, Nooitgedacht is the ground of a diamond operation. This underground fissure mine, located on Nooitgedacht, has been operating since 1933 (PetraDiamonds 2015: Helam). No heritage report exists for the farm. This is likely due to the time depth of the operations, predating current heritage legislation which requires a heritage assessment prior to the initiation of mining activity (National Heritage resources Act, Act 25 of 1999). From the historical aerial images and GE imagery stone wall sites in the northwestern corner of Nooitgedacht can be seen (these are not depicted in the Figure 2.7). These sites are however not as large as the ones found on Lebenya or Eensaamheid, and are quite a distance from the main stone wall structure on Eensaamheid (around 3.5kms) and Lebenya (more than 5kms).

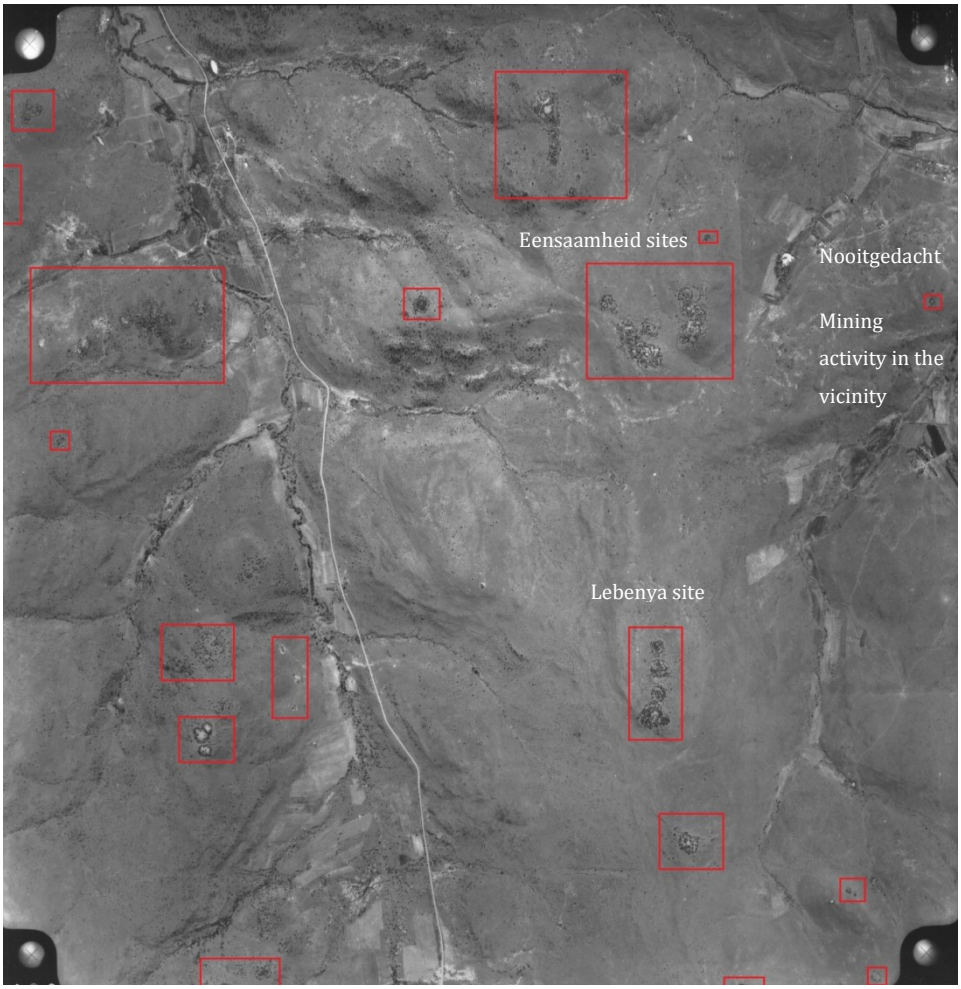


Figure 2.7 Aerial image from 1957 (courtesy of the NGI) red squares are stone wall sites in a 5km range

The stone wall cluster found on the farm Eensaamheid is 1.85km north of the stone-walled site on Lebenya, as shown in Figure 2.6. An Archaeological Impact Assessment (AIA) was conducted on the farm, at the land owner's request, and confirms the presence of stone walling on the farm Eensaamheid (Van Niekerk et al. 2002). These stone wall structures on Eensaamheid are not more than 2km north of Lebenya. The AIA linked the stone walling to the Sotho-Tswana, with the Hurutshe identified as the last occupants of the area prior to the occupation of white farmers in the late 19th century CE. However, as detailed by the previous section, it seems unlikely that the stone-walled settlements on Eensaamheid, and that of Lebenya, were constructed by the Hurutshe, since they were located in the region prior to 16TH century CE, and the stone walling is of a construction style adapted post mid 17th century CE (Breutz 1953).

Therefore, it is likely that the settlements located on Eensaamheid, Lebenya, and Nooitgedacht are related. Following a similar situation in regards to the oral locations of Marothodi and

Kaditshwene, it is possible that the core of the Phiring settlement was not located on Nooitgedacht, but rather on the adjacent farms Lebenya and Eensaamheid.

In order to substantiate this premise, the historical and archaeological evidence for the region needs to be investigated. The archaeology of the site will be discussed in chapters five and six, but the archaeology of the region will be discussed in the following section.

2.4. Settlement and ceramic classification of stone wall sites

Today the ruins of countless stone-walled settlements litter the region, inviting questions about the past inhabitants of these settlements. Archaeologists have addressed these questions through the classification of settlements and ceramics. The following section presents a discussion on settlement typologies in the region, followed by an appraisal of ceramic types found in the region. The research shows that the combination of settlement and ceramic type can be used to suggest the group identity (on various levels) of the inhabitants of a settlement

2.4.1. Stone wall site typologies for the region

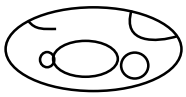
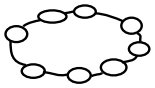
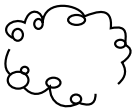
The use of stone in the construction of a settlement has been reasoned along pragmatic as well as symbolic terms; the pragmatic argument being the lack of trees in the highveld, and the symbolic refers to the ability of walling to demarcate spaces of ownership (Boeyens 2003:70). Walling, particularly stone for its permanence, can symbolise a person or group's claim to a land, even more so, in times of population movement (Boeyens 2003:70). The highly visible nature of stone-walled sites allows for a typology of these settlements. A range of typologies have been generated from aerial photography of these settlements (Seddon 1968; Maggs 1976a&b; Taylor 1979; Mason 1968 & 1986; and Huffman 1986a). While a majority of these typologies do not fall within the research region (Maggs 1976; Taylor 1979; and Sadr & Rodier 2012), they have been applied to sites sharing similar, if not identical, characteristics. Much of this research is built upon previous work in the region, as shown in Sadr & Rodier (2012). The typology created by Sadr & Rodier (2012) continues the initial typology created by Taylor (1979), but incorporates research by Mason (1976), Maggs (1976), and Huffman (1986) into the overall typology. The comprehensive nature of Sadr & Rodier's (2012) typology makes it suitable for application in the ZPR region (this is done in chapter five). However, before I can

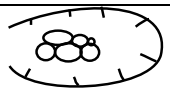
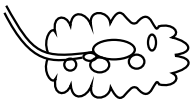
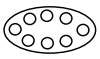
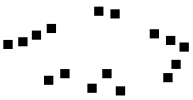
apply this typology to the ZPR region I will discuss the main stone wall site classifications that contributed to our understanding Tswana sites in and around the highveld region.

2.4.1.1. Mason's classification of stone-walled sites

Mason (1968) identified stone-walled sites from 1950s aerial photographs of the Magaliesberg Valley, which he classified into different classes. Seddon (1968) extended the survey area from Magaliesberg to the Botswana border; he counted visible sites, with variability in settlement style linked to chronological development. However, Mason later withdrew his 1968 classifications following further research on the region settlements, and presented an eleven classed settlement classification instead see Table 2.2 (Mason 1986:335). This classification reflected a general chronological development of Sotho-Tswana settlement style, with simple settlement layouts associated to an earlier time frame and more complex settlement layouts associated to a later time frame (Mason 1986:348).

Table 2.2 Mason's classes for stone-walled sites in the Magaliesberg-Johannesburg region (after Mason 1986: 335-343)

Class	Characteristics	Example
1	Isolated enclosure with an even or roughly circular boundary, with a few simple enclosures within the boundary. Settlement is visible on the edge of and apparently beneath later settlements.	Bruma 29/81 
2	Settlements are often large, with a boundary wall formed by adjacent roughly circular enclosures separated by open stretches of curved wall.	Waterval 11/65 
3	An elliptical boundary wall interspersed with circular stone enclosures. Mason believes these are the cattle stations of class 6 settlements.	Koster sites 
4	A roughly circular boundary wall immediately adjacent to an interior zone of smaller circular structures, with each circular structure related to an embayment and often connected to the boundary wall.	Doornspruit 
5	Sites have a roughly elliptical boundary wall with short straight sections of walling	Klipriviersberg 5/65

	projecting at right angles along the interior of the boundary wall.	
6	Usually identified as mega-sites. Settlements have a continuous boundary wall consisting of embayments. Some sites have parallel walled driveways from the interior to the exterior of the settlement, these are livestock drives.	Olifantspoort 20/71 
7	Sites are characterised by separate boundary embayments that do not connect, with interior circular enclosures.	Platberg 30/71 
8	Sites have a smooth elliptical boundary wall enclosing an interior of symmetrically placed circular enclosures.	Leeuwkop 
9	Sites also classified as mega-sites. Large sites without a single enclosing boundary wall. Mason suggests that these sites are an adaption of class 6 sites for larger populations.	*Kaditshwene 13/66 
10	Only one such site, it is characterised by the use of small pebbles in circular patterns, these anchored low clay walls which were built on either side of the pebble layout.	Olifantspoort 2/72 
11	Sites located in caves. Sites were likely used for refuge or industrial purposes.	Uitkomst 5/67 

2.4.1.2. Re-interpretation of Mason's class 3 and Doornspruit sites

The association of Mason's class 3 and Doornspruit sites to the Sotho-Tswana has been questioned by more recent research (Huffman 2007, Pistorius 1997). It is suggested that class 3 sites are not the cattle station of class 6 sites, but are rather a progression of Doornspruit settlements, and therefore are associated with Nguni-speakers (see Kruger 2010). This was noticed largely because of Pistorius's (1997) work which linked Doornspruit settlements near Rustenburg with the 19th century Khumalo (the Matablele under Mzilikazi's leadership). Pistorius argued that these settlements echoed the layout of Zulu military centres such as

Mgungundlovu (see Parkington and Cronin 1979). Huffman argued that the Nguni association for Doornspruit sites is likely, and that the these sites express the 'Ngunisation' of incorporated Sotho-Tswana woman into Mzilikazi's settlements (Huffman 2007:453). This would date Doornspruit settlements in the ZPR region to the Mfecane period (late 1820 to 1830s CE), the time when Mzilikzi's Khumalo crossed the Vaal river (Kruger 2010:6).

Architecturally, this progression from class 3 sites to Doornspruit is pronounced by the addition of back scallops (embayments) that are connected to the primary enclosures. This feature is defined by the Molokwane walling type characteristic of Sotho-Tswana speakers in the region. Therefore, this architectural spatial feature does further substantiate the idea that Doornspruit sites represent the 'Ngunisation' of Sotho-Tswana practices through the interaction with and incorporation of local people. Class 3 sites and Doornspruit sites occur to the North East of Lebenya, suggesting a complex layered landscape of people and relations in the region, Furthermore, these sites are likely to be contemporaneous or indeed post-date, the site at Lebenya.

2.4.1.3. Maggs's classification of stone-walled sites

While Mason was working north of the Vaal, another researcher, Tim Maggs (1976a & b), was recording and classifying stone-walled sites south of the Vaal in the Free State (termed southern highveld). Maggs (1976a & b) approached the archaeology from a historical perspective; he used Sotho oral traditions and history to link different site types to historical identities. Maggs employed aerial photography to classify stone-walled sites from the Vaal to the Orange River; this method was later extended to just north of the Vaal, parts of Griqualand West, southern Transvaal, and the upper Tugela Basin of Natal (1976a:26). Four main types were established from this aerial survey: Types N, V, Z, and R, further detailed in Table 2.3 Maggs's typology for stone-walled settlement (Maggs 1976a:28-44). Maggs's Type N site is named after the site Ntsuanatsatsi, and is linked to Huffman's (2007) ceramic facies, to be discussed in further detail in the ceramics section of this chapter. Maggs Type V and Z sites highlight the difference between Tswana and Sotho settlements respectively. Maggs highlights the difference between these two groups in settlement characteristics and pottery production (1976b:318). The major difference in settlement style is that Type V sites used stone extensively in their building, as seen by their corbelled dwelling structures; while Type Z sites used stone for boundaries, but retained their cone-on-cylinder house structure (Maggs 1976b:319). Ceramics made by the Sotho were made according to the ring technique or by moulding from the lump; whereas the Tswana build their pottery from the widest diameter up to the mouth, with roughly flattened

pieces of clay, completing the base after the upper section has dried slightly (Lawton 1976:130 & 150 in Maggs 1976b:318). His research established a time depth for stone-walled settlements in the interior; he also demonstrated the first expansion of farmers south of the Vaal, and provided a platform for further studies north of the Vaal.

Table 2.3 Maggs's typology for stone-walled settlement

	Type N	Type V	Type Z	Type R
Group association	Early fokeng, Kwena, and possibly the Kgatla cluster[15]	Cannot be associated to one group[16], but rather attributed to the Sotho collective	Kubung[17]	The work of bushman pastoralists
Distribution	Eastern region of southern highveld, concentrated in the area along the Vaal River and Klip River	Eastern region of southern highveld, spreading North, East and Southwest of type N settlement area	Northwest region of southern highveld	Southwest of the Riet River
Period	From the 14th to 15th century CE	Replaces type N settlements before the 17th century CE	From the 16th /17th to 19th century CE	Not relevant to this discussion

2.4.1.4. Taylor's classification of stone-walled sites

Further work on the classification of stone-walled settlements, or stone-walled structures (SWS)--- as not all stone wall sites are settlements, continued with Taylor's (1979) study of SWS in the Vredefort dome area. Maggs had noted the occurrence of SWS in the area, but did not investigate it further in his research (Maggs 1976a:44). Taylor selected the Vredefort dome area for further research as it lay between two regions of previously researched SWS concentrations; to the south was where Maggs (1976a & b) concentrated his research while to the north was where Mason (1986) had worked on Sotho-Tswana settlements. It was thought that research in this region might clarify the relationship between the SWS of the North and

[15] Legassick (1969:114) suggests the Fokeng were co-residents with the Kwena and Kgatla.
[16] The area to the south and west is associated with the Taung, while the north and east settlements are attributed to the Sotho collective (Maggs 1976b:316-317).
[24] Type Z sites are associated with the Kubung, a break-away branch of the Rolong, who did cross the Vaal from the North before the 1820s (Maggs 1976b:317).

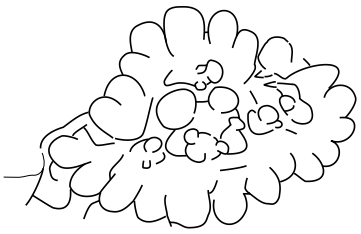
those of the South (Taylor 1979:1). Taylor (1979) continued the use of aerial photography to identify and classify SWS; the data collected from this investigation led to the creation of Taylor's typology for SWS in the region. The typology is divided into three groups. Group I was dated to the 16th century CE, while Group II and Group III date within the range of the mid 17th century CE to the early 19th century CE, and appear to be contemporaneous (Taylor 1979). The SWS Groups were linked to Maggs's type sites: Group I to Maggs's Type N, Group II to Maggs's Type Z, while Group III is not as clear. Group III sites were tentatively regarded as a later phase of Group I sites with some site features reflecting an incorporation of Group II site characteristics (Taylor 1979:107). This research established a sequence of archaeological entities, which represent different communities and their interaction within a region over a 300 year period. Taylor (1979:107) concluded that: Group I sites were associated with Sotho-speaking communities, Group II sites with Tswana speaking communities, and Group III sites as the product of Sotho communities interacting with Tswana communities. Taylor focused on the creation of morphological types, from which he suggested that varying group identity could be linked to differences in settlement style. This allowed for a typology which could be applied on SWS throughout the region which displayed similar morphological attributes.

2.4.1.5. Huffman's classification of stone-walled sites

Another typology commonly referred to in a discussion on SWS is Huffman's (2007) settlement type: see Table 2.4 for types relevant to this discussion. It combines ceramic style with settlement style in a discussion of group movement, contact, and assimilation. Huffman (2007:38) refers two types of walling north of the Vaal River, the Klipriviersberg type and the Molokwane type. Huffman's (2007) typology will be further discussed in the ceramic classification section.

A quick note on the correlation between ceramic and settlement style, at Marothodi the walling style is that of the Molokwane type, but *Uitkomst* styled pottery is found throughout the site (Hall 2012:312). Therefore, disjuncture does occur from the expected classes, and shall be discussed further in the following chapters.

Table 2.4 Huffman's stone wall site types north of the Vaal (2007:38)

	Klipriviersberg	**Molokwane**
Characteristic	Defined by an outer wall, sometimes including scallops (arcs in the wall), with small stock enclosures, with straight walls separating households in the residential zone of the settlement.	Defined by a scalloped outer wall, with sheep and goat enclosures kept between the central cattle enclosures and the residential zone.
Dwelling structures	Beehive houses are common at this type of settlement, with some huts exhibiting sliding doors.	Daga houses are common at this type of settlement, with sliding doors and verandas occurring at times.
Date range	18th and 19th centuries CE.	The late 18th and early 19th century CE.
Group association to type sites	Built by people of the Fokeng cluster.	Built by people of the western Sotho-Tswana cluster.
Ceramic association to type sites	*Uitkomst* ceramics	*Buispoort* ceramics
Type site		

2.4.1.6. Sadr & Rodier's classification of stone-walled sites

Sadr & Rodier (2012), who incorporated Taylor's typology for the Vredefort dome area, studied SWS in the Suikerbosrand Nature Reserve (the Suikerbosrand Nature Reserve is a 100 km northeast of the Vredefort dome area). Sadr & Rodier (2012) expanded Taylor's typology from three Groups to four. The main defining characteristics of the typology are the shape of the boundary walls, and, to some extent, the organisation of internal enclosures (Hunt & Sadr

2014:1). The details for each grouping (except Group IV which requires further research) are given in Table 2.5.

Through a detailed GIS study of mapped sites in the Suikerbosrand nature reserve a more functional perspective of settlement change was developed (Sadr & Rodier 2012). Group I settlements were geographically located in areas of poor agricultural yield, but of high grazing value, suggesting that these communities were more herding based (Sadr & Rodier 2012:1039). Group II and III settlements were placed in more agricultural promising areas, with Group II settlements clustered within a 5km radius of high potential arable soils (Sadr & Rodier 2012:1041). Group III sites are intermediate between Group I and II sites in many aspects. Group III sites show an increase in settlement size and rank from Group I. Group III site features, see Table 2.5, suggest that this society was more agriculturally based with increased livestock numbers; therefore, pointing to a more politically and economically stratified society (Sadr & Rodier 2012:1041). According to Sadr & Rodier (2012:1041), Group II sites are the last phase of occupation, where areas of high agricultural yield become populated by large groups of people inhabiting densely aggregated settlements--- referred to as mega-sites in the ZPR region (Sadr & Rodier 2012:1036). The size of the sites, their ranking, and the numerous middens associated with the sites, all indicate the depth of economic and political stratification in the region (Sadr & Rodier 2012:1041). Though there were less large livestock enclosures and more inner enclosures of different sizes in Group II sites, Sadr & Rodier (2012:1041) argue that this supports the proposition that these communities were becoming economically and politically stratified. They suggest this could be viewed as the beginning of privatisation, whereby members of the community show a greater interest in the creation of private flocks (Sadr & Rodier 2012:1041). Illustrating this process of privatisation is the splitting of communal herds (or heavier reliance on small livestock) as shown by the increased number of smaller enclosures, as well as the gaps in the walls to the central enclosures which opens up a previously restricted space(Sadr & Rodier 2012:1041). Due to the lack of chronological precision, with Radio-carbon dates as only a relative measurement, it is not certain if Group II and III sites are contemporary. Taylor (1939) argues that the differences between the Groups are reflective of cultural variation. However, Sadr & Rodier (2012:1039) argue that rather than varying contemporary groups, the Groups reflect variation over time within a group, whereby Group III sites are chronologically intermediate between Group I[18] and II sites.

[18] The origin and identity of the group who constructed Group I sites is further debated. Huffman (2007:431) believes the group associated with these sites were Nguni-speaking Fokeng, while Sadr (2012) suggests that the constructors of Group I SWS may represent a hybrid society comprising Khoisan herder-hunters and Bantu speaking agro-pastoralists.

Taylor's (1979) typology, expanded upon by Sadr & Rodier (2012) is versatile in its application, due to the focus on morphological attributes it can be applied in various regions. Sadr & Rodier (2012:1040) initiate such comparison by grouping SWS (already dated by radio-carbon finds) outside of the SKBR into Taylor's Groupings. Therefore, this classification system has value outside of the Vredefort area and SKBR, and could be applied in the ZPR region, where settlements share a similar trend of developing from small dispersed homesteads to aggregated settlements (Sadr & Rodier 2012:1039). In the following section I discuss the role of ceramic styles in the classification of groups in the ZPR region.

Table 2.5 Sadr & Rodier's typology for stone-walled settlements

	Group I	**Group II**	**Group III**
Identifying characteristics of SWS	Outer elliptical wall enclosing a group of smaller inner enclosures	The outer walling is a discontinuous series of c-shaped walls facing inwards towards a central group of enclosures	A confusion of inner enclosures within a continuous perimeter wall marked by varying lengths of curved and sometimes broadly scalloped walls
Further description	Outer walls are often nearly circular or oval, sometimes irregular, and with small primary circles attached	Usually found in dense aggregations, referred to as towns and mega-sites in the ZPR region	The inner enclosures often touch the perimeter wall, unlike in group II where the inner enclosures are mostly located centrally
Similar to	Type N structures, Mason's class 1	Type Z structures, Mason's class 6,7 and 9 sites, Huffman's 'Molokwane' type	Mason's class 2 and 5 sites, and Huffman's 'Klipriviersberg' type
Other distinguishing features	No presence of ash middens	The presence of ash middens in and around these structures	Rarely are ash middens seen in the area of these structures
Cluster	Relatively dispersed	Densely clustered	Intermediate to GI and GII type clustering
Distribution in relation to arable land	Less than half of SWS are within 5km of arable lands	Three quarters of SWS are within 5km of arable lands	Three quarters of SWS are within 5km of arable lands
Period	Oldest, date from the 15th to 17th centuries CE	Dated to the 17th to 19th century CE	Dated to the 17th to 19th century CE

2.4.2. Ceramic typologies for the region

One of the ways ceramics have been utilised in archaeological studies is in the creation of culture-history sequences, establishing a framework for agropastoral studies in Southern Africa (Huffman 2007). This culture-historical sequence traces the movement of streams of African agro-pastoralists into and across southern Africa (Huffman 2007:122). This sequence was largely established by Huffman (1980) through his multi-dimensional stylistic analysis of ceramics in the region. The variables are based on stylistic attributes, where a tri-dimensional combination of profile, layout, and motif(s) defines different categories of ceramic types (termed ceramic units) (Huffman 1989:157). This stylistic analysis identified ceramic units which are commonly equated with groups of people. In the following section I discuss the ceramic units which are relevant to this study. The discussion on ceramic units in the region requires knowledge of Huffman's (2007) terminology, see Table 2.6.

Table 2.6 Huffman's ceramic classification terminology (after 2007:117)

Tradition	A series of related ceramic units
Branch	One of multiple sequences within a tradition
Sub-branch	One of multiple sequences within a branch
Phase	Time segments of a tradition
Facies	Ceramic unit

Huffman (2007) established a migration sequence based on ceramic and linguistic evidence, where ceramic traditions illustrate the migration of agro-pastoral groups into southern Africa. The Urewe tradition marks the first stream of agro-pastoralists into eastern and southern Africa, with this group moving down the eastern coast into Mozambique, coastal KwaZulu-Natal, and Mpumalanga (Huffman 1989). The Kalundu tradition marks the second stream of agro-pastoralists into the region, which moved south of the Limpopo River, replacing the first stream of agro-pastoralists in the region (Huffman 1989). The Urewe tradition has four branches, Kwale, Nkope, Blackburn, and Moloko (Huffman 2007:118). These branches reflect different sequences; the Kwale and Nkope branches date from the 4th to the 14th century CE, and the Moloko and Blackburn branches date from the 12th to the 19th century CE (Huffman 2007:118). The *facies* of the later branches, Moloko and Blackburn, are relevant to the region of study, see Figure 2.8; therefore, necessitating further discussion.

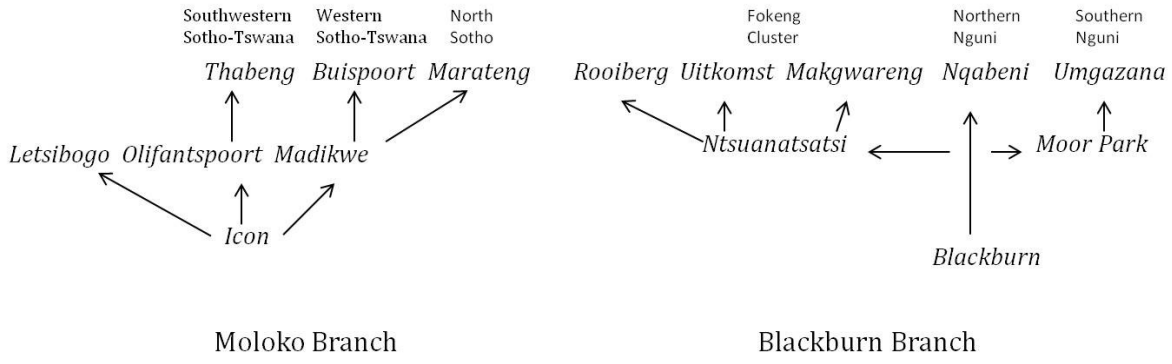


Figure 2.8 The facies of the Moloko and Blackburn branches (after Huffman 2007:118)

2.4.2.1. The Moloko and Blackburn Branches

These branches of the Urewe tradition are associated with the Sotho-Tswana and Nguni speaking people; it is suggested that both groups moved south into the region from the 11th to the 14th century CE (Huffman 2007:443). The Moloko branch, associated with the Sotho-Tswana, consists of three phases: the first phase is dated from the 14th to 16th century CE, the second phase is dated from the 16th to 18th century CE, and the last phase is dated from the 18th to 19th century CE (Huffman 2007:433 & 436). The first phase is represented by the *Icon* facies, sites with this pottery are limited to the Limpopo river. The second phase is a collection of three separate facies: *Letisbogo* in Botswana, *Madikwe* in the North West Province and Botswana, and *Olifantspoort* in the Magaliesberg (Huffman 2007:431). The third phase is characterised by the development of the *Buispoort* facies from *Madikwe*, and the *Thabeng* facies from *Olifantspoort* (Huffman 2007:433). The earlier Moloko phase (1 and 2) are distinguished from the later Moloko phase, due to changes in ceramic and settlement style (Boeyens 2000; Hall 1998; Huffman 2007; Fredriksen 2012). Therefore, the Moloko sequence is divided into early (before18th century CE) and late (after 18th century CE), with the earlier ceramic assemblages displaying high stylistic variability compared to that of the later Moloko ceramic assemblages (Hall 1998).

The Blackburn branch previously consisted of three phases, but now consists of five phases, subsequent to the inclusion of the *Ntsuanatsatsi* sequence, see Figure 2.8 (Huffman 2007:443). The first phase is from the 11th to 16th century CE and is associated with the *Blackburn* ceramics. The second phase is from the 14th to the 18th century CE and is associated with the *Moor Park* ceramics. The third phase is from the 15th to the 18th century CE and is associated with the *Ntsuanatsatsi* ceramics. The fourth phase is from the 17th to 19th century CE and is associated

with the *Rooiberg*, *Uitkomst*, and *Waterberg* ceramics. The fifth phase is from the 18th to 19th century CE and is associated with the *Makgwareng*, *Nqabeni,* and *Umgazana* ceramics.

The Blackburn branch, associated with Nguni-speakers, occurs along the north and south coasts of KwaZulu-Natal. However, the *Ntsuanatsatsi* ceramics occur in the Free State. This implies that the Fokeng cluster were the first Nguni speakers to move out of KwaZulu-Natal (Huffman 2007:444). This would corroborate Maggs's (1976a & b) work which suggests that the Fokeng were the constructors and inhabitants of Type N walling in the Northern Free State. This further verifies the oral records, which describe Kwena movement south of the Vaal into areas already occupied by the Fokeng, such as the Ntuanatsatsi site (Hall et al. 2008:63). It is also suggested that the Fokeng introduced stonewalling to the western and southwestern Sotho-Tswana groups when they subsequently migrated north of the Vaal (Huffman 2007:431 & 433).

The above discussion on the Fokeng and the re-categorisation of the *Ntuanatsatsi* facies is significant to this study of the ZPR region, because *Uitkomst,* a ceramic unit found in the ZPR region, is the product of a blend of characteristics found in *Ntsuanatsatsi* and *Olifantspoort* ceramics, as shown in Figure 2.9 (Huffman 2007:431). According to Huffman, this blend of characteristics reflects intensive cultural interaction between the ceramic manufactures of these facies (Huffman 2007:431). Furthermore, this has led to an on-going discussion as to the relationship between Sotho-Tswana and other Tswana groups of a possible Nguni origin in the region, a discussion informed by oral evidence and material culture studies.

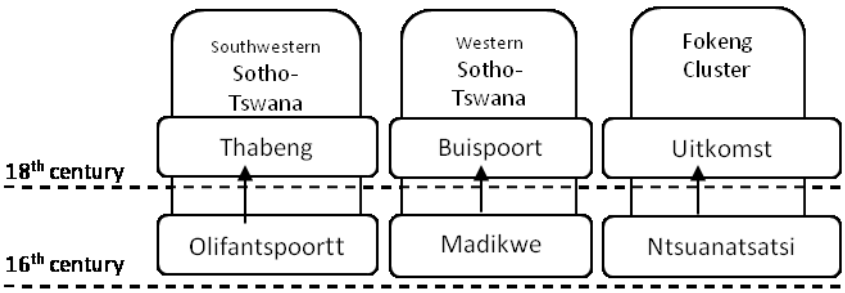


Figure 2.9 The attributes of the Thabeng, Buispoort and Uitkomst facies

2.4.2.2. Facies occurring in the ZPR region

The facies located in and around the ZPR region are *Ntsuanatsatsi, Madikwe*, *Olifantspoort*, *Buispoort*, and *Uitkomst* (Huffman 2007). The *Ntsuanatsatsi, Madikwe*, and *Olifantspoort* facies

occur earlierthan the *Buispoort* and *Uitkomst* facies. In the following section I provide a brief account of each facies.

2.4.2.3. *Ntsuanatsatsi* ceramics

Ntsuanatsatsi ceramics commonly occur around the Vaal River and spreading northwest to the eye of the Mario River (Huffman 2007:167). The *Ntsuanatsatsi* ceramics date from the mid 15th to mid 17th century CE, and are found at Maggs's Type N sites and Taylor's Group I sites (Huffman 2007:167). The ceramic style is characterised by broad band stamping in the neck, and stamped arcades on the shoulder and appliqué of vessels (Huffman 2007:169).

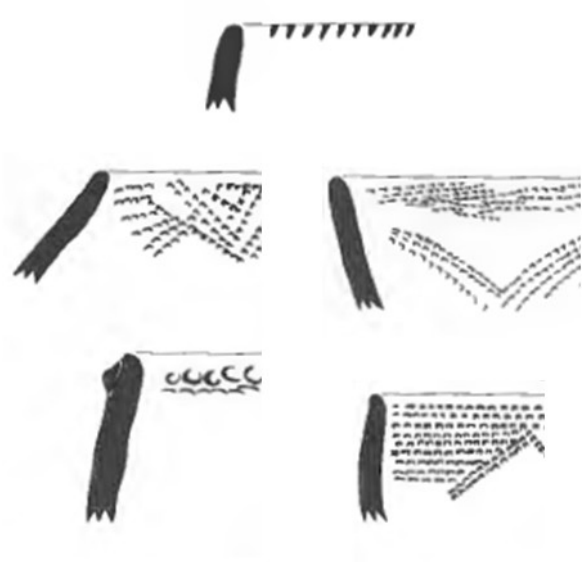


Figure 2.10 Ntsuanatsatsi ceramics from Huffman (2007:168)

2.4.2.4. *Madikwe* ceramics

Madikwe ceramics commonly occur in the region between the Waterberg in the northeast and the Marico river to the southwest (Huffman 2007:199). The date range is from the early 16th to early 18th century CE, and are found at Modipe Hill 94.2 and Rietfontein 2 (Huffman 2007:199). The ceramic style is characterised by multiple bands of cord impressions, incisions, stabs, and

punctates separated by colour (Huffman 2007:201). As Huffman (2002:21) states, the presence of *Madikwe* pottery often points to the presence of Kwena people in the area.

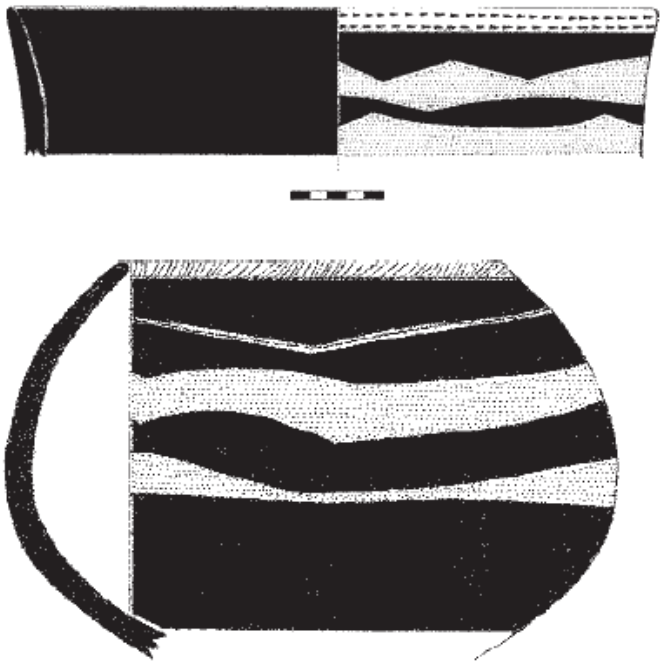


Figure 2.11 *Madikwe* ceramics from CB14 (house 3) from Huffman 2006:57

2.4.2.5. *Olifantspoort* ceramics

This facies is bounded by the Crocodile River to the south, the Vaal River to the north, and the eye of the Marico River to the west (Huffman 2007:191). The date range for this facies is from the early 16th to the early 18th century CE, and is found at Roberts Farm 28/71 (Huffman 2007:191). The ceramic style is characterised by multiple bands of fine stamping or narrow incision separated by colour (Huffman 2007:193).

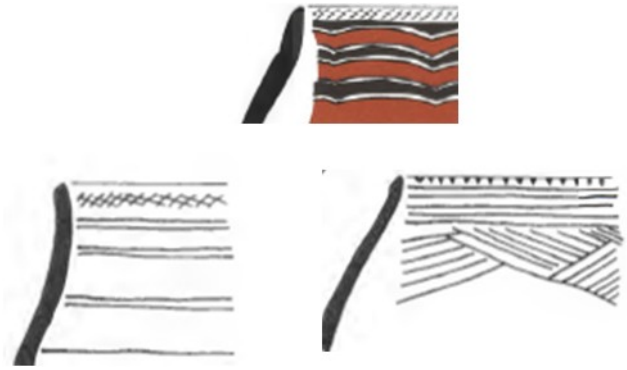


Figure 2.12 Olifantspoort ceramics from Huffman (2007:192)

2.4.2.6. *Buispoort* ceramics

Buispoort ceramics are distributed from the east of Pretoria to the west of the Marico River (Huffman 2007:203). *Buispoort* dates from the 18th to the mid 19th century CE, and is found at Taylor's Group II sites and Huffman's Molokwane type sites (Huffman 2007:203). The ceramic style is characterised by rim nicked and incised decoration on the vessel (Huffman 2007:205).

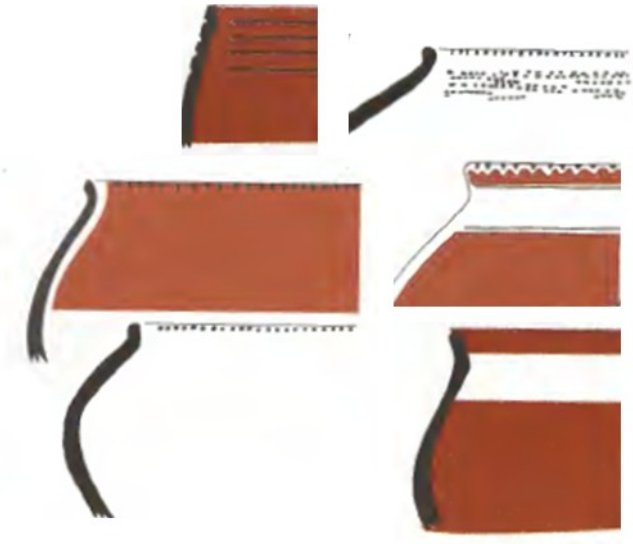


Figure 2.13 *Buispoort* ceramics from Huffman (2007:204)

2.4.2.7. *Uitkomst* ceramics

This facies occurs throughout the ZPR region (Huffman 2007:171). *Uitkomst* dates from the 17th to the 19th century CE, and is found at Huffman's Klipriviersberg type sites and Taylor's Group III (Huffman 2007:171). The ceramic style is characterised by stamped arcades, appliqué, blocks of parallel incisions, stamping, and cord impressions on the vessel (Huffman 2007:173).

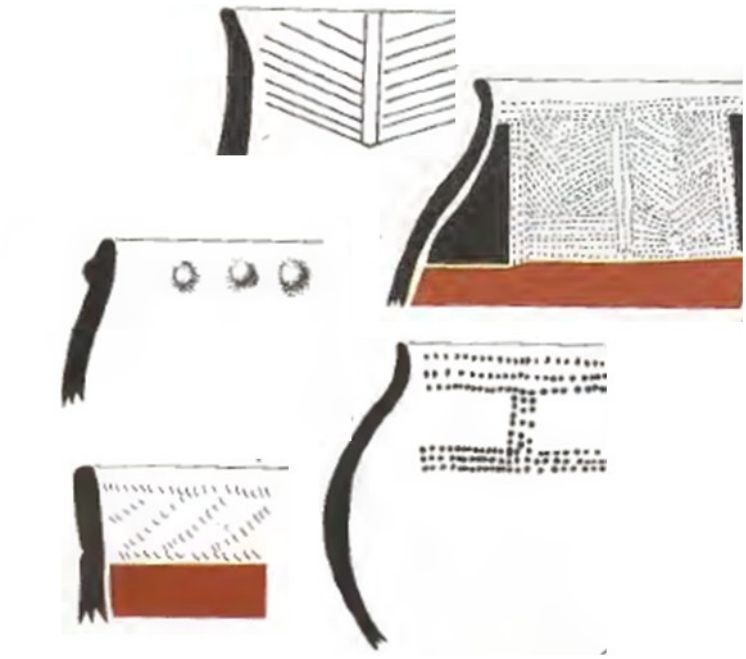


Figure 2.14 *Uitkomst* ceramics from Huffman (2007:172)

2.4.2.8. Uitkomst and Buispoort ceramics

The *Uitkomst* and *Buispoort* facies share a similar distribution area and date range, but each facies as proposed by Huffman (2007) is associated with a different cluster of people, the Fokeng cluster and the western Sotho-Tswana respectively. This will be further discussed in the following section, from which it is apparent that the distinction is not as clear as Huffman (2007) presents it to be.

Marothodi is a site associated with the Tlokwa. The Tlokwa are thought to be of Nguni origins. Ceramics found at Marothodi suggest a subtle distinction can be made between sites of the

Fokeng cluster and those of the western Tswana cluster (Hall et al. 2008:67). The stylistic attributes of the ceramics from this site are predominantly of the comb-stamping type, a characteristic of *Uitkomst* ceramics, while rim notching, a characteristic of *Buispoort* ceramics, is rare (Hall et al. 2008:67). These *Uitkomst*-like ceramics differ markedly from the *Buispoort* ceramics found at the contemporary Kwena settlement, Molokwane, about 40km south of Marothodi. Furthermore, beyond stylistic attributes, Rosenstein's (2008) technological study of the ceramics in the ZPR region identified a further distinction between *Buipooort* and *Uitkomst*-like ceramics in the region. This study established that graphitic and lustrous mineral inclusions, specifically muscovite mica, were a consistent attribute of *Buispoort* ceramics, and was a technological as well as possibly a stylistic addition to the ware (Rosenstein 2008). Technological attributes associated with the formation of pottery is the result of a primary learning process; therefore, the manner in which a pot is formed is reflective of socialisation, and embedded with aspects of social identity (Gosselain 2000:193). The inclusion of muscovite mica as a temper in *Buispoort* styled pottery, while not an attribute of *Uitkomst* styled ceramics, is therefore reflective of different cultural practices in the formation of pottery. Whereas, this attribute was absent in the Marothodi ceramics, as well as the ceramics from the Kgafela Kgatla sites (another Tswana group possibly associated with the Fokeng cluster) (Rosenstein 2008: 50).

However, while a discussion on Nguni origin and Tswana assimilation in the region is intriguing, the ceramic evidence is not conclusive. At Kaditshwene, from an excavation in the main court midden, a large number of *Uitkomst*-like ceramics were retrieved; this style of ceramic was also recorded in sketches made by John Campbell (1822) when he visited the town in 1820 CE (Hall et al. 2008:64). Furthermore, graphitic and lustrous mineral inclusions were identified in the temper of this comb stamped ware (Hall et al. 2008:67). Therefore, the possible *Uitkomst* association with a core western Tswana group, the Hurutshe, and the similar technological attributes shared between this ware and *Buispoort* ware, indicates that more research is needed (Hall et al. 2008:64).

Perhaps the difference in style and technology between the ceramics of the western Tswana and those of the Tlokwa and the Kgatla Kgafela is more a regional distinction. Both the Tlokwa of Marothodi and the Kgatla Kgafela are located to the north of the ZPR region, around the Pilanesberg area. Furthermore, what if this distinction is not just regional but due to intra-regional relations and craft specialisation? The Tlokwa, of Marothodi, and the Kgafela Kgatla, besides being neighbours in the Pilanesberg region, both seem to share an interest in copper. The Tlokwa at Marothodi worked copper possibly for intra-regional trade (as suggested by the scale of their copper and iron production [Hall 2007:175]), while tin-bronze earrings recovered

from an excavation at Marothodi suggest long-distance trade links, including with the Rooiberg tin mines (Boeyens & Hall 2009:477). The Kgafela Kgatla, according to oral sources, had links with the Rooiberg copper mines (Boeyens & Hall 2009:477). These two groups also held joint initiation schools, suggesting a close relationship (Boeyens & Hall 2009:477).

Further research on the ceramics found in the region and the past communities manufacturing these ceramics is vital, because variance between ceramic units might not solely reflect difference in group identity but also relationships of trade, craft manufacture, and trade specialisation.

2.4.3. Classification associations and issues

Archaeologists use walling and ceramic classification in order to distinguish pattern types that then can be attributed to a time and space context. However, these etic classifications sometimes mask the complexity of the past or remain poorly grounded in a space and time context, as the preceding discussion on Buispoort and Uitkomst ceramics attests to. At times, the interaction between people of varying backgrounds can be masked by such classifications, such as at Marothodi, where the recognition of difference within a pattern allowed us to better understand identity negotiation at a time when resources and protection based on certain alliances was to a distinct advantage. However, a reconsideration of these classifications in combination with historic and ethnographic data can lead to the identification of processes of identity change, such as the re-interpreted Doornspruit settlements. Due to these considerations and that previous research in the region has not focused on sites of this scale, it seems probable that Lebenya will not fall easily into the established classifications.

2.5. Direction of following chapter

Environmental and socio-political conditions shaped the Tswana experience in the ZPR region. As discussed earlier in this chapter, the environment, able to support growing populations, was a factor in the development of mega-sites in the region. The socio-political climate of assimilation, led to the re-negotiation of various group identities, creating a 'homogenous' Tswana collective. However, the past layers of these identities are hinted at by the archaeological and oral records. The oral record has provided a possible identity for the community who inhabited the settlement, the Phiring, but only the archaeological evidence can corroborate this identification. This will be discussed in the following data chapters. Settlement

style and layout and material culture can reveal intricacies about group identity, settlement function, intra-regional dynamics, and craft specialisation..

However, before we can investigate the archaeology of the site itself, I will discuss the interpretive framework. The ethnographic record allows for an understanding of the worldview of past groups, and allows for a more detailed analysis of a site. The following chapter presents a critical account of how ethnographic sources are used in the archaeology of this region. The chapter will also present a view of the worldview of the Tswana, and how settlement space and usage is attached to societal beliefs and practices.

Chapter 3 Theoretical Framework

3.1. Overview

The 'past does not exist…
[w]hat does exist are interpretations of the past constructed in the present'
(Reid & Lane 2004:1).

The following chapter presents a brief account on historical archaeology. Historical archaeology uses written and oral records to holistically interpret the archaeological record. An important resource used in the interpreting of the archaeological record is ethnographic sources. Ethnographic sources are used to describe the worldview of the historical Tswana. The worldview of the Tswana will be discussed in this chapter, with a particular focus on settlement space and usage. This chapter concludes with a review of how other researchers have interpreted Tswana settlements in the ZPR region.

3.2. Historical archaeology

The use of the term historical archaeology in this work is deliberate; it emphasizes a connection between the past and the present. Though the settlement found at Lebenya could be better classified as a late farming community or as an Iron Age site, I choose to discuss it in terms of a historical archaeological site. The above terms distance the site from its historical relevance, and its possible roots in local memory. While historical archaeology associates the site with a local history, a memory, or oral tradition, it also bridges the distinguishing of sites as 'pre' or 'post' colonial and/or as 'pre-history' or 'history'.

The term historical archaeology originates in the United States, and is characterised by long-held debates over the definition of the field (see Deetz 1991; Little 1992; Orser 1996). It is defined as the studies of societies for whom there are written texts available (Little 1992). Or as defined by Deetz (1991), as the study of societies affected and or involved with European expansionism in the fifteenth century onwards. Or as defined by Orser (1996 & 2004), as a period delimited by the emergence of modernity and literacy.

Historical archaeology is characterised by the combining of archaeology with written sources However, this combination can also lead to the creation of diverse histories. Dissonance between these sources, meaning the disparities between the accounts and the consideration of the contextual setting at the time of the generation of the account, provide information on the key issues and debates within the society (Reid & Lane 2004:10). For example, Hall (1997) contrasts the probate inventory of a late 18th century CE house on Barrack Street with the excavated contents of a well in a neighbouring house. The artefact list for both correlate, although the probate inventory generally lacks women possessions. Hall (1997) identifies this absence as a sign of gender inequality; whereby the male record is overt and the female record is concealed, where men dominate the public sphere, while women are confined to the private sphere of the household. Dissonance between one source and another should be expected and is an important tool for the examination of the past.

A focus on literate records could present a restricted view of the past depending on the region. It could encompass thousands of years, as in the Nile Valley, but a few hundred years, in other parts of the continent, regions defined as 'pre-literate' until relatively recently (Behrens & Swanepoel 2008:24). Such a definition relegates the majority of Africa's past as non-historical (see Schmidt 2006; Schmidt & Walz 2007). European texts, beyond North Africa and parts of the East African littoral, only appear from the 16th century CE onwards, and mainly are in regards to coastal locations (Reid & Lane 2004:7). For example, a rich source for historical archaeological investigation in southern Africa has been the Cape region. Records from the 16th century CE onwards detail European exploration and later settlement in this region. Whereas, European texts regarding the African interior only really occur from the 19th century CE onwards (Reid & Lane 2004:7). For instance, Rev. John Campbell (a director of the London missionary society) visited Kaditshwene (a capital of the Hurutshe) in 1820 CE, and estimated the population of this interior capital to be from 16 000 to 20 000 people (1822:277; MSB77 [iii]:18 cited in Boeyens 2000:1). Around the same time, Cape Town- the centre of colonial settlement in South Africa- was inhabited by 18 668 people(Thompson 1827[ii]:255 cited in Boeyens 2000:1). This example shows that the contemporaneous Colonial settlement on the coast and the African settlement in the interior were comparable in population size. Furthermore, this example also contradicts the popular belief that the interior was a vacant landscape prior to European expansion. An idea perpetuated by the pre-literate vs. literate divide. The complexity of societies in the interior, prior to colonial expansion into the region, needs to be recognised. This can be done through a holistic historical archaeology framework, one that incorporates 'non-literate' sources of history.

Historical sources, in the African context, should include European texts, as well as alternative sources of information. One alternative source is that of oral records, a source (such as court or group traditions or cluster histories) which is derived from African populations and which is not geographically restricted (Reid & Lane 2004:7). This can be further illustrated by the example of Kaditshwene. Mason (1986:837) claimed to have discovered the ruins of Kaditshwene at the farm Vergenoegd 279 JP relying heavily on the European historical records of the site in his justification of the site as Kaditshwene. However, the oral records were at odds with Mason's proposed Kaditshwene. Oral traditions of the Hurutshe were collected by Breutz in the 1950s from which Kaditshwene and its farm location were stated. The oral records suggest Kaditshwene was located around Bloemfontein 63 JP, differing from Mason's supposed location for Kaditshwene. This inconsistency was rectified by further research conducted by Boeyens (2000), who established the farms Bloemfontein 63 JP and Kleinfontein as the location of Kaditshwene. Boeyens research was characterised by an archaeological investigation supported by an array of sources, namely oral traditions and documentary evidence, which led to the identification and verification of Kaditshwene.

Historical archaeology, and other archaeological frameworks in Southern African Archaeology, have at one time or another relied upon ethnographic records (such as the interpretation of Stone Age sites through Hunter-Gatherer studies, see Brooks and Yellen 1987:66) to understand the archaeological record. The use of ethnographic sources in archaeological contexts infers certain reasoning. This reasoning is based on analogical inference, and will be discussed further in the following section.

3.3. Analogy and Southern African Archaeology

Analogical reasoning is a form of inference that suggests if something is like another in some respects it is likely to be similar in others (David & Kramer 2001:1). Analogical reasoning involves 'the selective transportation of information from source to subject' (Wylie 1985:93). An appropriate example of such analogical reasoning is stated by Lane (1994/5:51). An archaeological object commonly found at late farming community sites is a small circular pile of stones. These have been interpreted as foundations for granaries based on their similar appearance to stone bases of grain-bins observed among the ethnographic material of the Sotho-Tswana and Shona speakers. This example is illustrative of formal analogy or the direct historical approach (Fewster 2006:63). However, there are flaws to this reasoning. It can be illustrated by, once again, using the granary example mentioned by Lane (1994:51). The small

circular pile of stones (the archaeological object described in the previous example as a grain-bin foundation) could serve a different function; it could be a burial marker or drying rack instead (Lane 1994/5:51). This is particularly apparent when considering the variation in size, components, and appearance of these small circular piles of stones, which suggests that all these piles of stone might not have had the same function (Lane 1994/5:51). Therefore there could be no formal, law-like certainty that the small circular pile of stones was a grain bin foundation. Therefore, Wylie (1985:101) recognized it was essential to establish the principles of relevance or association between the subject and the source of analogy. This is acted upon by Hodder (1986), who seeks to establish natural or cultural associations between source and subject. This suggests that an analogy might be strengthened by incorporating other additional relevant information, beside morphological similarities between the source and subject. For instance, to return to the grain bin foundation example, incorporating additional information such as environmental and technological considerations for storing grain as well as other physical traces related to grain storage in the archaeological record, would establish natural or cultural associations between the source and the subject (Lane 1994/5:51).

The critiques of analogical reasoning brought about by the post processual movement had little effect on African, compared with Euro-American, archaeological research (Lane 1994/5:53). This is likely due to the belief that there is cultural continuity between the present and recent past communities and those of the more distant past (Lane 1994/5:53). This has encouraged a reliance on the ethnographic record, where the direct historical approach is used to substantiate archaeological interpretations (Lane 1994/5:53). An example is Pistorius's (1992) study of Molokwane. Pistorius (1992) used ethnographic accounts of late 19th to mid 20th century CE Sotho-Tswana communities to deduce the social and political dynamics of a late farming community. Molokwane was historically known and linked to the local Kwena communities, suggesting cultural continuity between the source and the subject (Pistorius 1992). Another example of a direct historical approach is the study of an 18th century CE stone-walled site Nqabeni by Hall & Maggs (1979). The site Nqabeni is located in Kwa-Zulu Natal, and is a type site (termed Type B) for a number of stone-walled settlements sharing similar architectural features in the region (Hall & Maggs 1979). The settlements in the region predominantly conform to the Zulu settlement model, as described in later 19th and earlier 20th century CE ethnographies (Hall & Maggs 1979:172). As stated by Hall & Maggs (1979:174), a number of the settlement features at Nqabeni were atypical, meaning they did not fit within the normal understanding of a typical Zulu settlement. Nonetheless, they still chose to interpret the site using the Zulu ethnographic model. The reason being that the use of ethnographic evidence in interpreting the function of Late Iron Age settlements 'is generally admissible where the date of

occupation is sufficiently close to the present day to make the probability of some degree of continuity high' (Hall & Maggs 1979: 172). It was noted that similar settlement features were found within a stone wall settlement type in the Free State a 150km away (Hall & Maggs 1979: 175). This was Maggs's (1979) type V settlement, a type associated with Sotho speakers (as discussed in chapter two). They concluded that the site while resembling settlement features of Maggs's type V, was a chance resemblance, and rather the site displays a number of cultural features which indicate a relationship with Nguni-speaking peoples (Hall & Maggs 1979: 175).

However this approach was later reconsidered by Hall (1984). Hall (1984) re-evaluated his direct usage of a Zulu homestead analogy on the site Nqabeni. The design (the placement of entrances and enclosures) and the distribution (a clustered rather than dispersed settlement style) of Type B settlements vary from the typical Zulu settlement (Hall 1984). Hall argues that this is evidence of cultural discontinuity between Type B settlement style and the Zulu ethnographic model, and that there is no basis for this interpretive analogy (Hall 1984:78). Hall (1984) recognised that cultural continuity cannot be assumed, in which groups were dynamic actors across time and space. Therefore, even in situations where historical and cultural continuities between the ethnographic source and archaeological object are prevalent it does not mean that such analogies are suitable (Lane 1994/5:54).Nonetheless, this cautionary tale on analogical reasoning in southern African studies of the recent past has not deterred the application of ethnographic models onto the archaeological record, which is increasingly done in an uncritical manner.

The ethnographic record is used in several manners to generate an understanding of the past; in the following section I will discuss and critique the use of ethnography in the creation of archaeological models, and its role in identifying group identity. In studies concerning agro-pastoral communities of South Africa, a prevalent model used to understand space usage and its related social meaning within these communities is the central cattle pattern.

3.4. The application of the Central Cattle Pattern

Ethnographers, specifically Schapera (1935:1938), in the description of the Tswana demonstrated that the organisation of a village was based on ideas of social order.

The organisation of a village was based on the creation of wards; each ward was a political unit as well as a cluster of homesteads. A homestead contained the households of individual family groups. The ward would have a headman; his homestead would be the most senior in the ward.

Within the homestead all families would place their households around the main household according to kinship closeness and affiliation to the headman. The headman presided over the ward and was accountable to the chief. In the centre of the ward was the Kgotla, a meeting place used as a political forum and as a court. Within each ward was a cattle enclosure, where cattle were kept for various purposes beyond dietary consumption (Schapera 1953:34-48).

Cattle were a medium of exchange; they were used for social transactions, such as fines or as bridewealth for marriage, and to maintain good relations with the ancestor spirits (Schapera & Goodwin 1962:137). Cattle are significant in the worldview of southern African agro-pastoralists, they are utilized in ceremonials having to do with the "great events in the life of the human being, birth, marriage, puberty, and death, and their care is the privilege of their owner, who often knows each member of his herds by name"[19] (Herskovits 1930:70 in Kuper 1982:10).

The layout of the village and its different constituents were therefore based on societal principles of order. Pursuing this further, Kuper (1980; 1982) a social anthropologist, formulated a model to account for core similarities in social structure, marriage practices, kinship terminology, and settlement layout found within southern African agro-pastoral communities. The key attribute of this model is the organisation of the settlement space, which Kuper (1982) suggests is determined by a set of values regarding the symbolic value of cattle, the relative status of men versus women, and the spiritual significance of ancestors. These are the structuring principles which govern the organisation of the settlement space in southern African agro-pastoral communities. Even though settlements may vary between different southern African agro-pastoral communities, their settlement organisation is still governed by the same set of principles according to Kuper (1982).

Drawing upon Kuper's structural model on the symbolic dimensions of southern African agro-pastoral homesteads, Huffman (1982) applied the model to an archaeological context. Huffman's model was termed the Central Cattle Pattern (CCP), after the common feature of centrally placed cattle enclosures at archaeological agro-pastoralist sites in southern Africa. The CCP is concerned with the symbolic dimensions of organised spaces within a settlement. The settlement organisation is identified by an outer arc of households arranged around a central zone dominated by enclosures, specifically those for cattle (see Figure 3.1) (Huffman 1986a:289). The CCP is characterised by the following settlement features (Kuper 1980, 1982; Huffman 1982; Lane 1994/5):

[19] The use of the term 'his herds' is indicative of the gendered division of cattle ownership in southern Bantu-speaking communities, whereby cattle keeping and ownership is mainly assigned to the realm of men (Kuper 1982:11).

1. Cattle enclosures are located centrally within a settlement
2. The cattle enclosures contain the burials of elite males and the communal grain storage facilities
3. The men's assembly area (*kgotla*) is located either in the cattle enclosure or near it
4. Households are arranged in an arc around the central cattle enclosures
5. The household(s) of the headman (or senior resident) is usually situated opposite the entrance to the cattle enclosure
6. Other households are arranged right and left of the senior household, according to seniority
7. Individual households are divided internally into right and left sections, which are , usually, divided along gender lines
8. Within the household there is also a front/back, secular/sacred dichotomy, which is usually orientated at right angles to the male/female, right/left dichotomies

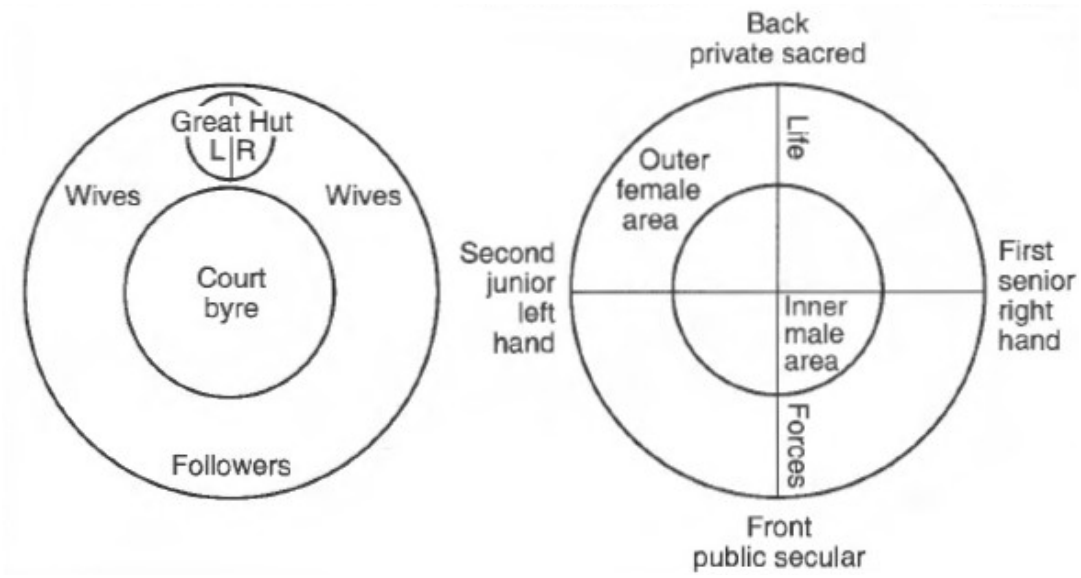


Figure 3.1 Organisational structure of the Central Cattle Pattern (from Huffman 2007:25)

Huffman argued that if such settlement features were identified at southern African archaeological sites, and 'if the structural relationship between language, culture and spatial organisation is valid, it follows that archaeological evidence for the central cattle pattern is sufficient to demonstrate the existence of cattle-based bridewealth in the past' (Huffman 1993:220). Therefore, the role and symbolic nature of cattle in these societies defines their worldview, as it is from this base that socio-political, gender, economic, and other societal

beliefs stem. The allocation of space within a settlement becomes a gendered, hierarchal system through the application of the CCP.

3.4.1. The critique of the Central Cattle Pattern

The CCP is a model that has been used in the understanding of farming communities in southern Africa (Pistorius 1992; Huffman 1993; Whitelaw 1994). It has been applied to sites falling within the early farming period, from the 4th to the 6th century CE site Broederstroom (Huffman 1993), to sites falling in the late farming period, such as the 17th to 18th century CE site Molokwane (Pistorius 1992). Its application to sites falling within the early farming period has undergone severe criticism (see Badenhorst 2009 for further discussion). Applying the CCP model to sites over the last two thousand years is problematic, as Lane (1994:56) states, the logical extension of applying the CCP model to such an extent would suggest:

> [T]he first Bantu-speaking, agricultural communities to settle in southern Africa possessed a settlement system and ideology that were sufficiently robust to survive approximately five-hundred years of population growth, settlement change, territorial expansion and migration and a further fifteen-hundred years of settlement consolidation and economic transformations up to the modern era.

As Lane's statement exemplifies, such a static past seems unlikely and misleading. It insinuates that African society is innately conservative and unable to change without some form of external stimulus (Lane 1994/5:56). Hall (1986) uses Giddens' structuration theory to further discount the ahistorical nature of the model. He does so by charting the manner in which power was signified in the local archaeological record challenging the idea of cattle as the central symbol of power in all farming communities (Hall 1986:86). Therefore, the CCP model is inadequate in explaining change within farming communities. Denbow's (1986) research exemplifies this further; he identified aspects of interaction between agro-pastoralists and foragers, whereby interaction has led to changes, changes which can only be witnessed in the archaeological record at a micro-scale. The CCP model is unsuitable for such a scale of investigation, as it treats farming communities as a closed system, avoiding or counter-acting discussions on interactions (Denbow 1986: 3; Lane 1994/5:57).

This critique is sustained for the recent past, the act of colonialism and the variation it was likely to have caused in the structure of farming communities is not accounted for in such a model as the CCP (Stahl 1993). Hall (1998b) uses material culture and spatial analysis at Mabotse, a Tswana site of the late 19th century CE, to illustrate subtle change in gender relations as a result

of European trade expansion into the interior. At Mabotse, a mix of European and indigenous ceramics were collected from surface material and excavations; while the introduction of European wares into the traditional ceramic assemblage could be seen as a functional or technological adaption, Hall (1998b) argues that it is rather a reflection of changing gender relations over time at Mabotse. This is expressed through the intrusion of men, associated with the domain of barter and exchange, into the female domain, ceramic production (Hall 1998b:217). Hall argues (1998b:217) that men were introducing and supplanting European wares over traditional ceramic wares. At the scale which the CCP functions only a superficial view of gender relations at the site would be witnessed, while Hall's focus on the materiality of the past reflected a history of dynamic gender relations (1998b). However, this account, while articulating gender dynamics, insinuates a passive female role. This is likely due to the nature of past southern African ethnography, a body of data deserving further reflection.

The CCP model is founded upon ethnography. Critical consideration of this body of data is necessary, as the manner and context of its collection is likely to reveal certain biases and underlying motives. Early ethnographies on southern Africa communities were predominantly accounts from male community elders collected by male ethnographers (see Schapera 1935; Van Warmelo 1935; Willoughby 1905). This led to a male centred account of the roles, values, and beliefs practised within the community, where the societal structure is defined by one segment of the community. While many communities might articulate their ideals through masculine interest, absolute forms of patrilineal communities only generally exist as ideals (Dederen 2010:27). In reality, male and female organising principles co-exist as competing forces (Dederen 2010:27). However, these views were accepted, leading anthropologists to state certain interpretations of the community customs as collectively agreed upon within the community. In many instances, actions of state anthropologists were then further utilised in situational politics, their work was used to establish 'customary law' by which courts determined legal precedent (Schmidt 1992:106-10 cited in Lane 1994/5:58). Through these actions women and the youth became actors in a 'customary tale', the script of which, created by male community elders and endorsed by foreign male interests. Therefore, the previous autonomy of women, whether acted upon or by its mere belief, was now lost by the implementation of customary law into the legal system. Ethnographic sources should be read critically and applied in an appropriate manner. An archaeologist is partly responsible for the reproduction of the past, but this must be done with an awareness of the present, as ideas pertaining to the past can influence the present.

Following the focus on ethnographic data, the conclusions drawn from ethnographic studies of particular communities should not be oversimplified, or applied generally without further

consideration. While a particular community that is part of a larger common group may exhibit certain characteristics, this does not necessarily signify that these characteristics are exhibited by the larger common group. This can be demonstrated by the differences highlighted by Morton (2013) between the Kalahari Tswana and the Transvaal[20] Tswana (mentioned previously in chapter two). What may seem like an insignificant difference, the varying geography across which a group occurs, led Morton to the conclusion that varying attributes in settlement style reflected the different environments in which people settled, which impacted the settlement style, and sustainability, as well as the socio-political organisation of the group. Furthermore, the Kalahari Tswana surveyed ethnographically by Schapera in the 1930s commonly built their settlements at quite a distance from agricultural lands and cattle grazing areas, necessitating the establishment of distant cattle posts. This differs significantly from the CCP pattern, but also from the records and archaeological data of the Transvaal Tswana in the mid 18th century CE who were recorded as keeping cattle inside the settlement, and placing the settlement near their agricultural lands. However, due to the reliance on Schapera's work in regard to the understanding of the Tswana has led to the belief that his work is applicable to all Tswana groups. Schapera studied a few, long-established, large, neighbouring, mostly of common descent, Tswana communities, mainly the Kgatla of Mochudi (Morton 2013:17). Due to the comprehensive nature of his work, many researchers apply his study on other Tswana groups; this is problematic, as a range of differences and complexities exist within the Tswana collective. As shown by Morton (2013), an awareness of the source and it specific reference to a context needs to be verified in order to develop a relevant understanding of the past.

Lastly, by viewing structure and agency as part of a process, it allows for the debunking or deconstructing of over-arching structuralist paradigms such as the CCP model. This is demonstrated by Fewster's (2006) enthnoarchaeological study of [the] Basimane ward in Serowe, Botswana. Fewster demonstrates that while there is continuity in settlement architecture at Basimane, it should not be interpreted as the persistence of cultural forms as described in the CCP (Fewster 2006:61). Within the Basimane ward there are no human burials in the central kraal, while the male defined space surrounding the Kgotla had become open to women since independence in 1966, these are both defining aspects of the CCP (Fewster 2006:83). Rather the persistence of elements from the CCP to post-colonial settlement is a testimony to the interplay between structure and human agency, to the capacity of people to re-negotiate the rules (past and present, social and architectural) in the situation of their present lives (Fewster 2006:61). As stated by Fewster (2006:85):

[20] The boundaries of which are described in chapter two.

> [H]uman beings have always had the capacity routinely to re-negotiate the structural rules to make sense of the lives they live. Thus the persistence of physical form cannot be simply equated with the persistence of cultural form.

This perspective allows for the recognition of cultural continuances but also recognises the subversive, and/or outright modification of aspects of practice. This stance needs to be incorporated in archaeological interpretations, in order to characterise the flaw of over-arching models and to present a space for the discussion of dissonance within such models.

The above critique of the CCP model reflects the current reflective approach to ethnographically derived data. The previous section presented a general overview on how farming community sites have been interpreted in southern Africa, in the following section the focus is on the ethnography of the Tswana. This discussion will include an account of the Tswana worldview and its relation to settlement and space usage.

3.5. The Tswana worldview and structure

As mentioned in this and the previous chapter, southern African agro-pastoralists share a similar worldview and social organisation, such as polygamy and patrilineal traditions. While social organisation between Tswana and Nguni speakers varies, Tswana-speakers prefer endogamous town settlements, rather than the dispersed exogamous settlements of Nguni-speakers (Sansom 1974 in Fredriksen 2012:55). Archaeological research (see Huffman 1986; Hall 1995) shows that the Tswana preference for aggregated settlements might only be a recent development (Fredriksen 2012:55). At the household level, a household consists of a nuclear or polygynous family, and may include other kin (such as divorced or widowed women) (Kuper 1975:71). Succession and inheritance is from father to son, and property usually belongs to men and their sons (Kuper 1975:71). A polygnist's first wife is normally the senior wife, and her eldest son is generally the heir (Kuper 1975:80-1). Similarities are also expressed in the accounting of misfortune.

3.5.1. Accounting for misfortune

In the worldview of southern African agro-pastoralists there are two forces which account for misfortune, the causal agents and the impersonal causation (Hammond-Tooke 1981). The

causal agents are thought of as conscious intelligences, in the form of witches and ancestors (Hammond-Tooke 1981:140). However, they also believe in impersonal causation. These are 'impersonal forces or states of being which can affect them in an automatic, almost mechanical, way, causing ritual pollution' (Hammond-Tooke 1981:140). Though both forces are present in the worldview of the southern African agro-pastoralists, it is thought that pollution beliefs are more fully developed in the Sotho cluster (Hammond-Tooke 1981:140-1)[21]. In the following section I will discuss pollution beliefs and how they affect social interaction and organisation.

3.5.1.1. Pollution beliefs

Pollution is found where 'matter is out of place' (Douglas 1966 in Hammond-Tooke: 127) or when an individual is in a liminal position (Hammond-Tooke: 127). Pollution beliefs are understood through a heat and cold concept. The term *go fiša* means 'to be hot', it describes someone suffering from a fever, as well as a symbolic malady (a tired and extremely irritable individual) (Hammond-Tooke 1981:113). It is believed that ritual pollution can contaminate an individual, through no action of their own, and often the danger is greater for others than that of the polluted person (Hammond-Tooke 1981:113). For instance, in the death of a relative (especially a child) the mourners are affected by *go fiša* (Hammond-Tooke 1981:113). Other scenarios which cause 'heat' are: inauspicious sexual acts,, during young boys initiation, handling a corpse, returning from a journey (this is explained as being a contagion arising from contact with strangers and the friction caused by travelling), and when a chief dies (Hammond-Tooke 1981:113- 116). In order to prevent or treat this 'heat' an individual must be purified, this is in the form of water (including saliva) and ash (soot) (Hammond-Tooke 1981:117). To protect or cleanse oneself one must either have contact with ash, or combine the ash with water (Hammond-Tooke 1981:118).

3.5.2. The socio-political order of a Tswana settlement

[21] One argument for this development of impersonal causation over causal agents is due to the closer agnatic relationships expected in settlements of the Sotho cluster, where overt accusations of witchcraft become unacceptably disruptive (Hammond-Tooke 1981: 126 & 141). Therefore a preference for impersonal causations is in the interest of harmonious community life within a settlement (Hammond-Tooke 1981: 126 & 141).

The Tswana settle in what is termed a village (*motse*), though aggregated versions of this settlement are termed towns (and archaeologically termed mega-sites). The village is largely an independent entity socially, economically, and, to a lesser degree, politically (Molema 1963:114). The village is led by the chief (*kgôsi*), if there are multiple villages under the control of a chief, each village will be led by a representative of the chief, termed a headman (Molema 1963:114). The placement of the chief's homestead, or headman, if the chief does not reside in the village, is in the central division of the settlement, which is not accidental, as it is the first area to be established (Pistorius 1994:49). The ground plan and layout of a settlement is based on a conceptual model emphasising symbols of status, rank, and ideas of precedence (Hardie 1981:43). This is emphasised by McKenzie (1871:367) who states, in the laying out of a town:

> [T]he first thing is to ascertain where the chief's courtyard with the public cattle pen is to be placed… as soon as the chief's position is ascertained, one says: "My place is always next to the chief on this side"; another adds: "And mine is always next on that side" and so on till the whole town is laid out.

Location or position is thus used as a marker of socio-political groupings (Kuper 1982:152). Willoughby (1928:67-8 cited in Kuper 1982:152) expands upon Tswana notions of positions:

> *'Godimo'* means 'above', 'high' … but *godimo* has other meanings. *Godimo* [is a] convertible term for 'west' ... denoting the quarter from which their streams flow… the houses of a chief's sons are located according to their standing in the family, that of the heir being on his father's right hand, west of the chief's dwelling and consequently described by this word *godimo*, though it may not be on higher land…To sum up in a sentence, the meaning of this very wide term, *godimo*, may be 'overhead', or 'higher up', or 'west', or 'on the right-hand of the chief' – this last being a synonym for 'superior status'.

The description of a location, in the form of cardinal directions and or elevation, could also refer to a group's status and rank within the settlement. At the scale of a large settlement, there are different divisions within the settlement; each division contained a number of wards, comprising a number of family units (Boeyens 2003:71). The threefold divide within a settlement, namely the centre (*fa gare*), upper (*ntlha ya godimo*), and lower (*nthla ya tlase*), was said to be derived from the position of each section of the settlement in relation to the river, along which settlements were commonly built, *godimo* meaning 'up stream' and *tlase* meaning 'down stream' (Schapera 1953:47).

Accordingly, the central division was occupied by the *kgosi,* meaning chief, including: his wives and children, foreign persons which had been absorbed into the cluster through marriage with the chief's sons, and the servants of the chief (Pistorius 1994:49). This homestead was termed

the *kgosing*, the chief's section (Kuper 1980:17). The inhabitants of the other two divisions consisted of persons not especially bound to the chief, this included: royals (*dikgosana*), commoners (*badintlha*, *batlhanka*), and immigrants (*bafaladi*, *baagedi*) (Boeyens 2003:71). This threefold division--- of nobles, commoners, and immigrants (Schapera 1953:36)--- was identified by Pistorius (1992, 1994) at Molokwane (depicted in Figure 3.2), suggested at Kaditshwene (Boeyens 2000), and recognized at Marothodi by Anderson (2009).

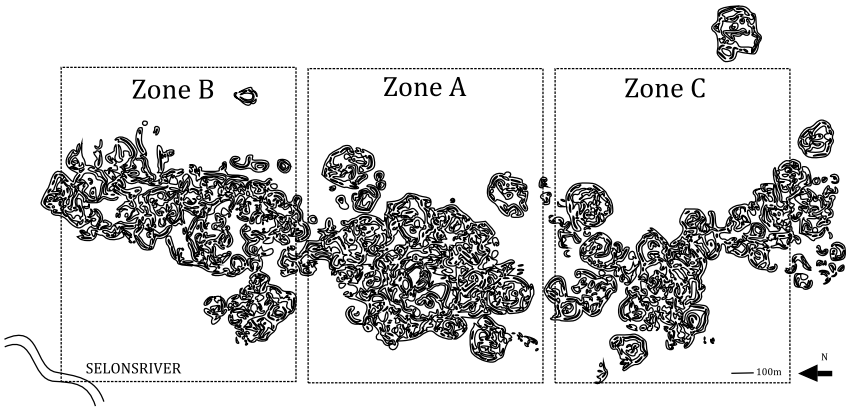


Figure 3.2 Molokwane settlement divided into three zones, the zones in relation to the stream 'selonsriver'. Zone B and Zone C are respectively located upstream and downstream of the river, with Zone A in the centre (after Pistorius 1992:5).

Within a homestead, the placement of wives and other dependants follows rules of status and rank. All the huts belonging to the same individual are enclosed within a low walled courtyard (*lapa*), which is a demarcated area surrounding the hut(s) (Pistorius 1992:75). Each married women is entitled to their own hut(s), and each wife is entitled to her own courtyard (Hoernlė 1962:91; Schapera & Goodwin 1962:160). When the homestead is built, the head of the household will be placed somewhat centrally, with his wives and dependants housed on either side of his courtyard (Pistorius 1992:65). In general the first wife married is the senior or great wife, and is accorded a prominent position in the household (Hoernlė 1962:91).

At Molokwane[22], Pistorius (1992:65) found that the dwelling(s) of the senior wife (wives) and sons are placed to the right of the main dwelling of the chief (or household head), while the junior wife (wives) and sons are placed to the left of the main dwelling. The married sons of the chief establish their own homestead either east or west of the chief's homestead, depending on their rank and status (Pistorius 1996:150). The death of the chief would require a new homestead to be built in order to accommodate the household of the new chief, and in order to

[22] At Molokwane, the positions of right and left were determined from the main courtyard (FRHSM01) looking towards the east of the homestead (Pistorius 1996: 150)

not displace the previous chief's household. This is shown at Marothodi where a primary and secondary *kgosing* were identified, not more than 120m from each other, with the secondary *kgosing* located east of the primary *kgosing* (Anderson[23] 2009:Chapter IV, Macro settlement structure, para.11).

Consequently the key attribute governing the spatial configuration of a settlement is the status and ranking of households (Pistorius 1994:49), whereby a person's location is determined by their status and rank, as well as their association to those of a high status or rank. Accordingly, this attribute holds true for the varying socio-geographic scales: be it on the large scale, such as each ward knowing its position in relation to other wards in a settlement; or on a smaller scale, each household knowing its position in relation to other households; or on a micro scale of each member of the household knowing their position in relation to other members of the household (Pistorius 1994:49). Therefore, the spatial arrangement of a settlement is a blueprint of an individual's, as well as a family's, socio-political importance within a settlement across varying scales.

3.5.3. The organisation of a Tswana settlement

A village consists of a cluster of homesteads (*kgotlana*) each occupied by a collection or single household group (Hoernlė 1962:91). A household typically consists of a man with his wife or wives and dependent children, as well as any other relatives or unrelated individuals who may be dependent on the man (Hoernlė 1962:69 & 70). Households are aligned together to form a ward (*kgôrô*), a number of families united under the leadership of a headman (Hoernlė 1962:88 & Schapera 1953:46). A ward may constitute a whole settlement, or more generally is part of a settlement, meaning more than one ward within a settlement (Hoernlė 1962:89). However, a ward is a social and administrative unit, distinct from other wards in the settlement (Hoernlė 1962:89). The central features of a ward are the cattle kraal and the adjoining court (*kgotla*), where judicial matters and other economic and political concerns are heard by the headman (*kgosana*), who is assisted in this task by other important family heads (Hoernlė 1962:89).

A village does not only consist of the settlement, but may also include agricultural fields and cattle posts which may be distributed over a large part of the landscape (Maggs 1976a: 277). The agricultural fields can be near or far from the village, but when they are further than a day's

[23]Anderson 2009, this source has no page numbers and therefore I cite, in this order: chapter, subtitle and paragraph number.

walk, a homestead, where the families will reside during the agricultural season, is built near the fields (Schapera & Goodwin 1962:134). Cattle may therefore be kept at cattle posts which are some distance from the village, depending on the available grazing areas (Schapera & Goodwin 1962:139). However, as stated by Morton (2013:22), this is unlikely for the Tswana settlements located in the ZPR region, as their settlements were usually located within short walking distance of grazing areas, crop fields, and water.

3.5.3.1. The different areas within a settlement

The main feature of a late Tswana settlement is the use of stone walling for the demarcation of space (a feature discussed further in the archaeology of the Tswana section). The walling is constructed by the erection of two rows of stacked stones, parallel to each other, with inner rubble filling the gap between the two rows (Walton 1958:135). This feature generally outlines the different areas within a settlement, these are: the boundary area, central area, and the intervening area between both spaces, as depicted in Figure 3.3. The boundaries are somewhat flexible, with some overlap between the different areas. In the following section I will discuss the main attributes of each area.

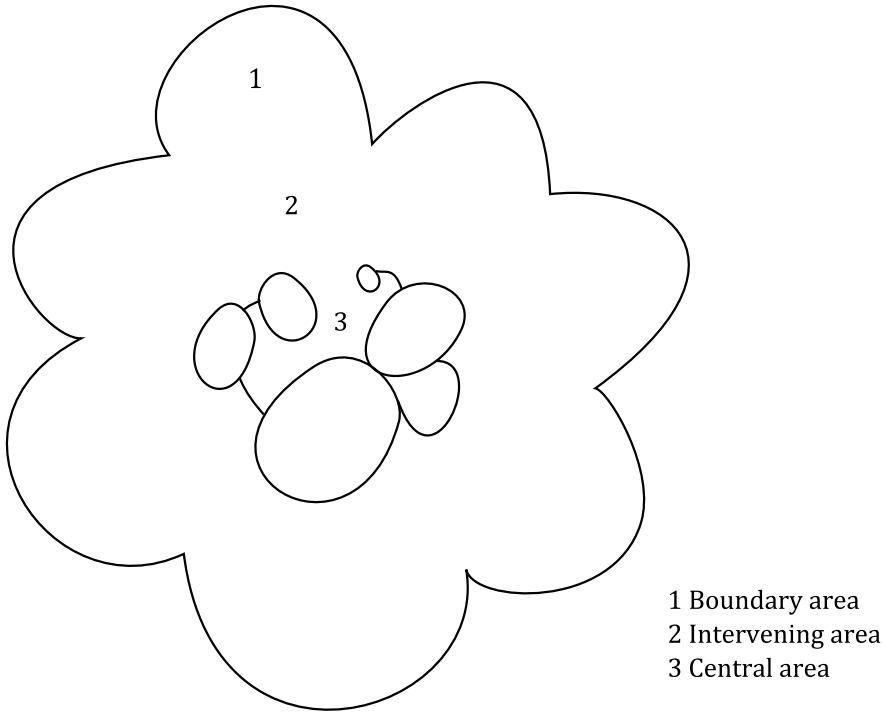


Figure 3.3 General ground plan of a Tswana stone-walled settlement

3.5.3.2. Boundary area

The boundary area is the area positioned just within the boundary wall of the settlement. In some cases the boundary wall is scalloped creating bays, which are often utilised as dwelling areas (Pistorius 1992:19). Within the dwelling area a hut or number of huts will be constructed. There are two types of huts, those which are dwelling quarters, and those which are used for storage (water, food, and beer) and perhaps for the preparation of food (Pistorius 1995:54). The dwelling huts are primarily used as bedrooms, with most activities conducted outdoors (Schapera & Goodwin 1962:144). The style of dwelling hut which is commonly associated with the Tswana is the cone-on-cylinder hut which often has a veranda, as well as lobe-shaped courtyards in front, or behind, or both (Maggs 1993:32). The floor of the hut is made of beaten earth, and is regularly smoothed over with cattle dung and mud (Schapera & Goodwin 1962:145). Another aspect of the hut is the entrance, which at times featured a sliding door situated, most commonly, on the veranda to secure the entryway to the inner compartment of the hut (Maggs 1993:32), as depicted in Figure 3.4. Sliding doors are a documented feature, found at sites such as: Olifantspoort (Mason 1974:214), Molokwane (Pistorius 1992:30), the z-type settlements of the Free State (Maggs 1976a:241), and the group II sites of Vredefort dome (Taylor 1979:105). The sliding door was most commonly wooden, and slid between clay panels built on long flat pieces of stone slabs (Pistorius 1992:30). These slabs, from the continual abrasive action of sliding a wooden frame along a stone base, show characteristic longitudal groove marks, and this is distinctive enough that this feature alone indicates the presence of a sliding door (Maggs 1993:33). When the occupants of the home perish, the hut is pulled or burnt down, and when a household-head dies the whole homestead is destroyed and relocated (Schapera & Goodwin 1962:145).

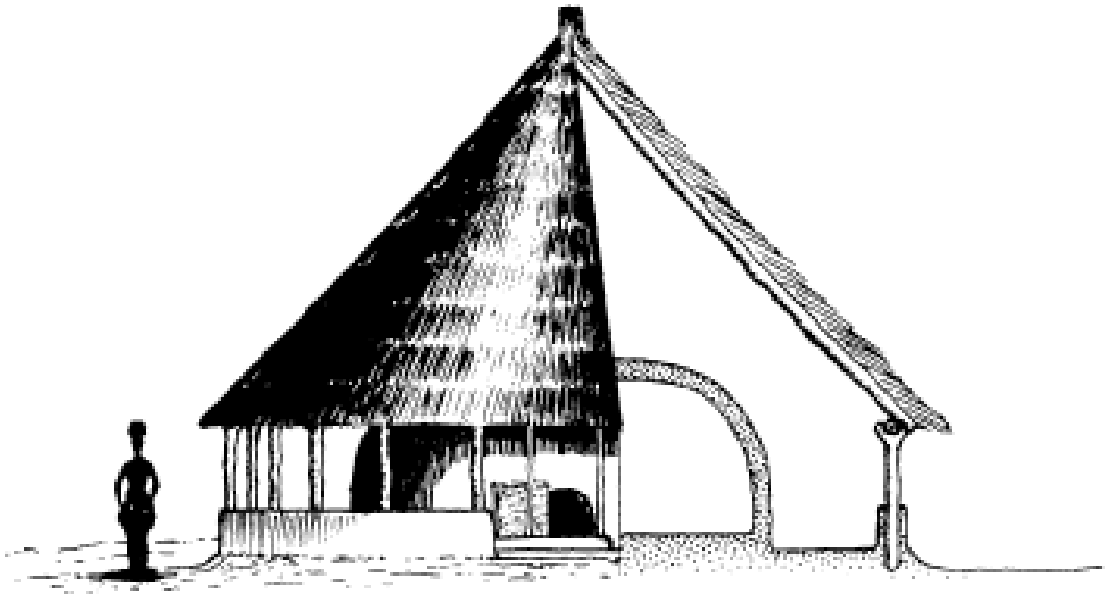


Figure 3.4 Reconstructed elevation and section of a Tswana dwelling with a front veranda and internal compartment closed by a sliding door (from Maggs 1993:34)

The household area is also a family activity area, whereby the evening meal is eaten together as a household (Lestrade 1962:126). The meal would be eaten within age and sex delimited groups, each group eating from a common meat or relish based-dish and individual porridge bowls (Lestrade 1962:126). The space shared by members of a household is physically divided from the space shared by members of another household. Courtyard walls of close relatives are connected, while households will have a space between their walls and the walls of their non-related neighbour (Hoernlė 1962:91). The family dwells together in one part of the village, their houses clustered together forming a distinct division from other households (Molema 1963:115).

3.5.3.3. Intervening area

The intervening area is the space for the movement and circulation of people and livestock (Maggs 1976a:24). Features and structures related to food preparation and storage, if not located in the boundary area, could also be located in the intervening area, as seen at Molokwane (Pistorius 1992:26). These features are depicted in Figure 3.5. These granary structures are unlikely to preserve over time; however, the bases of these structures are commonly found in archaeological settings. The base of the grain basket structure is identified

as a roughly circular or randomly stacked pile of stones around a meter in diameter (Pistorius 1992:22). The base of the clay container structure is identified as a circular platform around a metre in diameter, paved with flat slabs of stones (Pistorius 1992:20). Certain types of grains are threshed with heavy wooden flails on a specially-prepared floor of hard earth (Shapera & Goodwin 1962:136). The threshing floor can at times be identified in archaeological contexts, characterised by upright standing stones embedded in a circular pattern (Pistorius 1992:18 & 27).

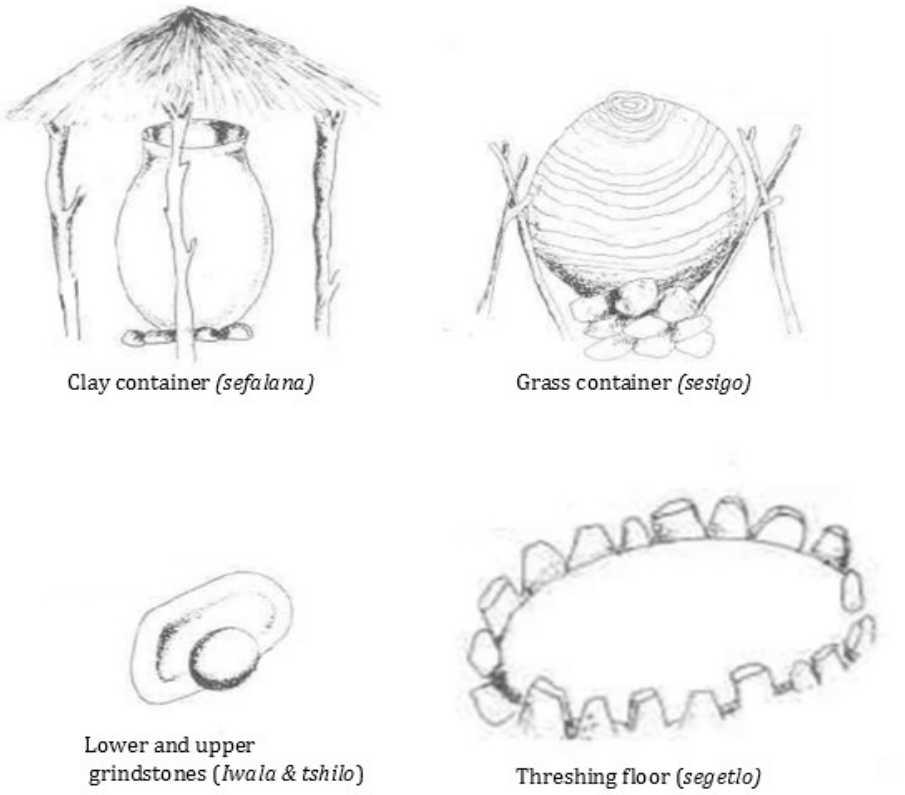


Figure 3.5 Features and structures related to food preparation and storage, (after Pistorius 1992:68)

3.5.3.4. Central area

The central area usually contains a cluster of circular stone-walled enclosures, these central enclosures are commonly utilised for the enclosing of livestock, but may also be enclosures associated with the *Kgotla* (Maggs 1976b:320).

The livestock enclosures range in size, with smaller enclosures likely housing smaller livestock or young livestock. The livestock commonly kept were cattle, goats, sheep, and fowls (Schapera

& Goodwin 1962:140). Cattle are utilised as a food source, but are also kept for their hides (even their horns are made into containers), and their dung which is used both as a fuel for fires and as plaster for walls and floors (Schapera & Goodwin 1962:137). Cattle are also a medium of exchange, necessary for the acquiring of a wife, the payment of court fines, and the maintaining of good relations with the ancestor spirits (Schapera & Goodwin 1962:137). Sheep and goats fulfil a similar role to cattle, they can be utilised for food, for their hides, and as a medium of exchange (Schapera 1978:119; Schapera & Goodwin 1962:140). However, goats do not arouse the same emotion as cattle (Schapera & Goodwin 1962:140).

Adjoining the central livestock enclosures are the court, council and male gathering area(s) (k*gotla*) (Pistorius 1995:59). I use the term *kgotla* as an encompassing term for a male only gathering area, which includes an area where a court or council could have been held. Within the *Kgotla*, there could be private chambers, 'summer houses', and a ceremonial cattle enclosure (each utilised for different purposes); however, this space could only be accessed by men of the settlement, and even within this space, certain areas were further restricted by rank or status. Pistorius (1996:159) further divides the term *kgotla* into two spheres, the private and the public. A secluded enclosure, termed a private chamber, was a space where private judicial affairs could be discussed, while a court was a space for the gathering of men be it for informal discussion or the hearing of plaintiffs and witnesses (Pistorius 1996:159).

Within a settlement there could be more than one *kgotla*, as each ward is likely to have a *kgotla* area (Hoernlė 1962:89). Campbell (1822a:90), after visiting the Tlhaping (a Tswana group) and viewing three different *kgotla*, noted that the men spend much of their time there together at work or in conversation. Such work as hide working, wood carving, and wire-work occur in the court area, and this is also the area in which visitors are welcomed and entertained (Lestrade 1962:123). The men also eat their morning/midday meal in the *kgotla* area, while the women and children eat in the household courtyards (Lestrade 1962:122).

Each *kgotla* area Campbell visited had a 'summer house', generally located in the eastern corner (1822a:90). A 'summer house' was usually built between the chief's family huts and the interior cattle enclosures according to Mason (1986:377). A 'summer house' was a hut most probably used for beer drinking by men (Mason 1986:377). Mason (1986) excavated several clusters of 'summer houses' at Olifantspoort 20/71, providing further details on these structures. These huts had several poles along the inner circumference of the structure, with a central pole two to three metres in length that supported a conical roof and provided shade for the men sitting inside (Mason 1986:386). Outside, the 'summer houses' had rectangular boulder paved yards, stretching two meters by three meters from the entrance, these paved yards likely supported

beer pots (Mason 1986:386). Clusters of beer drinking huts were found at Olifantspoort 20/71, and from the excavations it seems likely that these huts were built to accommodate people from the nearby residential huts. There were also social conventions regarding access to these beer-drinking huts, with access to huts restricted to members of a household or other people of a similar status (Mason 1986:421).

3.5.3.5. Middens

Middens, the area of refuse, are situated in different places within a settlement. There are two main types of middens, domestic and court middens. Court middens are primarily identified by their proximity to the *kgotla,* this midden would receive the debris of activities within this area (Boeyens & Plug 2011:7). As stated by Masiangoako (1939:6-7 cited in Boeyens & Plug 2011:7) "the refuse of the *kgotla* is emptied outside the *kgotla* in front of and next to the gateway at its side". A domestic midden can be small or large, depending on whether it is a communal domestic midden (the deposit is contributed to by several households), or a household's domestic midden. The smaller domestic middens are usually located behind courtyard walls, while the larger domestic middens are located in front of the household unit in the intervening space between households and the central enclosures (Boeyens & Plug 2011:7). There could also be middens located at the entrances to the settlement, such as those found at Molokwane (Pistorius 1992:18). The location of a midden deposit at the entrances of a settlement keeps with the Tswana custom of heat and cool concepts. Cattle are directed across a midden as they enter a settlement in order to be conceptually cooled or cleansed of the heat they may have become polluted with during their sojourn out of the settlement (Hammond-Tooke 1981:145). This practice may also have been beneficial to the health of the cattle, as reported by local farmers, as the midden deposit is placed in an area where the cattle cross so that fine ash would stick to the legs and body of the cattle reducing the infestation of ticks and other pests (Huffman 1986b:296). The location of these middens is different from Olifantspoort 20/71, where the majority of middens (termed ash heaps by Mason) are located in the interior of the settlement (placed in similar areas to the large domestic middens) (Mason 1986:358-366). Another site with different midden features is Marothodi. At Marothodi the court midden deposit was enclosed by a stone wall which kept the deposit within the walled area (Anderson 2009: Chapter VI, The court midden, para.1).

3.6. Discussion

Models and types, such as settlement typologies or the central cattle pattern, while expressive of cultural characteristics can mask the nuances of cultural practice. Historical archaeology attempts to prevent such a picture, through the use of a range of sources. The critical usage of sources needs to be practised; an overreliance on one source over another, or the complete disregard of one for another, needs to be checked in order to not perpetuate a partial account of the past. The availability of a wide array of sources allows for a nuanced version of the past, an opportunity to view the past from different perspectives. The points raised in this chapter apply to the generation of archaeological knowledge. As archaeologists we need to be aware of our role in the reconstruction of the past, as active contributors of the present. This chapter has presented a theoretical discussion on the generation of knowledge. The following chapter details the analytical and methodological approaches applied in this project.

Chapter 4 Method

4.1. Overview

"Have a plan',
a carefully thought-out scheme,
and execute it in orderly fashion"
(Sir M. Wheeler 1956:80).

This chapter provides a data plan on the various methods used in the data collection process. Within this chapter I discuss the field work procedures and the process entailed in the site map creation, followed by a discussion on the laboratory analysis of material retrieved from the field. Lastly, the catalogue system, illustration and photographic records, curation, and storage details for the collection are expanded upon.

4.2. Aerial and satellite survey

Stone-walled settlements (SWS) can be identified from aerial and satellite imagery, as they are visually distinctive on the landscape. In the 1960s and 1970s CE through the examination of aerial photography, researchers realised that the Magaliesberg valley and the hills of Gauteng contained a high density of Tswana settlements (Hall 2007:168). Aerial photographs were used to plot the distribution of SWS over these vast areas (Mason 1968). More recently, satellite imagery such as provided by Google Earth (GE) is used, instead of or in conjunction with aerial imagery, for such tasks. GE has a historical imagery toggle, which allows the user to view the earliest satellite image for that area, and to view the same area in different seasons and at different times of the day (Hunt & Sadr 2014:1). Figure 4.1 and Figure 4.2 are images of Molokwane (courtesy of GE) they are captured from the same location, but are from different time periods (the historical imagery toggle in action). The vegetation is less dense and the walling more apparent in the 2011 satellite image (Figure 4.2), than it is in the 2004 satellite image (Figure 4.1). Both satellite and aerial imagery provide a glimpse of the past landscape; however, the value of the imagery depends on the pixel quality of the image (the ability to zoom in without obscuring the SWS) and the density of vegetation in the landscape. Figure 4.3 and

Figure 4.4 depict SWS which can distinctly be seen from an aerial view, due to the open space and minimal clustering of vegetation around the SWS.

Figure 4.1 GE image of Molokwane from 2004

Figure 4.2 GE image of Molokwane from 2011

Figure 4.3 is an aerial view of the main settlement unit at Marothodi (Boeyens 2011:20)

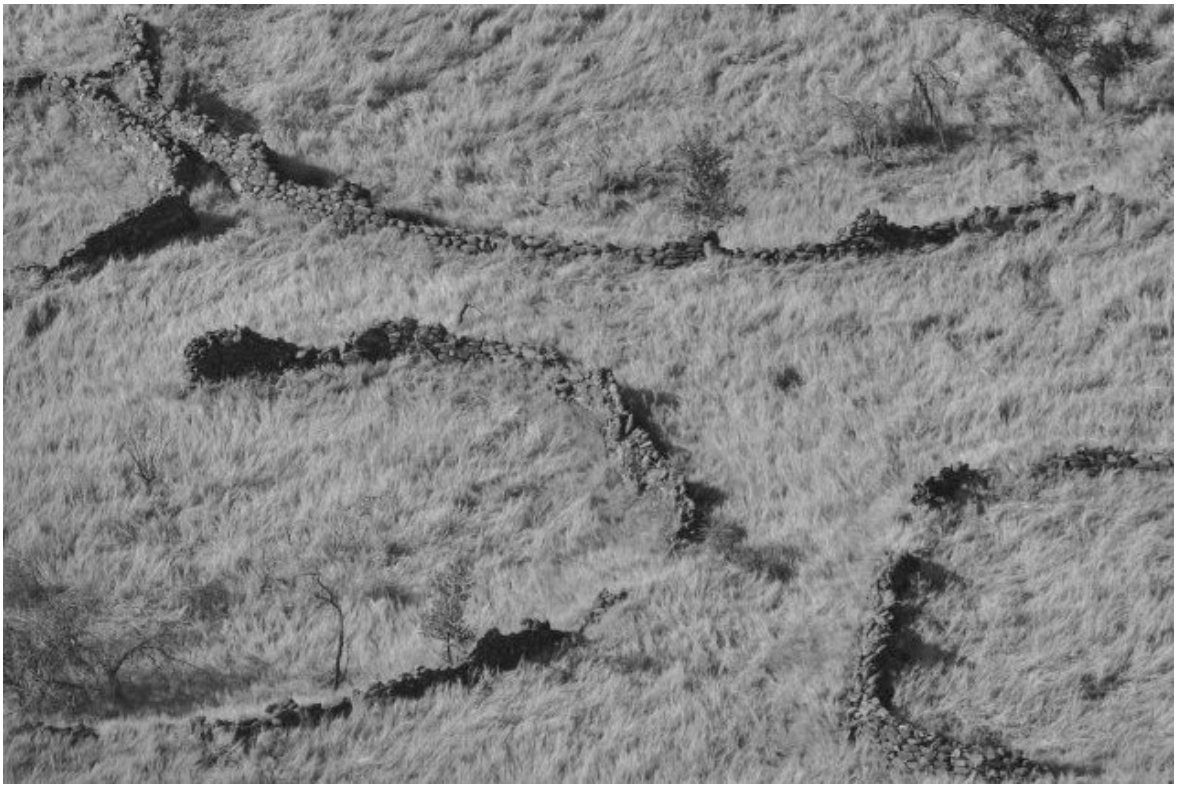


Figure 4.4 Close-up aerial view of Molokwane SWS taken from a helicopter survey (Jordaan 2012)

These images show the difference in value between satellite and aerial imagery depending on the time the image was taken and the condition of the landscape. A good quality image with areas clear of vegetation (such as Figure 4.2 and Figure 4.3) not only allows for the identification of stone walling, but can also be used for the mapping of the site. Pretorius (1992) and Anderson (2009) used aerial images to create a map of Molokwane and Marothodi, mega-sites found in the Magaliesberg/Pilanesberg region (as discussed in chapter two). In order to assess the suitability of the aerial imagery available for Lebenya a request was sent to the Chief Directorate of National Geo-Spatial Information (NGI) office in Cape Town for the images of the region.

Lebenya falls within the map set 2526DA in the North West province, the aerial images of the area date from 1957 to 2010 CE. The images, initially gathered to provide a visual outline of the settlement, are unsuitable for mapping purposes (see Figure 4.5). They are unsuitable because either the pixel resolution of the images is poor or vegetation covers the majority of the settlement preventing a clear/closer look of the spatial layout of the settlement. Therefore the images are not suitable for mapping purposes. GE imagery also lacks an outline of the settlement (see Figure 4.6). However the aerial images (specifically those falling in the range of the 20th century CE) show more clearly, than the GE imagery, other settlements in the surrounding area of Lebenya. The earlier aerial images show less vegetation cover and better preserved stone walls than the later aerial images (a trend noted by Tim Maggs, pers. comm. 2014 cited in Hunt & Sadr 2014:1). This could be due to a variety of reasons such as a change in climatic conditions in the region, or could reflect a change in landscape usage, or simply the deterioration of the SWS over time. Due to the poor resolution of the aerial images, I could not rely on remote sensing for the mapping of Lebenya.

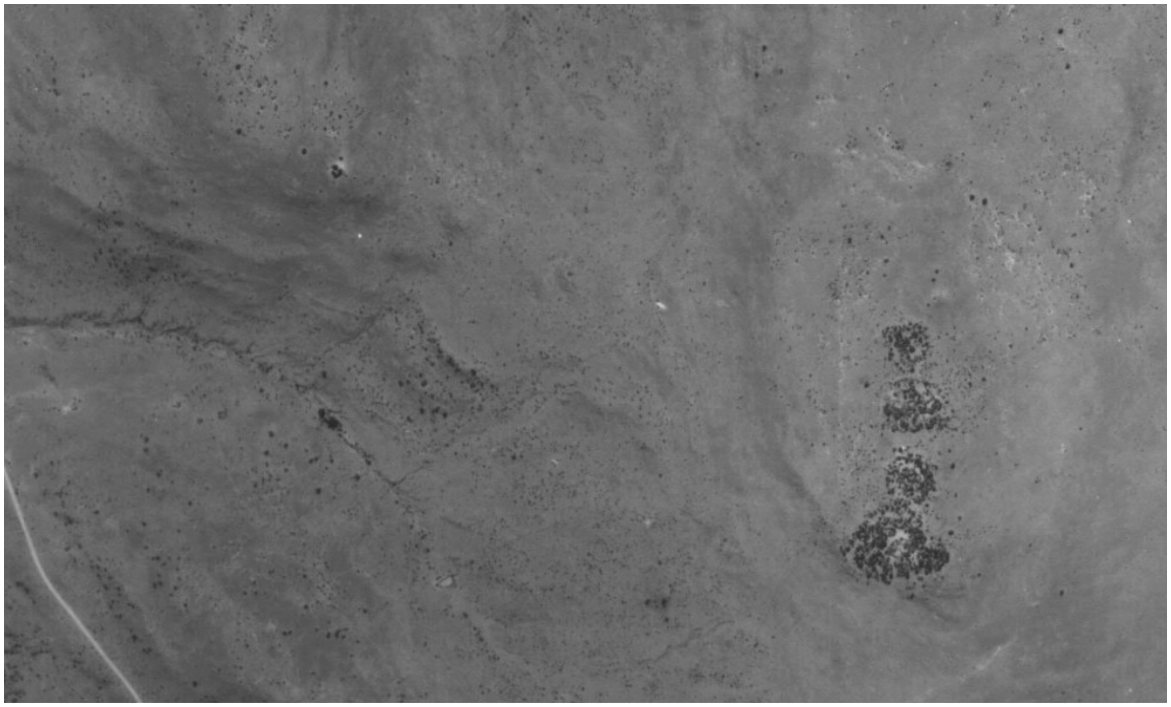


Figure 4.5 Aerial image of Lebenya from 1957, vegetation obscures the SWS (courtesy of NGI)

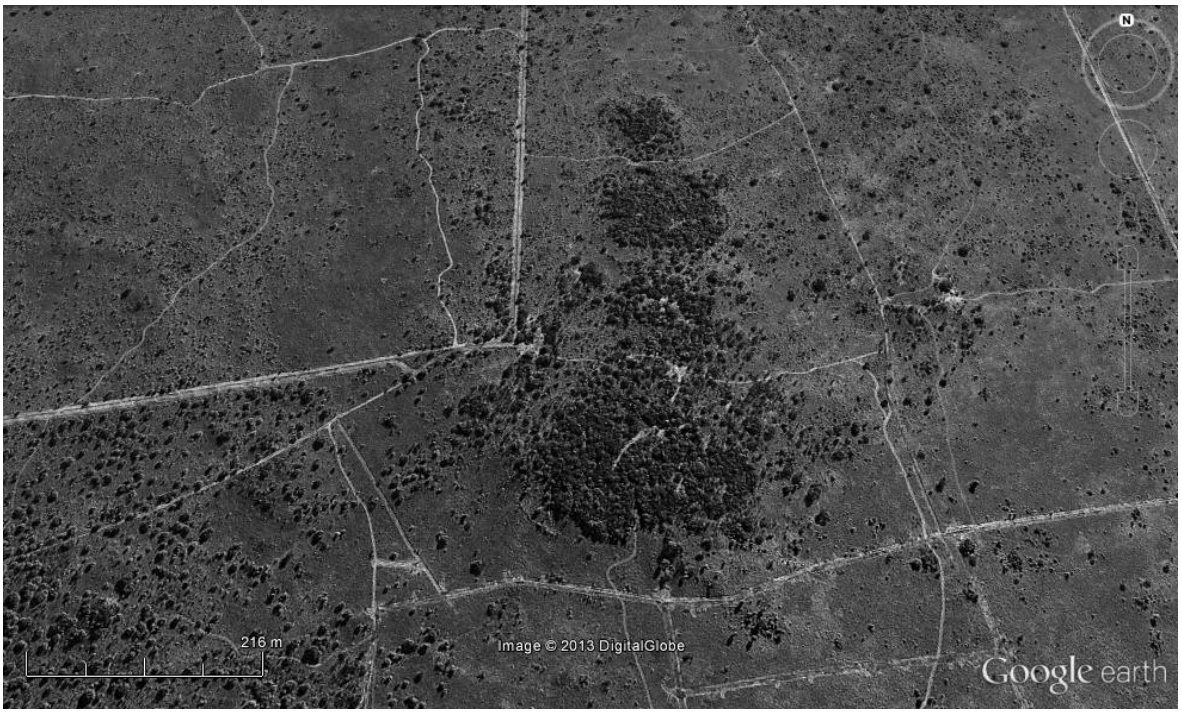


Figure 4.6 GE image of Lebenya dated to 2013, dense vegetation covers the SWS

4.3. Archaeological Survey of farm

A pedestrian survey comprises the walking over of a given area to locate artefacts and to gain an idea of the distribution and extent of artefacts in the area (Drewett 1999:44). This step is significant as it is important to identify the extent of the site. Furthermore, without an understanding of the parameters of the settlement the size and layout of the settlement cannot be inferred. As shown in chapter two, these are fundamental aspects involved in site classification.

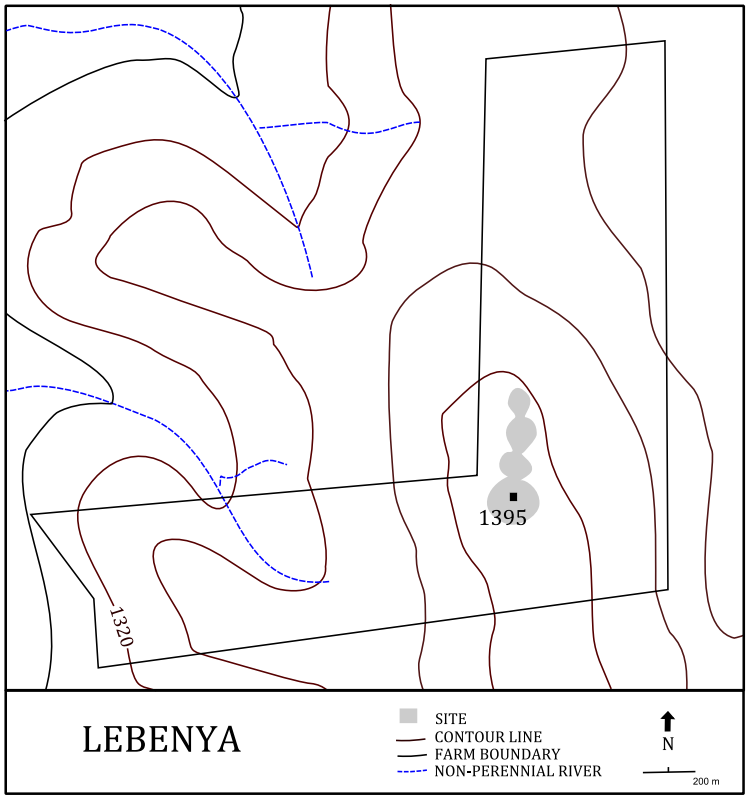


Figure 4.7 Contour map of survey area

A brief initial survey was conducted in 2012, followed by a systematic survey of the farm later that year. The aim of the survey was to identify and record any archaeological sites within the farm boundaries, in order to attain a comprehensive understanding of the archaeology on the farm and to identify the boundaries of the settlement (see Figure 4.7). The survey method was based on transects, walking a line across the landscape (Drewett 1999:43). The transects are conducted on a North to South axis, starting from the west side moving to the east side of the

farm. The surveyors stand in a line, 10 metres apart from each other, guided by a compass, and walk a north/south line from one end of the farm boundary to the other. Once the surveyors reach a boundary they move 10m from where the last individual stood and begin another transect.

The survey was conducted in winter, as field conditions are more suitable during this time of year (see chapter two for a full discussion of geo-environmental factors); the vegetation is less dense in winter but still covers much of the surface. Therefore, areas on the farm with low surface visibility were still surveyed for possible sites, but with an expectation of finding more sites in areas with less dense vegetation and high surface visibility. The survey method was suitable for the area to be covered, as the landscape of the farm (excluding the site area) is unvarying and the farm is only 262 hectares (2.62 square kilometres), with the stone walling covering roughly an area of 5.67 hectares (0.0567 square kilometres). Throughout the survey a record was kept, specifically a photo log and site record. If an archaeological site was identified, it was photographed, and recorded. The recording of sites included coordinates, and a description of the site and environment.

4.4. Survey for mapping of site

Three clusters of walling were identified, they are termed cluster A, B, and C. The clusters are separated by a few meters of open space; a previous landowner used this open space between the clusters (the exterior of the clusters) to create roads through the settlement. However, in the southern cluster of stone walling (cluster A) a road was made that cuts through the interior of the cluster. This road created a division between the different parts of this cluster; therefore, cluster A was further divided into section A1, A2, and A3 (as shown in Figure 4.8). The reason I chose to use the roads as dividing areas in cluster A is because there is evidence that the road follows an open space previously occurring within the settlement. It seems there were few walls enclosing this open space as shown by the debris still attached to the walls nearest to the road. Therefore, it allows for the division of a large space based on the past partition of space (as shown by the use of open spaces) within the settlement.

Figure 4.8 Division of site into sections

The site was surveyed cluster by cluster, starting with cluster C. The individual bays and enclosures within each cluster were systematically surveyed for surface material, features and soil changes. These were recorded and mapped by GPS, as well as noted on a hand drawn map of the site. This information was critical for the development of an excavation strategy, but was also essential for the interpretation of the spatial layout and function of certain spaces within the settlement.

4.5. The mapping of the site

In order to have a visual understanding of the spatial layout of the settlement a map of the settlement was created.

There was a wide range of instruments available for surveying and mapping purposes, whereby precision of measurement, sophistication of design, ease of use, or financial cost were the guiding factors (Howard 2007:15). Electronic equipment provides speed, and higher accuracy for less field time, and as the site is positioned 1km away from the base camp (where there is access to electrical power points for the charging of equipment) this was a viable option. The main factors guiding the choice of mapping equipment for this project were ease of use, field appropriateness, continuity, and financial cost. The precision of the measurement while important was a lesser factor due to the nature of the features mapped. These features, stone walls, are fixed visible constructs in the landscape, with the map mainly serving for orientation purposes. A GPS (Global Positioning Satellite) device fills the above criteria. A GPS provides relatively accurate results, is user friendly, is light and field appropriate, and requires a minimum number of surveyors and days required for mapping purposes (reducing the overall financial costs of the project). A Garmin eTrex 10 GPS was the instrument of choice, as stated by Howard (2007:82):

> We must seek to produce accurate surveys, but what matters most is the relative accuracy with which the shapes, sizes and relationships of archaeological features are expressed, and this accuracy can be achieved even using simple equipment.

The exterior walling of the settlement was mapped first; markers (red tape flags on pegs) were placed on mapped exterior walls, in order to prevent repetition. The interior walls were then mapped, using a different colour marker (blue tape). The markers were placed on the wall or on any vegetation overhanging the wall. This served to differentiate exterior from interior, as well as marking where the mapping process ended each day (in combination with photographic and written records). The GPS data was collected through waypoint feature of the GPS, rather than the tracking feature, due to the vegetation in and around the walls. The individual mapping the walls often needs to navigate round the vegetation; therefore, the use of the tracking feature would of created an inaccurate record. The individual mapping the walling would follow the wall, taking as many waypoints as possible, while noting the wall construction and its relation to the next wall to be mapped. The last wall mapped for the day, would be the first wall to be re-mapped the following day in order to create a known reference point. This was important as it allowed for some backtracking by creating daily a known reference point that connected the previously recorded satellite readings to the new readings for the day. All the above methods

were consistently done throughout the mapping process. This secured the accuracy of the data recordings, which was significant for the map creating process.

Once the waypoints were collected they were uploaded to a desktop for the creation of a map. Data gathered from the GPS mapping of the site was sufficient for the creation of a basic map using Geographic Information Software (GIS). GIS comprises of "computer systems whose main purpose is to store, manipulate, analyse and present information about geographic space" (Wheatley & Gillings 2002:8). The data was loaded onto GIS from which a basic map was created. The basic map was exported to Inkscape (an open source vectors program) for illustration purposes. With this program I was able to adjust and add features to the map illustration, without sacrificing the accuracy of the image. Throughout the map creation process, all features were substantiated and verified by detailed notes and another map of the site (sketched personally by the researcher). This allowed for the creation of a map with greater detail and accuracy.

4.6. Excavation

After surveying the settlement and the creation of a map, the excavation plan was formulated. A permit for excavation was obtained from SAHRA (South African Heritage Resources Agency), with the excavation commencing in July 2013. Surface features, such as material culture concentrations and soil changes, indicating various behavioural contexts, were areas considered for excavation. The excavation potential was limited by time and resources; therefore, the objective of the excavation was to excavate areas of high material culture potential. Material culture allows for a broader understanding of identity and socio-political relations, as discussed in chapter 2. This is shown by Rosenstein (2008) and Anderson (2009), where material culture provided insight into the socio-political dynamics and groupings beyond the site level. Considering the excavation objective, ashy soil deposits with a concentration of surface material were potential areas for excavation, as these deposits represent potential midden areas. From these types of deposits a selection of coring samples were taken, in order to acquire an understanding of the extent and depth of the deposit. Core samples are taken at the edges of any ashy deposit, so as not to disturb the stratigraphy of possible excavation areas. All core samples were mapped and recorded, and all material culture obtained from the samples were bagged, labelled, and taken back to the laboratory for curation and storage.

Layers are the result of natural processes of erosion and deposition (Pyddoke 1961 cited in Drewett 1999:107). Interacting within the natural processes is human activity (Drewett 1999:107). Human activities cut/ alter/ interact with soil deposits creating a new context. Differences in the soil deposit colour, texture, consistency, and coarse components are essential for the interpretation of a layer and any behavioural context (Drewett 1999:107). Layers were excavated according to 'natural layers', whereby changes in soil texture and colour, as well as a change in the density of material culture guided the creation and closing of layers. In order to keep track of the different layers, a layer logbook was created. Each new layer was signed in and out; a layer could only be signed out once all the procedures and paperwork for that layer were completed. The meta-data associated with the layer was recorded on a layer record sheet. The recording sheet was as detailed as possible, as excavation is destruction and a detailed record provides a permanent testimony of the nature of the excavated deposits (Murray, Roskams & Spence 1994). Details included on the record sheet: a bucket count (to record the volume of soil in each layer), a munsell colour reading (for wet and dry soil), a choice of soil texture (varying ranges of sand to loam to clay), soil inclusions and disturbances, as well as a description and observation space. Also recorded on the layer sheet was the depth readings of each corner and centre of the unit, and the point provenience readings of special finds, such as carbon clusters. This was done with a line and sprit level that remains secured to the datum point, which was rolled out for depth measurements within the unit. The record sheet (see appendix) is modelled after a recording sheet used by Dr. A. Antonites.

Once the above recordings were taken for the layer, the excavator collected a flotation and soil sample from the centre of the layer. The flotation sample was taken from the centre, going into the layer, filling half a bucket for a flotation sample; this equals a 10 litre sample for each layer. All the material that was contained in the soil was collected with the soil and bagged for flotation. The flotation sample was double bagged, with a label placed inside and outside of each bag. Flotation allows for the recovery of small material, such as beads, carbonized seeds, and charcoal (Drewett 1999:101-102). Small material is at times lost through the sieving process due to the mesh size and coarseness of the sieving action; however, through the flotation process a sample of what would have been lost through the sieving process is retrieved. Following the flotation sample a soil sample was taken. Soil samples can be used for future analysis, such as for pollen or chemical studies (Drewett 1999:103-104). A metal mug was used to collect the sample, and was cleaned prior to every collection of a soil sample to avoid contamination from the previously collected sample. Lastly soil from the centre of the layer was collected to identify the soil colour by using a munsell colour chart (the soil colour was identified when wet and dry). A characterisation of sediment texture was then conducted, by

squeezing and working a small, wetted sample of the sediment (Banning 2002:236). The categories are, as categorised by Banning (2002:236-237):

> Sand- sand has larger particle sizes, and the lack of finer material to hold it together makes it very loose, especially when it is dry, so that it is impossible to squeeze it into a ball.
>
> Silt- silt has a smaller particle size than sand, so that individual grains are not visible except under magnification. Although it can be somewhat gritty, it feels much smoother or silkier than sand when rubbed between your fingers.
>
> Clay- clay has an extremely small particle size. Its main characteristic is that it is sticky and plastic when wet, but dries into hard lumps that have shrinkage cracks running through them.
>
> Sandy loam- This is sandy sediment that contains enough clay and silt to make it hold together, rather than falling apart.
>
> Loam- consisting of roughly 40% sand, 40% silt, and 20% clay, loam is only a little gritty, and is more plastic than sandy loam.
>
> Silty loam- this is a mixture of at least 50% silt and sand, and 12 to 25% clay that feels somewhat silky and forms clods when dried out. The clods break into soft, floury powder.
>
> Clay Loam- with roughly equal parts sand and clay, clay loam is a fine-grained material that is plastic and cohesive when wet, but makes hard clods when dry.

The soil colour and texture are used to compare and differentiate between different layers and excavation units, as well as providing interpretative information on the behavioural context of the layer or excavation unit. The above procedures were applied consistently throughout the excavation process as quantitative comparison among samples holds more validity when the samples are similar in context, recovery method, and sample size (Reitz and Wing 2008:157). Following the above collection of samples, excavation then began. A layer was closed once a change in soil texture and/or colour was identified and/or if there was a change in the density of material culture. Once a layer was closed, the recording sheet was completed and a plan of the surface soil and material (if there is anything to note) was done. Then the process would repeat itself for the next layer, starting with the elevation readings, etc. This process continued until sterile soil was reached, and all records, photographic, illustrative and written were completed. Once all work and records were completed, the unit was back-filled.

The number of buckets, containing the excavated soil, for each layer was marked off prior to the sieving for material culture; this was done to keep a track of the volume of soil excavated per layer/unit. A sieve station was set-up keeping in mind the following considerations: ease of access and distance from unit (in order to prevent dust from settling in the unit and to reduce

backfilling time), and photography (so that the sieve station is not within the background of the unit shot) (Drewett 1999:104). Two sieves were used; a sieve with a mesh diameter of 20mm and another with a finer mesh diameter of 2mm. While smaller material could be lost due to the mesh size; this bias should be corrected and addressed through the flotation samples which will provide a sample of the micro material found in each layer. Once the material was sieved, it was sorted on-site. The material culture was then bagged and labelled. The sorted excavated material culture was taken to the Archaeology Laboratory on South Campus at University of Pretoria for analysis and final storage.

4.7. Method of Analysis

All laboratory procedures were undertaken at the Archaeology Laboratory on South Campus at University of Pretoria. All the material was analysed by me, with advice and instruction sought from experts in each respective field. Below is a discussion on the various methods applied on the varying material for analysis.

4.7.1. Faunal material

Prior to the analysis of the faunal remains, sources were consulted in order to establish an idea of which species were/are[24] found in the research area. The sources used for this purpose were Chittenden (2007), Du Plessis (1969), Rautenbach (1982), Skinner and Chimimba (2005), Smithers (2002), Stuart & Stuart (1995), and Walker (1996). However, if a species not located in the region is identified in the faunal collection, it could be due to a number of noteworthy reasons, such as trade and exchange networks or could signify cultural importance (e.g. Plug 1993[25]). After the list was compiled, the sorting of the faunal remains began.

4.7.1.1. Sorting of Specimens

[24] Bearing in mind, that past animal distribution patterns could be somewhat different to what present sources record (Plug & Badenhorst 2001).
[25] Plug (1993) demonstrates this at Abbot's Cave, a LSA site, where she identified a single specimen of blue duiker, a species unsuitable to the Karoo environment due to its particular requirements for forest or dense scrub. The occurrence of this specimen, led Plug (1993) to suggest that this antelope may have significance to LSA hunter-gatherers.

The faunal remains were analysed one layer at a time, unit by unit, to avoid any confusion or mixing of the material. The initial process begins with the sorting of the material into two categories: non-identifiable and identifiable. The non-identifiable category denotes faunal fragments that cannot be identified to species, genus, family, or size class (Plug 2014:10). These fragments are then further sorted into the following categories: enamel, skull, vertebra, rib, bone flakes, and miscellaneous skeletal fragments. During the sorting process it is necessary to take note of any fragments that could be from the same specimen, i.e. pieces that fit together forming a single specimen, as this would affect the number of identified specimens (NISP) count (the advantages and disadvantages of this method when used for quantification purposes are discussed later in this chapter).

A faunal assemblage undergoes various processes before it is collected as an archaeological sample; these processes are related to human as well as non-human action on the assemblage. It is vital to consider these processes, prior and after the discard and burial of the specimens, when analysing the material (Reitz & Wing 2008:117). Therefore, each fragment of each category was examined for modifications, cut and chop marks, rodent and carnivore gnawing, traces of burning, and weathering (see below). Lastly, each category and layer of unidentifiable fragments was weighed (measured in grams). The reason for the categorising, noting of modifications, and weighing of non-identifiable fragments is manifold. Non-identifiable fragments, while unable to provide data for a species list, can be used to understand disposal habits, activity areas, butchery, cooking and preparation methods, and even social organisation (Reitz & Wing 2008:213).

Each layer was recorded separately on a printed recording sheet. The recording sheet for non-identifiable and identifiable faunal specimens was adapted from the work of Dr. Annie Antonites. All meta-data, such as excavation date, as well as unit, section and layer details, was recorded on the sheet and on a label that was attached to the non-identifiable faunal bag for that layer.

Identifiable fragments are faunal remains that are possibly identifiable to species, genus, family, or size class (Plug 2014:10). All specimens were marked with a catalogue number (ex TOL/LEB/F01) which is linked to the meta-data for the specimen (further description of catalogue system below). The identifiable fragments were weighed and counted; each fragment that does not fit with another fragment receives its own faunal number. If there was more than one faunal fragment from the same specimen, the fragments were given one faunal number, counted as one specimen, and bagged together. The following characteristics were recorded for

each identifiable faunal fragment: the species, genus, family or size class, the skeletal part and side (left or right), if the specimen was worked, the portion of the fragment, traces of burning, cut and chop marks, carnivore and rodent gnawing, weathering, and measurements. In the following section I will describe each of these characteristics further.

4.7.1.2. Analysis of identifiable faunal specimens

The identification of faunal specimens was based on morphological features such as the shape, density, texture, and curvature of the specimen. The placement and extent of features, such as vascular grooves and nutrient foramens, also aids in the identification process. The Archaeology Department at University of Pretoria has a basic comparative faunal collection. This comparative collection was used for initial identification, mainly that of skeletal part followed by bovid versus non-bovid classification. The next step verifies or readjusts the initial identifications. This is done through access to Ditsong National Museum of Natural History's (Pretoria) comparative faunal collection. A collection that contains (excepting a few smaller animals) the majority of fauna found in southern Africa (Badenhorst 2008:1). The majority of specimens are then identified to species, genus, or family. If they cannot be identified they were noted as non-identifiable and transferred to the non-identifiable bag for that layer. All information regarding the transferred specimen (such as weight and NISP) was then added to the un-identifiable specimens' data for that layer. Below follows a discussion on the attributes of faunal analysis, the identification of specimens, and the identification of taphonomic features. Taphonomy is the study of the "natural and cultural processes that affect bones from the time the animal is killed to its excavation and analysis by archaeologists" (Antonites 2014:164). These attributes could reveal consumption, depositional, and social practices of the past community at Lebenya.

4.7.1.3. Size class

With bovid identification, when species identification cannot be attained, then size class and domestic versus non-domestic identifications are sought. Bovid size classes are used according to Brain (1974), Table 4.1 shows the differing bovid size classes, the expected range of mass for that class and a selection of species found in the different size class (after Antonites 2014:168).

Table 4.1 Bovid size classes

Size class	Species
Bov I (small bovids) 0 – 23kg / 0 – 50lbs.	Blue duiker (*Philantomba monticola*) Red duiker (*Cephalophus natalensis*) Common duiker (*Sylvicapra grimmia*) Damara dik-dik (*Madoqua damarensis*) Oribi (*Ourebia ourebi*) Steenbok (*Raphicerus campestris*) Cape grysbok (*Raphicerus melanotis*) Sharpe's grysbok (*Raphicerus sharpei*) Klipspringer (*Oreotragus oreotragus)* Suni (*Neotragus moschatus*)
Bov II (medium bovids) 23 – 84kg / 50 – 185lbs.	Bushbuck (*Tragelaphus scriptus*) Bontebok/Blesbok (*Damaliscus pygargus*) Southern reedbuck (*Redunca arundinum*) Mountain reedbuck (*Redunca fulvorufula*) Puku (*Kobus vardonii*) Grey rhebok (*Pelea capreolus*) Springbok (*Antidorcas marsupialis*) Impala (*Aepyceros melampus*) Sheep (*Ovis aries*) Goat (*Capra hircus*)
Bov III (large bovids) 84 – 296kg / 185 – 650lbs.	Greater kudu (*Tragelaphus strepsiceros*) Nyala (*Tragelaphus angasii*) Sitatunga (*Tragelaphus spekii*) Black wildebeest (*Connochaetes gnou*) Blue wildebeest (*Connochaetes taurinus*) Lichtenstein's hartebeest (*Alcelaphus lichtensteinii*) Red hartebeest (*Alcelaphus buselaphus*) Tsessebe (*Damaliscus lunatus*) Roan (*Hippotragus equinus*) Sable (*Hippotragus niger*) Gemsbok (*Oryx gazelle*) Waterbuck (*Kobus ellipsiprymnus*) Lechwe (*Kobus leche*) Cattle (*Bos taurus*)
Bov IV (very large bovids) >296kg / >650lbs.	Buffalo (*Syncerus caffer*) Eland (*Tragelaphus oryx*)

Size classes for carnivores and birds are classified as small, medium, large. Birds are classed as small (sparrow-sized), medium (chicken-sized), and large (eagle- or stork-sized). Carnivores are classed as small (mongoose-sized), medium (caracal-sized), and large (Leopard-size). I identified all teeth according to Hillson (2005).

4.7.1.4. Worked specimens

This category refers specifically to faunal specimens which were modified to be a tool, ornament, or other use. For instance, horn, mollusc shells, and some turtle shells may serve as a container of sorts (Reitz & Wing 2008:133). Worked faunal specimens could or may have a polished surface, while the original shape has been modified to some extent. Trampling of the faunal specimens by livestock or humans, could mimic the characteristics of a worked bone (Plug 1988:58, Lyman 2008:139). However, marks from trampling are usually randomly placed superficial scratches (Lyman 2008:139).

4.7.1.5. Diagnostic zones

In describing the portion of the skeletal part I use Dobney and Rielly's (1988) method of 'diagnostic zones'. This method is based on the division of intact bones into diagnostic zones, from which fragments can be attributed. Each zone of a skeletal part is assigned a numerical code and is defined by a precise anatomical description (Dobney & Rielly 1988:81). This allows for the accurate record of each fragment which does not rely on "subjective estimation of the portion of whole bone which is represented in that fragment" (Dobney and Rielly 1988: 80). All zones present in a fragment were recorded. Incomplete zones were recorded as more, or less, than half present. This method also allows for the more precise recording of taphonomic features, such as gnawing or butchery.

4.7.1.6. Burnt specimens

There have been several studies which have considered the effects of natural versus cultural burning on bones (see Asmussen 2009 for a summary of previous research on varying aspects of the topic). Burnt bone can be associated with cremations, culinary activities, waste disposal, fuel use, and as a by-product of naturally occurring fires (Bennett 1999:1).

Burning of a faunal specimen is the result of excessive heat (Lyman 2008:275), due to this different stages of burning can be identified. Brain (1981:55) compiled three stages in regards to the burning of faunal specimens, stage 1 (unburnt), stage 2 (carbonized), and stage 3

(calcined) [26]. The descending order marks a rise in the effect of heat on the bone. These stages relate to the proximity of the bone to heat and the temperature of the heat source. However, there are other post-burial variables that can replicate or contribute to such an assemblage, and surface colour is not suggested as a sole identifier of fire temperature (Bennet 1999:7). Bones burned in a post-burial setting are characterised by continuous surface colour, negligible fracturing and warping (Bennet 1999:7). Therefore, a more holistic approach is necessitated. It is necessary to have an awareness and understanding of the relation between taphonomic features of a bone. This allows for a better understanding of the natural and cultural processes contributing to the collection.

4.7.1.7. Butchered specimens

Cut and chop marks were noted for their depth and number, specifically if they were shallow or deep and whether single or multiple marks occur. It is necessary to differentiate between the depth and numbers of marks as these reflect different butchering techniques. Shallow, narrow incised lines on bone fragments were classified as cut marks. They are likely caused during skinning or when the flesh is removed from the bones before or after cooking (Plug 1988:56). While a deep, and often broad, non-symmetrical 'V-shape' mark was caused by a chop. This occurs when a carcass was dismembered, or during the chopping of joints to make smaller portions (Plug 1988:56).

4.7.1.8. Gnawed specimens

Two broad categories of gnawing are noted: rodent and carnivore. Rodent and carnivore gnawing differ in appearance. Rodents leave characteristic parallel grooves that are closely spaced and flat bottomed. These marks are often found along the edge of a specimen but can also occur over the entire surface of the bone (Reitz & Wing 2008:135). Carnivore gnawing produces furrows and punctures on the bone, but can also leave irregular marks, such as striations, pits, and ragged/chipped edges (Fisher 1995:36). Rodent and carnivore gnawing are

[26] Within the faunal collection the colour designation for burnt fragments also contains brown and grey fragments, which reflect a range between the stages. The colours are abbreviated to BR (Brown), BL (Black), W (White) and G (Grey). The diagnostic zone within which the burning occurs is also noted with the colour.

recorded separately, with the occurrence of single or multiple marks noted to indicate the extent of the damage. Rodent and carnivore gnawing could reflect disposal habits because specimens that were gnawed by non-humans probably were not buried promptly after use (Reitz & Wing 2008:136). Gnawing also affects faunal numbers and later identification of specimens (Plug 1988:17).

4.7.1.9. Weathered specimens

Weathering is a process, in which bone is altered by physical and chemical agents while in-situ either on the surface or within a soil matrix (Behrensmeyer 1978:153). The extent of weathering increases from light, as seen by slight cracks on the surface, to severe, such as in-situ specimen flaking apart. The degree of weathering noted on a faunal specimen could provide an estimate of the relative length of time an assemblage remained exposed prior to burial (Behrensmeyer 1978:161). The rate however varies depending on the regional, local, and micro-environmental conditions, as well as the amount of moisture and shade, as and the degree of fluctuation between temperatures seasonally and diurnally in a region (Behrensmeyer 1978:159). However, a factor affecting the rate and identification of weathering are human activities such as the burning and boiling of bones, which could alter the bone surfaces, mimicking weathering (Fisher 1995:32). Nonetheless, a combination of weathering and gnawing provides information on depositional practices (Orton 2012:324).

4.7.1.10. Pathology, Ageing, Sexing and Measurements

Pathology, as well as the ageing and sexing of the animals are components of faunal analysis not undertaken in this research project. This is due to the expertise and experience needed for such analysis. However, juvenile specimens were noted and measurements were taken when possible. Measurements of specimens were taken according to the standard points of measure described by Von den Driesch (1976). After identification, all recorded data for the faunal collection was transferred to an excel table for quantification.

4.7.1.11. NISP and MNI

The primary data acquired from the physical examination of each specimen was used to create secondary data which contributes to an understanding of butchering patterns, disposal habits, dietary contributions, and procurement strategies (Reitz & Wing, 2008:153). The secondary data was derived from the primary data collection, and involves specified mathematical relations between fundamental measurements (Lyman 1994:37). Two of the fundamental forms of quantification in faunal analysis are NISP (Number of Identified Specimens) and MNI (Minimum number of Individuals). NISP is an observational unit, whereas MNI is a derived unit. NISP is the basic number of fragments within a category, while the MNI count considers attributes of individual variation, such as age and sex (Lyman 1994:38).

There is some debate in regards to which method should be used (see Lyman 2008 for a synthesis of the debate). There are a number of advantages to the NISP method. Once the data is represented in a species list the NISP count provides an immediate idea of the relative frequency of various species. It is also easy to incorporate further data, such as additional NISP counts (Plug 1988:74). However, the NISP method does not allow for skeletal complexity; therefore, species with more skeletal elements will be overrepresented while those with fewer skeletal elements will be underrepresented (Plug 1988:74). For instance an animal with 180 skeletal elements could contribute more bones to a collection than an animal with 80 bones. Therefore, a NISP from this collection could reflect skeletal complexity over relative frequency of a species. This is also a problem with regards to the overrepresentation of certain species by skeletal elements which are identifiable even when fragmented (Plug 1988:74). For example, a fragmented mollusc shell is more identifiable, compared to fragmented mammal long bone. Lastly, the NISP method assumes that all specimens are uniformly affected by the varying causes of fragmentation within a sample. This assumption is incorrect, as the specimens are disposed of in varying states (for example a cooked bone would deteriorate faster than a non-cooked bone) and various skeletal elements preserve differently (for example a carapace fragment would deteriorate at a different rate than a tibia fragment) (Grayson 1984:21).

MNI, as with NISP, can be used to reflect taxonomic abundance (Lyman 2008:41). MNI is a count of the most commonly occurring kind of skeletal specimen of a taxon in a collection (Lyman 2008:39). For instance, if the most commonly occurring skeletal specimen for Taxon A is a left tibia, the sum of these parts then equals the MNI for taxon A. The MNI method can also be further refined by taking age and sex of the animals into consideration (Plug 1988:77). For instance if the most abundant skeletal part for taxon B are femurs, then five right adult femurs and one right juvenile femur equals an MNI of six for taxon B. This method reduces the effects of butchering fragmentation and specimen interdependence in a faunal sample (Plug 1988:77). A

MNI count[27] is given in the table for species taxa, in order to give an alternative measure of species frequency.

However, the MNI method while solving some of the problems with the NISP method also has its own shortcomings (see Lyman 2008). Whenever new data is added to an existing sample, the MNI count has to be recalculated (Plug 1988:78). MNI counts represent less accurate and more inconsistent estimates of species abundance than other methods (Gilbert et al. 1981 cited in Plug 1988:78). The MNI method relies on the way in which faunal material from a site is divided, and different approaches would alter the minimum numbers (Grayson 1984:29). For example, MNI will differ depending on whether it was calculated according to excavated layer or to unit. The smaller the sample and NISP numbers, the more likely the number of individuals will be exaggerated (Plug 1988:78). Due to these reasons, I primarily used NISP counts for quantification.

4.7.2. Ceramic Material

Initial sorting of the material was conducted in order to separate the diagnostic items from the general mass of items. Diagnostic attributes are attributes that are used to identify ceramic classes and styles. Diagnostic attributes form the basis of a typology. A typology is when vessels are grouped together on the basis of similar features and a single example is illustrated which thereby represents all the others (Orton, et al 1993:153). To create types that were standard to the expected ceramic style occurring at Lebenya background research was conducted on the ceramic types known to occur in the research region (as discussed in chapter 2). I began the creation of my typology by an investigation of other typologies for the region. The ceramic typology was formed by drawing on various sources, mainly Hall's (1998) typology for late Moloko ceramics, Huffman's (2007) typology for late Moloko ceramics, Anderson's (2009) ceramic typology for Marothodi, and the Prehistoric Ceramics Research Group (2010) guide to the study of prehistoric pottery. Lastly, for the appraisal and defining of petrographic characteristics of late Moloko ceramics the work of Rosenstein (2008) was consulted.

A typology allows for the classification of vessels based on observable morphological traits. These traits may indicate stylistic, functional, or technological dimensions of a vessel, which

[27] The variables considered for this count, was age (juvenile or adult), skeletal part and portion (diagnostic zones and left versus right parts). Sex was not a variable as this was not easily identified in the sample. The MNI count was worked out per layer.

may be interrelated. The stylistic traits of a vessel are not restricted to decorative attributes, but rather attributes that do not have considerable effects on a vessel's utilitarian functionality (Banning 2002:162). The functional traits are those that affect the usefulness of a vessel for various tasks, such as for containment, transport, distribution, and temperature control (Banning 2002:161). Technological traits are those which reveal the process of manufacture and modification of a vessel (Banning 2002:162). These attributes – stylistic, functional and technological- of a vessel may inform on the chronological, spatial, social, economic, and ideological aspects of an archaeological investigation (Banning 2002:162).

The items recorded during the ceramic analysis were: number of vessel sherds[28], if the vessel had been modified after production, vessel type, rim type, diameter of rim orifice, and the extent of the rim sherd, surface treatment and placement, decoration type and placement, and if there were any attachments to the vessel form, such as a lug.

4.7.2.1. The sorting of the material

The initial step in ceramic analysis was the sorting of the material into diagnostic and non-diagnostic categories. Non-diagnostic refers to material which the researcher is unable to utilise in the analysis of key variables within the ceramic collection. The key variables for this project being rim profile and decoration. If a ceramic sherd was a rim piece or was decorated it was classified as diagnostic.

The material was sorted into diagnostic and non-diagnostic sherds, and were weighed and counted separately according to each layer. Exceptions in the sorting process were sherds with black soot; these were bagged separately and were not cleaned. These ceramic pieces were not analysed for this master's project, but might be used in future analysis of organic residue in ceramic ware.

Each ceramic sherd which did not fit with another ceramic sherd received its own vessel number. If more than one sherd of a vessel was found, the sherds were bagged together, but were recorded as one vessel, with the number of sherds per vessel noted.

[28] Sherds can be fragments of one vessel, or multiple. By noting similar profiles, some sherds can be refitted to form a part of, or complete, vessel. Therefore, the number of vessel sherds refers to the observed number of such sherds belonging to one vessel.

The non-diagnostic sherds while not used for the identification of significant variables, contributes to the total count of material, which was significant for quantification purposes. The non-diagnostic sherds were also surveyed for fragments which have a distinct sparkle, an effect of the inclusion of Mica in the ceramic (Rosenstein 2008:29). These fragments were tallied per layer. This was done because the inclusion of Mica is an attribute of a ceramic type found in the surrounding region (Rosenstein 2008).

Diagnostic ceramic sherds were analysed according to a set of variables. An excel spreadsheet was used for the recording of variables within the diagnostic-ceramic collection. All significant or characteristic finds were illustrated and photographed (discussed further later in chapter). At times it was not possible to classify some or a majority of these variables due to the nature of the ceramic fragments, such as size and condition of the fragment. If this occurred I did not record the variables of the vessel due to the uncertainty regarding the accuracy of such data.

4.5.2.1. Vessel Portion

The vessel was divided into different parts (as shown in Figure 4.9), these parts were used to record the location of surface treatment and decoration. The different parts were given a key, labelled 1-4 (as listed below). A fragment that can't be identified to vessel portion was labelled as 5.

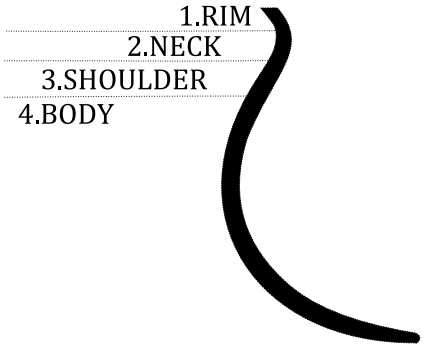


Figure 4.9 Vessel portions

4.7.2.2. Vessel form

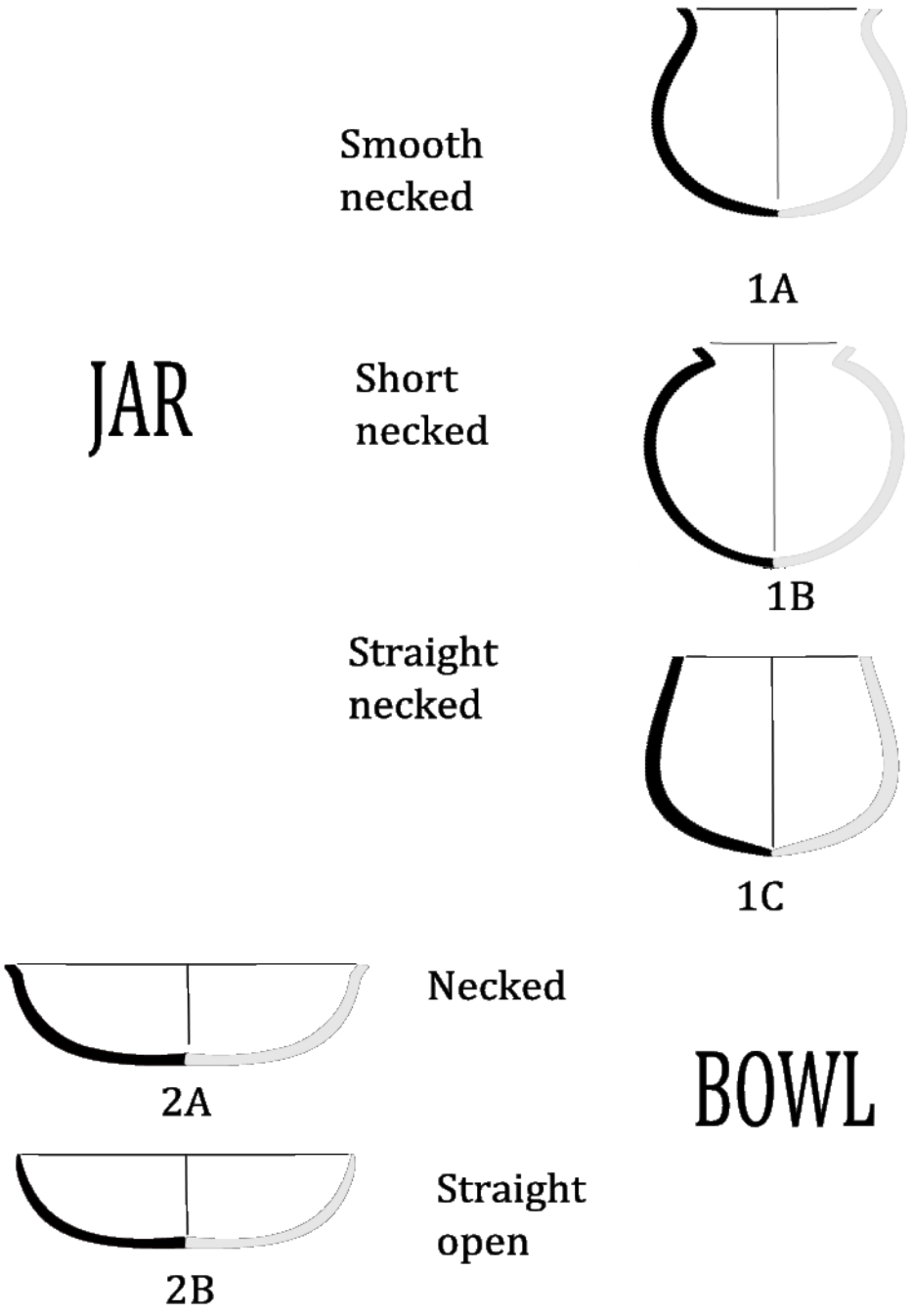


Figure 4.10 Vessel forms

Two general categories of vessel forms were referred to in the literature (Anderson 2009; Hall 1998a; Huffman 2007), these were jar and bowl. Anderson's (2009) vessel forms were adopted for this analysis. The jar and bowl are broad categories, with variation within the categories; the variation is noted as sub-categories. A jar is a necked vessel, vessel with a restricted orifice, with its height greater than its maximum diameter (Rice 2005:216). A bowl is a vessel, which may have a restricted orifice or not (depending if it is a necked vessel), with its height varying from a

third of its maximum diameter to equal height and maximum diameter measurements (Rice 2005:216). The sub categories for jars are smooth necked, short necked, and straight necked. The sub categories for bowls are necked (a restricted vessel) and straight open (an unrestricted vessel). Figure 4.10 depicts the vessel form and its key (1A-2B).

4.7.2.3. Modification

Modified ceramics are those which have been intentionally altered in order to serve a new purpose, such as the re-use of ceramic sherds for spindle whorls (Prehistoric Ceramics Research Group 2010:35). Examples of modified ceramic sherds occur at Buffelshoek (Loubser 1985:82) and Marothodi (Anderson 2009). Loubser (1985:82) records potsherds (as well as faunal specimens) with abraded edges and suggests they were used as a skinning tool. This variable, in connection with other variables, could provide data on activity areas, contributing to the spatial understanding of the site. These were recorded and noted for illustration.

4.7.2.4. Rim types, diameter of orifice and rim extent

Rim sherds were used to provide information on vessel shape, and yet can be useful for more than just vessel shape analysis. Rim sherds can also provide information on the size of a vessel (Rice 1987:222). This can be done "by fitting the curve of a rim sherd to a standard diameter-measurement template, marked off in centimetre units, [so] one can calculate the diameter orifice" (Rice 1987:223). The diameter of the rim orifice was done on a 0-40cm rim chart; however, in cases where N/A (not applicable) was stated it was due to either the ceramic sherd not being a rim sherd or the rim being uneven, making it difficult to establish the precise orientation and diameter of the sherd. The extent of the rim is also a variable which affects the accuracy and identifying of the rim type and orifice, due to this, rim fragments less than 1cm were not analysed. The rim types ranged from flattened, rounded, and tapered, as depicted in Figure 4.11.

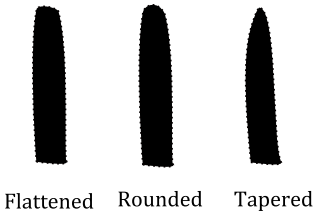


Figure 4.11 Rim types

Rim type and diameter can reflect functional attributes of pottery, as shown in Henrickson & Mcdonald's (1983) work. Morphological attributes, such as shape and rim type, were used to identify functional classes. For instance, long-term dry storage vessels were found to almost all "have rolled-over or […] everted rims, possibly to facilitate tying a pliable cover over the opening for protection against insects and dirt" (Henrickson & Mcdonald 1983:632). The rim diameter differs based on the function, i.e. cooking pots have a rim diameter range of 12.7 to 56cm, with a mean of 24.1 cm (Henrickson & Mcdonald 1983:631).

4.7.2.5. Surface treatment and placement

The kind and location of treatment on the vessel is significant, as it can be used to understand vessel function as well as intra-site status (Prehistoric Ceramics Research Group 2010:33). The treatment types are smoothing, burnishing, and slips. Smoothing and burnishing are two techniques which slightly alter the vessel surface, they involve the rubbing of the vessel surface with a tool while the vessel is hard or dry, prior to firing (Banning 2002:174). The techniques differ in that smoothing is done less aggressively and leaves the surface matte, while burnishing often done on a slip, results in a hard, reflective and less porous surface (Banning 2002:174). A slip is "a thin layer of fine clay adhering to the surface of a vessel and fired with it" (Banning 2002:175). A slip can vary in colour and may be used for decorative effect. The placement of the surface treatment is recorded according to vessel portions.

4.7.2.6. Decoration type and placement

The placement of the decoration was recorded according to vessel portions. The late Moloko ceramic groups show less style complexity than pre 18TH century CE Moloko ceramic groups (Fredriksen 2007:130). Decoration on the ceramics within the Lebenya collection is expected to

be minimal. Decoration, according to Rice (1987:144) is the "embellishment of a vessel beyond the procedures used in forming the clay mass into the final vessel shape and finishing its overall surface". These embellishments are formed by certain techniques; expected decoration techniques are stamping, incision and possibly punctuation.

Stamping is when a tool (i.e. comb) is used as a die to impress a repeated pattern of identical motifs (Rice 1987:145). The individual marks from the teeth of the comb range from square-like to rectangular. The size of the individual tooth mark also varies, as well as the spacing between the tooth marks.

Incision is when lines are cut into the surface of a vessel with a pointed implement (Rice 1987:146). The width, length and depth of each incision vary. Engraving is a variation of incision, if the clay is dry or fired and incisions are made this is termed engraving (Balfet et al cited in Rice 1987:146). Lastly, the term rim notching occurs often in the literature on ceramics for this region and context (Anderson 2009; Boeyens 2003; Huffman 2007).

Punctation is when a tool is used to punch depressions into wet clay; the tool is usually a pointed instrument of some kind, such as a hollow reed or even a fingernail (Rice 2005:145).

4.7.2.7. Attachments

Attachments are an added aspect to the ceramic vessel, such as lugs or handles. These aspects can contribute to a better understanding of the possible function the vessel served, such as the vessel being a water container (Prehistoric Ceramics Research Group 2010:19). Any attachments to the ceramic vessel were noted.

4.7.3. Other material

All other material, such as beads, lithics, metal, and unidentified ceramic objects were cleaned, recorded, and catalogued.

4.7.4. Flotation and soil samples

These samples were collected for future use, as they do not form an aspect of this master's dissertation due to time and resource constraints. The process of collecting flotation and soil samples is described in the excavation sector of this chapter. Flotation involves the recovering of small material, specifically carbonized seeds and charcoal (Drewett 1999:101). This is done through a flotation unit. Drewett (1999:102) describes the process:

> The flotation unit consists of a tank of water with soil held in a 1 mm mesh in the top of the tank. Water is pumped through the soil, breaking it up and releasing organic materials like seeds and charcoal. This light fraction flows over the lip of the tank to be collected in a nest of sieves. The water is then either passed through resettling tanks for recycling, or discarded if mains water is used.

Items normally lost through sieving, such as beads, seeds, and small mammal faunal material can be recovered through flotation, or at least a sample for each layer can be recovered. This corrects the bias created by the use of sieves with larger mesh sizes, providing a more representative sample. Boeyens (2003:67) highlights the possible implications of mesh size in the retrieval of small material, specifically beads less than a 1mm in diameter. As he explains a large number of glass beads were recovered from one site, while from other sites of the same context there were no glass beads retrieved (Boeyens 2003:67). Therefore, is this an accurate representation of bead distribution at these different sites or is it a sampling error (such as that caused by differences in mesh size during the sieving process)? Answers to such questions lie in flotation samples.

The following level of recovery is the retrieving of material not generally visible to the eye. This is done through soil samples, with samples analysed under laboratory conditions. This is how pollen is recovered, whereby it is identified and counted under a microscope (Drewett 1999:102).

4.7.5. Carbon samples

The point-provienced carbon samples which are extracted from the excavation units were placed in foil bags, with special care taken to prevent contamination of the samples. Only samples large enough for future radio-carbon dating were collected. Radiocarbon dating does not fall into the scope of this master's dissertation, due to financial constraints. The samples were catalogued and stored.

4.8. Photographs and illustrations

All photographic imagery for this research was captured using a Nikon D90 SLR camera, utilizing appropriate lenses in order to create a sharp image without distortion. All images were captured in RAW format at the appropriate exposure with an appropriate scale, in order to maintain as close as possible an accurate replication of the artefacts. All artefact illustrations were initially sketched, and then digitised on inkscape.

4.9. Curation and Storage

All research was conducted according to ASAPA (Association of South African Professional Archaeologists), standards and regulations. All necessary permits were acquired through SAHRA. University of Pretoria are the custodians of archaeological material collected from the site, until otherwise stated. The collection, termed Tolaniesfontein Archaeological Project, is stored in the University of Pretoria archaeological collection. The collection was cleaned (according to the material specifics), catalogued, labelled, and packaged. The collection was catalogued under Tolaniesfontein Archaeological Project/ Lebenya- abbreviated to TOL/LEB. The catalogue numbers follow the project and site description, these catalogue numbers refer to the material (indicated by a C for Ceramic, F for fauna, and B for Beads) with non-diagnostic material acquiring one catalogue number per excavated layer, while each specimen of diagnostic material receives its own catalogue number. The catalogue information was written individually onto the diagnostic material. This was done using a dilution Paraloid B-72 in acetone as a base for the markings on the material. B-72 was used as it is reversible; therefore, the material can be restored to its original state. The markings were made using a calligraphy pen (the finer the tip the better, to prevent blotching while labelling) and white ink. The material was then bagged and labelled. The material was bagged in zip-lock bags, with a label containing the catalogue number and meta-data. The label was placed at the bottom of the zip lock bag, and then was sealed using a plastic sealer, the material is then added and zip-locked. This method prevents the label from becoming unreadable due to wear and tear, and also allows for easy access to bag data. The meta-data contained on the label was: catalogue number, project name, period at which material was excavated, site, section of site, excavation unit, layer and material description as well as whether diagnostic or non-diagnostic material. The material was stored according to material type and in unit/layer order.

4.10. Discussion

In the following chapters the results of this methodology will be presented. The following data is divided into two chapters: the spatial interpretation of Lebenya, and the excavation data which includes the analysis of the excavated material culture.

Chapter 5 Spatial Data

5.1. Overview

'Space acted as a canvas upon which cultural activity left traces'
(Wheatley & Gillings 2002:5).

This chapter presents the data acquired from the survey and mapping of the site. The data is compared to other sources (as reviewed in chapters two and three) in order to possibly understand the social organisation and daily life of the past community settled at the site. The site is then discussed in relation to the regional typologies for SWS.

5.2. Survey and mapping results

The settlement is located on a hill top with an elevation of 1394m at the southern part of the hill, with the elevation decreasing to the north of the ridge to 1383m above sea level. Lebenya covers an area of 5.67 hectares roughly, whereas Molokwane covers 156 hectares (Steyn 2011:122); this is demonstrative of the size difference between a small-scaled site and a mega-site.

The settlement, particularly when viewed from aerial images, is divided into three clusters of stone walling situated on a hilltop. The clusters have therefore been termed sections A, B and C. Section A was further divided into A1, A2, and A3, for reasons discussed in chapter 3. The sections represent enclosed entities, except between section A & B; across these sections a low lying wall (now degraded) extends from the exterior western wall of B to the exterior western wall of A. An exterior survey of the settlement revealed, just to the west of section A (less than 500m from the settlement), a cluster of three circular stone-walled structures. These were most likely outlook enclosures or related to the grazing of livestock. No other sites related to the stone wall settlement were found on the farm.

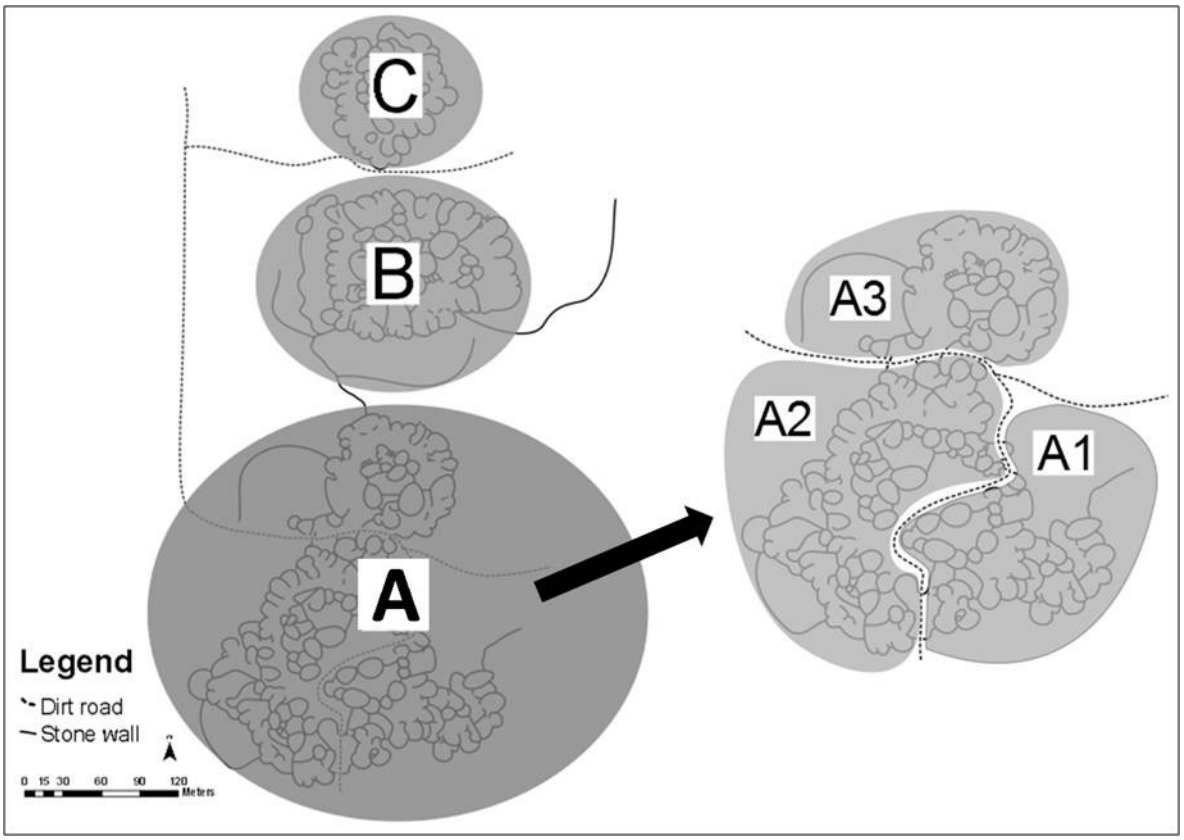


Figure 5.1 The clusters of walling divided into sections

Figure 5.1 indicates the division of the settlement into sections. Section A is located in the south, section B in the centre, and section C in the north of the settlement. Furthermore, within section A: A1 is located in the south easterly part, A2 in the south westerly part, and A3 in the northern part. The settlement is elevated around the southern section, specifically along the east side of section A, while the elevation decreases to the north. Section B is elevated along the west side, but reaches its most elevated specifically in the southwest corner. Section C varies in elevation, only by a metre, along a northwest to southeast line, where the western section is slightly more elevated than the eastern section. The site is located near the non-perennial Tholwane (also spelt Thulane or Tolanie) stream, with the stream parallel to section A. A stream of the Elands River also occurs to the east of the settlement. All the streams in the vicinity are located 1 km or less from the settlement, see Figure 5.2.

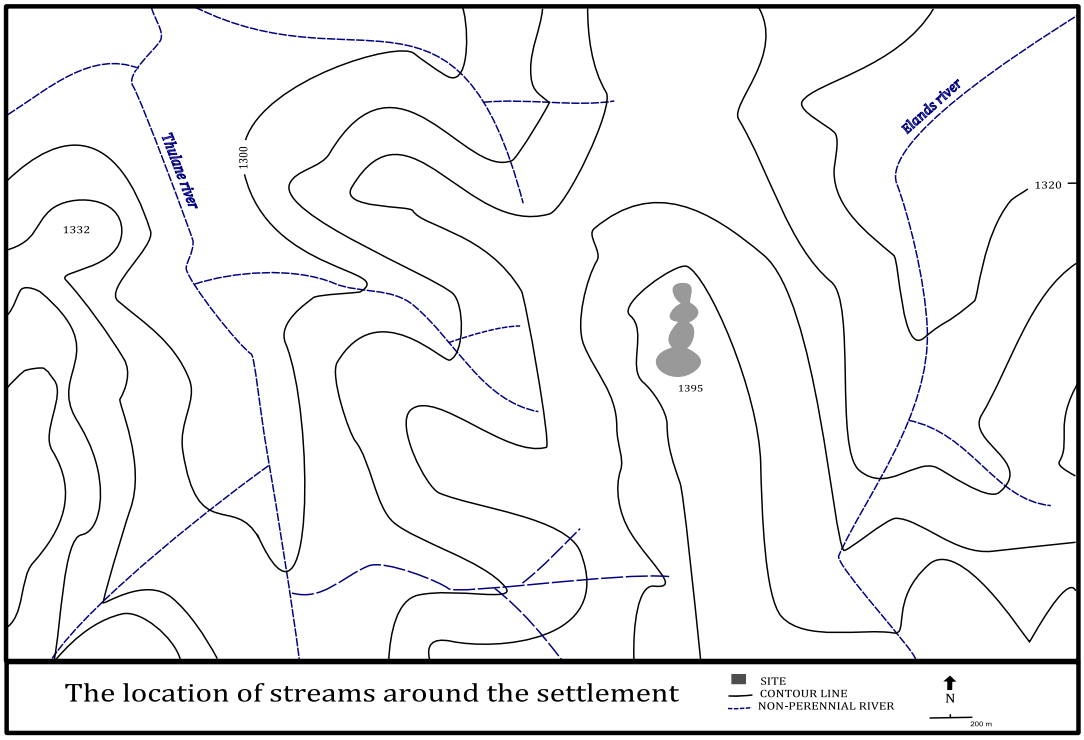


Figure 5.2 The location of streams found around the settlement

Throughout, the site surface material culture was recorded, such as the foundation of grain bins, upper and lower grindstones, fragments of sliding door features, and ceramic and lithic clusters. Figure 5.3 and Figure 5.4 depicts the general surface material culture features. No hut structures were identified from the survey.

Lastly, the walling throughout the site has suffered from collapses in the structure; this could be a result of game on the farm, as animals over time contribute to the collapse and destruction of stone walls. This has had repercussions on the identifying of entrances and openings within the different walled structures and enclosures.

Figure 5.5 (see QR code 1) is the complete map of the site. For better accessibility of images I have created QR codes, as well as hyperlinks, which links the reader to an online high resolution PDF version of the image. This allows the viewer to zoom in on features, as well as to access, view, and store the image. The QR codes and their hyperlinks are available in the appendix.

Figure 5.3 Sliding door fragment

Figure 5.4 Lower grind stone

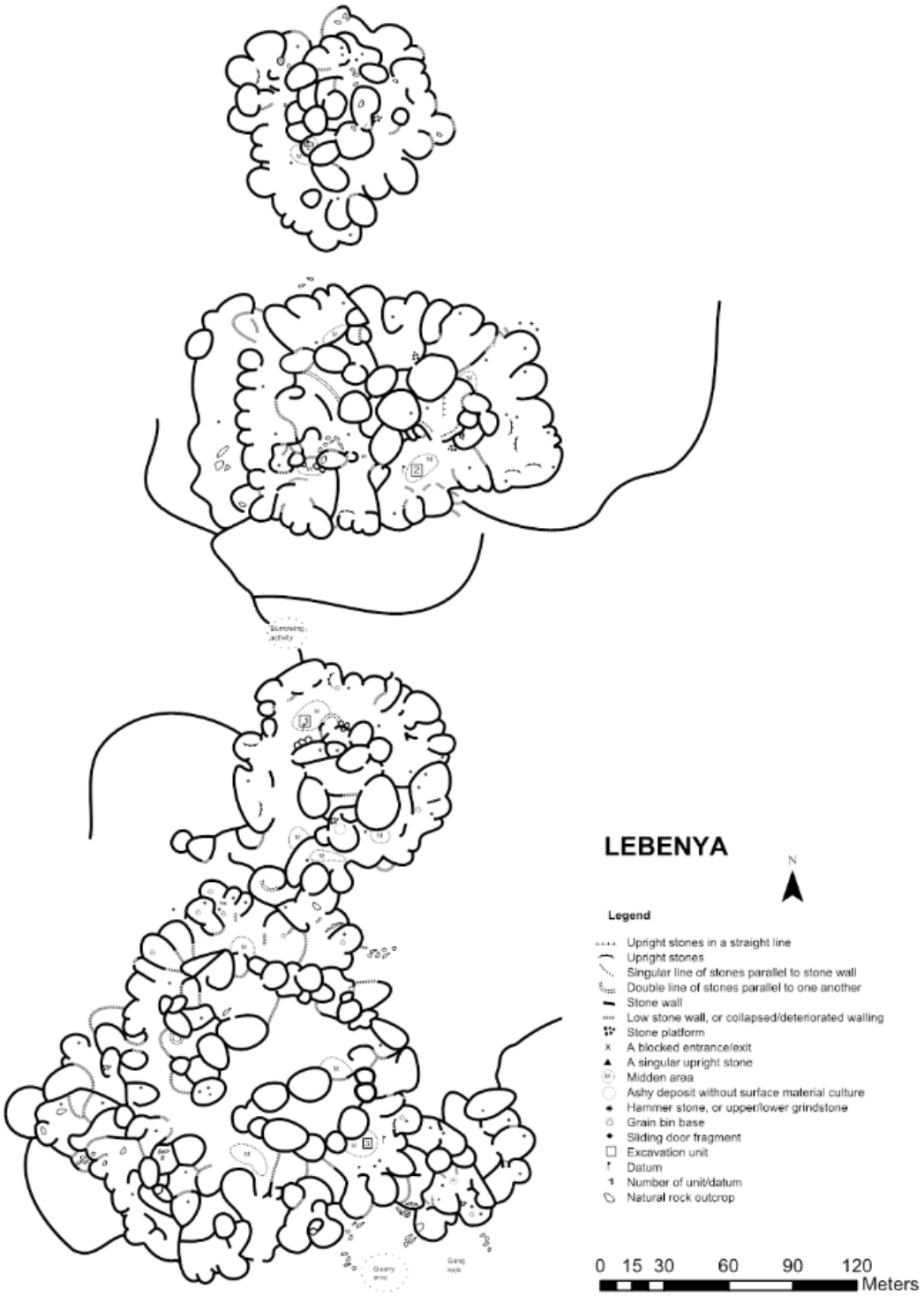


Figure 5.5 Map of the site

5.2.1. Features of section A

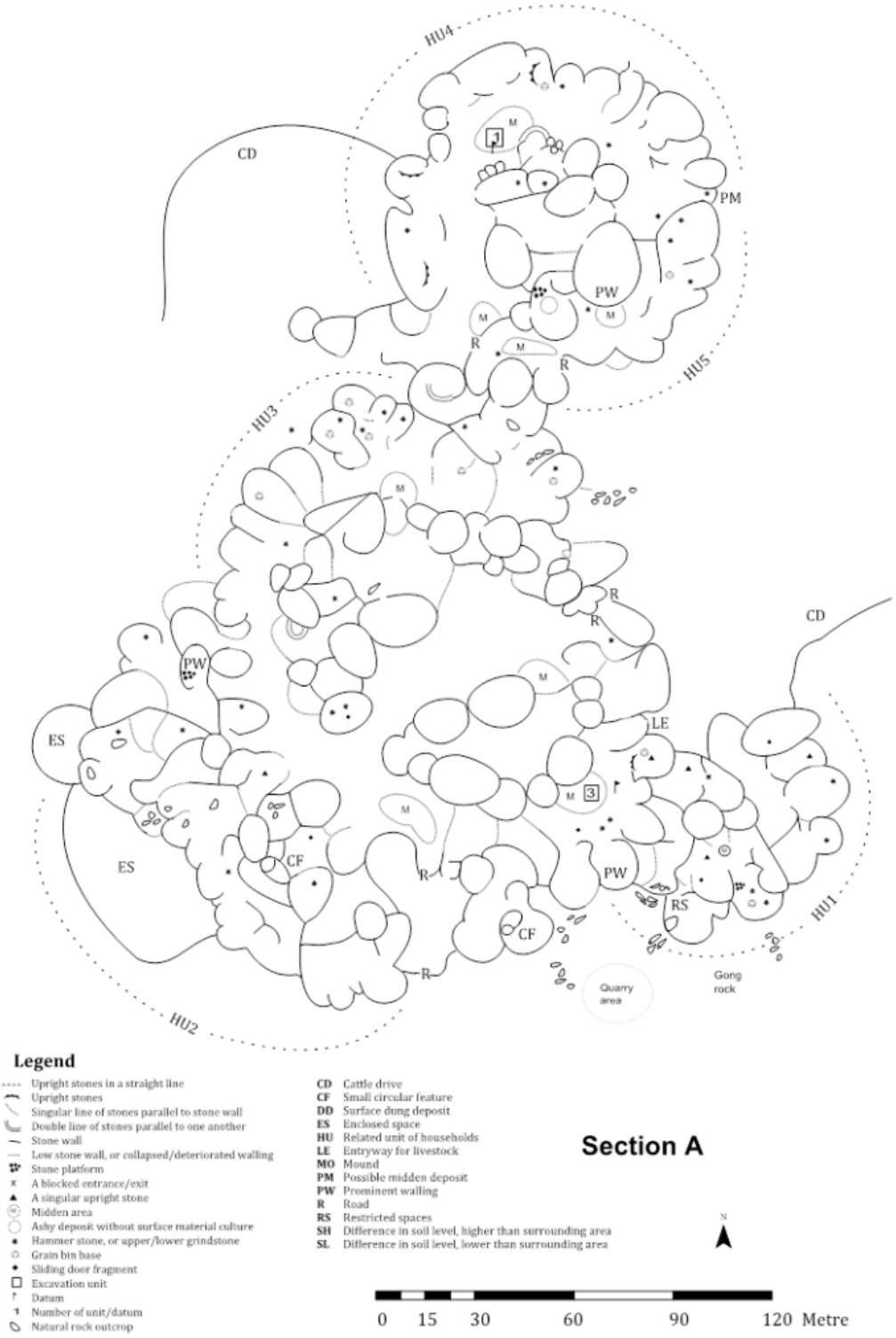


Figure 5.6 Features of section A

Section A is the largest unit and is therefore divided into three sections: section A1, A2, and A3. Section A has clusters of walling within the boundary area. This suggests the marking of household units, as discussed earlier in chapter three. Households would be identified by a shared area, where courtyard walls would attach to the courtyard walls of relatives. Working on this assumption, I identified possibly five clusters of related households, termed HU (meaning a unit of related households). These were identified based on the sectioning of the boundary area, where a dividing wall would enclose a number of bays, which represents a HU. The features of section A are depicted in Figure 5.6 (see QR code 3). Section A3 is nearly a separate entity to the rest of section A, it is only possibly connected to section A2 by two walls[29]. Therefore, I will discuss section A1 & A2 as one entity and A3 as another.

5.2.2. Section A1 & A2

The boundary wall is scalloped, with entrances and/or exits found on the west side and south side of the section. Prominent walling (termed PW) occurs in section A2 and at section A1. The prominent walling occurs in two places, the south and west of section A. The prominent walling to the south of section A appears along the boundary wall adjacent from the quarry area. The prominent walling demarcates a likely entrance (as the walling naturally rounds along the edge and is smooth along the surface) suggesting it did not attach to the walling on the other side, as shown in Figure 5.8. The prominent walling to the west is part of an enclosure, within this enclosure there is a platform. The enclosure is near a natural opening in the boundary wall (suggesting this was an entrance). Therefore it is possible that this was a space used for the welcoming of guests, due to its location near a possible entrance, the prominence of the walling, and the platform feature. From the above discussion, it seems likely that the prominent walling in section A1 & A2 is likely associated with entranceways and entry spaces, where prominent walling would suggest a sense of status and authority to those entering the settlement.

The boundary wall has many features beyond scallops. Attached to the boundary walls on the southwestern part of section A2 are enclosed walled areas, termed ES (enclosed space) as the space is enclosed by low walling. The enclosed spaces are on a declining slope, providing a panoramic view of the surrounding landscape (as shown in Figure 5.7).

[29] It is likely that the walls were cleared for the construction of the road, specifically where the road (termed R on the map) crosses from the boundary walling into the settlement , due to the amount of stone rubble lying near the road and wall.

Figure 5.7 Enclosed space, panoramic view looking south of section A2

Along the southeast boundary wall another unique feature is found. Attached to the boundary wall is another single wall leading out to the plains. It is possible that this was used as a cattle drive, termed CD (Cattle Drive), though it is also likely that it was used as a livestock barrier, preventing livestock access to crops or gardens A possible entryway for livestock (termed LE-Livestock Entrance/Exit) is found on the eastern side of the settlement, adjacent from the possible cattle drive. The cattle drive would have been used to drive cattle in and out of the settlement, with two possible routes available for the driving of cattle into the central enclosures of the section A. To the west, through a series of low walls in section A1 across a midden deposit into the central enclosures. The other is to the north, a more direct route to the central enclosures.

The central area is ringed by a c-shape of linked enclosures and walling with two densities of enclosures (one at each end of the c-shape). The intervening space is not as clear as in the other sections, and is somewhat enclosed in these sections. No small circular features were found attached to the central enclosures; nonetheless, two small circular features, 1m in diameter, were found within another enclosed space in the boundary area, termed SCF (small circular feature). In the central enclosure area of section A2 a semi-circular parallel double line of stones occurs (another occurs in the northern section of A2). These double parallel semi-circular lines of stone could be the foundation for thatch screens, creating a more secluded space. The one attached to the central enclosure area of section A2 is likely to be part of the *kgotla* area, due to it being situated centrally, in close proximity to the central enclosures, and in a private secluded space..

Figure 5.8 The prominent walling located in section A1, also possibly an entrance

Five middens were identified. One midden was found in the intervening space (on one of the possible routes the cattle would have been driven through to the central enclosure), three were near or behind a wall of a central enclosure, and the other was located in an enclosed area associated with bays. One of the middens in section A1, located between the wall of a central enclosure and a boundary with prominent walling, is where excavation unit 3 was placed.

Lastly, in section A1, near the southeast section of the boundary wall, there is an area to which access is restricted, termed RS (Restricted Space). This is an area that has a zigzag path, lined by stones, that leads into a narrowly enclosed space, with natural boulders within this space. The function of this space is unidentified, though the structure seems to indicate a secluded area. Just south of this restricted space (which is found along the boundary wall), outside of the walls of the settlement is the quarry area[30] (Figure 5.9).

[30] It seems to have been an area of quarry; a quarry used possibly as a source for the stone used for the construction of the settlement. Furthermore, a similar 5m depression was found outside of the Klipriviersberg 18/69 site, which is also suggested to be a quarry area for the materials used in the building of the settlement (Mason 1986:577).

Figure 5.9 Image of quarry area, note the depth of the quarry (middle bottom area of image).

Adjacent to the quarry area, a gong rock can be found. The gong rock is situated on the edge of the slope just before the slope declines. It is unknown if the gong rock was utilised[31] by the inhabitants of the settlement, as another stone-walled homestead occurs just 700m south (located on the neighbouring farm) of this point (as mentioned in chapter two, and shown in Figure 2.7).

5.2.3. Section A3

The boundary wall is scalloped. This piece connects section A to B, with a wall extending from the north of section A to the south of section B. From the western boundary wall, another possible cattle drive extends to the veldt. Two entrances occur in section A3, one in the north and the other in the west of the section. These entrances are marked by natural openings in the boundary wall with no or little rubble found near these openings. A dividing wall from the central enclosure to the boundary wall occurs in two places, creating two separate household units in this section (and enclosing the intervening space in the southeast section of the unit).

Four middens and an ash deposit were identified in section A3. One of the midden deposits found in the intervening space (north of the central enclosures) is where excavation unit 1 was

[31] A gong rock when tapped with another object makes a loud hollow sound. It cannot be known if it was utilised, unless documented by a historical or ethnographic observers, which I have yet to come upon.

placed. The middens were found in the intervening spaces, and a possible midden deposit (marked on map as PM) is located behind the east boundary wall. An ash deposit was also found in an enclosed space linked to the central enclosures, but with no material culture found on the surface. In the enclosed space containing this ash deposit is a stone platform. This enclosed space is surrounded by midden deposits (to the east, west, and south). It is likely that this enclosed space was a part of the *kgotla*; this is further substantiated by its relation to the largest livestock enclosure in the settlement, as shown in Figure 5.15. The livestock enclosure also has prominent walling along the south wall of the enclosure. A double parallel line of stones is linked to the central enclosures: this feature was possibly used as a foundation for a fence, providing privacy to the attached central enclosures. Near to this are multiple small circular features, less than a 1m in diameter, on each side of the walling, with another three small circular features attached to the northwest central enclosure, as shown in Figure 5.10 .

Figure 5.10 Small circular features section A3, attached to circular enclosure wall

5.2.4. Section B

The boundary wall of this section is predominantly scalloped, as shown in Figure 5.11 (see QR code 4). The intervening space is enclosed by walls, which link the boundary wall to the central circular enclosures. Attached to the southern boundary wall are walls that stretch out into the veldt. These walls were most likely used as cattle drives. No middens were found just outside the boundary walls. Four middens were found in section B: one in the north, one in the northeast, one in the southeast, and one in the southwest. The midden deposit located in the north seems to be a domestic midden associated with HU9. The midden deposit located northeast could be related to the domestic activities of HU12, but it is also likely to be associated with the central enclosures, as it was the only midden deposit found attached to central

enclosure walling. The southeast midden could also be associated with the central enclosures, but could also be a communal domestic midden due to the size of the deposit and its proximity to several household units. The southwest midden deposit is found outside the walls of the central enclosure located in the western part, it is likely that HU8 contributed to this midden deposit. It is possible that the middens located in the southern part of section B were communal midden deposits since no individual household midden deposits were found in the vicinity. The largest midden, the one in the southeast part of the unit, was where excavation unit 2 was placed.

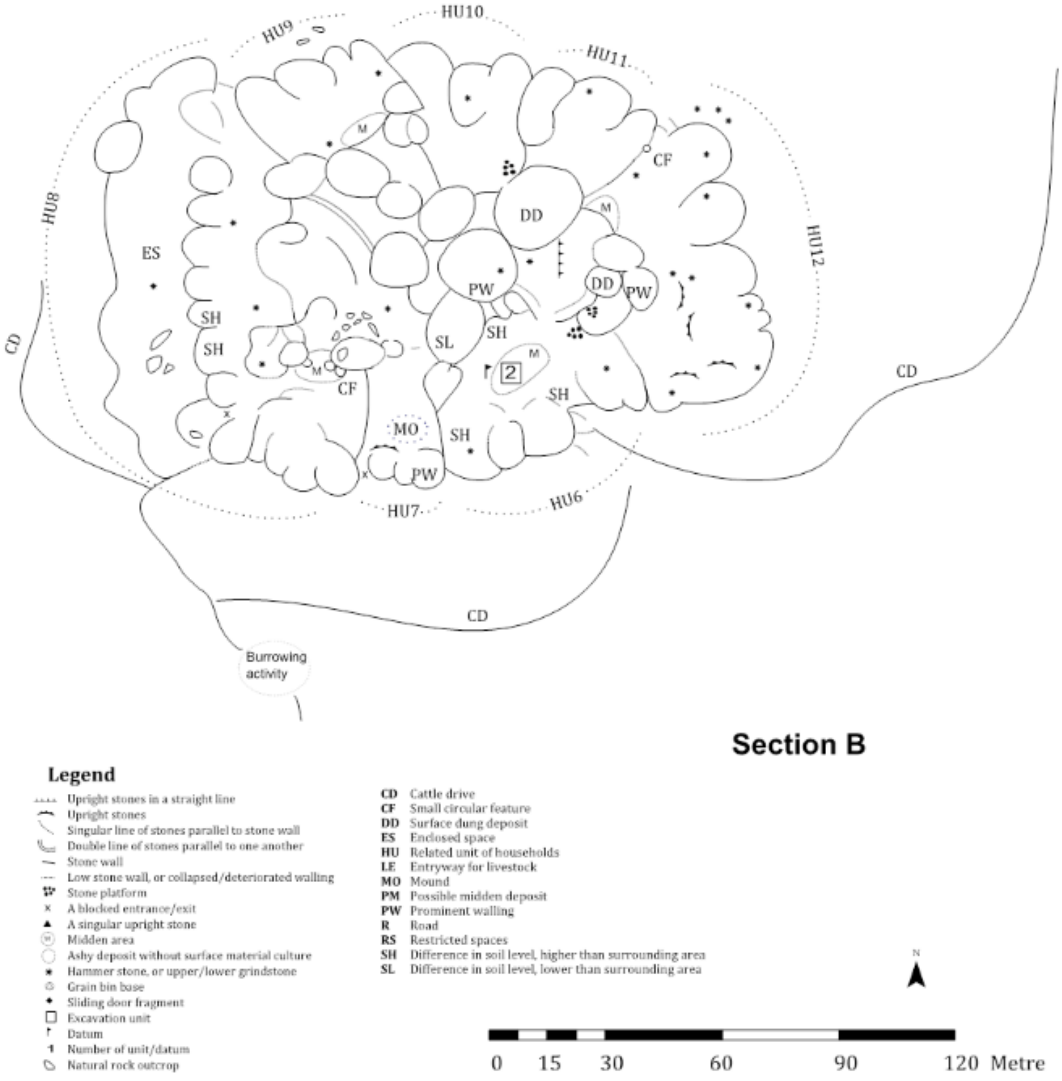


Figure 5.11 Features of section B

The walling along the southwest boundary wall is higher and neater than the rest of the walling in this section. There was a soil mound (marked as MO on the map) in the southern section, in the intervening space between the boundary wall and circular enclosures. Foundation stones of a possible hut were only identified in one bay; this was the bay adjacent to the soil mound. The bay adjacent from the mound also displays prominent walling, and to the west, within the household unit, was a clear entrance that is now blocked by stones. Another blocked entrance occurs in HU8, in the southern part. Within this household unit there is an enclosed space (termed ES on the map) along the western boundary, and a circular enclosure attached to this boundary wall. Within this enclosed space are bays, two of which have higher soil levels (termed SH on the map) than the surrounding bays. The central space associated with the western space (HU8 and HU7) is different from the central enclosures found within the rest of section B and the settlement.

There is a high occurrence of natural boulders within the central space, which restricts movement into the enclosure. There are a number of low walls in this area; these could be used to demarcate the channels of movement, or could be foundations used for fencing in order to privatise this area. Attached to the central enclosures, located within the midden deposit, are three small circular features, each 1m in diameter. Another small circular feature, less than 1m in diameter, is found along a wall in the intervening space, connecting the boundary wall to the central circular enclosures in the northeast part of the section; this feature is unique to unit B, as depicted in Figure 5.12.

Figure 5.12 Small circular feature section B

The soil level is generally higher (termed SH on the map) in the vicinity of HU6, with the exception of the central enclosure adjacent to HU6. This enclosure has a markedly different soil level to HU7, and slightly less so to HU6, which is 1.4m below the soil level of HU7 (marked on the map with the term SL). This is mostly[32] due to the slope of the landscape, as the western central space also slopes down to the north quite significantly. Another area that slopes significantly is the northern part of HU12, where another entryway into the settlement is located. Upright stones, most likely hut foundations, were found in the southeast section in HU12.

The eastern central enclosure part of section B has many features that suggest it is was used as a *Kgotla*. The stone platforms were found in the eastern central enclosure part of section B; a feature commonly associated with high status areas and the *kgotla* (Anderson 2009: Chapter V, Eastern occupational unit, para. 2). A singular line of stones parallel to a stone wall occurs in the central space of the eastern part of section B, in the near vicinity of the other stone platforms; this central space also has a line of upright stones, possibly used as a foundation for fencing. A low wall provides access into the enclosures to the east of this central space. The one enclosure has prominent walling (marked PW on the map) that is built neater and higher than the rest of the enclosure walling, with an ashy surface deposit with no surface material culture located within this enclosure. The enclosure adjacent to this has a surface dung deposit. Figure 5.13 depicts the main livestock enclosure in section B. This livestock enclosure is one of the largest enclosures in the settlement (the other is a livestock enclosure in section A3).

Figure 5.13 Panoramic view of livestock enclosure section B

[32] The other factor for different soil levels, especially in livestock enclosures, is the due to the removal of dung in the enclosure, which alters the soil levels in the enclosures.

The enclosure adjacent to this (to the south west of the enclosure) has prominent walling, with both these enclosures associated with the central space. The enclosures attached or connected to this central space are likely to be part of the *Kgotla*, with different structures used for different aspects of the space, such as a space for private versus public council.

5.2.5. Section C

The boundary wall is scalloped, with a clear intervening unenclosed space between the boundary and central enclosures see Figure 5.14 (see QR code 5). The intervening unenclosed space narrows to the north of the unit, where it eventually becomes an enclosed space connected to the circular enclosures and boundary wall. There are a series of walls along the northern part of the unit; these would have channelled movement into the homestead. Therefore, it is likely that this area was an entrance with two channels, one to the east and one to the west. The whole homestead has been classified as one set of related households, due to the lack of divided spaces. There is an opening to the southeast of the section, across from the platform area.

A midden was found inside an enclosed space in the northern part of the unit, and another in an enclosed space in the central enclosure area of section C. Attached to the end of the bay wall in the northern part of the unit is a small, 1m in diameter, circular feature. A core soil sample was taken within this enclosure (ash soil and ceramic fragments were found in the sample). The majority of the midden deposit is retained behind a wall, but there is a leakage of midden deposit west of the wall into the intervening unenclosed space. Excavation unit 4 was placed in this midden. Both midden deposits are unique features of section C; unique in that the midden deposits were enclosed by walling.

Foundation stones of a possible hut were only identified in one bay in the northwest part of the section. The soil level was consistent, with the bays and intervening unenclosed spaces around the same level. In the intervening space on the eastern side of the unit attached to one of the central enclosures is a stone platform. The enclosure seems to have had an opening, close to where the stone platform attaches to the enclosure, which was blocked at some stage. Opposite the blocked entrance is a low line of stones; this could have been used as a foundation for a fence, blocking any view into the enclosed area. The walls were highest and neatest along this enclosure and the other south connecting central enclosures. This area with the prominent walling is likely to be the *Kgotla* area, with the midden deposit possibly the refuse of the *Kgotla.*

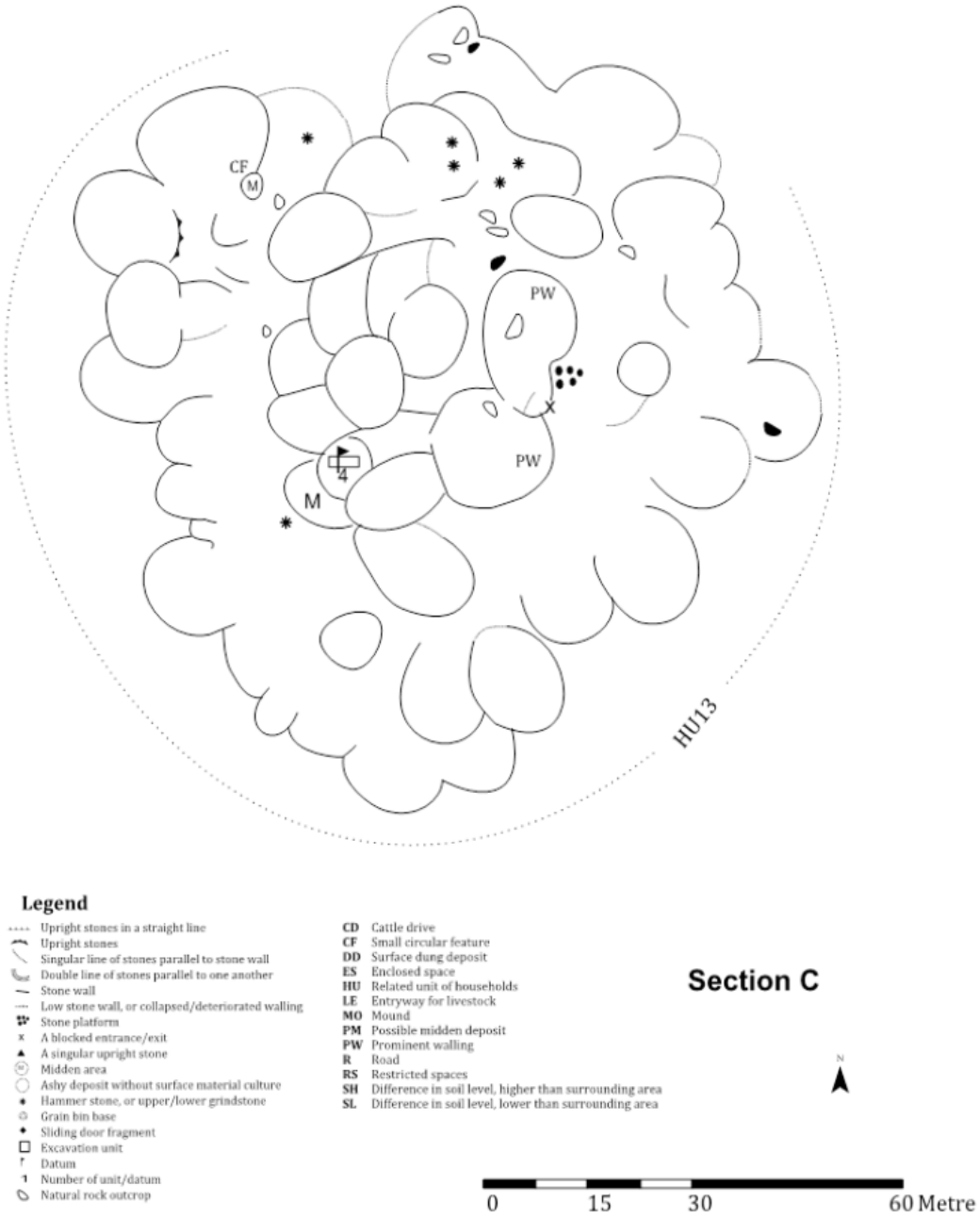


Figure 5.14 Features of section C

5.2.6. A comparison of enclosures throughout the site

As discussed previously, the central enclosures are areas within the centre of the settlement that are enclosed by walling, usually in a circular form; they are generally associated with

livestock but could also be associated with the *Kgotla*. Figure 5.15 (see QR code 2) displays the general size classes of the enclosures within the settlement.

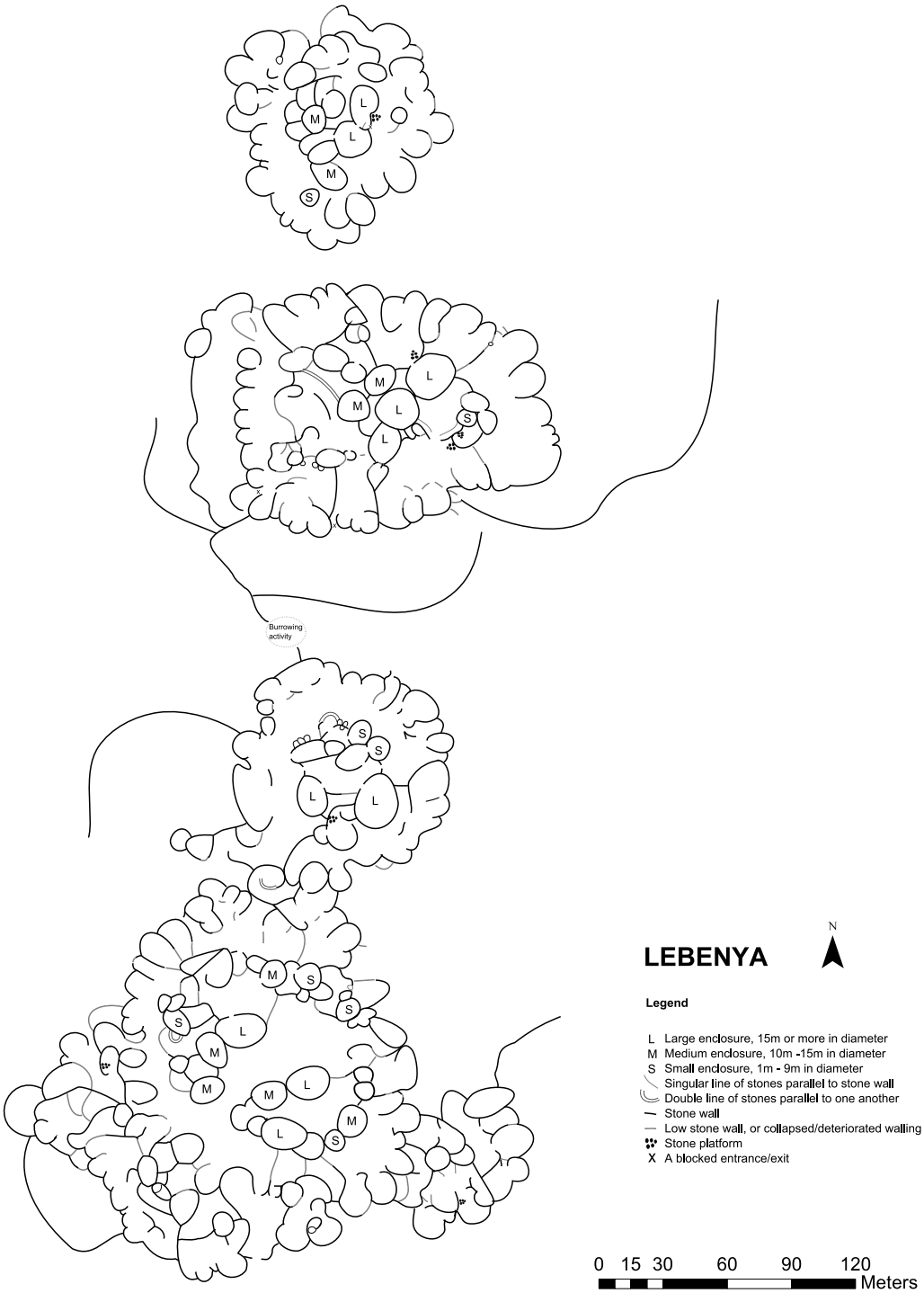


Figure 5.15 Map with size classes of central enclosures

The large central enclosures are predominantly situated to the east side of each section. The largest central enclosures occur in section B and in section A3. The differing sizes of the central enclosures could be reflective of the different livestock kept within the settlement; generally, the large enclosures (16m or more in diameter) were used for cattle, the medium ones (10-15m in diameter) for calves and cattle, and the small ones (specifically those with a diameter of less than 4m) for sheep and/or goats (Pistorius 1992:61).

Some central enclosures can be identified as livestock enclosures, as the soil level in some central enclosures is lower than that surrounding the enclosure. This feature is caused by the repeated removal of dung over some time, resulting in a lower soil surface level. Dung was a source of fuel, but was also utilised for the decoration and surfaces of huts and floors, amongst other uses (Pistorius 1992:61).

The *kgotla*, as discussed previously in this chapter, is the male gathering area. It is commonly identified by its proximity to a central enclosure. Another aspect to consider in its identification is the height of the walls and the creation of secluded spaces. While the height of the walls might be a symbolic feature it is also functional, it alludes to the private and exclusive nature of the affairs conducted within this space (Pistorius 1992:23). Another feature associated with these secluded spaces is a lintel entrance, which also restricts entry into the space, but none were found at the settlement. A lintel entrance could have occurred originally, but due to the common collapses in the present walling it was not possible to identify such a feature. In the following section I will discuss the features of the HU.

5.3. Settlement features

The features found within the different sections can be suggestive of how space was utilised and/or cultural meaning (such as status and rank), while in other instances it remains a riddle. I shall discuss these features in relation to the site and the possible group who inhabited the settlement.

5.3.1. Features linked to rank and status

The prevalent idea of status and rank expressed in a Tswana settlement is through elevation, whereby elevated positions within the settlement would have been reserved for people of

status (Huffman 1986b:301; Pistorius 1996:151). Therefore, elevation and position of households can be seen as an index of rank throughout the settlement. Within section A the elevation is equally high in HU3 (section A2), HU1 (section A1), and HU5 (section A3), while the lowest elevation is HU2 (also section A2). In section B the HU6, HU7, and HU8 are situated on the highest elevations and match the elevation range of HU2 (in section A2). The northern and north eastern parts are the lowest elevated areas of section B. Section C has the lowest elevation within the settlement, and is even lower in elevation than the north and north eastern parts of section B. Some of the largest bays occur in HU1 (section A1), while one large bay occurs in HU5 (section A3), and HU3 (section A2). The largest bays in section B, are comparable to those of section A, and are found in HU6, HU10, HU11, and HU12 (the eastern part of section B). The largest bays of section C (comparable in size to both section A and B) are the first three located in the north west of the homestead and another two in the south east of the homestead. The largest livestock enclosures occur in section B and A3. With the most prominent features associated with rank and status (such as platforms, and prominent walling) found within section B, A3, and A1. Lastly, the walls termed as cattle drives are also associated with these parts of the settlement, with the majority of this type of walling attached to section B.

Not only can an index of rank be seen through the elevation and position of households, but also on a larger scale, where sections of a settlement can be ranked. By applying the threefold division, discussed earlier in this chapter (Schapera 1953), ideas regarding rank and status can be further discussed. According to this division, the centre is the high status section, in which the chief or headman resides, and the section to the west/up of the centre retains individuals of higher rank than the section to the east/lower of the centre (Schapera 1953:47).

The chronology of the establishment of each section of the settlement is not definitively known, but there are various hypotheses. Each section of the settlement could be a subsequent construction, for instance if a new headman required the building of a new homestead (as discussed earlier in this chapter). Another hypothesis is that the sections were constructed and lived in contemporaneously. It seems likely that section A and B were contemporaneous, due to the low/degraded wall that links the two sections. However, section C differs in spatial features from section A and B. This could be due to reasons of chronology. The outer walling of section C is low, which could suggest that the stones from section C's walling were pillaged for the construction of the rest of the settlement. However, if section C is contemporaneous to the other sections of the settlement this difference could be explained by the threefold division.

The elevation of each section in relation to the threefold division is comparable, whereby the section which is slightly elevated to the centre is associated with higher ranking individuals,

while the section which is a lower elevation to the centre is of junior or less ranked individuals. This then would suggest that section B is the centre section, where the individual and household with the highest status and rank stayed. This is supported by the spatial data, the elevation is highest amongst the household units located east of section B (HU6, HU10, HU11, and HU12), and it is likely that the chief or headman of the settlements stayed in one of these household units. Furthermore, this is where the largest bays are located and the households are located near a large livestock enclosure and *kgotla* (see Figure 5.15), a space associated with the headman or chief of the settlement. Section A, especially section A3, would be where other households of high status would be situated; this is corroborated by the ranking of household units according to elevation and position within the settlement. This is further substantiated by the large livestock enclosure and *kgotla*, with prominent walling (see discussion on section A3 features), in this section. According to the threefold division, then Section C would be the homestead of lower status households within the settlement, this is corroborated by the ranking of household units according to elevation and position within the settlement. This suggests that section C was the home of an immigrant 'less ranked' community that were assimilated into the settlement. This could account for section C's size, less distinguishable walling, and unique features.

5.3.2. Comparison of settlement features

As mentioned previously, the occurrence of enigmatic features has value in itself. The occurrence of these features at varying sites allows for a comparative discussion on these features across various sites. Shared features can be culturally, socially, or politically important and can allude to the dynamics of intra-regional relations.

The cattle drive feature, connected to the boundary walls of section B and A, is not commonly seen in other settlements in the region. A similar feature occurs at Olifantspoort 20/71, where instead of a single walled cattle drive there are two double walled cattle drives (Mason 1986:358). Outside of the ZPR region, a comparable feature is seen at the Klipriviersberg 18/69 site (Mason 1986:563). However, Mason (1986:577) does not identify the wall as cattle drive; he sees it simply as an extension of the boundary wall. The feature is a single wall extending from the boundary wall of the settlement to the veldt, the same as those which appear at Lebenya. Another feature that occurs at Lebenya, which is not common in the region, is the occurrence of small circular features. Small circular features, less than a metre in diameter, appear throughout the settlement in different forms: attached within a small enclosure (section

A2), attached to central enclosures both near midden deposits (section A3 and section B), or attached to a dividing wall running from boundary wall to central enclosure (section B), and attached to the end of a bay wall, with the circular feature filled with midden deposit (section C). The small circular feature in section C was unique from the others in form and function; it was part of the bay wall and was of the same height as the boundary wall, it also was positioned in the entrance way into the bay and a possible entranceway into section C. These small circular features, except that of section C, are found at Group III type sites (those of Taylor's 1979 classification system, as discussed in chapter two), one of which is Klipriviersberg 18/69. The possible link between the inhabitants of Olifantspoort 20/71, Klipriviersberg 18/69, and Lebenya is discussed further in this chapter and in chapter seven.

The enclosed (walled) midden deposit in section C is also a distinctive feature, not commonly seen in other settlements in the region. However, this type of feature has been described at Marothodi. At Marothodi type of midden deposit was associated with the court, *kgotla* (Anderson 2009: Chapter VI, The court midden, para.1). Another similar feature, found at Marothodi, is the location of large midden deposits in front of domestic areas, abutting the central enclosure walls, the same location of a majority of midden deposits found at Lebenya (see Figure 5.5). It is assumed that these large middens are the product of many households; therefore, were communal midden deposits (Anderson 2009: Chapter VI, Midden 1, para. 1). The location of large midden deposits in an area of public view and movement may be due to anxieties about the disposal of intimate ash (Huffman & Steel 1996:54). As discussed in chapter three, the southern African agro-pastoralists share a similar worldview, a worldview accounting for two forms of misfortune, causal agents and impersonal behaviour. A causal agent is witchcraft. The concern over witchcraft manifests in various forms, in this instance the location of a midden in public view. This concern about witches stealing ash and utilising it against individuals in the community becomes manifest in the public location of midden deposits (Raum 1973:146 & 152). As Raum[33] (1973:146) states:

> A stranger must certainly not tamper with a homestead's ash. He would be got hold of; there would be a case against him. For ash is used in maleficent magic against its owner… [the ash heap] must be kept under constant observation.

[33] Raum (1973) studied the social functions of avoidances and taboos among the Zulu, so the above statement is representative of Zulu' beliefs, but as discussed in chapter three, the Sotho-Tswana and the Nguni- under which the Zulu fall- share a common worldview; therefore, share similar avoidance and taboo ideas, to a degree.

Therefore, ash was a potentially hazardous substance and it could be dangerous to dispose of in an unwatched space, such as outside the settlement (Anderson 2009: Chapter V, Western occupational unit, para.5). A concern regarding witches utilising intimate items, such as hair or nail clippings, and utilising it against the individuals from whom it came is noted in the worldview of southern African agro-pastoralists (Hammond-Tooke 1974:339). Nonetheless, there is a difference in emphasis between the Nguni and Sotho-Tswana communities, whereby the Sotho-Tswana communities while believing in ancestral and witch causation, are less likely to socially mobilise in action to this concern (Hammond-Tooke 1981:21). For example, the placement of middens outside of the settlement occurs at Molokwane, a Kwena settlement (Pistorius 1992:18), and suggests that the Kwena did not view their ash as a hazardous substance[34] that needed to be monitored. This difference in midden placement and the occurrence of midden deposits within a walled enclosure at Marothodi, led Anderson (2009: Chapter V, Western occupational unit, para.5) to suggest that these are features that depict the Nguni roots of the Tlokwa who inhabited Marothodi. This necessitates further analysis of middens for the understanding of group identity in the region, a concern to be further developed in the following chapter.

5.3.3. Classifying the site

Regional typologies for stone wall structures have been discussed in chapter two. The classification of sites into one or more of these typologies has not commonly been done for SWS found in the North West Province. This is rather regrettable, as stone-walled sites in the North West province show similar architectural trends and settlement patterns as those recorded in Vredefort dome and Suikerbosrand Nature reserve (Sadr & Rodier 2012:1039). In the following section I consider Taylor's and Sadr's comprehensive settlement typology in classifying Lebenya.

The stone wall structures found at Lebenya, based on the wall features and spatial layout, either belong to Group II or III, depending on which section of Lebenya is focussed upon. The following figures (Figure 5.16, Figure 5.17, and Figure 5.18) depict the settlement plans of Taylor's Group I, II and III sites alongside Lebenya. Examples of known sites classified as Group II are Kaditshwene and Molokwane (Sadr & Rodier 2012:1040). Examples of known sites classified as

[34] As mentioned in chapter three, the Sotho-Tswana had a slightly different view to ash (it was viewed as a 'cooling' rather than 'maleficent' agent).

Group III sites are Waterval 11/65, Klipriviersberg 5/65, and 18/69, and Buffelshoek CD 5 and CD6 (Sadr & Rodier 2012:1040, and for a full account of sites listed in each group see Sadr & Rodier 2012).

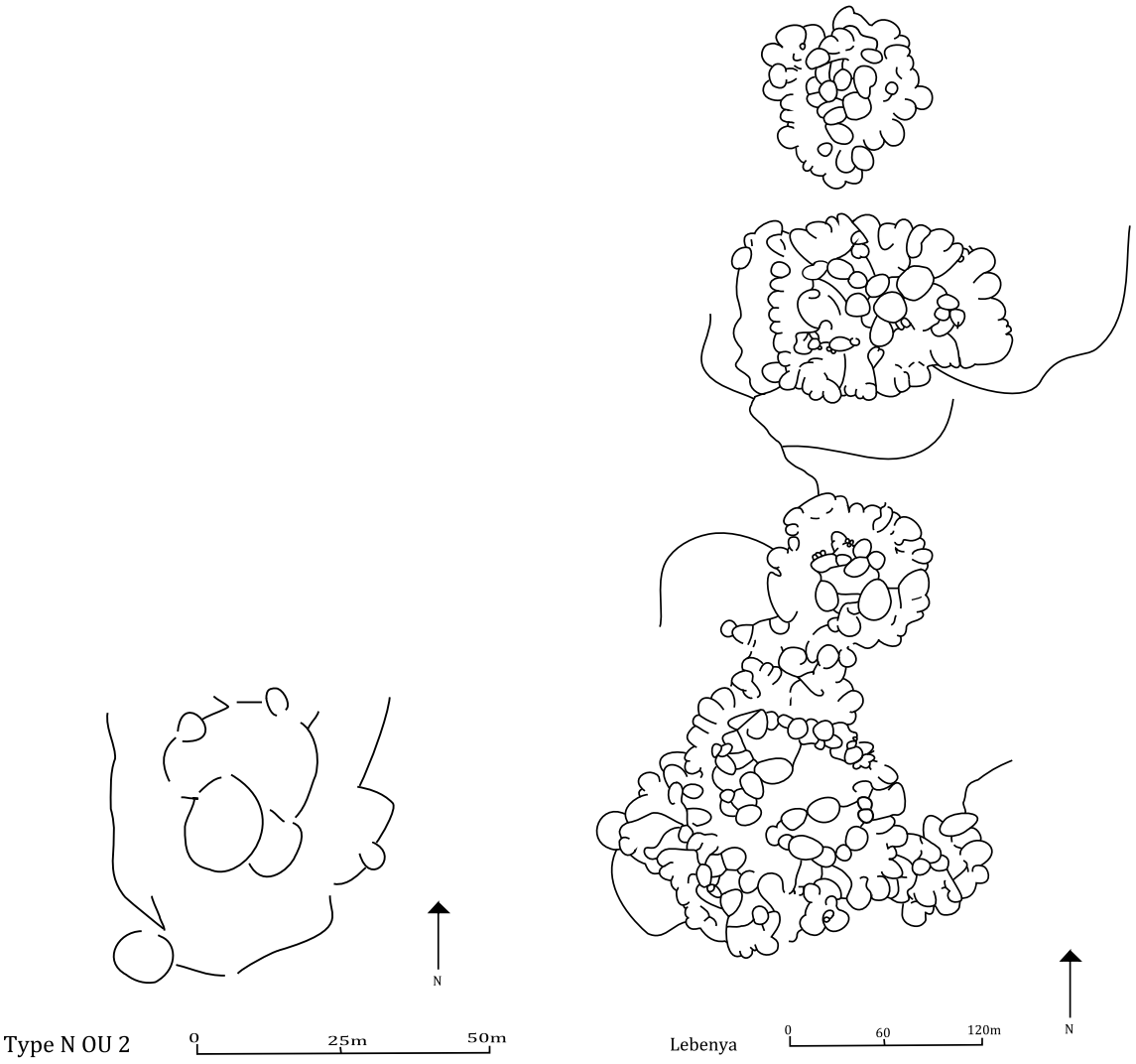


Figure 5.16 Group I site alongside Lebenya (after Maggs 1976b)

Both Group II and III sites date to the 17th to the 19th century CE, and are distributed north of the Vaal river, from Gauteng to Zeerust (Huffman 2007:32 & 38). The Group II walling occurs mainly north of this stretch, past the Limpopo River into Botswana, while the Group III walling occurs mainly to the south of this stretch (Huffman 2007:32). Lebenya falls within the shared distribution area. This could be another reason why characteristics of Group II and III features are apparent at one site. As sites of both Groups occur in this area, it is likely that communities interacted and adopted varying features in a socio-political environment of assimilation (as discussed in chapter two). However, this is what Taylor (1979:107) suggested occurred for

Group III sites, that these sites were the product of interaction between different communities sharing the Vredefort dome area.

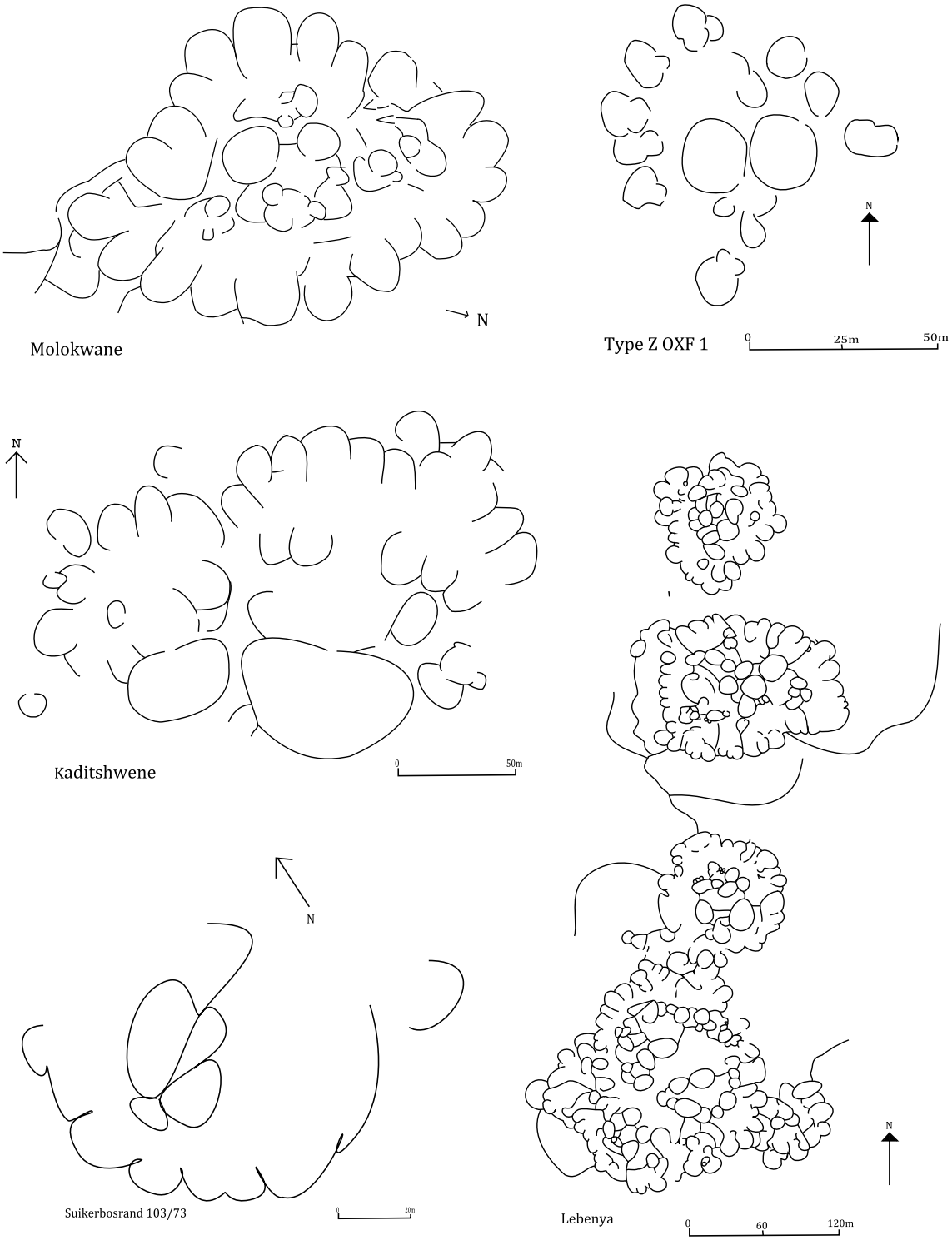


Figure 5.17 Group II sites alongside Lebenya (after Boeyens 2000, Maggs 1976b, Mason 1968, Pistorius 1992)

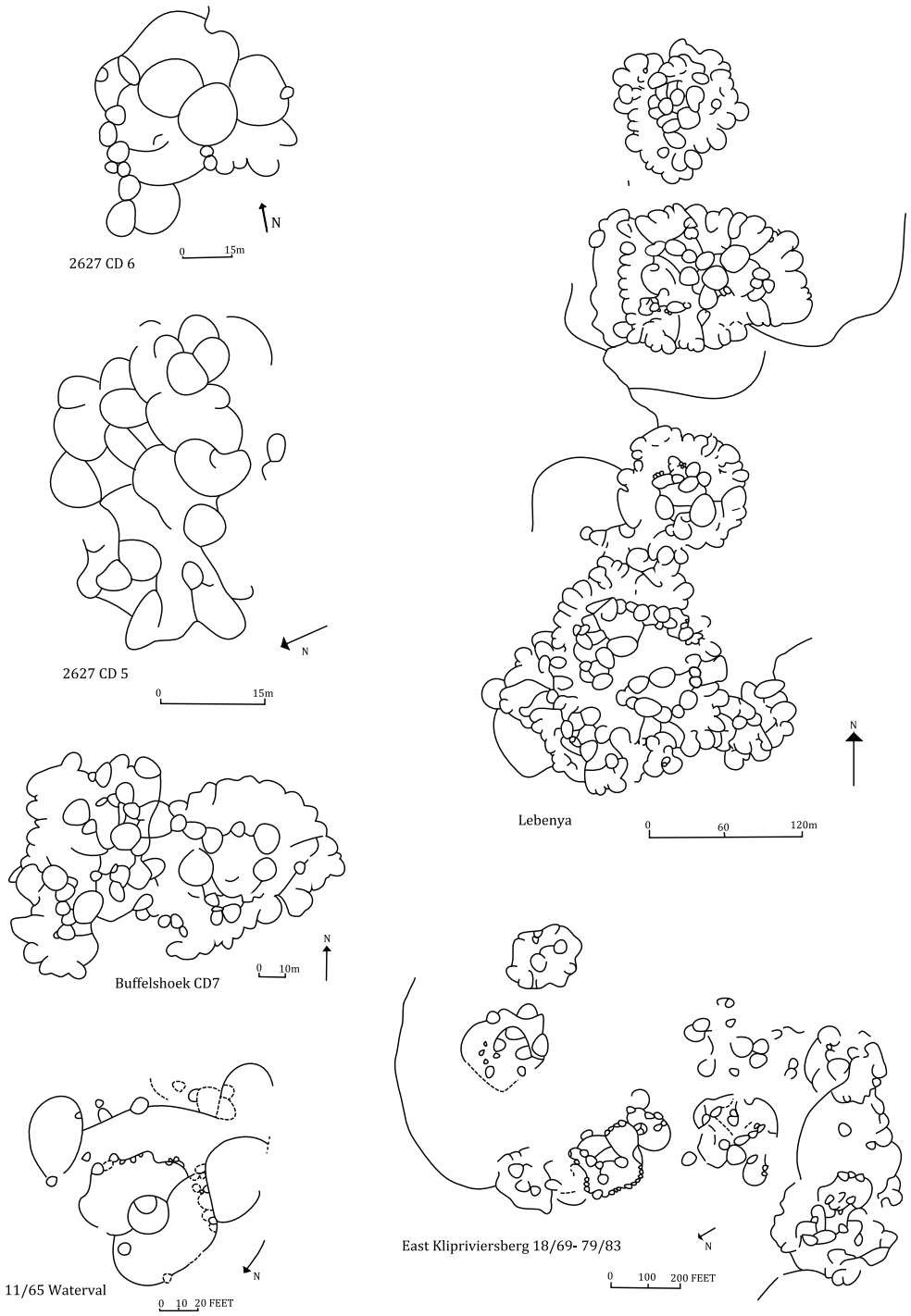


Figure 5.18 Group III sites alongside Lebenya (after Loubser 1985, Mason 1968, Taylor 1979)

The different sections of the settlement have different pronounced features. Section C differs from the rest of the settlement in the intervening unenclosed space between the boundary and livestock enclosures, with the livestock enclosures clustered centrally. Section A and B share

similar features, such as the single walls extending from the exterior boundary to the veldt and the enclosed intervening spaces. Furthermore, sections A2 and A3 have a dense cluster of enclosures and embayments, with the livestock enclosures not located centrally but rather to the east side of section A2, forming a c-shape ring of enclosures (similar to that seen at Doornspruit type settlements). Features found in section A and B, the dividing walls from boundary to central area, the attachment of small circular features to the inner enclosures and along a dividing wall, and the singular wall attached to the boundary to the veldt, are characteristics of Group III sites.

5.4. Discussion

The data acquired from the survey and the mapping of the site allowed for a spatial analysis of the settlement. The spatial analysis was linked to the ethnographic and historical data, chapter two and three, in order to understand the social organisation and daily life of the past community settled at the site. The role of relative elevation and positioning within a settlement allowed for the ranking of household units as well as sections within the settlement. The site was also analysed according to regional stone wall classifications.

In the following section I will discuss the excavations conducted at Lebenya and the material collected from this activity. The spatial data and the excavation data will then be combined in an interpretation of the site in chapter seven.

Chapter 6 Excavation Data

6.1. Overview

This is the second data chapter, and it focuses on the excavation and the excavated material. In this chapter, I discuss the data collected through the excavation processes, as well as the results of fauna and ceramic analysis collected through this process. The results from this chapter are then discussed in relation to the spatial results collected during the mapping process (chapter five).

6.2. The Excavation

As discussed in chapter four, the objective for the excavation was to excavate an area with high material culture potential in order to gain insight into the socio-political dynamics of the past community. Therefore, ashy soil deposits with a concentration of surface material were key areas for excavation, as these deposits represent potential midden areas. From these deposits a selection of coring samples were taken, as to acquire an understanding of the extent and depth of the deposit.

From the site survey and core sampling a selection of potential midden deposits were identified. From this selection, four areas were selected for excavation. Three other high potential areas were identified through coring, but due to the restraint on time and resources, these areas were not excavated. An excavation unit was placed in each section, with two excavation units placed in section A (due to the size of this section). All excavation units were 2m x 2m, except for unit 4 which was a 2m x 1m (due to the size of the enclosure in which the excavation unit was located).

Excavation unit 1 was placed in section A3, unit 2 in section B, unit 3 in section A1, and unit 4 in section C. A datum was set-up near each excavation unit, datum I (S 25.62378˚, E 26.63018˚) near unit 1, datum II (S 25.62274˚, E 26.63057˚) near unit 2, datum III (S 25.62560˚, E 26.63043˚) near unit 3, and datum IV (S 25.62132˚, E 26.63016˚) near unit 4. Figure 6.1 depicts the excavation units and datum points.

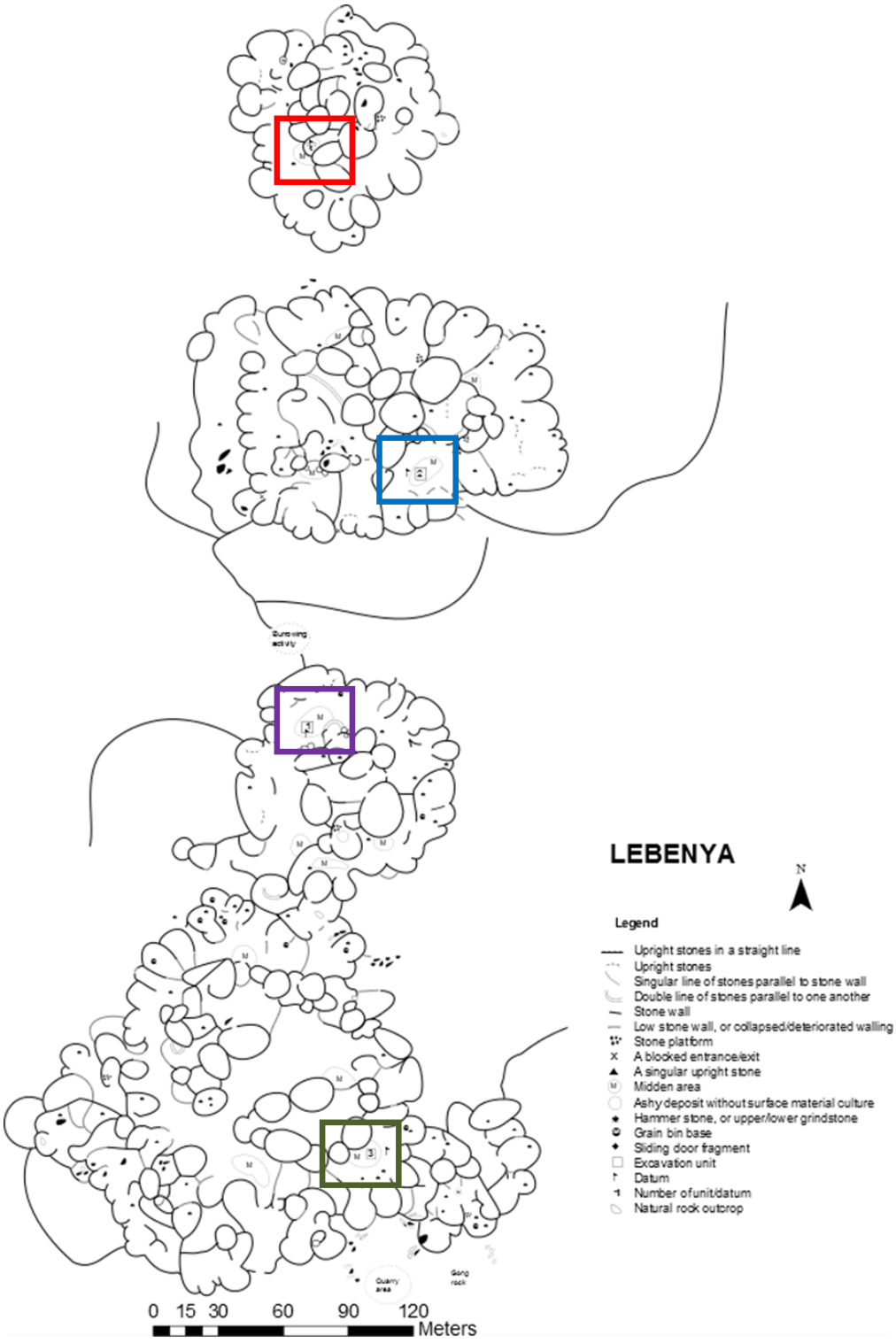


Figure 6.1 Location of excavation units, units highlighted by colour, purple is unit 1, blue is unit 2, green is unit 3, and red is unit 4.

The four excavation areas were chosen due to their proximity to areas of spatial interest, as discussed in chapter 5. Excavation unit 1, 2, and 3 were placed in the intervening space, the space between the boundary dwelling and the central enclosures area. The surface deposit in

each of these areas varied in size. Excavation unit 2 was placed in the area with the widest ashy surface deposit, and was clearly a midden deposit. The extent of the ashy surface deposit in excavation unit 1 and 3 was comparable. At excavation unit 1, a considerable amount of ceramic fragments were scattered in the vicinity of the excavation unit. Excavation unit 3 did not have a significant amount of surface material in the area, but was the nearest ashy soil deposit located to the prominent walling (as described in chapter five). This spatial feature, as discussed in chapter five, is associated with areas of high status. Therefore, excavation unit 3 was located in this area in order to substantiate or provide further information on this claim. The area chosen for excavation in section C was the only area with a surface ashy deposit. Furthermore excavation unit 4 was unique in its location as it was located in an enclosure. This was a rare feature at site, as discussed in chapter five, and necessitated further investigation.

6.3. Profiles and stratigraphy

Stratified sequences are formed by a process of deposition and removal, whereby the stratigraphy enables an understanding of the activity represented in the archaeological record (MoLAS 1994). As discussed in chapter 4, layers were excavated according to 'natural layers', whereby changes in soil texture and colour as well as a change in the density of material culture, guided the creation and closing of layers. The following section is divided into a discussion of each unit's stratigraphy accompanied by a profile image of the unit. Table 6.1 displays the meta-data associated with each excavation unit.

Table 6.1 Meta-data for excavation units

Ex. Unit	Dates	Section	Datum	Co-ordinates	Size of unit	Depth when closed
1	2013/07/15	A3	I	S 25.62378, E 26.63018	Started as a2m x 2m Closed as a 1m x 1m	Centre: 37cm
2	2013/07/16	B	II	S 25.62274, E 26.63057	2m x 2m	Centre: 60cm
3	2013/07/17	A1	III	S 25.62560 E 26.63043	2m x 2m	Centre: 32cm
4	2013/07/23	C	IV	S 25.62132, E 26.63016	1m x 2m	Centre: 47cm

6.3.1. Unit 1

Unit 1 is situated in section A3, in an intervening unenclosed space between the boundary wall and the central circular structures. The surface area had a scatter of ceramic sherds, with a

slight depression to the SE of the unit most likely due to animal burrowing activity. After the initial layer was excavated, the unit was downsized to a 1m x 1m (this being the SE quadrant of the initial 2m x 2m excavation unit). This was due to the lack of material and ashy deposit found in the northern part of the unit.

As shown in the profile image (Table 6.2) a homogenous brown soil dominates most of unit 1, excluding the SE quadrant. Layer one was defined by the predominantly brown soil, and layer two by the brownish grey soil. Below both layers a compact red soil was reached. Table 6.3 and Table 6.4 provide further information on the volume of soil removed per layer and the attributes of each layer.

Figure 6.2 Surface layer (unit 1)

Table 6.2 Southern profile image (unit 1)

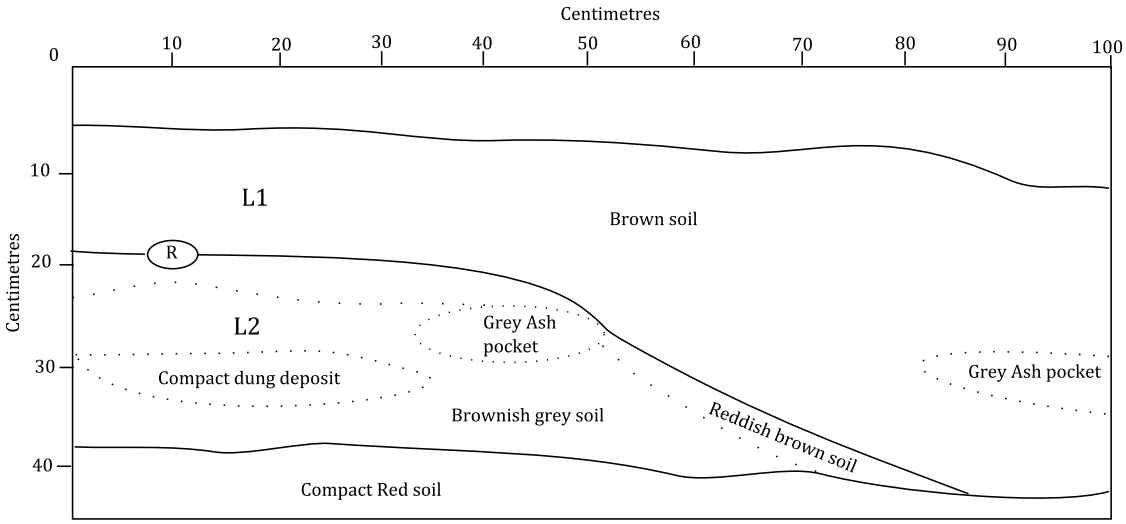


Table 6.3 Volume of soil removed per layer (Unit 1)

	Volume of deposit
Layer 1	615 L
Layer 2	155 L
Total for unit	**770 L**

Table 6.4 Attributes of each layer (Unit 1)

	Soil texture	**Soil description**	**Disturbances**	**Further details**
L1	Light Loam	The soil was predominantly brown, with grey ash pockets in the south-western part of the unit.	Minor insect activity and very little vegetation	Unit downsized to 1m by 1m
L2	Light sand	A reddish brown layer extends from the SE corner to the centre. Under this reddish brown soil, a brownish grey soil was found. A compact dung pocket occurs, interspersed, from the southern part to the centre of the unit.	Minor insect activity and some vegetation.	

6.3.2. Unit 2

Unit 2 was situated in section B in an intervening enclosed space between the boundary wall and the central circular structures. The surface area had scatters of material culture and dung

deposit within a large area of greyish brown (ashy) deposit. The unit was located north of a depression most likely caused by animal burrowing activity (as shown in Figure 6.3). The profile image (Figure 6.5) depicts the southern wall of the excavation unit. The profile section depicts the natural layers found in the unit, note localised pockets of deposits are found within each layer. These pockets of deposits were shallow and/or occurred in parts throughout the layer.

As shown by the profile image, unit 2 had several deposits most of which slope down to the east of the unit. The surface deposit, in the area in which the unit was located, also slopes down to the east, demonstrating the natural lay of the area. The unit had pockets of charcoal deposits for which provenance readings were taken. The carbon was then extracted (for possible future radio-carbon dating). The dung deposit, found near the surface and in the middle of the western quadrant, reoccurred in stages throughout the unit mixed with grey soil. There were also lenses of dark grey soil and grey soil between deposits of brown and red soil. The unit ends on compact red soil. Table 6.5 and Table 6.6 provide further information on the volume of soil removed per layer and the attributes of each layer.

Figure 6.3 Surface layer (unit 2)

Figure 6.4 Base of unit 2

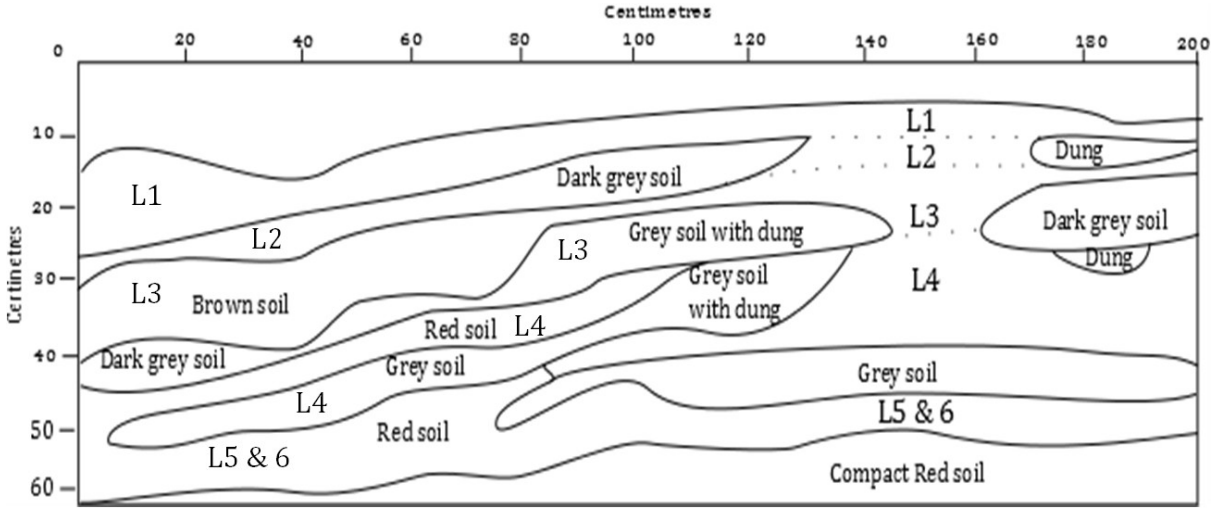


Figure 6.5 Southern profile image (unit 2)

Table 6.5 Volume of soil removed per layer (unit 2)

	Volume of deposit
Layer 1	120 L
Layer 2	126 L
Layer 3	630 L
Layer 4	660 L
Layer 5 & 6[35]	230 L
Total for unit	**1766 L**

Table 6.6 Attributes of each layer (unit 2)

	Soil texture	**Description**	**Disturbances**	**Further details**
L1	Light loam	Brown soil with pockets of dark grey soil and red soil. The red soil occurs around and between roots.	Minor insect activity and some vegetation.	Natural dip in north wall of unit, the area slopes down to the NE.
L2	Loam	Layer is mottled, with dark grey soil interspersed with red soil patches, and dung patches. Dark grey soil found predominantly in South & West quadrants of unit with red showing more in the North & East quadrants.	Minor insect activity and some vegetation.	Increase in material culture, with charcoal prominent in dark grey soil. Dark grey soil is softer than red soil.
L3	Loam	Layer is mottled. Varying soil colours occur from very dark greyish brown, to brown and red, with an ash pocket in NE corner of unit. Dark Grey soil is intermixed with dung deposit which started at the SW corner extending and sloping out to NE corner of unit. No dung deposit in NE corner.	Insect activity and some vegetation	Soil softness becomes more uniform throughout unit.
L4	Light sand	The dung deposit continues through the middle of the layer. Grey soil pockets occur in the SW quadrant, centre and around the mid-section of the eastern wall of the unit. The soil is becoming rocky, and is predominantly red in these areas, specifically the SW corner and along the northern part of the unit.	Insect activity and some vegetation.	Large rocks found in NW corner.
L5 &6	Sand	Predominantly red soil within this layer. Along the northern	Insect activity, and some	The layers were combined, as they

[35] Layer 6 was a gravelly, red deposit; it was joint with layer 5. This was done as it became apparent that layer 6 was a less compact deposit continuing from layer 5.

part of the unit bedrock is reached. Along the southern part of the unit the soil is compact and gravelly	vegetation, with an increase in gravelly deposit.	seem to be from the same natural layer.

6.3.3. Unit 3

Unit 3 was situated in section A1, in an intervening enclosed space between the boundary wall and the central circular structures. The surface area has scatters of ceramic sherds. The unit is located east of a depression most likely caused by animal burrowing activity. The profile image (Figure 6.10) depicts the southern wall.

Unit 3 is characterised by a uniform brown deposit extending down from the surface. This is followed by a grey deposit to the south of the unit and a brownish grey deposit to the north of the unit. Patches of dung (compact and loose), grey soil, dark grey soil, reddish grey soil, red soil, and compact dark red soil occur within the unit. In Layer 3 there is a concentration of rocks that curves from the east wall and appears again from the centre of the southern wall, bordering layer 4[36] in the SW corner, see Figure 6.8. Layer 5[37] occurs in the NE quadrant. The deposit is light brown bordered by a line of white ash and carbon concentrations (see Figure 6.9). The surface of layer 6 is marked by a concentration of stones grouped along the western wall and southern wall of the unit; this stone feature is composed of mainly small stones with three larger stones found along the western wall of the unit. This stone feature could be the foundation of a structure or fence (this is further discussed in relation to the material data for the unit). Table 6.7and Table 6.8 provide further information on the volume of soil removed per layer and the attributes of each layer.

[36] There was a concentration of light grey deposit in the SW quadrant, due to the small volume of deposit it was decided to sample the whole layer; however, this sample does not form part of the discussion of this masters.
[37] Another small volume of deposit taken out as a separate layer for sample; however, this sample does not form part of the discussion.

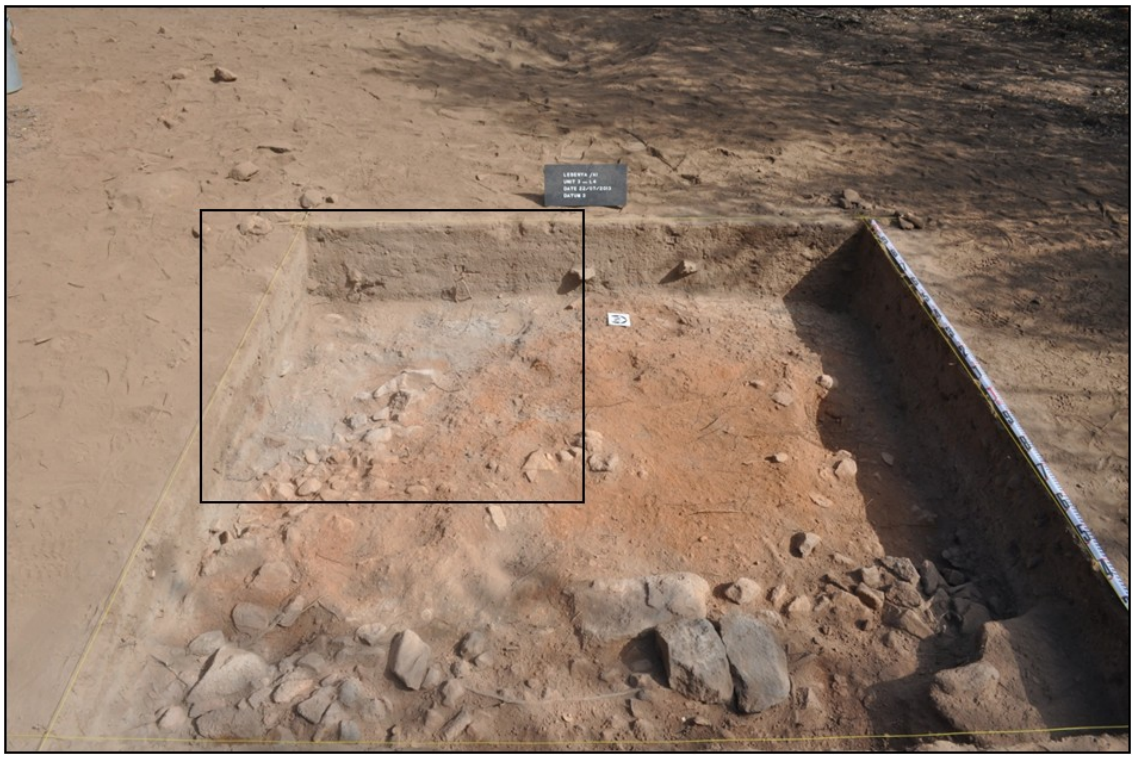


Figure 6.6 Area highlighted is the surface of layer 4 (unit 3)

Figure 6.7 Area highlighted is the surface of layer 5 (unit 3)

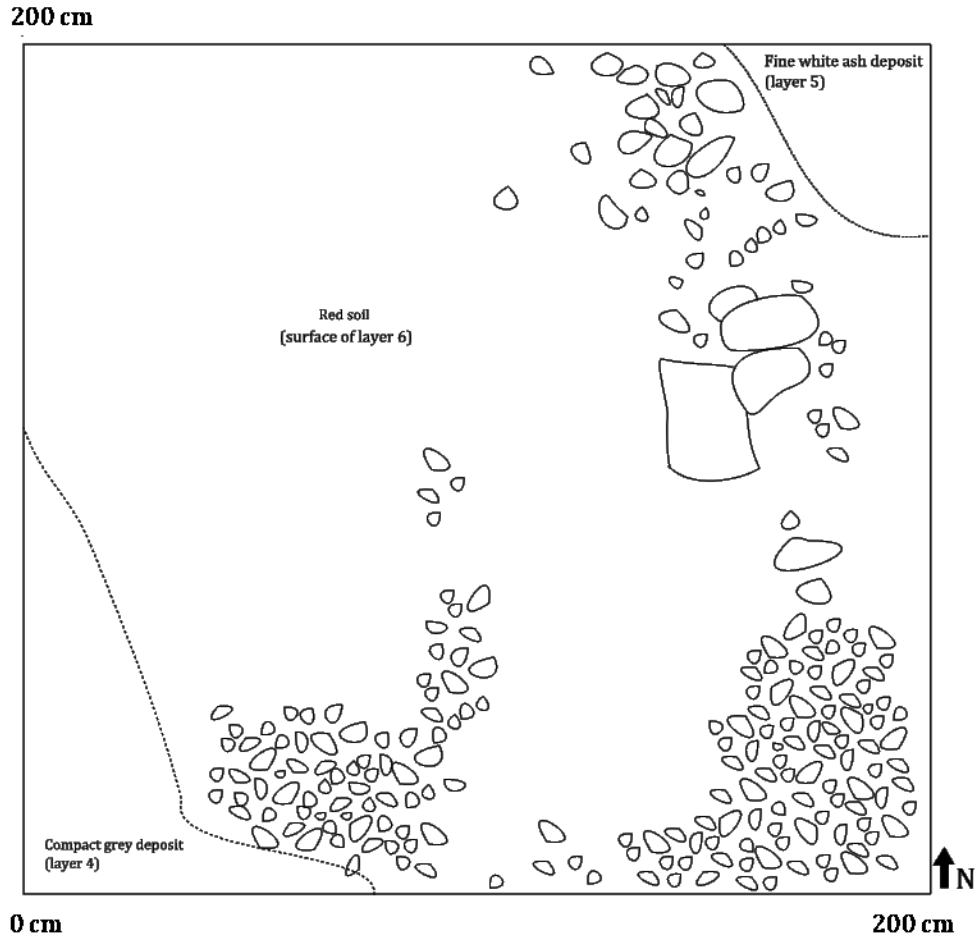


Figure 6.8 Plan of layer 4 and layer 5 in unit 3

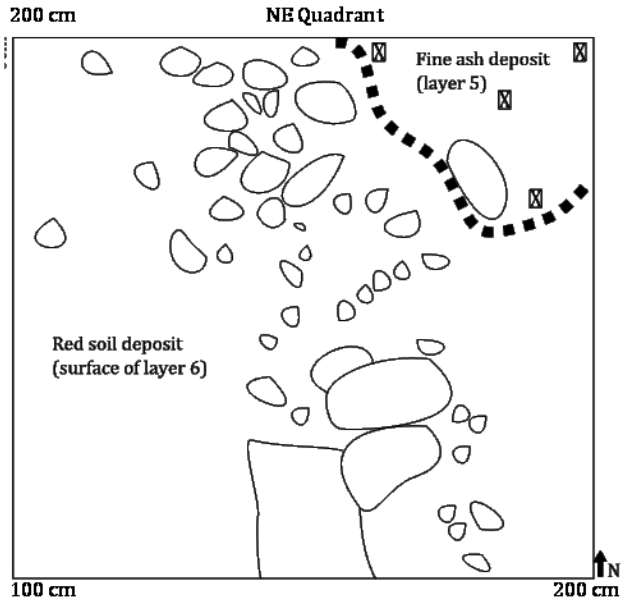


Figure 6.9 Plan of NE quadrant showing details of layer 5 (surface), the dark dotted line, is line of charcoal deposit, and the marked boxes are provienced points.

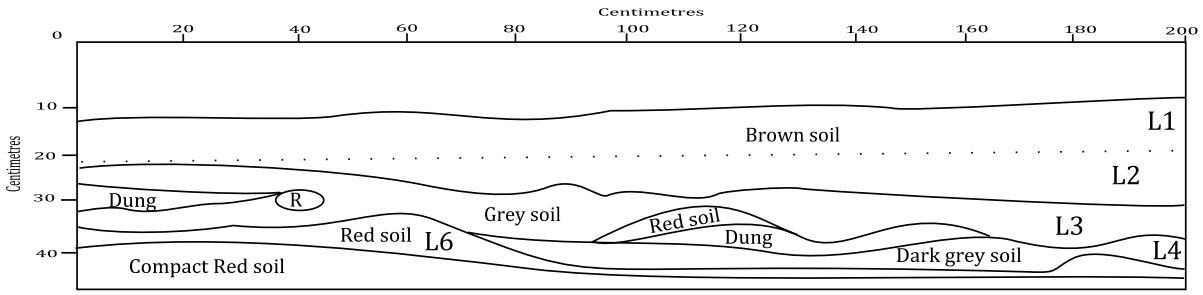


Figure 6.10 Southern profile image (unit 3)

Table 6.7 Volume of soil removed per layer (unit 3)

	Volume of soil per layer
Layer 1	530 L
Layer 2	340 L
Layer 3	415 L
Layer 4	15 L
Layer 5	3 L
Layer 6	220 L
Total for unit	**1523 L**

Table 6.8 Attributes of each layer (unit 3)

	Soil texture	**Soil description**	**Disturbances**	**Further details**
L1	Light loam	The deposit is fine, soft and ashy.	Little vegetation, with minor insect activity.	Flecks of carbon through-out unit, very little material culture.
L2	Light loam	Soil still ashy and loose as in L1, though slightly more compact than L1. Patches of red soil, and dung deposit appear within the unit.	Little vegetation, with minor insect activity.	Carbon cluster in NE quadrant. Layer slopes down from east to west.
L3	Light sand	Soil remains loose and ashy. A compact dung deposit is revealed in the NE quadrant. White ashy pockets, possibly degraded dung deposit, as well as a compact deposit appear in the SE quadrant.	Increase in rock debris in unit, as well as insect activity.	Continued carbon cluster in NE quadrant. Burnt dung deposit and carbon coming out of SE corner.
L4	Light sand	Soil in this section of unit is a compact grey deposit, below compact lens, it is looser and soil becomes light brown	Rocks, and pebbles with some vegetation	Layer from deposit in SW quadrant, L4 is below L3 and on top of L6.
L5	Light loam	Layer was identified in L3. A fine white ash and carbon-lined border form	Slight presence of vegetation	Layer from deposit in NE quadrant. Layer is only a few centimeters deep. L5 sits

		the boundary of this layer.		directly on L3, and has no association to L6.
L6	Light loam	Sterile, gravelly soil.	Minor insect activity, vegetation and rocks of mixed sizes.	Minimal, if any, material culture present. The debris of rocks uncovered in this layer, reveals a stone feature (as depicted in the section drawing).

6.3.4. Unit 4

Unit 4 is situated in section C, in an enclosed walled space connected to the central circular structures. The surface area was bare of material culture; however, there was an animal burrow in the area which revealed a significant grey ash deposit below the red surface soil. The enclosed walled area deposit was also elevated (see Figure 6.11) from the surrounding deposit in section C, with material culture and ashy deposit seeping from the walls into the intervening space. The profile image (Figure 6.14) depicts the southern wall. Figure 6.15 depicts the western profile of the excavation unit; this was included to demonstrate more clearly the segmented layering of deposit in this unit (to be discussed further). Table 6.9 and Table 6.10 provide further information on the volume of soil removed per layer and the attributes of each layer.

Figure 6.11 Enclosed midden deposit, note soil is filled to the brim at the west end of the enclosure.

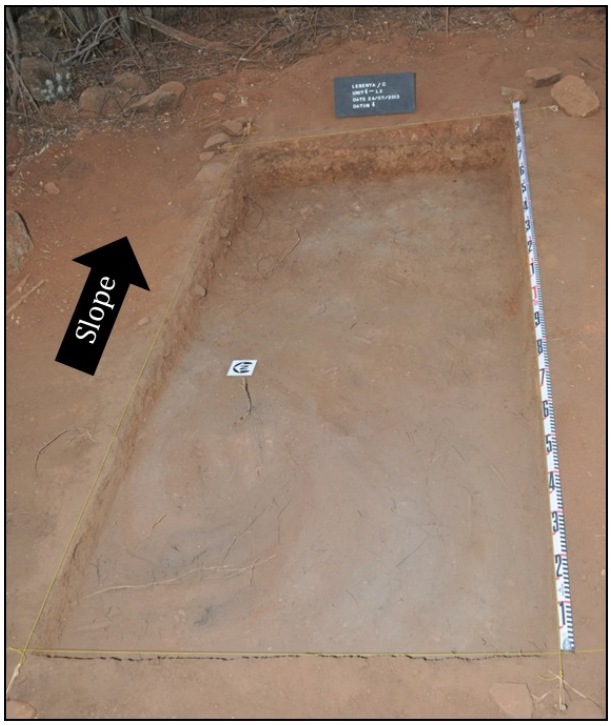


Figure 6.12 Suface of layer 2 (unit 4)

Figure 6.13 Base of unit 4

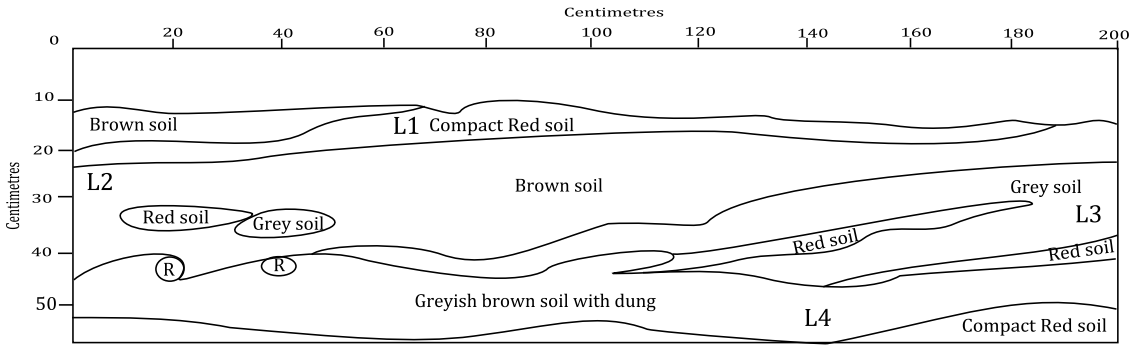


Figure 6.14 Southern profile image (unit 4)

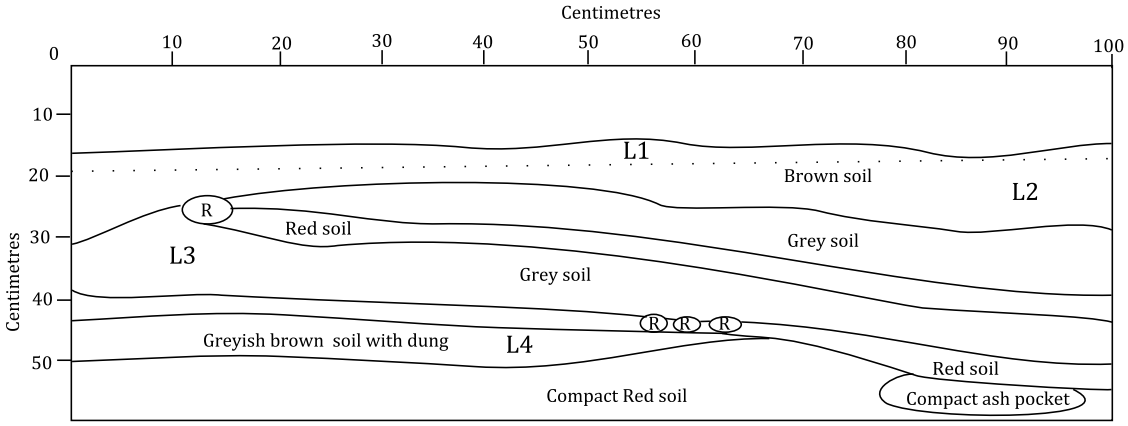


Figure 6.15 Western profile image (unit 4)

Table 6.9 Volume of soil removed per layer (unit 4)

	Volume of soil per layer
Layer 1	110 L
Layer 2	310 L
Layer 3	380 L
Layer 4	186 L
Total for unit	**986 L**

Table 6.10 Attributes of each layer (unit 4)

	Soil texture	Soil description	Disturbances	Further details
L1	Loam	Brown soil, with a layer of compact red soil stretching from the south of the unit, fading to the north and east of the unit. This compact red soil is likely soil displaced from burrowing activity.	Some vegetation. Animal burrow located south of the unit.	No further details.
L2	Loam	Brown soil, with pockets of red and grey soil.	Minor insect activity, vegetation and rocks of mixed sizes.	Layer slopes down significantly from west to east.
L3	Light loam	Soil is softer and mottled. Grey soil mixed with red soil occurs throughout unit.	Minor insect activity, vegetation and rocks of mixed sizes.	Layer slopes down significantly from west to east. Notable material culture increase in layer.
L4	Light sand	Dung deposit found in layer, below dung deposit is compact gravelly red soil	Minor insect activity, vegetation and rocks of mixed sizes.	Minimal, if any, material culture and fauna present.

6.3.5. Discussion on Units

Unit 2 (at 60cm) followed by unit 4 (at 47cm) are the units excavated to the most depth with unit 1 and 3 reaching similar depth readings (at 37cm and 32cm respectively). Unit 1 revealed little variation of stratigraphy and the unit was dominated by a homogenous brown soil; the unit was downsized due to the lack of ashy deposit and low material culture density. Unit 2 showed lenses and pockets of varying soil deposits as well as containing a high volume of material culture. Unit 3 displayed variation in deposit with a low density of material culture excavated from the unit. Unit 3 also had a concentration of rocks (which became apparent in L3) which seems to have been the base of a structure. Unit 4 differed in placement from the rest of the middens in that it was the only midden on site that was found in an enclosed walled structure. Unit 4 displayed alternating layers of ash deposit and red soil (also seen in unit 2), and contained a high percentage of material culture (relative to deposit removed per unit) in comparison to Unit 3 and 1. All units were excavated to a compact red sterile soil level.

6.4. Excavated material

In this section I will discuss the results of the analysis of the various excavated material. I start with the faunal material, then ceramics, and then the rest of the material. Lastly, this data is synthesized in a discussion of the collection.

6.5. Faunal Material

The complete faunal count (NISP and weight) for each unit is given in Table 6.11. The amount of faunal material is highest in units 2 and 4, and lowest in unit 3. Unit 4 has the least fragmented material, while Unit 2 has the most fragmented material.

Table 6.11 Complete faunal count

	NISP	Weight
Unit 1	739	556.8g
Unit 2	5203	2477.6g
Unit 3	445	351.2g
Unit 4	2000	1695.2g
TOTAL	**8387**	**5080.8g**

6.5.1. Species representation

The faunal material was sorted into diagnostic and non-diagnostic groups (see Table 6.12). Of the total amount of fauna recovered per unit (based on NISP) 14% of unit 1's faunal material could be identified to species, 9% of unit 2, 19% of unit 3, and 7% of unit 4. The higher percentage of identifiable fauna in unit 1 and 3 is possibly due to the less fragmented nature of the material. In total 758 specimens or 9 % of the collection was identifiable to species, genus or family level.

Table 6.12 Diagnostic and non-diagnostic faunal counts

	Layer	Non-Diagnostic faunal material		Diagnostic material		Total faunal count for layer	
		NISP	Weight(g)	NISP*	Weight(g)	NISP	Weight (g)
Unit 1	1	254	138.1	24	41.3	278	179.4
	2	426	312.2	35	65.2	461	377.4
Unit 2	1	98	50.1	21	5.7	119	55.8
	2	211	98.7	57	59.6	268	158.3
	3	1853	631.3	207	280.5	2060	911.8
	4	2012	743.3	149	254.9	2161	998.2
	5&6	560	272.9	35	80.6	595	353.5
Unit 3	1	80	64.1	18	6.5	98	70.6
	2	174	94.9	34	27.2	208	122.1
	3	108	67.2	31	70.9	139	138.1
	6	24	20.4	-	-	-	20.4
Unit 4	1	31	3.6	13	143	174	146.6
	2	201	100	58	84.6	259	184.6
	3	1315	550.5	58	564.9	1373	1115.4
	4	176	82.2	18	166.4	194	248.6

*Including shell fragments

See Table 6.13 for a full list of species identified in the collection. I will use the common English names of the various species when discussing them in this text, for their scientific names please refer to the table of species [taxa names follow those presented in Skinner & Chimimba (2005)]. A variety of species were identified, most of which are currently found in the region[38]. The site is slightly outside the distribution region of red hartebeest, blesbok, and suricate. However, their current distribution area is not distant enough to substantiate that the specimens were brought or traded into the settlement. The specimen identified as either impala or springbok is more likely to be impala, as this species occurs more readily in the environment (see chapter two for a discussion of the environment), springbok are found further west of the site.

[38] The regional distribution of species was verified using Badenhorst & Plug (2001) and other sources, as discussed in chapter four.

Table 6.13 Species list, numbers represent NISP count with MNI count in brackets

Taxon (common name)	Unit 1	Unit 2	Unit 3	Unit 4	Total
Homo sapiens sapiens (human)	-	1 (1)	1 (1)	-	2 (2)
Papio hamadryas (chacma baboon)	-	-	-	1 (1)	1 (1)
Herpestidae (surricate/mongoose)	-	-	-	1 (1)	1 (1)
cf. Herpestidae (possible surricate/mongoose)	-	2 (1)	-	1 (1)	3 (2)
cf. Galerella sanguine (possible slender mongoose)	-	-	-	1 (1)	1 (1)
cf. Genetta genetta (possible genet)	-	1 (1)	-	-	1 (1)
Suricata suricatta (suricate/meerkat)	-	1 (1)	-	1(1)	2 (2)
cf. Felis s. lybica (possible African wild cat)	-	4 (1)	-	-	4 (1)
Felidae small (cat)	-	-	-	1 (1)	1 (1)
Carnivora small (carnivore)	-	-	-	1 (1)	1 (1)
Equus quagga (plains zebra)	-	2 (2)	-	-	2 (2)
Equidae (horse/zebra)	-	-	-	1 (1)	1 (1)
Suidae (pig)	-	-	-	1 (1)	1 (1)
Bos taurus (cattle)	2 (1)	17 (3)	1 (1)	13 (3)	33 (8)
cf. Bos taurus (possible cattle)	-	2 (0)	-	2 (0)	4 (0)
Capra hircus (goat)	8 (2)	11 (4)	1 (1)	-	20 (7)
Ovis aries (sheep)	6 (1)	12 (4)	5 (3)	-	23 (8)
cf. Ovis aries (possible sheep)	-	-	1 (0)	1 (0)	2 (0)
Ovis/Capra (sheep/goat)	12 (3)	13 (4)	5 (3)	3 (2)	33 (12)
Alcelaphus buselaphus (red hartebeest)	-	-	-	2 (1)	2 (1)
Damaliscus pygargus (blesbok)	-	3 (2)	3 (1)	1 (1)	7 (4)
cf. Sylvicapra grimmia (possible common duiker)	-	1 (1)	-	-	1 (1)
Antidorcas/Aepyceros (springbok/impala)	-	-	1 (1)	-	1 (1)
Bovidae small (Bov. I)	-	-	-	3 (2)	3 (2)
Bovidae medium non-domestic (Bov. II wild)	1 (1)	2 (2)	1 (0)	1 (1)	5 (4)
Bovidae medium indeterminate (Bov. II)	1 (1)	6 (2)	10 (4)	19 (3)	36 (10)
Bovidae large indeterminate (Bov. III)	-	15 (4)	-	9 (2)	24 (6)
Bovidae indeterminate (bovid)	1 (0)	-	-	-	1 (0)
Hystrix africaeaustralis (porcupine)	-	-	-	1 (1)	1 (1)
Rodentia small (rodent)	1 (1)	9 (3)	6 (2)	10 (5)	26 (11)
Struthio camelus (ostrich eggshell fragments only)	-	3 (0)	1 (0)	-	4 (0)
Aves francolin-sized (bird)	-	1 (1)	-	-	1 (1)
Aves medium indeterminate (bird)	1 (1)	2 (1)	-	-	3 (2)
Serpentes (snake)	-	-	-	3 (1)	3 (1)
Gekkonidae (gecko)	-	-	-	3 (2)	3 (2)
Bufo/ Rana (frog/toad)	-	-	-	5 (2)	5 (2)
Freshwater crab	3 (2)	4 (2)	-	-	7 (4)
Freshwater bivalve	37 (1)	349 (1)	46 (1)	22 (1)	454 (4)
Cypraea sp. (cowrie shell)	-	1 (1)	-	-	1 (1)

The high number of fresh water bivalve (FWB) fragments is due to the fragmentary nature of the specimen, and the easier identifiability of a FWB fragment compared to mammal bone. Their shells also survive much better than vertebrate teeth and bones (Reitz & Wing 2008:203). This holds true for tortoise carapace as well. The domestic and non-domestic bovidae occur throughout the units. Domestic stock make up 15% of the identifiable material, while 8% is indeterminate Bov II and Bov III. Bov II numbers in unit 4 are significantly lower than those found at the other units. Bov III occurs in each unit, with higher numbers found in unit 2 and 4.

6.5.2. Skeletal Part representation

Table 6.14 provides a summary of the bovid skeletal parts identified in the collection. The highest percentages of skeletal parts are teeth, followed by the same number of 'skull and mandible', and phalanx II parts. Metapodial and phalanx I are also highly represented. The high representation of phalanx I and II is expected, as there are more phalanges in a single bovid skeleton compared to other skeletal parts. In addition, these bones generally preserve well due to their density (Boeyens & Plug 2011:12).

Table 6.14 representation of different sized bovid skeletal parts at the site

Skeletal Part	BOV I	BOV II	BOV III	Total BOVID	Percentage of total*
Skull and mandible	1	9	5	15	10.3%
Teeth	0	23	23	46	31.5%
Scapula	0	1	2	3	2.1%
Humerus	0	2	0	2	1.4%
Radius	0	1	2	3	2.1%
Ulna	0	1	1	2	1.4%
Pelvis	0	6	1	7	4.8%
Femur	0	2	2	4	2.7%
Tibia	0	5	3	8	5.5%
Metapodial	0	4	7	11	14.3%
Carpal	0	0	1	1	0.7%
Tarsal	0	0	3	3	2.1%
Sesamoid	0	4	0	4	2.7%
Phalanx I	1	7	3	11	7.5%
Phalanx II	0	10	5	15	10.3%
Phalanx III	0	1	0	1	0.7%

*The percentage at which a part occurs in the total bovid collection, calculated using NISP

Ribs and vertebrae were considered non-diagnostic and therefore are not represented in Table 6.14. The high representation of certain skeletal parts may be due to differing rates of preservation for skeletal elements (see chapter four for further discussion). However, another possible reason for this high presence of skull and lower leg/feet bones in the sample is due to problems with the identification of long bone shaft fragments. Other bones become less represented because it is easier to identify fragmented metapodial shafts, teeth, and phalanges (partly due to density, but partly due to size and morphology) than other skeletal parts (see Marean et al. 2004 for a full discussion). Therefore, a combination of differing preservation

rates and a lack of identification of highly fragmented shaft fragments likely affected the skeletal representation at site level.

However, at a unit specific level the variation between skeletal parts could also be due to cultural factors (see Reid 2004). The bovid skeletal parts identified per unit are given in Table 6.15. The ethnography points to cultural factors affecting the representation of skeletal parts. The ethnographic literature suggests that certain meat cuts were preferred over others, and that certain portions of meat were given according to an individual's status (Grivetti 1976:361). For instance, the Tlokwa have historically ascribed cultural significance to the receiving and giving of meat, whereby the chest of a large wild or domesticated animal would be reserved for the chief, an individual of high status (Grivetti 1976:361). However, the exact meat portions given to the chief can differ depending on the context. At certain Tlokwa festivals, for example, portions of the forelegs are given to the person with the highest status, which could include the chief (Grivetti 1976:363). While the skeletal parts represented per unit do not, in this case, reflect such specific preferences, they do reflect some general patterns. Generally, similar skeletal parts occur at all units. Unit 1 has the least bovid skeletal diversity, and similar to Unit 3, has low BOV III representation. Unit 2 and unit 4 have similar skeletal parts and Bovid classes represented. The most varied skeletal diversity for BOV II occurs in unit 3, and for BOV III in unit 2. These patterns once again highlight the difference and similarities between the units. The higher number of Bov III specimens in unit 2 and 4 could reflect differential wealth at the site. Especially since cattle are seen as a sign of wealth (see chapter three). However, it could also be a reflection of size and context, where single household midden deposits would possibly contain less skeletal diversity of varying bovid classes. A midden deposit where several households contribute to the deposit would likely contribute higher skeletal diversity of varying bovid classes.

Table 6.15 Bovid skeletal part per unit

*Skeletal part[39]	Unit 1			Unit 2			Unit 3			Unit 4		
	BOV I	BOV II	BOV III	BOV I	BOV II	BOV III	BOV I	BOV II	BOV III	BOV I	BOV II	BOV III
Skull and mandible	-	3	-	1	-	1	-	3	-	-	3	4
Teeth	-	3	-	-	16	17	-	1	1	-	3	5
Scapula	-	1	-	-	-	1	-	-	-	-	-	1
Humerus	-	-	-	-	1	-	-	1	-	-	-	-
Radius	-	-	-	-	-	1	-	1	-	-	-	1
Ulna	-	-	-	-	-	1	-	1	-	-	-	-
Pelvis	-	1	-	-	-	1	-	4	-	-	1	-
Femur	-	-	-	-	1	1	-	1	-	-	-	1
Tibia	-	-	-	-	2	-	-	1	-	-	2	3
Metapodial	-	3	1	-	2	8	-	1	-	-	2	4
Carpal	-	-	-	-	-	1	-	-	-	-	-	-
Tarsal	-	-	-	-	-	3	-	-	-	-	-	-
Sesamoid	-	-	-	-	1	-	-	-	-	-	3	-
Phalanx 1	-	1	1	-	-	-	-	3	-	1	3	2
Phalanx 2	-	-	-	-	-	3	-	3	-	-	7	2
Phalanx 3	-	-	-	-	-	-	-	1	-	-	-	-

* Calculated using NISP

6.5.3. Taphonomy

Although the non-diagnostic specimens are not identifiable to species or even skeletal part at times, these specimens still provide useful data on other aspects of the collection. Such data can inform on the deposition context and activity areas found at the site (see chapter four). Table 6.16 contains the NISP count for each category of the collection. Figure 6.16 depicts the distribution of weathered, burnt, butchered, and gnawed specimens found within the diagnostic and non-diagnostic faunal material per unit.

Table 6.16 Taphonomy count for each unit

	Weathered	Burnt	Cut	Chop	Carnivore	Rodent
Unit 1	72 (9.7%)	82 (11.1%)	15 (2%)	15 (2%)	29 (3.9%)	7 (0.9%)
Unit 2	256 (5%)	440 (8.5%)	14 (0.3%)	26 (0.3%)	110 (2.1%)	35 (0.7%)
Unit 3	99 (22%)	115 (26 %)	10 (2.2%)	8 (2.2%)	31 (7%)	14 (3.1%)
Unit 4	244 (12%)	98 (4.9%)	11 (0.6%)	13 (0.6%)	81 (4.1%)	32 (1.6%)

[39] Note on table: all cf. specimens left out of count, horncore identified to bovid, but no further, tibia includes calcaneum and talus

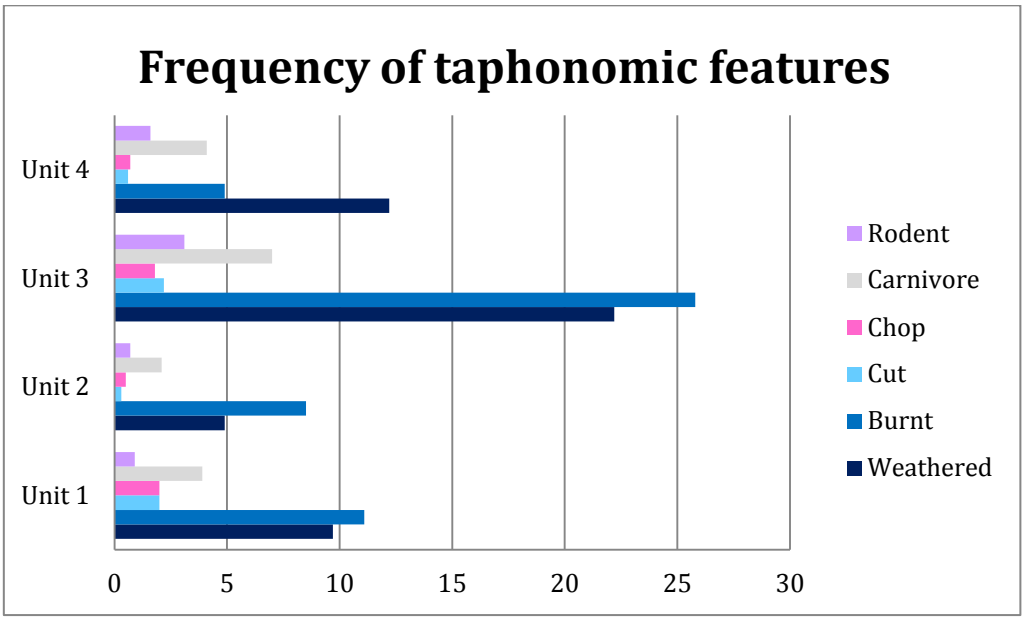


Figure 6.16 The frequency of taphonomic features across the units (numbers across the horizontal axis are a percentage of taphonomic feature per unit)

The taphonomic attributes, while presented as distinct categories, should not be seen as such. Patterns can be better seen by drawing together these different attributes. For instance, high percentages of weathering and burning, could affect the fragmentation rate and the visibility of butchery and gnaw marks. Beyond analytical issues, taphonomic patterns can also reveal cultural information, such as food preparation practices and depositional processes (see Orton 2012). In the following discussion I highlight the taphonomic patterns which contribute to the understanding of activity areas and cultural practices at the site.

Unit 2 displays a lower percentage of weathered specimens compared to the other units, and has a low percentage of rodent and carnivore gnawed specimens. This combination implies that the remains did not remain exposed in the deposit for a lengthy period. The material in the deposit would have been 'buried' by new material or soil quicker than the rate suggested at the other deposits. This variation could be linked to cultural practices (to be discussed further in this chapter). Unit 1 has a low percentage of rodent gnawed specimens, which could suggest that the deposit was not a large or established midden; therefore, not attracting rodents to the deposit. Another possibility is that the deposit was placed in a high thoroughfare area (of people and dogs) which would disturb rodents from the deposit. This is possible as the excavation unit is located in an intervening space (see chapter five for spatial discussion).

Burning[40] and butchery are the visible modifications of Human action on bone. The frequency and location of burning, and the presence of butchered[41] specimens, can inform on food preparation and related areas (Orton 2012:323). The high percentage of burnt and butchered specimens in unit 3 could suggest that this deposit was related to a food preparation area. The excavation data (as discussed for unit 3) revealed a stone feature in the unit; it is possible that this feature is related to a cooking structure. Unit 1 also displays these attributes (though not to same degree as unit 3 in regards to weathered and burnt specimens). The high incidence of weathered, and possibly the burnt, specimens in unit 3 could be due to the deposit being exposed, and not covered by subsequent material debris and soil. Unit 2 and 4, have low percentages for burnt and butchered specimens relative to the other deposits, suggesting that the debris from these deposits was not primarily related to a food preparation area. Lastly, the specimens predominantly burnt or butchered across all units were of bovid and FWB type. A further review on burnt and butchered specimens is discussed shortly (in the 'dietary and non-dietary contributors' section of this chapter).

6.5.4. Modified shell and bone

Out of all the faunal specimens 19 were modified, and seven were possibly modified. Two bird tibia fragments from unit 2 are in the initial stages of bead manufacture. There is also a perforated rodent mandible from unit 3 (Figure 6.17). It also has cut marks, suggestive of skinning. It seems likely that the specimen was worn as a pendant.

The FWB specimens have smoothed edges, and, according to Boeyens & Plug (2011:19), were probably used to smooth the clay of pots and house walls. The worked FWB specimens all occur in unit 1 and 2. Modified bone occurs in all units, except for unit 1. Two, and one possibly worked, BOV III specimens are found in unit 4, two of which are identified as cattle specimens. The rest of the modified specimens are unidentified and consist mainly of bone flakes and long bones. Similar specimens are recorded at Molokwane, Boitsemagano, Mabjaamatshwana, and Buffelshoek (Loubser 1985; Plug & Badenhorst 2006; Pistorius & Plug 2001). The majority of

[40] Though burning could be a direct result of food preparation, in a majority of cases the burning is severe and does not reflect usual cooking practices (Orton 2012:325).
[41] However, the lack of butchery marks does not mean an animal was not butchered. Skilled butchers tend to leave as little marks as possible, as scraping the bone dulls the cutting tool (Orton 2008:282).

the specimens are non-formal bone tools, and are arc-shaped and smoothed at the end. Figure 6.18 depicts two of the modified specimens from the collection, note the similarities between modified bone specimens found at Buffelshoek (Figure 6.19).

Figure 6.17 Perforated rodent mandible from unit 3

Figure 6.18 Modified bone from collection

Figure 6.19 Modified bone from Loubser (1985:83).

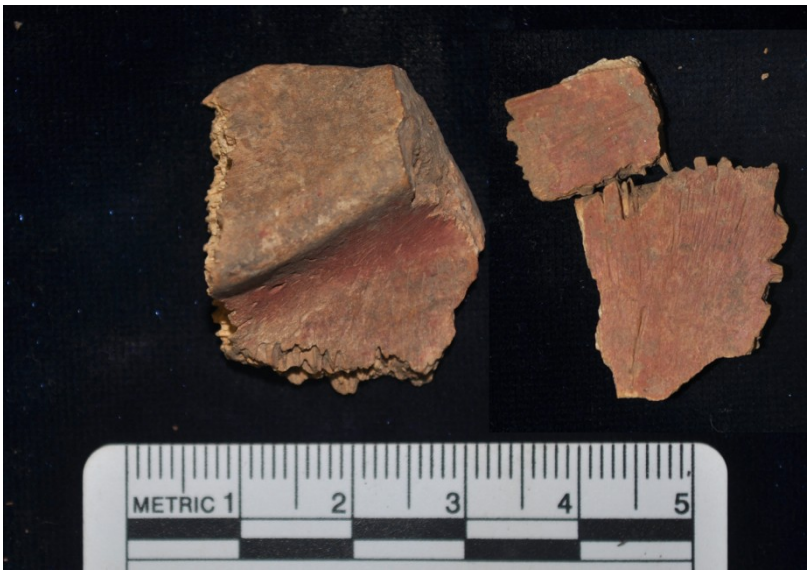


Figure 6.20 Ochre stained interior of a Tortoise carapace

The tortoise was likely a diet contributor, but it seems as if at least one carapace was re-utilized as a container. A number of the tortoise carapace fragments were red stained in the interior (see Figure 6.20) and suggests that the shell was used as an ochre container. Ethnographic records substantiate such a use, whereby containers are diverse in form and matter (Insoll 2011:158).

6.5.5. Discussion of faunal material

The following section brings together the faunal data in a discussion on dietary and non-dietary contributors. However, variability between different Tswana groups and their food practices also needs to be acknowledged.

6.5.5.1. Dietary and non-dietary contributors

Tswana populations for this period were nourished with meat and milk from their domestic stock (Boeyens & Plug 2011; Plug & Badenhorst 2006; Pistorius & Plug 2001), while wild game supplemented their diet and provided items such as natural clothing, implements, medicines, ornaments, weapons, charms, and emblems of status (Morton 2013:5). The faunal collection at Lebenya supports this statement.

Medium-sized bovids (Bov II) are represented at each unit, with higher numbers of larger-sized bovids (Bov III) found in unit 2 and 4. The majority of butchered specimens in each excavation unit were bovid with a high percentage of these specimens representing domestic stock. Other butchered specimens that occur at a majority of the excavation units are freshwater bivalve and freshwater crab. The occurrence of these specimens demonstrates the utilization of riverine food sources, even if only seasonally.

Figure 6.21 Chopped (at both ends) FWC pincer

Non-contributors can range from self-introduced specimens to specimens associated with trade, ornaments, and cultural practice. Taphonomic features may assist the researcher to differentiate between dietary and non-dietary contributors, as well as self-introduced species at the site. Self-introduced species are specimens that entered the midden deposit during or after

the settlement were occupied, and would not display butchery damage (Scott et al. 2009:55). This might explain the presence of rodents, amphibians, and lizard at Lebenya. The rodents occur in all units and are likely[42] to be self-introduced (with one exception[43]). The amphibian specimens[44] occur in unit 4; these could be self-introduced but it is also peculiar that they are only found within one unit. The lizard is also likely self-introduced.

The isolated human specimens, a juvenile incisor from unit 2 and an adult metacarpal from unit 3, are unlikely to be dietary contributors. It is not uncommon to recover isolated human specimens from agro-pastoralist sites; these are associated with ritual, healing, or disposal practices (e.g. Plug & Pistorius 2001:37).

The following discussion focuses on specimens, some of which were dietary contributors, which were utilised for non-dietary purposes.

6.5.5.2. Hunting, Trade, and Status

The trade of animal products prior to the 19th century CE was not large-scale, as discussed in chapter two (see Morton 2013b). During this time, the Tswana predominantly hunted for meat, raiment, ornaments, and status markers for trade at a local-community scale. Grivetti (1981:356-357) describes organised regimental hunts for communal distribution. These hunts were conducted under the discretion of the chief and were initiated primarily when food reserves were low (Grivetti 1981:356-357). The prey species would include a range of carnivores and large to medium ungulates, including small bovids (Pistorius & Plug 2001:37). Ostrich eggs, tortoises, and freshwater bivalves were opportunistically collected predominantly by women and young children on their way to collect water, or to tend the crops (Pistorius & Plug 2001:37). Grivetti (1981) observed that young boys, while herding the stock outside of the settlement, would collect and set traps for birds and small game.

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[42] However, Grivetti (1996:98) mentions that rodents were not totally rejected as food by children at times, though there is no evidence to suggest this of the rodent specimens found at Lebenya.
[43] The modified rodent mandible, as discussed in modified bone section.
[44] Though the amphibian specimens have been suggested as self introduced, they may be associated with non-dietary practices. As noted by Grivetti (1996:98), amphibians are significant in Tlokwa folklore. However, how this significance is interpreted in daily practiceand whether the group inhabiting Lebenya shared this tradition is unknown.

Freshwater bivalves, tortoises and ostrich eggshell are found in the faunal collection. Tortoise carapace fragments, and ostrich eggshell fragments[45] were found, but no skeletal remains of either were identified at the site. Both the carapace and the eggshell were used beyond dietary concerns, the carapace as a container (discussed under modified bone section) and the ostrich eggshell fragments as beads.

Many of the wild animals hunted, were also prized for their skins, some of which were the preserve of royalty (Boeyens & Plug 2011:1). Skins, and other animal by-products, attained from hunting signified status and authority in the pre 19th century CE of the Tswana in the ZPR region. In the Lebenya collection, the African wild cat specimen suggests such a purpose. There are cut marks on the phalanx II pieces of a likely African wild cat. The location of these marks, suggest that the animal was skinned, with the skin used as a dress item (Badenhorst & Plug 2006:63; Morton 2013:6). This specimen was found in excavation unit 2, in section B. The occurrence of a carnivore specimen, the skin of which is a high status object, supports the assertion that section B (as discussed in the spatial data chapter) is the homestead of the chief. Therefore, items linked to high status might be more likely to found in this excavation unit than others. Other possible animals in the collection utilised for raiment are shown in Table 6.17 (after Morton 2013[46]).

Table 6.17 Historically documented use of specific animals for raiment and ornament items

Animal	Closest comparative in collection	Raiment and ornament Type	Unit
Guineafowl	Bird (medium sized)	Plumes and beads[47]	1 & 2
African wild Cat	Cf. African wild Cat	Fur and tail used for cloak	2
Duiker	Duiker	Leggings	2
Weasel/ferret/Meercat	Mongoose	Fur and tail cloak	2 & 4
Sprinkbok	Blesbok	Skin used as a sling Skin used as a knapsack Head sash	2, 3 & 4

[45] Ostrich eggshell fragments occurred, either as irregular fragments (less than one cm in size) or incomplete to complete bead fragments (these are listed and discussed later in this chapter). It is unknown if these fragments were collected as a raw material for bead production, or from eggs collected for consumption, or both.

[46] Morton has synthesised information regarding wild animals and their utility from varying historical sources: Barrow (1806); Borcherds (1861); Burchell (1824); Campbell (1813 & 1822); Cole & Moncho-Warren (2012); Lichtenstein (1973 & 1815); Kay (1834 & 1835); Kirby (1939&1940); Moffat (1841); and Schapera (1965).

[47] This is not suggested by Morton (2013), but from the Lebenya faunal and bead collection. Tibia fragments of medium sized bird shows modification, likely part of the bead making process. The bead collection displays further worked bird bone (discussed further in bead section).

Sprinkbok	Springbok/Impala	Skin used as a sling Skin used as a knapsack Head sash	3
Warthog	Pig	Turban	4
Porcupine	Porcupine	Skin made into a hat Hair used for headdress Quill headdress	4
Hartebeest	Hartebeest	Skin used as a cloak Tail hair as cloak fringe Tail hair as head ornament	4
Snake	Snake	Head adornment	4

The majority of animals possibly used for raiment and ornament are found in excavation units 2 and 4. Unit 4 contains a wide variety of animals which could have been used for such purposes (this is discussed shortly). A cowrie shell was found in unit 2; this is indicative of trade, as the cowrie shell is only found along the east African coast (Mason 1974:212). At Molokwane, cowrie shells have their dorsal surfaces cut away and the cut edges are worn smooth, which is indicative that the specimen was worn as a dress item (Pistorius & Plug 2001:37). Cowrie shells as dress items usually grace the apparel of high status figures, such as diviners or other officials (Pistorius & Plug 2001:37). The cowrie shell, another status associated item, was retrieved from unit 2 (Figure 6.22).

Figure 6.22 Cowrie shell fragment from Unit 2

6.5.5.3. Taboo, Charm and Medicinal specimens

The different groups of Tswana people are usually associated with totem animals. The members of such a group may not kill, eat, or have any contact with the skin of their totem animal (Massie 1905:125; Schapera 1946:18). These and other animals could be restricted for dietary

consumption based on the specific taboos of the community (Plug & Badenhorst 2006: 63). There are several animals which are taboo to different Tswana groups. For example, some avoid porcupine consumption as it is said to resemble pork[48] (Grivetti 1996:100).

Other animals could be used for ritual activity, charms, and medicine, such as for the act of divining (Plug 1987). A diviner would use a set of objects; these collected items could range from botanical material, stones, seashells, tortoise shell, and other skeletal parts (Plug 1987:50-55). The species included in such sets were lion, dog, hyena, horse, pig, warthog, cattle, sheep/goat, impala, duiker, steenbok, klipspringer, aardvark, baboon, bullfrog, and chicken. Domestic substitutes were made in the absence of wild animals (Plug 1987:57). The primary skeletal parts used in divination sets are horn-sheaths, hoof-sheaths, first phalanges, carpals, and astragali (Plug 1987:57). However, the interpretation of ritual activity should be strengthened by other collected data (see Plug 1987).

The specimens found at Lebenya do not suggest a primary ritual context throughout the site. Table 6.18 lists the Lebenya collection specimens to those associated by Morton (2013) to charm and medicine making. However, one specimen does suggest ritual activity. Only the Baboon specimen matches the description[49] given by Morton (2013:7). The baboon specimen, a portion of burnt femur, matches the description aptly. Baboon specimens have been associated with medicinal, social, and divination contexts (Plug 1987:57). The baboon specimen occurs in unit 4, where a wide variety of other species are found (as mentioned in previous section).

Table 6.18 Historically documented use of specific animals for charms and medicine

Animal	Closest comparative in collection	Charms and medicine	Unit
Small antelope	Duiker	Horn used as amulet and blood-drawing cup	2
Baboon	Baboon	Bones burned to make rain	2 & 4
Blesbok	Blesbok	Bones burned to make rain	2, 3 & cf.4
Antelope	Springbok/Impala & Hartebeest	Hooves cut into pyramid or dice and used in divining	3 & 4

Another specimen found in unit 4 associated with medicinal practice is snake. Snake is generally rejected as food by Tswana groups, and is predominantly only ingested as medicine (Grivetti

[48] Interestingly, the only pig/hog specimen identified at the site occurs in the same unit as the porcupine (unit 4).
[49] The other specimens are not of the skeletal part or in the state as described by Morton (2013).

1996:107). Unit 4 is the only deposit that could be associated with ritual activity based on this evidence.

6.5.5.4. Use and deposition context

The higher percentage of identifiable faunal material in unit 1 and 3 is possibly due to the less fragmented nature of the faunal material, but perhaps also reflecting area usage or disposal habits. Unit 3 had a much lower number of fauna in relation to the other units, which perhaps reflects a short term midden deposit or an area not related to food disposal. Unit 3 has the highest percentage of weathered, carnivore, and rodent gnawed specimens, this area was likely the most exposed. This suggests that Unit 3, and possibly Unit 1, were primary rather than secondary deposits.

Unit 2 has a low percentage of weathered specimens as well as a low percentage of rodent and carnivore gnawed specimens. This indicates that the midden deposit was not exposed to the same environmental conditions and scavenging animals as at the other units. This is suggestive of midden capping; a practice by which midden deposit is sealed with a layer of red sterile soil (as described in the stratigraphy section). This practice has social significance (see chapter five, comparison of settlement features). Unit 2 and 4 have a low percentage of butchery marks on the specimens, suggesting that food preparation was not a primary activity in that area. Unit 2 and 4 have a high number of fauna in relation to the other units, suggestive of a long term midden deposit.

6.6. Ceramics

The complete ceramic count for each unit is given in Table 6.19. The largest quantity of ceramic material is in unit 2, and lowest in unit 3. The material in unit 1 and 2 is slightly more fragmented than the material from unit 3 and 4. The ceramic material was sorted into diagnostic and undiagnostic groups, according to the principles established in chapter four, see Table 6.20.

Table 6.19 Total number and weight of sherds collected per unit

	No. of sherds	Weight
Unit 1	409	3284g
Unit 2	701	5929g
Unit 3	289	2955g
Unit 4	383	3692g
TOTAL	**1782**	**15860g**

Table 6.20 Total count of non-diagnostic and diagnostic ceramics

		Non-Diagnostic ceramic material		Diagnostic Ceramic material		Total ceramic count	
	Layer	NS*	Weight(g)	NS	Weight(g)	NS	Weight
Unit 1	1	327	2230	33	243	360	2473
	2	46	800	3	11	49	811
Unit 2	1	139	760	12	38.8	151	798.8
	2	93	530	8	30	101	560
	3	220	2310	16	70	236	2380
	4	152	1600	11	50	163	1650
	5&6	47	530	3	10	50	540
Unit 3	1	114	1030	15	80	129	1110
	2	83	1000	14	125	97	1125
	3	42	450	9	120	51	570
	4	-	-	-	-	-	-
	5	-	-	-	-	-	-
	6	6	90	6	60	12	150
Unit 4	1	24	190	1	2	25	192
	2	157	1375	22	100	179	1475
	3	144	1550	25	375	169	1925
	4	10	100	0	0	10	100

*Number of sherds

Of the total number of ceramics recovered per unit: 9% of unit 1's material was diagnostic, 7% of unit 2's material was diagnostic, 15% of unit 3's material was diagnostic, and 13% of unit 4's material was diagnostic. The higher percentage of diagnostic ceramic material in unit 3 and 4 is possibly due to the less fragmented nature of the material. The collection was dominated by

non-rim plain sherds, and, out of the total collected ceramic material, only 10% of the collection was diagnostic.

6.6.1. Diagnostic ceramics

The total number of diagnostic ceramic sherds is 178 out of a collection of 1782 sherds, and the total number of diagnostic vessels[50] is 168. The varying number of sherds identified to various features is listed in Table 6.21. Within the diagnostic collection 41% of the ceramics could be identified to vessel type[51]: the majority of vessel types fall within type 1A (smooth necked jar), followed by type 1C (straight necked jar) and 2B[52] (straight open bowl), with a paltry number of 1B (short necked jar) vessels, as depicted in Figure 6.23.

Table 6.21 Percentage and number of sherds displaying various diagnostic features

Identifiable features	*Number of Vessels	**Percentage of diagnostic collection
Vessel form	74	44%
Rim sherd/extent	156	93%
Rim type	70	45%
Rim diameter	36	23%
Surface treatment	60	36%
Decoration	10	6%

* Number of vessels contains 'cf.' counts
** Percentage calculated from total diagnostic vessel count (168), except in the case of rim type and rim diameter which is calculated from the total of rim sherds (156).

The frequency of different vessel types in each unit is depicted in Figure 6.24. In unit 1 only jar types occur in the assemblage. In unit 2 there is high number of jars, specifically smooth necked jars and a bowl. In unit 3 there are a high number of jars and some bowls. Unit 4 has a high

[50] Sherds can be fragments of one vessel, or multiple. By noting similar profiles some sherds can be refitted to form a part of, or complete, vessel. Therefore, diagnostic vessels refer to sherds, with at least one sherd displaying a diagnostic feature, which form part of one vessel.
[51] Some fragments could not be identified to either straight-necked bowl or straight-necked jar type due to the size of the fragment and or the deterioration of the rim surface. These specimens, classified as 1C/2B, were not included in the total vessel type count.
[52] Vessel type 2A was not included as it was not identified in the collection.

number of jars, specifically straight necked jars, and a high number of bowls. Unit 3 and 4 have the highest percentage of bowls per unit. No necked bowls were identified in the collection.

Within the diagnostic collection 93% (n=156) are rim sherds; those which were not rim sherds consist mainly of modified ceramic sherds (to be discussed in the modified ceramics section). A lug and a lid fragment are also part of the non-rim diagnostic material (see Figure 6.26).

Out of the total rim sherds 97% (n=68) could be identified to rim type. The most prevalent rim type was flattened; this could be so that there is a flat surface for a lid[53]. The frequency of different rim types in each unit is depicted in the Figure 6.28. In unit 1 rounded rims are predominant. In unit 2 and 3 flattened rims are predominant. In Unit 4 flattened rims are predominant. Unit 4 is the only unit with a high percentage of tapered rims (discussed further shortly).

As shown in Figure 6.29, certain rim types occur more frequently with certain vessel shapes: vessel shape 1A was likely to have rounded or flattened rim types, 1C was more likely to display a flattened rim type, and 2B more likely to be tapered. There is not sufficient data to associate vessel type 1b with a rim type. However, it seems likely that jars were more likely to be rounded or flattened and bowls to be tapered. This suggests that rim type was perhaps related to vessel type, and that the higher occurrence of tapered rim types in Unit 4 correlates with the high number of bowls (in relation to the other units) occurring in this unit.

Out of the total rim sherds 23% (n=35) could be identified to rim diameter, with the majority falling within the 10-15cm and 20-25cm bracket (see Figure 6.30). The smooth necked jar generally had a smaller orifice range than the straight necked jar, and was most likely used either for storage, and/or cooking, and/or the transport of goods.

One of the reasons for the low identifiable number of rim diameters could be due to the rim extent. The majority of the rims are a centimetre in extent, as depicted in Figure 6.31, with a rim extent of no larger than 10cm. Out of the total diagnostic material, 6% (n=10) is decorated and 36% (n=60) have a form of surface treatment (discussed further in the following section).

[53] However, it is just as likely to do with style or accident as function (Henrickson & McDonald 1983:682).

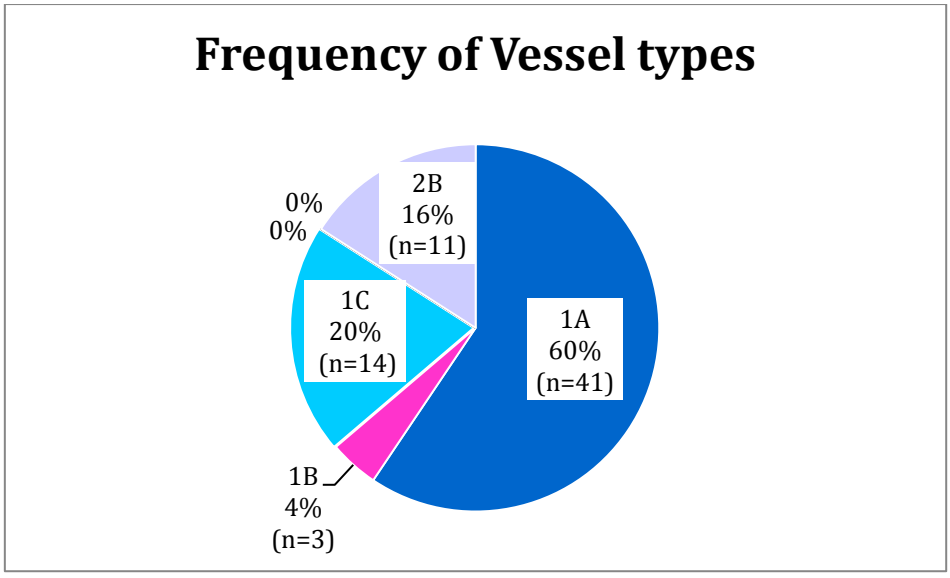

Figure 6.23 Frequency of vessel types in collection

Table 6.22 Number of vessel types per unit

	1A	1B	1C	2B
Unit 1	2	0	2	0
Unit 2	18	2	1	1
Unit 3	11	1	4	4
Unit 4	10	0	7	6

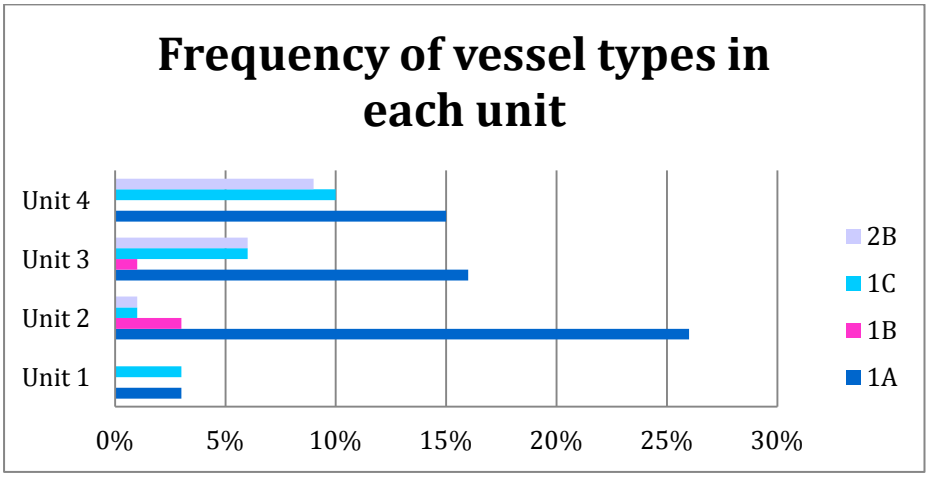

Figure 6.24 Frequency of vessel types in each unit

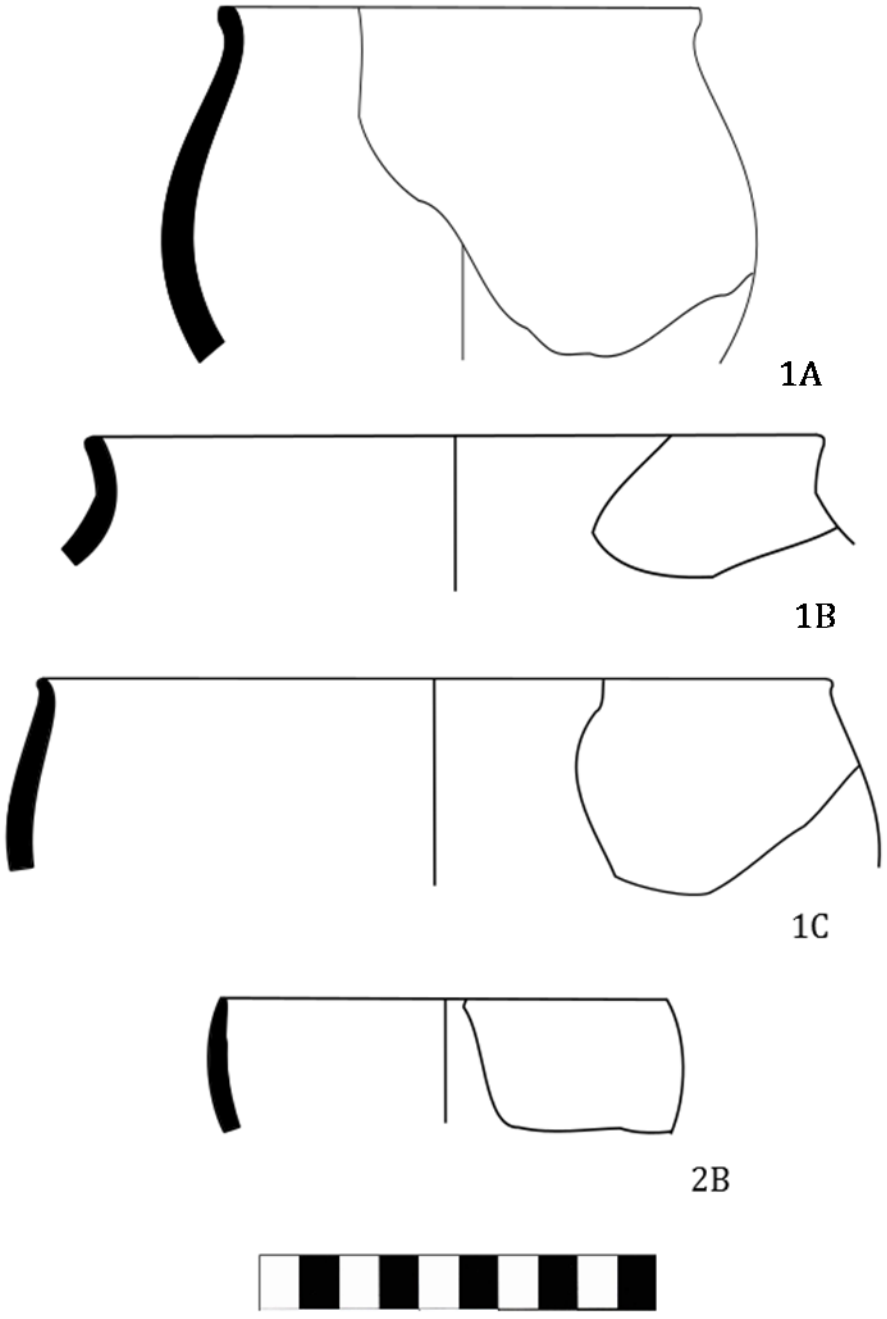

Figure 6.25 Ceramic forms in collection

Figure 6.26 A lid and lug fragment, part of the collection

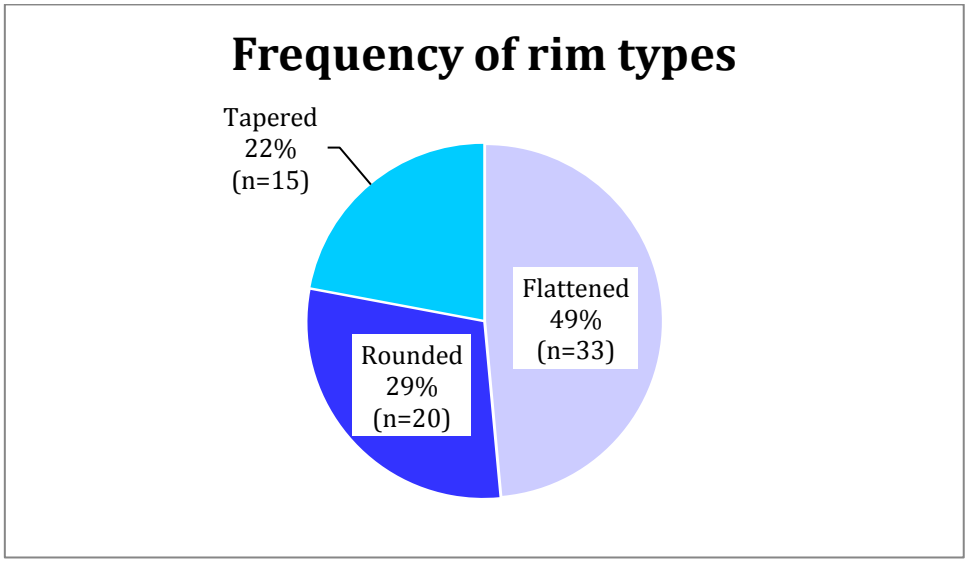

Figure 6.27 Frequency of rim types at site

Table 6.23 Number of rim types per unit

	Unit 1	Unit 2	Unit 3	Unit 4
Flattened	4	11	9	9
Rounded	7	4	6	3
Tapered	3	1	1	10

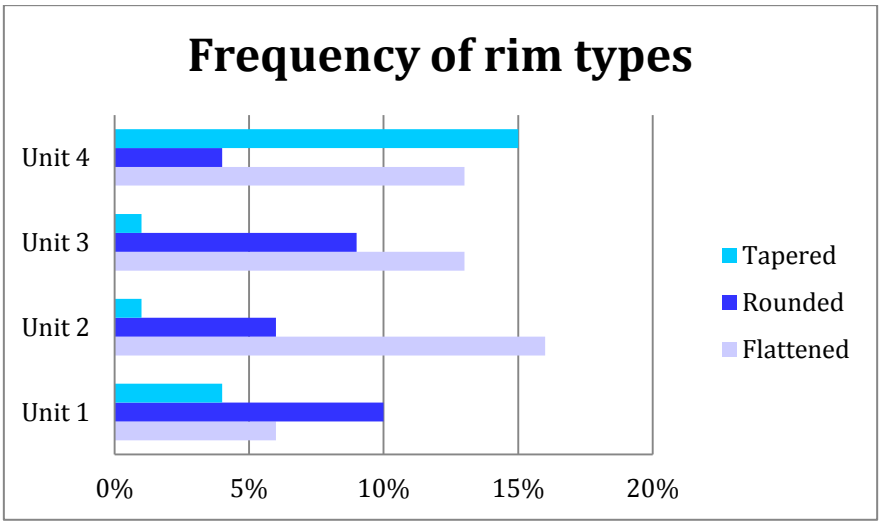

Figure 6.28 Frequency of rim types per unit

Table 6.24 Number of rim type occurring with vessel type

	1A	1B	1C	2B
Tapered	3	0	1	5
Rounded	10	0	1	1
Flattened	12	1	8	0
Not identifiable	16	2	4	5

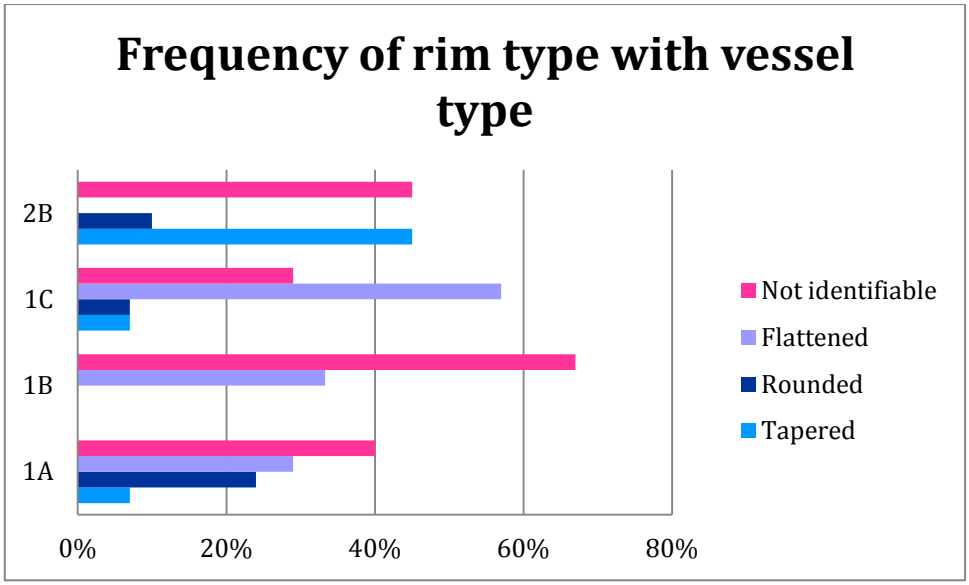

Figure 6.29 Frequency of rim type with vessel type per unit

Table 6.25 Number of vessels for different rim diameter classes

Rim diameter	0-9cm	10-15cm	16-19cm	20-25cm	26-29cm	30-35cm	36-39cm
Number of vessels	2	12	5	13	2	1	1

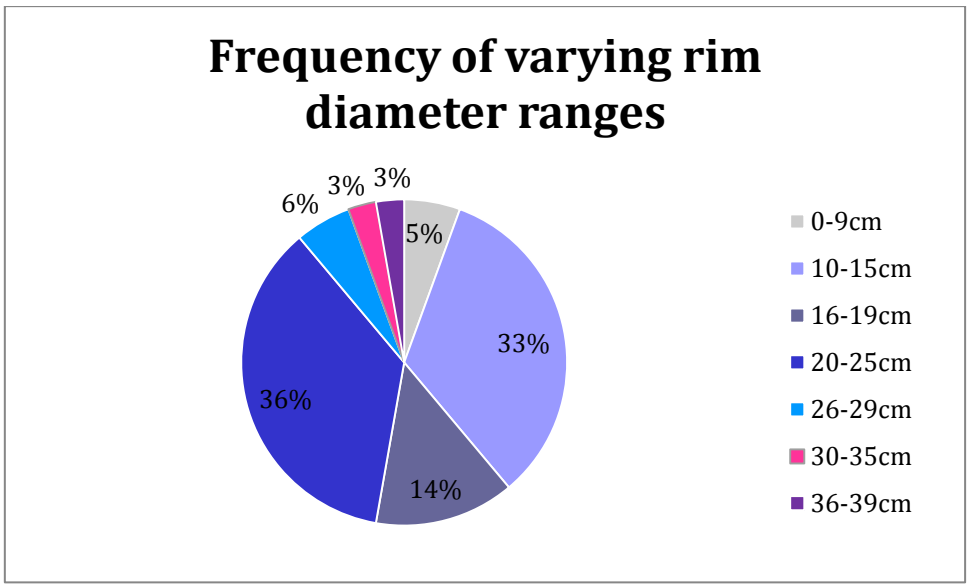

Figure 6.30 Frequency of varying rim diameter ranges at the site

Table 6.26 Number of vessel types falling within the different rim diameter classes

	1A	1B	1C	2B
0-9cm	1	0	1	0
10-15cm	5	1	2	3
16-19cm	6	0	0	0
20-25cm	9	0	4	0
26-29cm	0	0	1	1
30-35cm	0	0	1	0
36-39cm	0	0	1	0

Table 6.27 Number of vessels for different rim extent classes

Rim extent	Less than 1cm	Between 1cm- 2cm	Between 2cm- 3cm	Between 4cm- 7cm	Between 8cm-10cm
N. of vessels	68	48	21	17	2

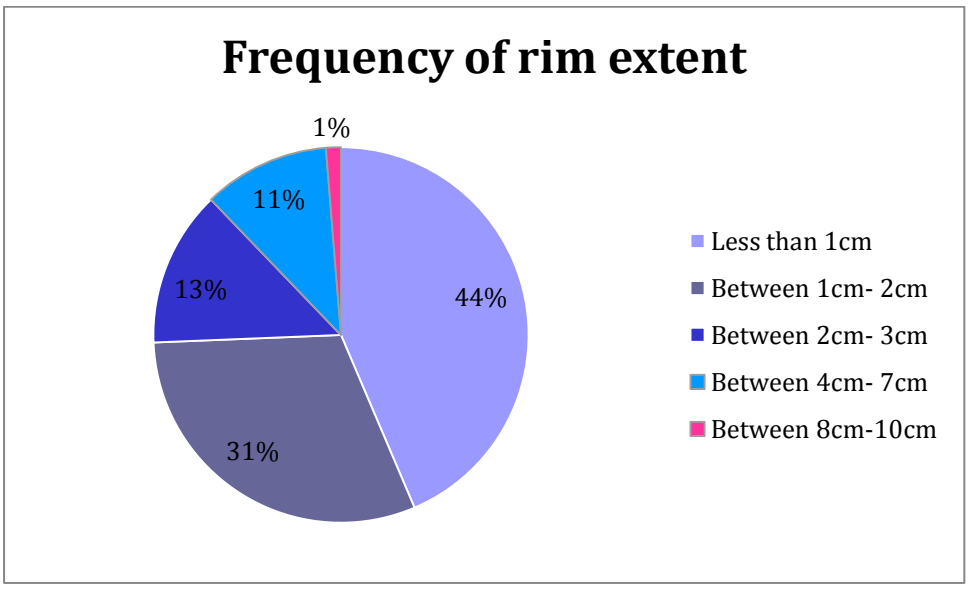

Figure 6.31 Frequency of rim extent

6.6.1.1. Decoration

Decoration on the ceramics were minimal, out of the total diagnostic collection only 10 vessels fragments were decorated, which is 6 % of the diagnostic collection, and 0.6% of the total

ceramic collection, as shown in Table 6.28. The unit with the highest percentage of decorated ceramics is unit 3 and the lowest is unit 4.

Table 6.28 Number and percentage of decorated sherds per unit

	No. of decorated sherds per unit	*Percentage of decorated sherds per unit
Unit 1	2	0.5%
Unit 2	4	0.6%
Unit 3	3	1%
Unit 4	1	0.3%

*Percentage calculated from total number of sherds per unit

Some vessels were polished, burnished, and or had slips on the surface of the vessel. The most prominent position for surface treatment was the neck area. However, such a small portion of vessels were diagnostic, and, those that were, were commonly rim pieces. Therefore, this is not a realistic account of the position of surface treatment for the collection. The decoration techniques recorded in the diagnostic collection fall into three categories incision (including notching), stamping, and punctuation (further described in the decoration section of the methodology chapter). Table 6.29 list the decorated ceramics found in the collection. The decorated ceramics are illustrated in Figure 6.32.

Table 6.29 List of decorated ceramics in collection

Vessel Number	Unit/Layer	Decoration Style	Decoration Placement
21	1/1	Incision (notching)	Rim
36	1/2	Stamping with ochre slip	Unknown
40	2/1	Stamping with graphite slip	Unknown
58	2/3	Incision (notching)	Rim
59	2/3	Incision (notching)	Rim
64	2/3	Incision (notching)	Rim
88	3/1	Incision (notching)	Rim
115	3/3	Incision (notching) and punctates	Rim and neck
127	3/6	Incision (notching) and graphite slip	Rim, neck and body.
143	4/2	Punctates and ochre slip	Rim and neck

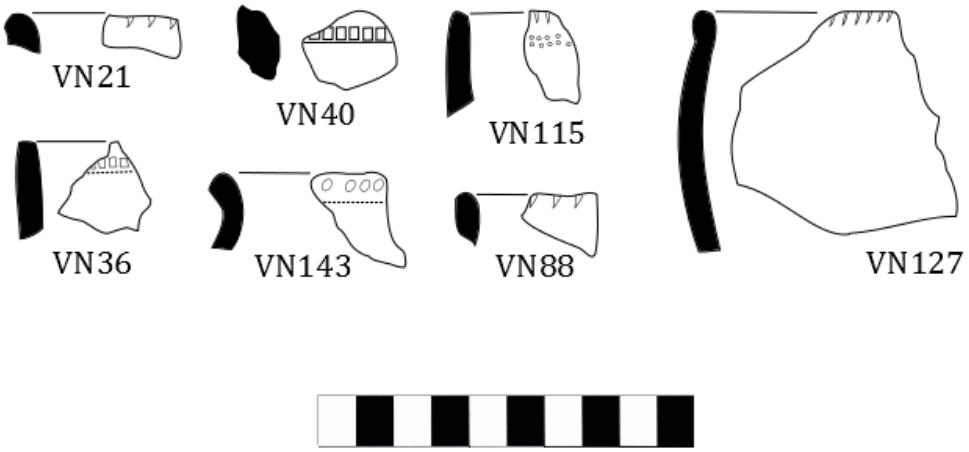

Figure 6.32 Illustration of decorated ceramics in collection

The predominant decoration technique was incision, specifically rim notching, this is characteristic of *Buispoort* ceramics, as discussed in chapter two and four. The rim notching, initially sub-divided according to slight variances, has been collated into one group, as variation is minimal. Stamping occurred on two ceramic sherds, one from unit 1 and another from unit 2. Two styles of decoration occur that are not characteristic of *Buispoort* ceramics that is stamping and punctates. The stamped ceramic sherds are possibly a reflection of a different ceramic style, termed *Uitkomst*, which is characterised by stamping, cord impressions, stamped arcades, appliqué, and blocks of parallel incisions, as discussed in chapter two (Huffman 2007:173). The punctated sherds are also possibly a reflection of a different ceramic style. However, both punctated sherds differ quite significantly from each other. The one from unit 3 has dots of punctates with rim notching, and the one from unit 4 has broad punctates on the rim with an ochre slip on the neck. The one from unit 4 shares features with the ceramic style *Madikwe*, a preceding ceramic style to *Buispoort,* and occurs in the region early 16th – 18th century CE (Huffman 2007:199 & 201). The *Madikwe* ceramic style is characterised by multiple bands of cord impressions, incisions, stabs, and punctates separated by colour, as discussed in chapter two (Huffman 2007:199 & 201) .

Another aspect which was noted in the ceramic analysis was the inclusion of platy, fibrous, and lustrous mineral inclusions. This refers to the use (most commonly) of Muscovite Mica as a temper in the production of ceramics (as discussed in chapter two). Mica as a temper was provisionally noted in a large sample of the ceramic collection, with mica tempered ceramics

occurring in all units. However, future thin section analysis on the material will provide further information on this attribute. The inclusion of mica as a temper was identified in *Buispoort* ceramics from the later occupations at Olifantspoort and Molokwane (Rosenstein 2008:28). It seems likely that this type of temper might be a regional characteristic of *Buispoort* ceramics (Hall 2012:310).

6.6.1.2. Modified ceramics

Modified ceramics, as defined in the methodology chapter, are present in the collection. They are characterised by abraded edges, as depicted in Figure 6.33.

Figure 6.33 Collection of modified ceramics, abraded along the top edge of the ceramic

Modified ceramics do not occur in unit 1, but they do occur in all of the other units. In each of the other units (unit 2, 3 and 4) a total of four modified ceramic sherds are identified. Relative to the low density of ceramic material retrieved in unit 3, it would seem to have the highest percentage of abraded ceramics per unit. Similarly modified ceramics occur at Marothodi and at Buffelshoek, see Figure 6.34 (Anderson 2009: Chapter VI, Artefacts from the court midden, para. 3; Loubser 1985:82). They are suggested as tools for scraping and skinning (Anderson 2009:

Chapter VI, Artefacts from the court midden, para. 3; Loubser 1985:82). The modified ceramics are similar to the modified bone found in the Lebenya collection, and are associated with the same context and activities, according to Loubser (1985:82-83). This seems likely as the items are similarly modified, with one edge smoothly abraded.

Figure 6.34 Modified ceramics from Buffelshoek, from Loubser (1985:83)

6.7. Other material

The other excavated materials to be discussed in this chapter are the bead, metal, and ceramic object categories. Other excavated material, such as ochre, lithics[54], and dung, were not further analyzed after collection.

6.7.1. Beads

The bead collection consists of bone and ostrich egg shell (OES) pieces. A total of 37[55] beads were collected from the excavations; however, beads were only found in unit 2 and 3 (see Table 6.30). Unit 2 and 3 had a similar count of beads retrieved, but for unit 3 this indicates quite a high percentage of beads (relative to deposit removed per unit). The majority of the beads are not whole fragments, and none were in the production stage. Unit 2 and 3 were also the only units in which non-bead OES fragments were found (three fragments in unit 2 and two

[54] The lithic material was scant with no formal tools collected from the excavations.
[55] This count includes the likely clay bead, similar to the one described by Mason (1986:465).

fragments in unit 3 each under around or under a centimetre in size). Figure 6.35 depicts the varying bone beads found in unit 2.

Table 6.30 Bead type and distribution at site

	Number of OES pieces	Number of bone pieces
Unit 2	15	4
Unit 3	17	0
TOTAL	**32**	**4**

One piece is quite distinct from the rest and is not made from bone or OES, and is not in the above total, as it was originally classified as a ceramic object.

Figure 6.35 Beads made from bone in collection

One bead has not been classified as OES or bone, as it is distinct from the rest of the bead material; it is an incomplete fragment of spherical shape with a distinct perforation in the centre (see Figure 6.36). Mason (1986:465) recorded spherical beads, made from clay, at Olifantspoort 20/71, and states that these are similar to those found at OND3 (a type V settlement pattern) site in the Free state (Maggs 1976b:329).

Figure 6.36 Clay bead (the image has been manipulated to include the interior view of specimen)

6.7.2. Metal

The metal collection consists of 4 pieces, two pieces from unit 2 and two pieces from unit 3. The two pieces of metal from unit 2 are degraded, fragmented, flat pieces of no recognisable shape. The two pieces from unit 3 are complete. The one piece is a bullet casing that appears to be recent; therefore, is not a part of the archaeological material discussion. The other piece from unit 3 is a small complete Y-hoe shaped piece of metal, see Figure 6.37.

Figure 6.37 Hoe-shaped metal piece

6.7.3. Ceramic objects

Out of the excavated material, 9 ceramic objects were retrieved. Four different types occur: termed A, B, C, and D. Type A is a cylinder fragment that narrows to one side, and, at the narrowed end, the bottom is pressed in to a concave shape. Type B is an irregular cone-like fragment, which could be a horn or foot of an animal figurine. Type C is a double cone (diamond shape) fragment: however, the one end is stubbed, rather than pointed. Type D is an irregular fragment with smooth areas. The ceramic fragments occur in all units, except unit 1. A similar styled ceramic object to type C occurs at Olifantspoort 61/71, termed miscellaneous pottery (Mason 1986:476). The function of these ceramic objects are unknown, they are depicted in Figure 6.38.

Table 6.31 List of ceramic objects in collection

	Type A	Type B	Type C	Type D
Unit 2	0	4	1	0
Unit 3	1	0	0	1
Unit 4	0	1	1	0

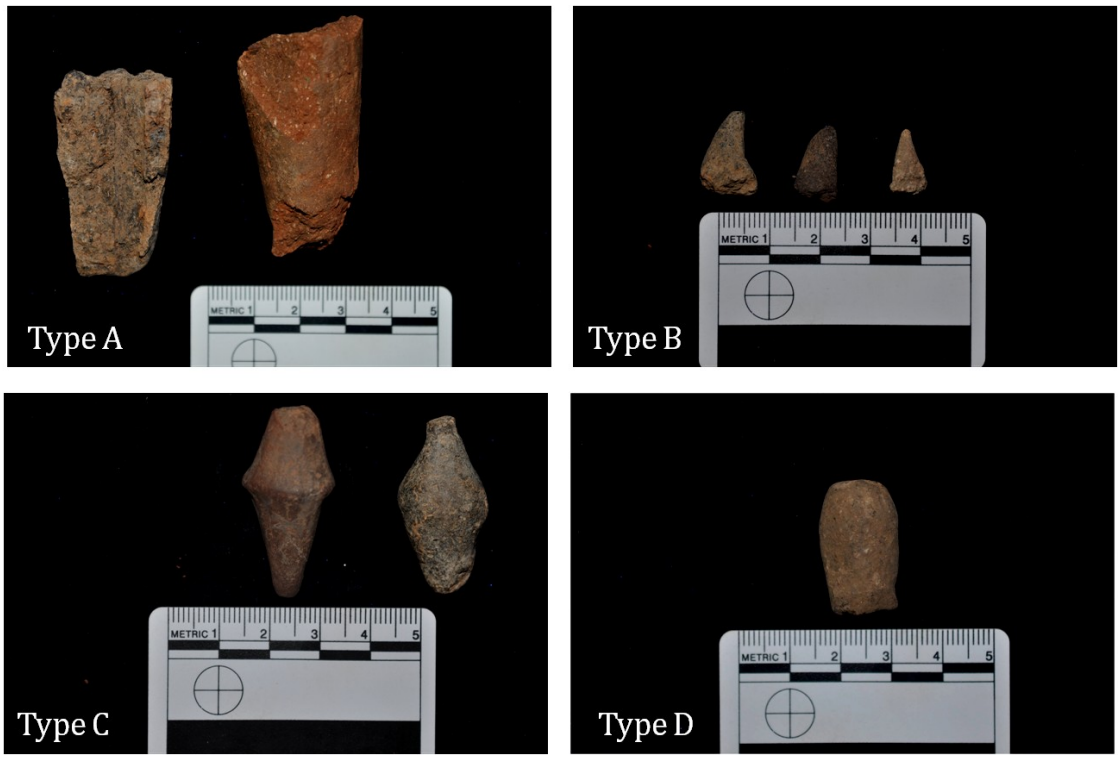

Figure 6.38 The varying types of ceramic objects identified in the collection

6.7.4. Discussion of other material

Unit 2 and 3 are the only units from which metal and bead pieces were retrieved. Unit 3 has a large percentage of beads, relative to the other units, and contains a shaped metal fragment. This once again differentiates unit 2 and 3 from the rest of the units. The occurrence of beads in unit 3 could indicate an area of differing status or wealth from the other sections. Ceramic objects occur in all units but unit 1: the function or symbolism of the differing ceramic objects in the assemblage is unknown.

6.8. Discussion of excavation results

Unit 1 largely consisted of a homogenous soil, with little differentiation in the deposit. It has the second lowest amount of excavated material. The excavated material is also limited, in comparison to the variety of excavated material retrieved from the other units. The unit has the highest density of ceramic material recovered, with a low faunal density. No beads, metal, ceramic objects, or modified ceramics were found in the unit. The selection of species found in the unit was primarily domestic bovid, freshwater bivalve, and crab, with the majority of specimens likely being dietary contributors. The unit seems to have been a household disposal area, but not a large one, as attested by the excavation depth; however, this could also be due to the unit placement.

Unit 2 showed lenses and pockets of varying soil deposits as well as containing a high volume and variety of excavated material. Unit 2 has a low percentage of weathered, as well as rodent and carnivore gnawed specimens suggesting that the midden deposit was not exposed as much as the other units. This may suggest the practice of capping, where the midden deposit is sealed with a layer of red sterile soil in order to avoid 'stealing of the ash' (see chapter 5 for further details). The stratigraphy for Unit 2 was complex, with various pockets of dark grey soil and dung overlaid by red soils lenses. The deposit displays a wide variety of excavated material and was the only unit with bone beads, and a cowrie shell. It seems likely that unit 2 was a communal midden; therefore, a secondary deposition area for the material, as supported by the fragmentary nature of the material and the density and variety of the recovered artefacts. A similar practice of capping occurs at Marothodi, and is associated with middens in the court areas (Anderson 2009). This might echo with excavation unit 2, where the spatial data suggest that excavation unit 2 is near the *kgotla* of section B.

Unit 3 had variation in the deposit and contained a rock feature, which was likely part of a structure. This structure could be related to cooking or could be the edge of a storage hut. This unit had a low number of faunal material in relation to the other units, and had the highest occurrence of taphonomic features, suggesting that the faunal material was exposed for prolonged periods before burial. Perhaps the deposit was a not a formal midden, and the material is likely related to the possible structure excavated in this unit. The high percentage of decorated material found within unit 3 could indicate an area where food was served or stored, as these vessels tend to be the more decorated pieces (Rice 2005:238). This is further substantiated by the relatively high (in comparison to unit 1 and 2) occurrence of unrestricted vessels in unit 3, which is typically associated with the serving and preparation of food (Rice 2005:238).

Unit 4 is a midden deposit located in an enclosed walled structure, the only one in such a location identified at the site. The unit displayed alternating layers of ash deposit and red soil, similarly seen in unit 2, but with thicker alternating deposits. It contained a high density of material culture, once again similar to unit 2. However, while similar to unit 2, there were no metal or beads found in unit 4. Besides the location of the midden deposit, unit 4 also differentiated from the other units in fauna. It has a wide variety of identified species, the only pig, snake, porcupine, baboon, and hartebeest specimens occur in unit 4. The variety of species identified from unit 4, could suggest different status, activity, and or cultural practice in Section C. The idea of different status and or cultural practice from the main settlement resonates with the spatial data. The spatial data suggests that section C was a foreigner community assimilated into the Tswana group inhabiting Lebenya.

In the following chapter I will discuss the excavations in relation to the spatial results, and conclude with the site appraisal and future research avenues.

Chapter 7 Conclusion

7.1. Overview

In this chapter I combine the spatial data and the excavation data in order to present a holistic interpretation of the past inhabitants of the settlement. The chapter is then concluded with a discussion of possibilities for further research at the site and within the region.

7.2. The Archaeological data

The material retrieved from each excavation unit varies somewhat; in the following section I will discuss the excavated material, for a full account see chapter six, in relation to the spatial data, as discussed in chapter five. Then I conclude with a discussion on the excavation material in relation to the settlement as a whole. The material excavated from each unit can be summed up in Table 7.1.

The archaeological data does provide support to the spatial interpretation of the site. Section B is likely the homestead of the chief, and is where excavation unit 2 was placed. The material excavated from unit 2 is that of higher status items, and items not retrieved elsewhere on site, such as the carnivore specimens, the cowrie shell, and the metal hoe. The material retrieved from excavation unit 3, in section A1 (to the south of section B) also contained items of status, with the highest quantity of beads and metal items retrieved per unit. Spatially, this has also been interpreted as an area of status; this section is second in rank to that of the chief. The excavated material from unit 1 (in section A3) differs from the other units. It is likely that this deposit is a household midden, which would account for the homogenous nature of the excavated material and deposit. The placement of the midden deposit in which unit 4 was excavated (as discussed in chapter five) is unique to the site, but occurs at another site in the region, Marothodi (Anderson 2009: Chapter VI, The court midden, para.1). This midden deposit was connected to the central enclosures and is likely a deposit linked to the *kgotla* in the homestead. This is further supported by a similar structured midden deposit associated with the *kgotla* at Marothodi (Anderson 2009: Chapter VI, The court midden, para.1).

Table 7.1 List of attributes from each excavation unit

	Unit 1	Unit 2	Unit 3	Unit 4
Soil profile	Mostly homogenous	Varied- lenses of ash soil deposit	Varied- stone feature, and pockets of varying soil deposits	Varied-alternating red soil and ash soil deposits
***Amount of ceramic material**	Medium	High	Low	High
***Amount of faunal material**	Medium	High	Low	High
Bead fragments	No	Yes	Yes	No
Metal fragments	No	Yes	Yes	No
Ceramic objects	No	Yes	Yes	Yes
Modified material	No	Yes	Yes	Yes
Faunal specimens	Predominantly dietary contributors.	Widest range of dietary contributors, and carnivore specimens.	Predominantly dietary contributors.	Possible medicinal or ritual specimens, with dietary contributors.
Type of deposit	Household midden	Communal midden	A short term midden deposit, and an area linked to a stone feature (likely the base of a fence or structure)	Likely midden deposit associated with the *Kgotla.*

*Amount taking into consideration the extent of the unit

The decorated ceramics recovered from the excavations at Lebenya are few; nonetheless, these have been identified as *Buispoort* based on the geographic and chronological occurrence of this type in the region. This provides a disjuncture in the expected ceramic sequence at a site sharing features with the Klipriviersberg walling type. The expected ceramic style for a Klipriviersberg type walled site is the *Uitkomst* style, and this pottery style does not occur throughout the site. This disjuncture of settlement layout with ceramic style is also noted at Marothodi, where the settlement layout echoes the Molokwane type walling but *Uitkomst* styled pottery is found throughout the site (Hall 2012:312).

7.3. A site perspective

The walling layout of section A and B differ from section C, specifically in the unenclosed intervening interior space and the organisation of the inner enclosures. Section A and B are also physically linked (with a wall that connects the two sections), while section C is independent (physically) from the other sections. Furthermore, the stamped ceramic fragments occur only in section A and B. Section C varies from the other sections in spatial style and in material culture. The broad rim punctated decorated ceramic and faunal specimens of a medicinal and ritual nature occur in unit 4. The spatial data suggests that section C was the homestead of an immigrant group (as discussed in chapter five), who were incorporated into the larger group inhabiting the settlement, or was occupied prior to the rest of the settlement by another group. Either way this could account for the difference in material culture. The faunal specimens while seeming to be of a medicinal or ritual nature compared to the specimens found at the rest of the site might actually be specimens that are more likely to be eaten by another group, due to different food beliefs within different communities. The walling of Section C is of the Molokwane type, suggesting the group who inhabited this section of the site were of the western Sotho-Tswana cluster. The punctated sherd retrieved from layer 2 of unit 4, could indicate that this section of the site was inhabited earlier than the rest of the settlement, as it is characteristic of the *Madikwe* facies which precedes the *Buispoort* facies. However, mica tempered ceramic sherds (a likely characteristic of *Buispoort* ceramics) occur throughout the layers of unit 4; therefore, this singular punctuated ceramic sherd is inconclusive. Furthermore, both facies are associated with groups of the western Sotho-Tswana cluster, sustaining the idea that the group who inhabited section C were of western Sotho-Tswana descent. .

However, a feature connecting section C to Section B is the layering of red soil deposit, at excavation unit 2 and 4. Though this is possibly a cultural factor associated with Nguni practice, it is also a practice documented in other southern African agro-pastoralist groups during times of conflict or expansion ; therefore, this could not necessarily only reflect a Nguni based practice (A. Schoeman 2014 pers. comm.). The region, over different periods was marked by droughts and famine, as discussed in chapter two, which could have been a source of conflict. As attested by the oral records, the Phiring themselves were suffering from a time of famine (Breutz 1953:218).

7.4. A regional perspective

As discussed in chapter five, the classification of the sites into a regional typology is somewhat complex. The lack of a fixed chronology for the inhabitation of the different section of the site presents some difficulties in classifying the site. Settlement form is the result of dynamic processes, and settlement typologies mask this nature of site formation. A Group III classification for the site indicates that the site formation is a product of cultural interaction in the region, either of a 'foreign' group assimilating a Sotho-Tswana identity, or a 'foreign' group incorporating people of a Sotho-Tswana identity. The use of the term 'foreign' refers to people of a non Sotho-Tswana origin, likely people of Nguni-origin who migrated into the region at different times.

Certain aspects of the settlement at Lebenya could be suggestive of a non Sotho-Tswana affiliation for the inhabitants of Lebenya, such as the Klipriviersberg styled walls, the placement of middens in public spaces, the possible cultural practice of capping ash deposits, and the occurrence of stamped ceramics in section A and section B. Other aspects reflect a western Sotho-Tswana identity, such as the *Buispoort* styled ceramics, the scalloped walling, and centrally placed enclosures found in section C. A mix of attributes between Sotho-Tswana and Nguni settlement characteristics occurs at Marothodi, a site reflective of Tlokwa assimilation in a western Sotho-Tswana environment, and also at Doornspruit type settlements. Doornspruit type settlements are reflective of a Nguni affiliated society who incorporated Sotho-Tswana women into their society (Kruger 2010: 172). Section A, specifically section A2, does share similarities with Doornspruit settlements in the spatial layout of the c-shaped ring of enclosures. A further consideration in this matter of cultural interaction is the timeline for the site. The date range for the site is mid 17th century to 1830s CE, based on the walling sequence for the region. Colonial ware and related structures would have been a feature at this site had it dated from 1830 CE onwards, due to the expansion of colonial trade and farmers into the region around this time (Bergh 2005: 99). Furthermore, there are no signs of sudden flight from and destruction of the settlement. Prior to 1830 CE, the region was beset by the turmoil of the *Mfecane* (Boeyens and Hall 2009:479). This incursion into the region by Mzilikazi's Ndebele left many settlements deserted and damaged. The site displays no mounds in the settlement bays, which would have been a sign of burnt down hut structures. This suggests that either the site was no longer inhabited by the time of the Ndebele incursion into the region, or that the inhabitants of the site were associated with the Ndebele, therefore avoiding the destruction of the settlement, as is suggested to be the case for the inhabitants of Doornspruit type settlements (Kruger 2010),

Nonetheless, the oral records place the nearest known group in the vicinity to be the Phiring. The Phiring do have a possible link to the Fokeng cluster, a group said to be of Nguni-Origin but that had assimilated a Sotho-Tswana identity. This could also account for the cultural mix of site attributes at Lebenya. Ngcongco (1979: 28) refers to the Fokeng-Dighoya,s discussed in chapter two, the Dighoya may refer to either the Kubung or the Taung (Maggs 1976b:327); however, according to Breutz (1953:217), the informants for the Kubung and the Phiring assert that they together formed the Dighoya.

Lastly, the presence of *Buispoort* styled pottery at the site signifies a connection between the inhabitants of Lebenya and the dominant western Sotho-Tswana cluster established in the region at that time. Therefore, it is likely that Lebenya was connected to Molokwane and Boitsemagano either socio-politically or economically.

7.5. Future research

Hall's idea of layered identities in the Magaliesberg region could account for the variances displayed at Lebenya. Certain features of the settlement, such as ceramic style, display a western Tswana character; therefore, indicating involvement in regional socio-political dynamics in the 18th century CE. While other settlement features, such as walling style, could reflect a layered historical identity, which connects the inhabitants of the site to groups of the Fokeng and Nguni cluster.

While it is possible that the settlement at Lebenya is part of the Phiring capital ofMotsôkwe, further archaeological and historical research needs to be conducted to verify this statement. Further archaeological research needs to be conducted at the neighbouring farm, Eensaamheid, as well as the adjacent farm, Nooitgedacht. A full survey of the farms and a complete map of all stone wall sites on these farms would confirm whether the settlement at Lebenya was related to these settlements, and whether they are the Phiring capital, Motsôkwe.

Further historical research on the Phiring and their relation to the Kubung or other groups in the region would establish a better understanding of the origins of these groups and their association to the western Tswana cluster. This avenue of research could substantiate the archaeological evidence found at Lebenya, providing a historical account for the varied settlement features.

The research in this region also highlights the need for further in-depth material culture studies, such as Rosenstein's temper analysis of *Buispoort* pottery. Ceramic decoration in of itself is not sufficient for a discussion on cultural difference. This is why further ceramic analysis is needed, but analysis focused on the technological attributes of pottery formation.

The past archaeological focus on mega-sites has led to an uneven presentation of the range and character of groups and settlements found in the region. This was characterised by the difficulty of finding comparative archaeological data in the region. By re-focusing archaeological attention on a small-scaled settlement it allows for the creation of larger data sets, which will allow for a more nuanced view of regional identities and interaction.

Lastly, settlements, such as these constructions in stone, will always leave an impression whether on the landscape or on the imagination. Locally, we have a heritage worth displaying, sharing, and developing. Further research should attempt to impress this rich local heritage on the public imagination, installing pride locally byan acknowledgement of past achievements in the region.

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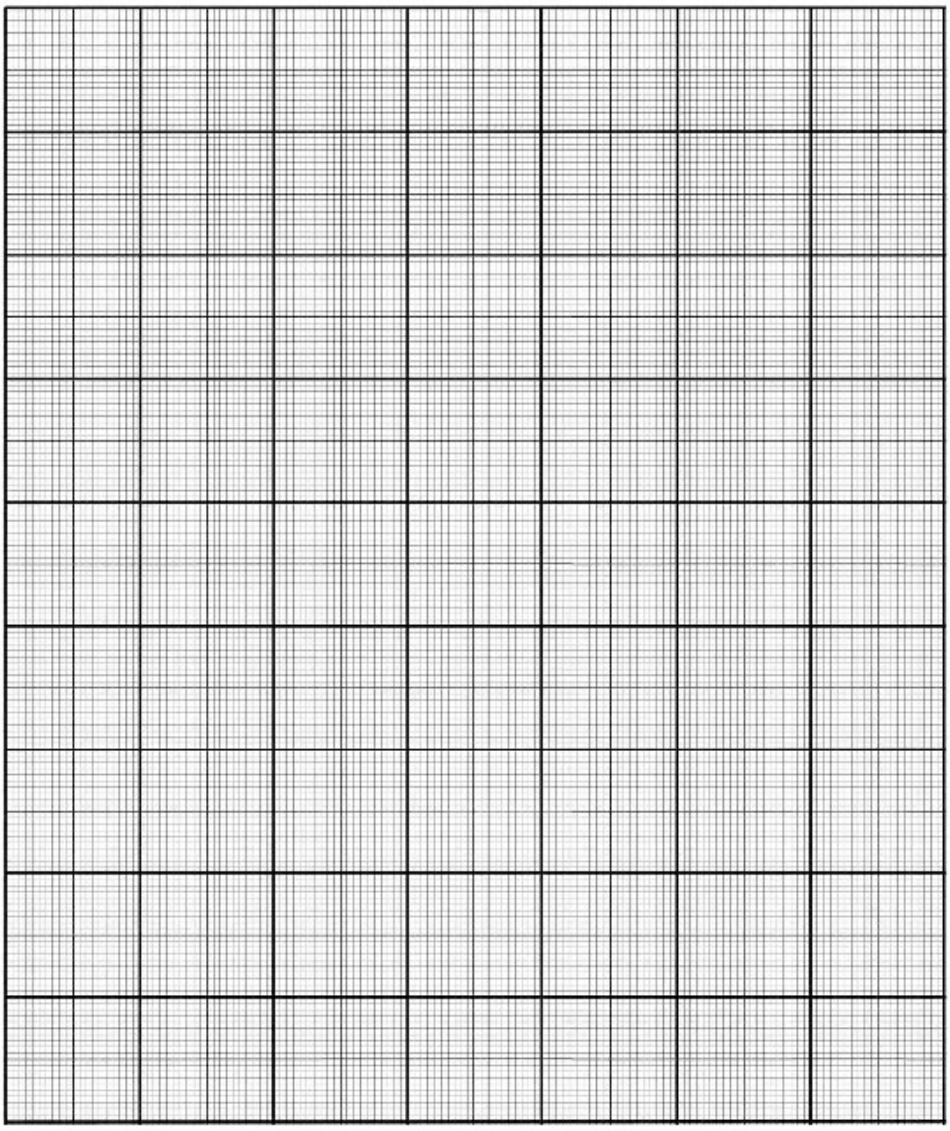
Appendix A - Forms

Tolaniesfontein Archaeological Project 2013			Layer Form
Site: Lebenya	Section:	Buckets:	Page____ of _____
Unit:		Datum:	Munsell Colour:
Layer:		Date:	Wet: Dry:
Initials:			Texture: S LS LL L HL LC C
Limits:		Inclusions:	
Disturbance:			
Description:			
Observations:			

	North	East	BD	Elv	Description	# Bags	Harris Matrix Relationship
/1						Ceramics	The Locus below _____
/2						Lithic	
/3						Stone (other)	
/4						Bone	The Locus is equal to: _____
/5						Carbon	
/6						Metal	The locus above: _____
/7						Beads	
/8						Other	
/9							
/10							
/11							
/12							

Tolaniesfontein Archaeological Project '13		Layer Form
Site: Lebenya	Layer:	Page ____ of ____
Section:	Datum:	
Unit:	Date:	Scale: ____



Appendix B - QR codes and hyperlinks

The hyperlink is:
https://drive.google.com/file/d/0B7_LHlkDtztDVjVnUlcxeWxOXzg/view?usp=sharing

QR code 1, links to Figure 5.9, The map of the site

The hyperlink is:
https://drive.google.com/file/d/0B7_LHlkDtztDalJTQldrb1R0a0k/view?usp=sharing

QR code 2, links to Figure 5.10, Map with general sizes of central enclosures

The hyperlink is:
https://drive.google.com/file/d/0B7_LHlkDtztDS1Y5Q09Nc0hIZUk/view?usp=sharing

QR code 3, links to Figure 5.11, Features of Section A

The hyperlink is:
https://drive.google.com/file/d/0B7_LHlkDtztDdHdHczhpU0xldms/view?usp=sharing

QR code 4, links to Figure 5.16, Features of Section B

The hyperlink is:
https://drive.google.com/file/d/0B7_LHlkDtztDeU9kX3ZBdC1CcGs/view?usp=sharing

QR code 5. links to Figure 5.19 , Features of Section C