

TK2 Pottery: the shift to Mapungubwe

Jaco van der Walt

0114213M

Supervisor: Prof. T.N. Huffman

A dissertation for the Faculty of Humanities, University of the Witwatersrand,
Johannesburg, in fulfilment of the requirements for the degree of Master of
Arts.

August 2012

DECLARATION

I declare that this dissertation is my own, unaided work. It is being submitted for the degree of Master of Arts in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

Jaco van der Walt

14th Day of August, 2012

ABSTRACT

The main processes and events that led to class distinction and sacred leadership in the Limpopo Valley are well known. Recent research nevertheless advances our understanding of the development of social complexity and the social process that led to class distinction and sacred leadership. The spatial shift from K2 to Mapungubwe is marked by several changes in material culture, most notably a change in ceramics. This transitional step is now termed *Transitional K2* or *TK2* ceramics and dates to between AD 1200 and 1250. The material from the Mapungubwe rehabilitation project provided the opportunity to analyse these ceramics, focusing on the palace and court areas. The better understanding of the full definition of *TK2* ceramics clarifies the settlement sequence at the Mapungubwe capital where Transitional ceramics marks the first true occupation of the hill. It also enables us to re-evaluate assemblages that were previously identified as *K2* or *Mapungubwe*. This provides us with a clearer picture of population dynamics in the valley. Sites such as Mtanye in Zimbabwe, with a *TK2* component, could mark the initial spread of the Mapungubwe state. Future surveys and ceramic analyses in the valley will also benefit from this better understanding of Transitional pottery.

ACKNOWLEDGEMENTS

Thank you to Prof. T.N. Huffman who assisted with guidance and advice and helped me to complete this project.

Thank you to Wendy Voorvelt who digitalized the drawings.

Thank you to the NRF for the financial assistance as well as the Mapungubwe Rehabilitation project for funding.

The Mapungubwe Museum and staff were so kind to assist with any queries – thank you so much for this.

Lastly thank you to Adèle for motivating me and supporting me to complete this thesis.

I would like to dedicate this dissertation to my parents, Karel and Franci van der Walt, who always encouraged me to follow my dream to become an archaeologist.

CONTENTS

DECLARATION	2
ABSTRACT	3
ACKNOWLEDGEMENTS	4
CHAPTER I: INTRODUCTION	9
I.1 Archaeological research	9
I.2 Plan of Presentation	12
CHAPTER II: ARCHAEOLOGICAL BACKGROUND TO RESEARCH IN THE SHASHE-LIMPOPO VALLEY	14
II.1 Environmental Background	14
II.2 Archaeological Background	15
<i>II.2.1 Early Iron Age</i>	17
<i>II.2.2 Middle Iron Age</i>	20
CHAPTER III: RAINMAKING AND SETTLEMENT ORGANISATION IN THE MIDDLE IRON AGE	29
III.1 Introduction	29
III.2 Settlement organisation	29
III.3 Rainmaking	32
III. 4 Mapungubwe Layout	33
CHAPTER IV: METHODOLOGY AND DATA ANALYSIS	35
IV.1. Data analysis	35
IV.2. Data set	36
IV.3. Limitations	37
IV.4. Ceramic Analysis	37
IV.5. Scope of work and terms of reference	38
<i>IV.5.1 JS5 and JS6</i>	40
<i>IV.5.2 JS2(b)</i>	40
<i>IV.5.3 JS6</i>	40
<i>IV.5.4 JS1</i>	40
CHAPTER V: RESULTS	41
V.1 Ceramic facies	41
V.2 Distribution	45
<i>V.2.1 Palace</i>	45

<i>V.2.2 Court</i>	48
CHAPTER VI: DISCUSSION	49
VI.1 Lapa surfaces	49
VI.2 Mapungubwe occupation sequence	49
VI.3 Ceramic evidence	54
VI.4 Re-classification of known sites	56
CHAPTER VII: CONCLUSIONS	58
REFERENCES	60

Figures

Figure 1: Map of Shashe-Limpopo Confluence Area and some important sites. After Huffman 2009b.	10
Figure 2: Location of important sites in the Shashe-Limpopo confluence area.	12
Figure 3: Iron Age ceramic facies for the Mapungubwe region (Adapted from Huffman 2009b).	16
Figure 4: Definition of <i>Mzonjani</i> ceramics on the left and <i>Happy Rest</i> ceramics on the right (Adapted from Huffman 2007a).	17
Figure 5: Definition of <i>Zhizo</i> ceramics on the left and <i>Leokwe</i> ceramics on the right (Adapted from Huffman 2007a).	19
Figure 6: Map of southern Africa indicating migration routes of different Iron Age Traditions (Adapted from Huffman 2007a).	19
Figure 7: Definition of <i>K2</i> ceramics on the left and <i>TK2</i> ceramics on the right (Adapted from Huffman 2007a).	22
Figure 8: Definition of <i>Mapungubwe</i> ceramics (Adapted from Huffman 2007a).	25
Figure 9: Definition of <i>Eiland</i> types (Adapted from Huffman 2007a).	27
Figure 10: Idealised model of the Zimbabwe Pattern (upper) and Central Cattle Pattern (lower) (Adapted from Huffman 2009b).	31
Figure 11: Mapungubwe settlement plan (Adapted from Huffman 2009b).	34
Figure 12: Sample localities (Adapted from Nienaber and Hutten 2006).	38
Figure 13: Section of rehabilitated wall (Adapted from Nienaber and Hutten 2006).	39
Figure 14: <i>Happy Rest</i> type.	41
Figure 15: <i>Leokwe</i> type.	41
Figure 16: <i>K2</i> Type.	42
Figure 17: <i>Eiland</i> types.	43
Figure 18: <i>TK2</i> types including some that could be either <i>TK2</i> or <i>Mapungubwe</i>	44
Figure 19: <i>Mapungubwe</i> types including bowls.	45
Figure 20: Distribution of ceramic facies in JS1.	46
Figure 21: Distribution of ceramic facies at JS5.	46
Figure 22: Distribution of ceramic facies in JS6.	47
Figure 23: Distribution of ceramic facies at Gardener East.	47
Figure 24: Distribution of ceramic facies at JS2b.	48
Figure 25: Distribution of ceramic facies in the five localities.	48

Figure 26: Hut complex associated with the first King. After Gardner (1963). (Adapted from Huffman 2009b).	51
Figure 27:JS1. Southwestern wall (adapted from Nienaber & Hutten 2006: Figure 210b – 215b).	52
Figure 28 Eastern section of K8 from Nienaber & Hutten 2006: 93. Phases modified from Meyer 1998. (Adapted from Huffman 2008).	53
Figure 29: Mapungubwe Hill motifs compiled from Meyer 1980, diagrams 7-10.	54
Figure 30: Southern Terrace motifs compiled from Meyer 1980, diagrams 7-10.....	55
Figure 31: Ceramic facies at Leokwe, compiled from Huffman 2007b.	55
Figure 32: Ceramic facies at Skutwater, compiled from van Ewyk 1987.	56

Tables

Table 1: Radiocarbon dates for levels with <i>TK2</i> ceramics (Adapted from Huffman 2007b).	23
Table 2: Dating sequence at Mapungubwe (Adapted from Huffman 2007b).	23
Table 3: Distribution of <i>TK2</i> sites that were previously identified as <i>K2</i> or Mapungubwe.	57

CHAPTER I: INTRODUCTION

Between AD 1000 and 1300, a community developed in the Shashe-Limpopo valley whose economic and political sphere of influence reached as far as the east coast of Africa. This complex society evolved at the sites of K2 and Mapungubwe (Figure 1) as a result of surplus trade wealth and population increase. These factors stimulated a series of internal changes leading to the earliest known society with class distinction and sacred leadership. In addition Mapungubwe had a number of other firsts: the first town, the first king, first stone walled palace and ultimately the capital of the first state (Huffman 2005).

Because of these firsts, Mapungubwe is the most important pre-colonial farming site in southern Africa (Maggs 2000; Meyer 2000; Huffman 2000). The Mapungubwe and K2 complex was declared a National Monument in the 1980s and more recently a World Heritage site. Mapungubwe has also become an icon of the African Renaissance. The concept of a flourishing African civilization half a millennium before European colonization is the very opposite of the Apartheid myth of an empty land settled by Europeans (Maggs 2000).

I.1 Archaeological research

Iron Age research within the basin began in 1932 with the discovery of several golden objects on Mapungubwe Hill (Fouché 1937; Gardner 1963; Meyer 1998). Large-scale excavation followed in the 1930s and 1940s, with the primary aim being to collect as many exotic goods and complete ceramic vessels as possible (Meyer 1998).

A year after the discovery of Mapungubwe, the University of Pretoria started the first archaeological field expedition (Fouché 1937; Gardner 1963). Research in the area by them continued until early 2000 under the auspices of Professor Andrie Meyer and the Greefswald Archaeological Project (Meyer 1998). The research focused on detailed stratigraphic investigations of the excavations at K2 and Mapungubwe, cultural identifications of the settlements, reconstruction of the economy and the relationship of the people at K2 and Mapungubwe.

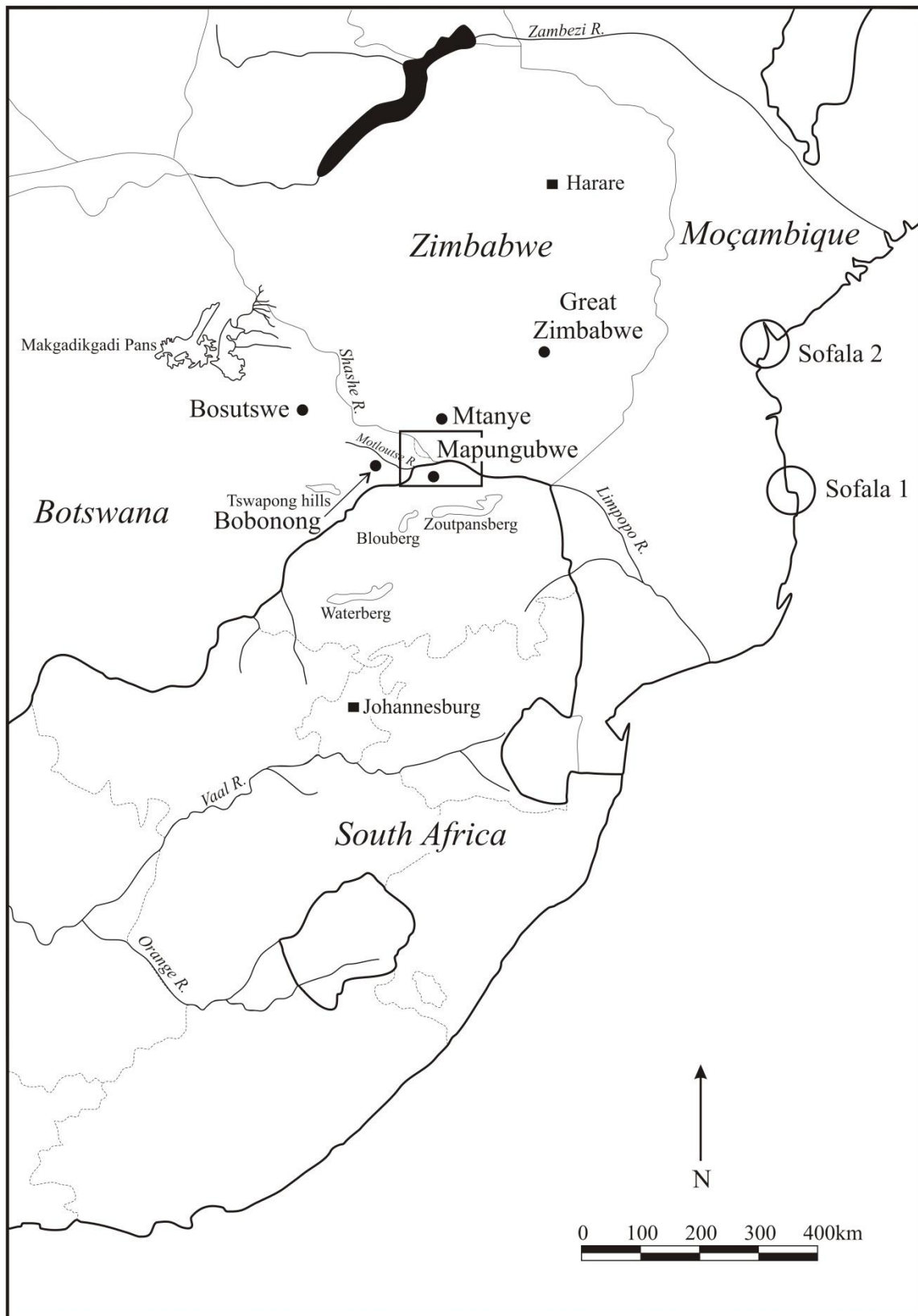


Figure 1: Map of Shashe-Limpopo Confluence Area and some important sites. After Huffman 2009b.

The University of the Witwatersrand was involved with the original research at Mapungubwe through C. van Riet Lowe, and the University still houses some important collections. Since the 1990s, a number of research projects have focused on the Middle Iron Age (AD 900 – 1300) under the Origins of Mapungubwe project spearheaded by Professor Tom Huffman.

The project involves extensive surveys for Iron Age sites, test excavations of Middle Iron Age sites focussing on diverse topics, such as population dynamics (Huffman 2000), ethnicity (Calabrese 2000, 2007; du Piesanie 2008), herding strategies and climate (Smith 2005, Smith *et al.* 2007), glass beads (Wood 2000, 2005, 2011), phytoliths (Mashimbye 2007, In Prep), and the ethnographic and archaeological aspects of rainmaking (Murimbika 2006, Schoeman 2006a). Current research includes human diet, faunal remains and herding strategies. As a result of this research there are approximately 1150 sites on record, 16 have been excavated and roughly 60 ¹⁴C dates are available (Huffman 2007b and pers comm. 2012).

Unfortunately, most of the early archaeologists did not rehabilitate their excavations. To rectify this problem in preparation for World Heritage listing, SANParks commissioned the rehabilitation of Mapungubwe in 2003. As a result, I could use the large body of documentation and artefacts that are now available.

The main processes and culture history in the valley are now well documented. Recently, however, researchers have recognized a new ceramic facies, one marking the transition between K2 and Mapungubwe (Huffman 2007a, 2007b).

My aim is to analyse ceramics from the rehabilitation project focussing on the palace area and court area since this is where *Transitional K2 (TK2)* ceramics should be found associated with rainmaking, underlying classic *Mapungubwe* pottery. My results, incorporated with the existing definition of *TK2* ceramics, provide a more comprehensive definition of the facies and its key features. This new information will enable researchers to re-evaluate assemblages that were previously identified as *K2* or *Mapungubwe* and can help to identify and date sites without the necessity for excavation. These identifications in turn will help to clarify other questions regarding population dynamics, ethnic stratification, sacred leadership, the settlement sequence on Mapungubwe Hill and the spread of the Mapungubwe state.

I use a multidimensional analysis to examine ceramic units at K2 and Mapungubwe. The results are compared with other samples from the area (Figure 2), for example Pont Drift 1 (Hanisch 1980), VK2 (Huffman 2006), Skutwater (van Ewyk 1987), Den Staat and Weipe (Huffman 2006), Bobonong (Kinahan, *et al.* 1998), Mtanye (Huffman 2008), K2 and Mapungubwe itself (Meyer 1980, 1998).

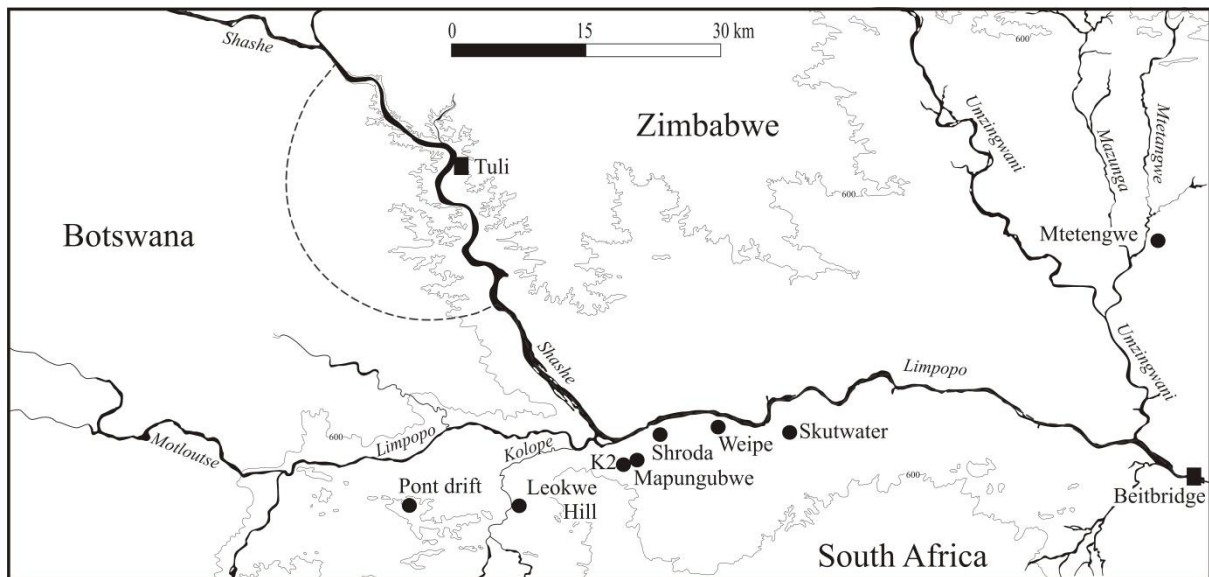


Figure 2: Location of important sites in the Shashe-Limpopo confluence area.

I.2 Plan of Presentation

Chapter II reviews previous research in the valley. It introduces the sequence of events and occupation from AD 900 with the identification of *Zhizo* ceramics, up to and including the rise of complex society at Mapungubwe at AD 1220. This chapter introduces new research and accepted hypothesis on the sequence and processes in the valley, and places my data in context.

Chapter III focuses on cultural aspects applicable to the Middle Iron Age in the valley. The archaeological signature of rainmaking and cultural organisation are discussed.

Chapter IV reviews the scope of work of the rehabilitation project as well as the localities from which the data were sampled. I further discuss the methodology used in the analysis of the ceramics.

Chapter V summarises the findings and the extent to which they answer the research questions.

Chapter VI collates the available data and uses the better understanding of *TK2* ceramics and compares it to assemblages misidentified as *K2* or *Mapungubwe*.

Chapter VII presents the conclusions and summary of my findings.

CHAPTER II: ARCHAEOLOGICAL BACKGROUND TO RESEARCH IN THE SHASHE-LIMPOPO VALLEY

II.1 Environmental Background

The Shashe-Limpopo Valley lies within the Limpopo Mobile Belt (McCarthy & Rubidge 2005) between the Kaapvaal and Zimbabwe cratons. This terrain consists of sedimentary rocks broken by mafic intrusions. The visual sedimentary formations include Molteno, Elliot and Clarens sandstones; while porphyritic dolerite and basalt form the intrusions. The Shashe and Limpopo are the major rivers that run through this Karoo landscape. The Shashe is considerably wider than the Limpopo because it once incorporated the Zambezi. Now, it is a river of sand except when in flood. The Shashe deposits silts when in flood and there are extensive floodplains downstream of the confluence. Furthermore, the Shashe acts like a dam wall when it floods, backing up the Limpopo and feeding a large vlei next to the confluence. This vlei is also supported by the delta of the Koloape, a small tributary that comes from the south. Significantly for the past, this vlei supports a vast stand of grass (*Sporobolus pyramidalus*) which has attracted large herds of elephant.

Equally significant, this floodplain is able to hold more water and for longer periods than nearby colluvial soils and the floodplains were favoured locations for cereal agriculture. In some cases it may have been possible to produce a good sorghum crop along the vlei margins from floodwater alone. Multiple yields could have also been possible especially because different varieties of sorghum and millet are adapted to different soils and moisture conditions (Simmonds 1976).

The valley lies within a rainfall trough because it is only about 600 m above sea level. As a result, the valley is semi-arid and hot, occasionally exceeding 50° C in summer before the rains come. Annual rainfall is about 350 mm and falls between October and March, with most rain expected between January and February. Only 1 – 0 mm of rain usually falls during the winter months (Smith 2005). Rainfall is variable, however, and some years receive only some 180 mm and others 500 mm.

This erratic rainfall and high temperatures support a subtropical alluvial vegetation type (Mucina & Rutherford 2006) within the Musina Mopane bushveld. In addition to

mopane, the flora includes dramatic baobabs (*Adonsonia digitata*) in an open, deciduous tree savannah.

The present-day average is not sufficient for traditional subsistence agriculture, but rainfall was adequate during the Medieval Warm Epoch, usually dated from about AD 900 to 1300 (Tyson *et al.*, 2000). Smith's (2005) isotopic data shows that there were multiple droughts between about AD 1200 and 1250 and then rainfall improved again until about AD 1300. These environmental conditions had a huge influence on the Iron Age economic and social sequence in the valley.

II.2 Archaeological Background

Previous archaeological research has reconstructed the settlement sequence. I will focus on the portions that have a bearing on my study.

The culture-history sequence is divided into the Early, Middle and Late Iron Age, and phases within each period are marked by different ceramic facies (Figure 3). Each ceramic facies that has a bearing on my study (Figure 4, 5, 7, 8, and 9) is illustrated in a circle or "wheel" of multidimensional types based on jars. Following Huffman (2007a), the most complex jar (consisting of vessel shape, motif and motif position) is presented in the middle. The different types of each facies appear in a circle around the most complex type. Most complex types have four decoration positions, and so there are usually 15 possible combinations (position 1 and 2; position 1, 2 & 3, etc.). The decoration positions are indicated under each type.

These facies in space and through time represent broad cultural identities because, as Huffman (1980) argues, pottery techniques and ceramic styles are learnt and communicated within specific cultural settings. I return to this point in Chapter IV.

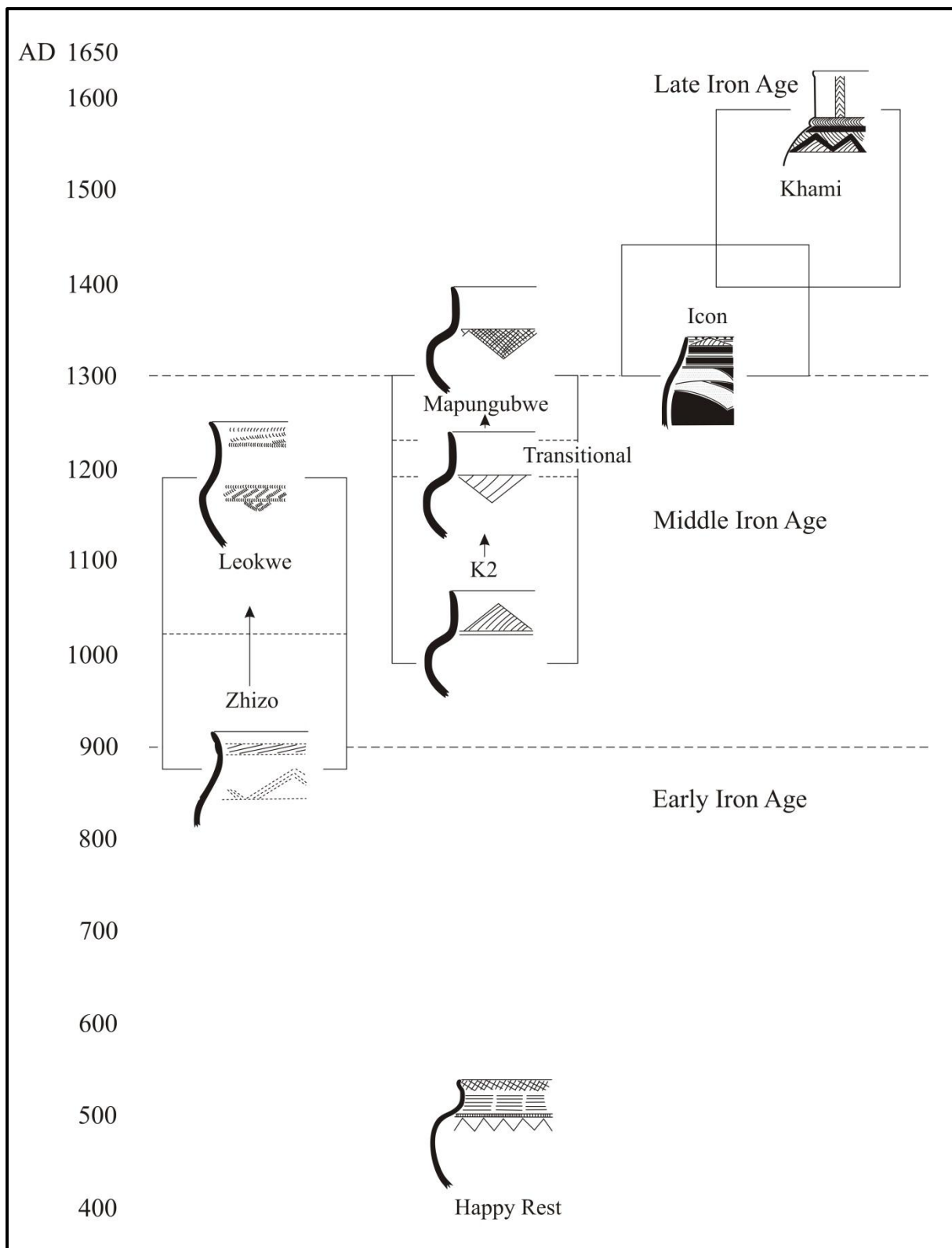


Figure 3: Iron Age ceramic facies for the Mapungubwe region (Adapted from Huffman 2009b).

A short summary of occupation in the valley provides the background for the origins of class distinction and sacred leadership.

II.2.1 Early Iron Age

Between AD 500 and 700, agro-pastoralists joined the hunter–gatherers in the region. This was marked by ceramics belonging to the *Happy Rest* and *Mzonjani* facies (Figure 4). These societies were patrilineal (cf. Hammond-Tooke 1993) and spoke an Eastern Bantu language (Huffman & Herbert 1994/1995).

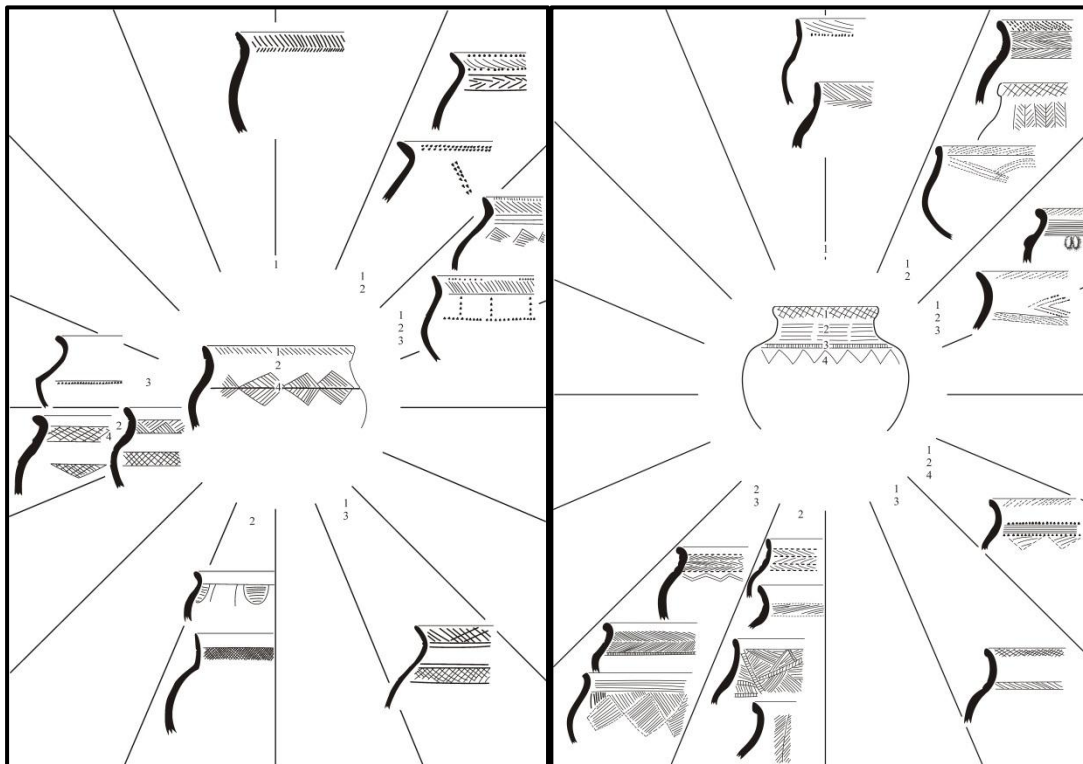


Figure 4: Definition of *Mzonjani* ceramics on the left and *Happy Rest* ceramics on the right (Adapted from Huffman 2007a).

After this initial intrusion, agro-pastoralists seem to have abandoned the area until AD 900 because of adverse climatic conditions (Huffman 1996a).

From AD 900 to 1000, *Zhizo* pottery (Figure 5) marks the second phase of occupation. *Zhizo* ceramics belong to the Nkope Branch of the Urewe Tradition (or Central Stream) (Figure 6). It originated in Eastern Bantu-speaking groups that spread southwards from East Africa through Malawi, Zimbabwe and into eastern Botswana and the northern part of the Limpopo Province (Huffman 1989). *Zhizo* homesteads were scattered in the valley with their capital at Schroda near the Limpopo River (Hanisch 1980, 1981). The population at Schroda was small, probably between 300 and 500 people. Initially it was thought that *Zhizo* people moved into the area to practise agriculture (Huffman 1996a). However, isotopic analysis shows that the climate was no better than today (Smith 2005). *Zhizo* farmers would therefore have found farming difficult, and some other factors must have lured them to the area. Presumably, they moved in to the valley to take advantage of the East Coast trade (Huffman 2000; Smith 2005), where the Limpopo River served as a route into the interior. The location of settlements (most are located well away from the rich agricultural soils around the floodplain because elephants would have destroyed the crops) as well as ivory chippings and exotic goods at Schroda (Hanisch 1980, 1981; Voigt 1983) suggest that trade was the main attraction. Ivory, like gold, was a lucrative export commodity, and historical accounts record large amounts of ivory reaching Sofala from the interior (Kusimba 1999). In addition, the wide distribution of *Zhizo*-period glass beads (Wood 2000, 2005) suggests that *Zhizo* people traded them for grain with more successful farmers outside the valley.

Toward the end of *Zhizo* occupation, the climate improved considerably. This climatic shift is evident at the archaeological site called Baobab on the farm Edmondsburg where at least 50 grain-bin foundations testify to successful agriculture (Calabrese 2007; Huffman 2009b).

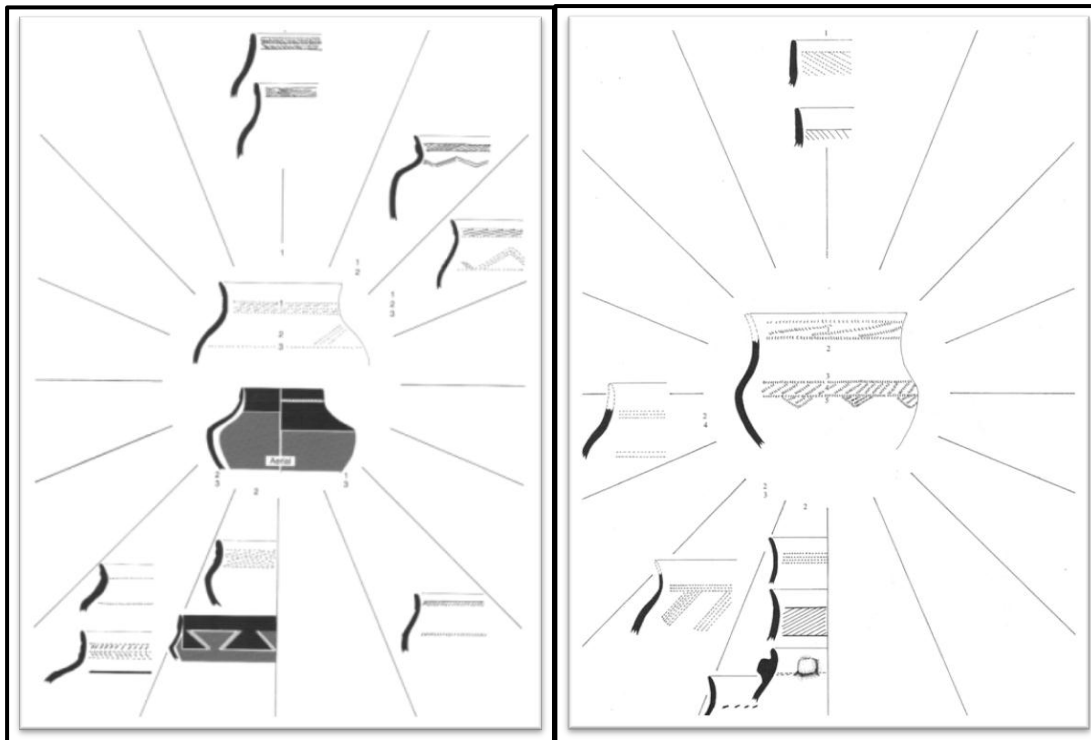


Figure 5: Definition of *Zhizo* ceramics on the left and *Leokwe* ceramics on the right (Adapted from Huffman 2007a).

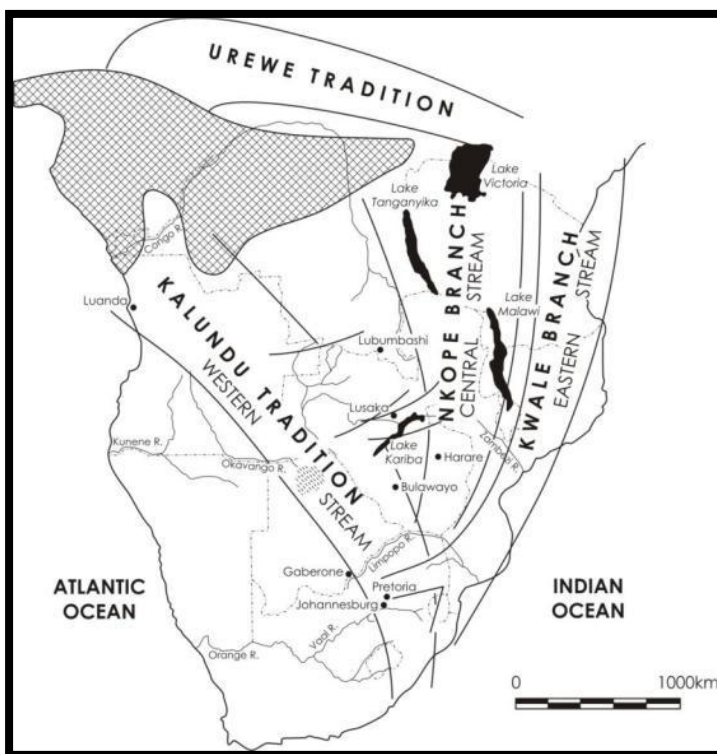


Figure 6: Map of southern Africa indicating migration routes of different Iron Age Traditions (Adapted from Huffman 2007a).

II.2.2 Middle Iron Age

After approximately 100 years, around AD 1010, Zhizo political control over the area was terminated by the arrival of new agro-pastoralists that archaeologists refer to as Leopard's Kopje. Leopard's Kopje ceramics are derived from the *Doornkop* facies (formerly Lydenburg) to the south (Huffman 2007a), an Early Iron Age phase of the Kalundu Tradition (Figure 6).

When Leopard's Kopje took over the trade, many Zhizo people left the valley, and their chiefdom shifted to Toutswe in Botswana (Huffman 1982; Denbow 1979, 1982, 1983, 1986). Some Zhizo people stayed in the valley as shown by Calabrese (2007) who established that *Zhizo* ceramics transformed into *Leokwe*. Key attributes of *Zhizo* ceramics include a rim and shoulder layout with triangles and hatched bands of comb-stamping. *Leokwe* continues this layout and decoration technique with multiple lines of stamping in the neck and stamped triangles lower on the vessel shoulder (Figure 5).

Various data show that Leokwe people lived within the K2 interaction sphere: this represents the first ethnic interaction during the Iron Age in southern Africa (Calabrese 2007; Huffman 2009b).

After replacing the Zhizo chiefdom, Leopard's Kopje people established their capital at K2, located in the raised valley on the western side of Bambandyanalo Hill (Fouché 1937; Gardner 1963). K2 was occupied between AD 1000 and 1220 (Meyer 1980, 1998, 2000; Vogel 2000). This period was marked by higher rainfall (Smith 2005), resulting in an emphasis on floodplain agriculture (Huffman 2000; Smith 2005) and population growth. As a result, the K2 capital was much larger than Schroda. It is estimated that 1500 people lived there at its peak. Innovative agricultural strategies also included the movement of livestock to ensure the availability of water and vegetation; it also limited the effect of seasonal changes (Smith 2005). During this time, K2 commoner sites were scattered in the river valleys away from the capital and eventually spread into areas not previously occupied by Zhizo communities (Huffman 2000). The extent of the coastal trade also increased, as did the size of the polity under the control of the K2 leaders (Huffman 1986a).

As a result of the increase in trade wealth and population, K2 society underwent political, economic and ritual changes. Changes in settlement organisation are evident at the K2 capital towards the middle of the occupation when cattle were displaced and the kraal relocated (Meyer 1980, 1998, 2000). This shift marks a change in the community's worldview towards class differences (Huffman 1982, 1986b, 2000).

Furthermore, changes in world view are marked by a shift away from the Central Cattle Pattern (CCP) to the elite Zimbabwe Pattern (ZP) (Chapter 3 discusses the CCP further). The new ideology of sacred leadership was materialised when Leopard's Kopje people moved from K2 to Mapungubwe, about a kilometre away. Overall, changes in worldview resulted in three spatial shifts. The first was the removal of cattle from the centre of K2, away from the men's court. This represents the start of class distinction. The second shift was the move to Mapungubwe, with leadership on the hilltop and commoners below. This change represents the full materialisation of class distinction and the start of sacred leadership. Thirdly, the construction of the first stonewalled palace on top of the rainmaking area on the hill signals the crystallisation of sacred leadership. The new settlement organisation at Mapungubwe is the first example of the ZP. As the society evolved from social ranking to formal classes, the CCP was no longer suitable. According to Huffman (1982, 1986b, 1996b, 2007b), these changes eventually became incompatible with the settlement organisation informed by the old ideologies.

During this period of transition in settlement organisation, class distinction and sacred leadership (AD 1200 to 1250), the ceramic style also changed. This change was also recognised by Meyer (1980) and Eloff & Meyer (1981), but they attributed it to a new influx of people.

More recently, Calabrese (2007) as well as Vogel & Calabrese (2000) identified a change in ceramics in the hilltop deposits at Leokwe Hill, referring it to a transitional phase between K2 and Mapungubwe. Huffman (2007a) formally defined this ceramic transition into what is now termed *Transitional K2*, or *TK2*. *TK2* ceramics are different from classic *K2* ware (Figure 7): *K2* has hatched bands and upright incised triangles in the neck, whereas *TK2* has triangles on the lower neck and upper shoulder, together with alternating triangles (Huffman 2007a). This change in

ceramics is also reflected in trade beads where new Indo-Pacific greens are abundant (Wood 2011), consisting of mineral soda glasses (Prinsloo *et al.* 2011; Wood 2011). Radiocarbon dates for levels with *TK2* pottery and beads range between AD 1175 and 1290 (Table 1).

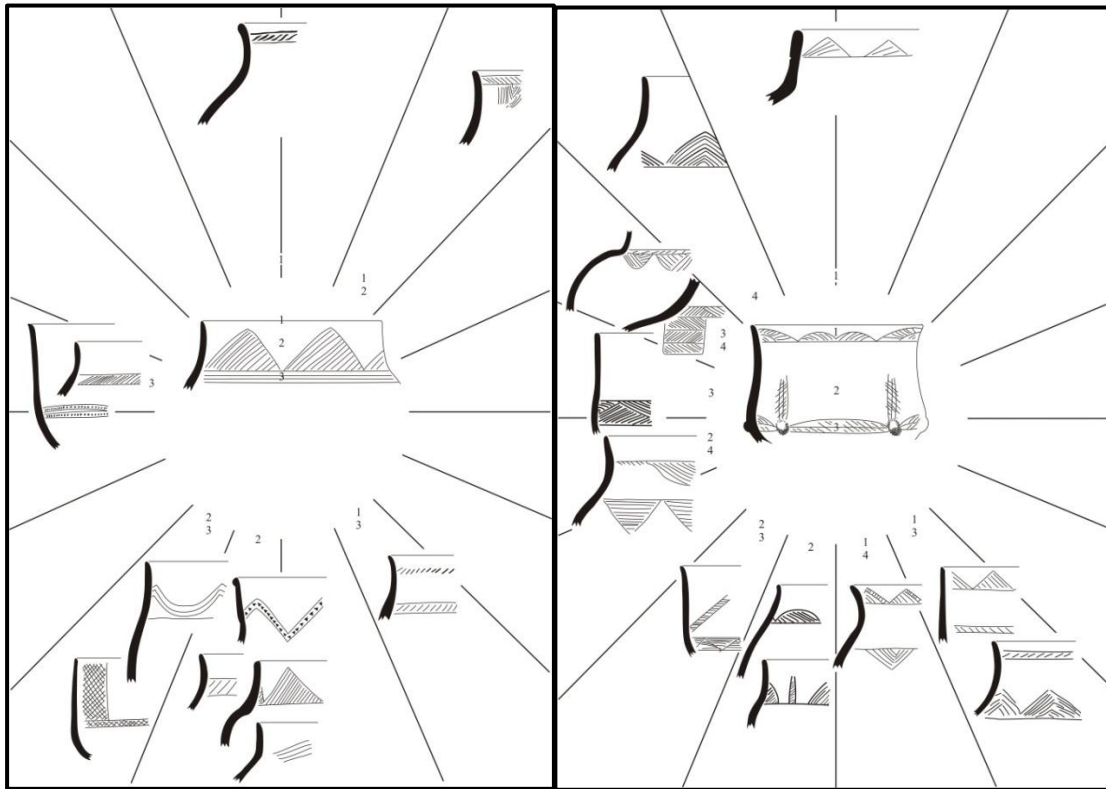


Figure 7: Definition of *K2* ceramics on the left and *TK2* ceramics on the right (Adapted from Huffman 2007a).

Table 1: Radiocarbon dates for levels with *TK2* ceramics (Adapted from Huffman 2007b).

Pont Drift	(Pta 1818 bp 840±50)	1200 – 1275
Skutwater	(Pta 3734-bp 830±40)	1215 – 1275
	(Pta 3715-bp 820±45)	1250 – 1285
Bobonong	(Beta 62740-bp 810±70)	1210 – 1290
Den Staat	(Pta 8350-bp 770±25)	1270 – 1285
Edmundsburg	(Pta7279-bp 850±50)	1195 – 1270
Mapungubwe Hill		
MK1, L11	(Pta 1159-bp 840 ± 40)	1210 – 1270
L11	(Pta 1158-bp 850±50)	1195 – 1270
Block 6/4	(Pta 372-bp 880±45)	1175 – 1250
MK3 L3	(Pta 1145-bp 880±45)	1175 – 1250
Southern Terrace		
K8, L3	(Pta 766-bp 860±45)	1195 – 1260
K8, L15	(Pta 1156-bp 860±40)	1195 – 1260

The dating of the *TK2* facies provides the background for a revised sequence of Mapungubwe Hill (Table 2).

Table 2: Dating sequence at Mapungubwe (Adapted from Huffman 2007b).

Classic Mapungubwe (Phase IV)				
Mapungubwe Hill				
MK4	60 - 75 cm		(Pta 6692-bp 720±40)	1285 – 1305
Skeletons	Gr7		(Pta 3480-bp 770±40)	1265 – 1290
	Gr6		(Pta 3480-bp 850±40)	1200 – 1265
Southern Terrace				
H5	L2ii	30 cm	(Pta 1138-bp 590±50)	1320 – 1345 1395 - 1425
K8	L1ii	28 cm	(Pta 1209-bp 770±50)	1260 – 1295
	L2ii	64 cm	(Pta 752-bp 790±50)	1250 – 1290
Transitional (Phase III)				
Mapungubwe Hill				
MK1	L11	155 cm	(Pta 1159-bp 840±40)	1210 – 1270
		165 cm	(Pta 1158-bp 850±50)	1195 – 1270
MK3	L3	35 cm	(Pta 1145-bp 880±40)	1175 – 1250
Block 6/4	150 cm		(Pta 372-bp 880±45)	1170 - 1255 (cereal)

Southern Terrace				
E2	L5	95cm	(Pta 437-bp 810±45)	1230 – 1280
	L7iii	147cm	(Pta 438-bp 820±60)	1210 – 1285
	L10	188cm	(Pta 439-bp 840±50)	1200 – 1275
K8	L3	88cm	(Pta 766-bp 860±40)	1195 – 1260
	L15	285cm	(Pta 1156-bp 860±40)	1195 – 1260
K2 (Phase II)				
Southern Terrace				
H5	L6iii	220cm	(Pta 2023-bp 930±40)	1045 - 1095 1135 - 1200
F4	L10	204cm	(Pta 2024-bp 1030±40)	1005 – 1035
K8	L16	292cm	(Pta 768-bp 1030±50)	1000 – 1040
EIA (Phase I)				
MK1	L17		<i>Happy Rest</i> pottery	
K8	L17		<i>Happy Rest</i> pottery	

Transitional occupation was equally divided between floodplain and escarpment where there is a clear distinction between cattle and agriculturally orientated settlements. The population was roughly 7750; made up of 6250 people in the valley and an additional 1500 at the K2 capital (du Piesanie 2008). On present evidence, the *TK2* facies changed into classic *Mapungubwe* by about AD 1250. *Mapungubwe* ceramics are characterized by dark burnish on bowls and cross-hatched triangles on jar shoulders (Figure 8). Evidently, *Leokwe* pottery had completely disappeared by this time.

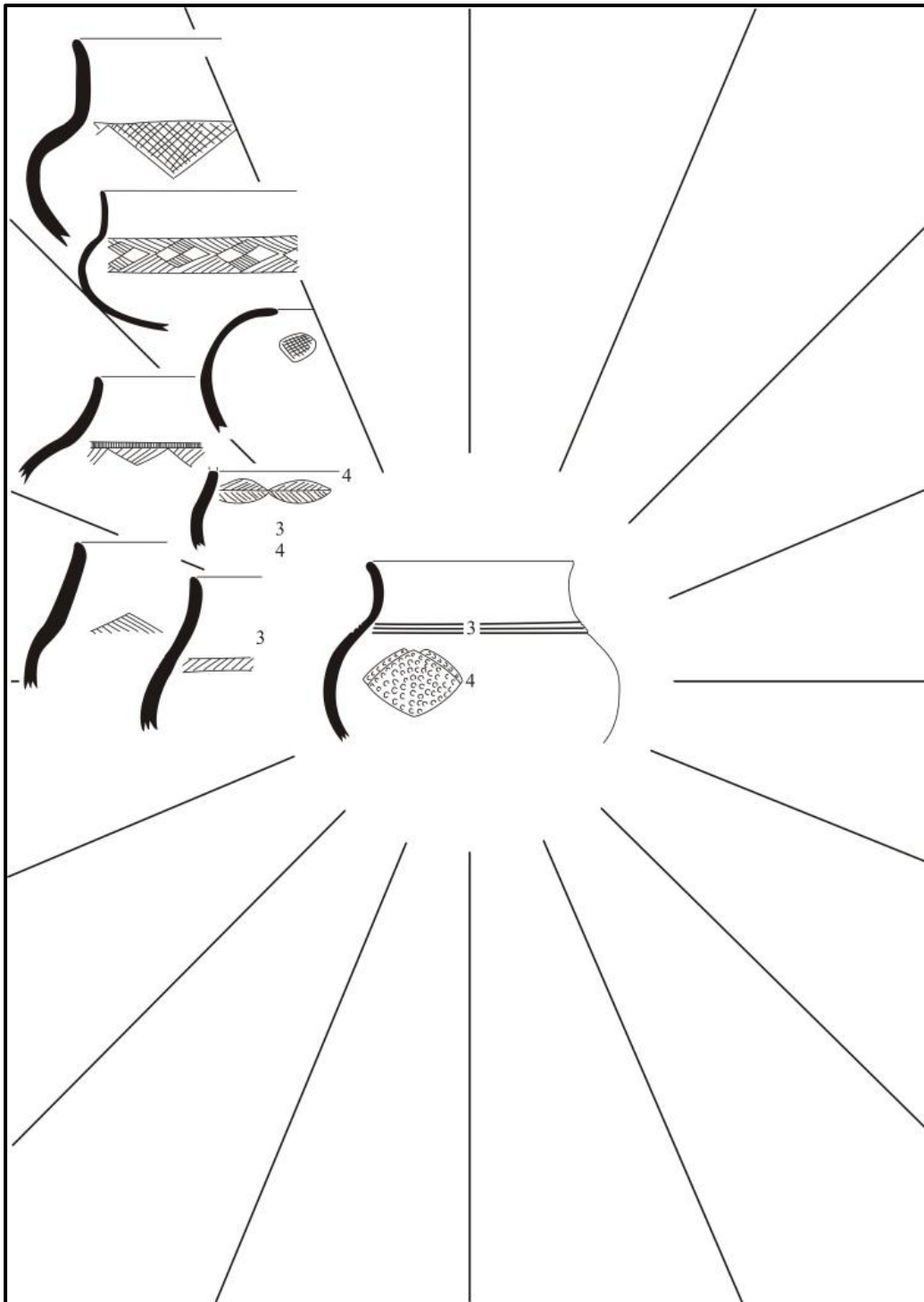


Figure 8: Definition of *Mapungubwe* ceramics (Adapted from Huffman 2007a).

Excavations at Mapungubwe were conducted on the hilltop and its base (Gardner 1955, 1963; Meyer 1980, 1997). The settlement organisation was different from the earlier K2 capital, and no cattle kraal was found on the hill or at the base. Another visible change is the presence of stone walls at Mapungubwe, but absent at K2. Compacted gravel floors marked the hilltop occupation, with substantial compacted gravel and daga floors (called Zimbabwe cement) characterising the palace.

Based on the ZP, Huffman (1996b) argues that the king and his ritual sister (without whom the king could not rule) and young wives would have occupied the royal palace.

The base of the hill is marked by residential deposits that can be classed into two types: elite (on terraces around the hill) and commoners (Meyer 1980, 1998, 2000; Huffman 1982, 1986b, 2000). The hilltop royals were thus physically separated from both their elite and commoner subjects. The supporters in turn probably occupied different areas according to their family units. This physical separation signals class distinction. According to Schoeman (2006a), social hierarchies were no longer solely created through lineage links with the leaders. Instead, some hierarchies probably related to occupation specialisation. In addition to coastal trade, the economy now included specialised craft production for metal, ivory, cloth and ceramics (Voigt 1983), as well as intensive flood plain agriculture (Huffman 2000) and cattle transhumance (Smith 2005, Smith *et al.* 2007).

Small quantities of *Eiland* ceramics (marked by fine herringbone and ladder stamping, Figure 9) occur on K2 and Transitional sites. Therefore, Eiland women may well have been preferred marriage partners (Huffman 2008). The core area for Eiland lies to the south around the Blouberg where iron ore is available. Thus, these marriage alliances may well have had an economic focus.

At its peak, Mapungubwe housed a population of about 5000 people. This denotes not just urbanisation, but also increasing political centralisation. Furthermore, such a large urban population requires an even greater amount of food than the K2 population, and the number of agricultural sites in river valleys also increased (du Piesanie 2008).

Large quantities of glass beads indicate that Mapungubwe traded successfully with both the East Coast and with communities in the interior (Wood 2000, 2005, 2011). Around AD 1300, Great Zimbabwe became the new seat of power, and Mapungubwe quickly declined.

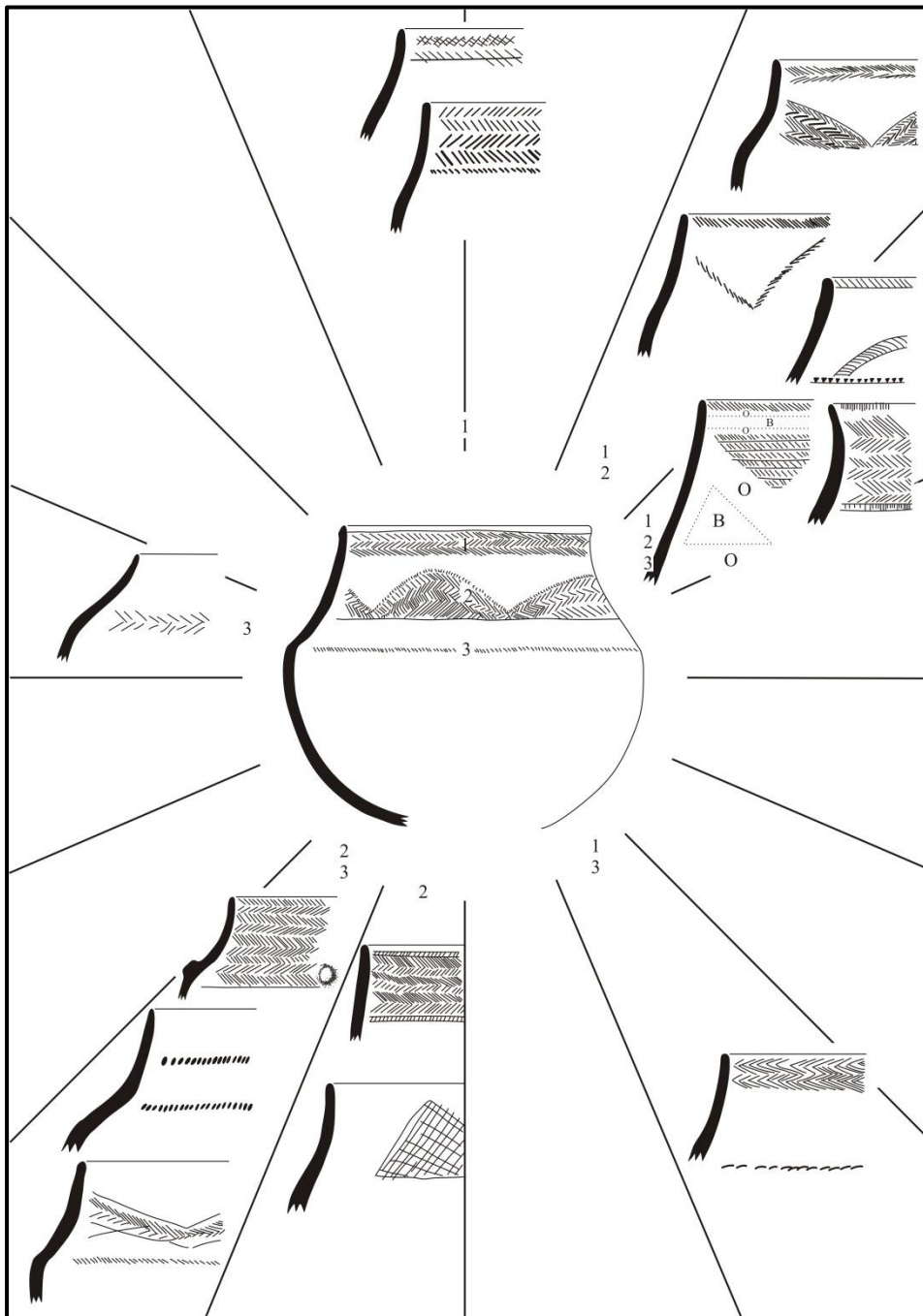


Figure 9: Definition of *Eiland* types (Adapted from Huffman 2007a).

Although the population was able to increase because of favourable climatic conditions, droughts nevertheless occurred (Huffman 2009a; Smith 2005). These droughts have been linked to intensive El Niño events (Huffman 2010b). At least two if not three occurred between AD 1200 and 1250, and they would have made surplus production difficult (Smith 2005). The 13th century droughts coincided with the shift from K2 to Mapungubwe and the further development of sacred leadership. The link is unclear, but a change in the ideology of rainmaking was an integral part of developments at Mapungubwe.

I consider the rise of class distinction and sacred leadership in Chapter III and the accompanying change in rainmaking.

CHAPTER III: RAINMAKING AND SETTLEMENT ORGANISATION IN THE MIDDLE IRON AGE

III.1 Introduction

As the previous chapter shows, the dating sequence for the Limpopo Valley is well established. Zhizo dates to between AD 900 and 1000, the capital at K2 dates to between AD 1000 and 1220 and then Mapungubwe leaders occupied the hilltop. The palace was built at about AD 1250 and around AD 1300 Mapungubwe and the entire valley was abandoned.

The transformation of the K2 polity into the Mapungubwe state not only involved a change in settlement organisation but also economic, spatial and ideological changes. Political changes and the development of social power and sacred leadership are influenced by many different aspects. In the Limpopo Valley rainmaking was an important aspect of political power.

To understand the relationship between rainmaking and settlement organisation, I briefly discuss the CCP and ZP, followed by a basic understanding of hilltop rainmaking and activity areas on Mapungubwe Hill.

III.2 Settlement organisation

For Bantu speaking people cattle are central to life— politically, economically and spiritually (Kuper 1980, 1982). During the Iron Age, many mixed farmers in southern Africa used some variation of the CCP. The CCP is associated with a linked set of beliefs about patrilineal descent, male hereditary leadership and bride wealth in cattle, as well as a positive view of the ancestors. This set of linked beliefs was held by Eastern Bantu speakers who had a ranked-based social organisation (Huffman 1982, 1986, 2001, 2010a).

There are now many examples of the CCP in the literature (e.g. Calabrese 2007; Dreyer 1992; Huffman 1993; Kinahan *et al.* 1998; Loubser 1991, 1994; Maggs 1976; Manyanga 2007; Pistorius 1992; van Ewyk 1987; van Waarden 1989; Whitelaw 1994). The male domain in the village centre (Figure 10) contained a cattle kraal with

male burials, as well as grain pits and raised grain bins for long term food storage. The central area also often contained a public smithy and always an assembly area where men gathered to resolve disputes and make political decisions.

The outer zone was arranged by a system of seniority. The focal point was a 'great hut' that was occupied by the senior wife or mother of the village headman and built upslope from the court and kraal. Married women lived in this outer zone, with their individual households arranged to the left and right of the great hut. These households also included cooking areas, private grain bins, shallow storage pits as well as the graves of wives and children (Huffman & Murimbika 2003).

However, when the kin-based, ranked society changed to a class-based system, the principles of the CCP did not fit with the new ideologies. When the leadership moved to the hilltop and separated themselves from commoners, they began the ZP.

In the ZP the same concepts (Figure 10) as in the CCP existed but they were expressed in a different way. More particularly, a ZP capital requires five components to function (Huffman 1996b):

- 1) a palace at the conceptual back of the settlement;
- 2) a court to one side;
- 3) compound for the leaders' wives opposite the court;
- 4) place for followers at the front;
- 5) and various places for guards.

Sacred leaders had to remain aloof and so the palace was private and sacred. Ideally it should be placed above, behind and east of the public and secular area allocated to followers. The court, on the other hand, was predominantly a male area allocated to the side of the palace, on a separate status axis, as opposed to the compound for the king's wives. The palace and the town should be protected from physical and supernatural danger by concentric rings of guards and medicine. Away from the capitals commoners still followed the CCP.

Both Zhizo and Leopard's Kopje settlements were organised according to the CCP model (Hanisch 1980; Huffman 1986a, 2000; Kinahan *et al.* 1998; Kuper 1982; Manyanga 2007). This indicates that Leopard's Kopje people and Zhizo communities

held similar worldviews. Murimbika's (2006) research shows there was a specific ideology about agriculture and rainmaking that was associated with the CCP.

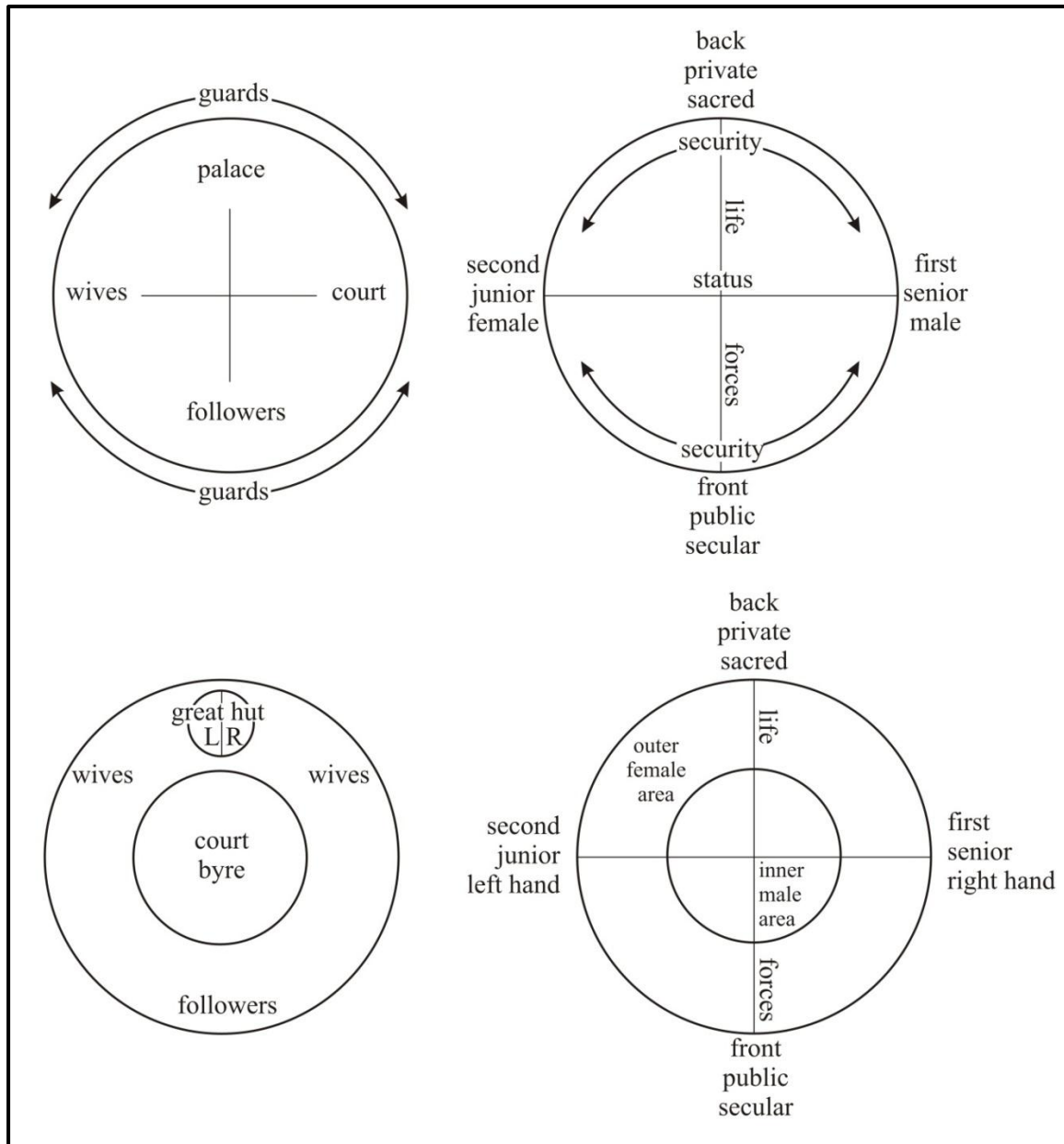


Figure 10: Idealised model of the Zimbabwe Pattern (upper) and Central Cattle Pattern (lower) (Adapted from Huffman 2009b).

III.3 Rainmaking

Eastern Bantu speakers in southern Africa are the descendants of pre-colonial farmers. Their ethnography is thus directly relevant to understanding the Iron Age archaeological record. Rainmaking was tied to the agricultural cycle in their society (e.g. Schapera 1971). Rainmakers were generally men who performed their duties in a special area at the back of their homesteads. Normally, they appeared to be successful. When these rituals and medicines failed, however, and droughts persisted, rainmakers moved to special, steep-sided hills (Murimbika 2006).

Schoeman's (2006 a,b, 2009) research shows that rainmaking hills are distinctive in that they are:

- (1) usually steep-sided with difficult access;
- (2) too small for normal settlement;
- (3) covered in pottery from different time periods;
- (4) and exposed rock often bears artificial cupules in association with natural cisterns.

Moreover, the archaeological signature on these hills is also distinctive. The deposit contains features such as temporary small stock kraals, temporary grain bins, burnt sorghum and thin lapa surfaces (Murimbika 2006; Schoeman 2006a,b). These thin lapa surfaces are characteristic of the TK2 period, and I discuss them further shortly. Significantly, no other activity in the archaeological record produces this kind of deposit on this particular kind of hill. Huffman (1996a, 2009) argues that this archaeological signature correlates with independent climatic evidence for aridity (Smith 2005; Smith *et al.* 2007; Tyson & Lindesay 1992), and can be used as a cultural proxy for drought.

Smith's (2005) isotopic evidence recognised multiple droughts during the Transitional Period (AD 1200-1250) when both temperature and rainfall dropped well below average.

Numerous hills in the area have a considerable amount of rainmaking deposit that dates to this same time such as EH on the farm Machete (Schoeman 2006a,b).

Huffman (2007b) argues that Leokwe Hill Calabrese (2007), near EH, was also a rainmaking site and not an early elite residence.

By the mid-13th century, professional rainmakers no longer used hills in the Mapungubwe area because sacred leaders had changed the system. Rainmaking had become fully nationalised (Schoeman 2006a).

The impact of the 13th century droughts on the final materialisation of sacred leadership is still unclear and needs further investigation. Huffman (2009b) argues that if historic cultural systems are reliable guides, then the return to higher rainfall would have been interpreted as supernatural sanction for the new order. In any case, from this time on most sacred leaders regularly placed their palaces on top of rainmaking hills (Huffman 2009b).

III. 4 Mapungubwe Layout

Archaeologically, prestige walling identifies the hilltop palace, while the status of its occupants is further marked by the royal cemetery and associated gold grave goods. Following Huffman (1982, 2009b), royal wives probably lived at the western end of the hill. The public court was now located at the base of the hill on the southern side, next to a large standing rock. Court officials could control access to the hilltop via the western ascent (Figure 11). The link between the court (male activity) and this route suggests it was only men that used it, or that it was the main access to the king. Access to royal wives was via a stairway on the west end that has now collapsed. Commoners lived around the base of the hill on the Southern Terrace and on a low plateau to the north. Unlike Schroda and the initial stage of K2 occupation, there was no central cattle kraal at Mapungubwe.

Presumably, one of the reasons for the shift from K2 to Mapungubwe was to express class distinctions and sacred leadership more overtly. As part of the ideological change, the sacred leader was more closely tied to rainmaking. At first, when the king lived on the west end of the hill, old-style rainmaking continued upslope in the centre (Figure 11), where isolated lapa surfaces mark this activity.

Later, at about AD1250, the first stonewalled palace was built on top of this area, and the king had become the rainmaker.

It was my task to examine the pottery from the earlier rainmaking area and the new court down below.

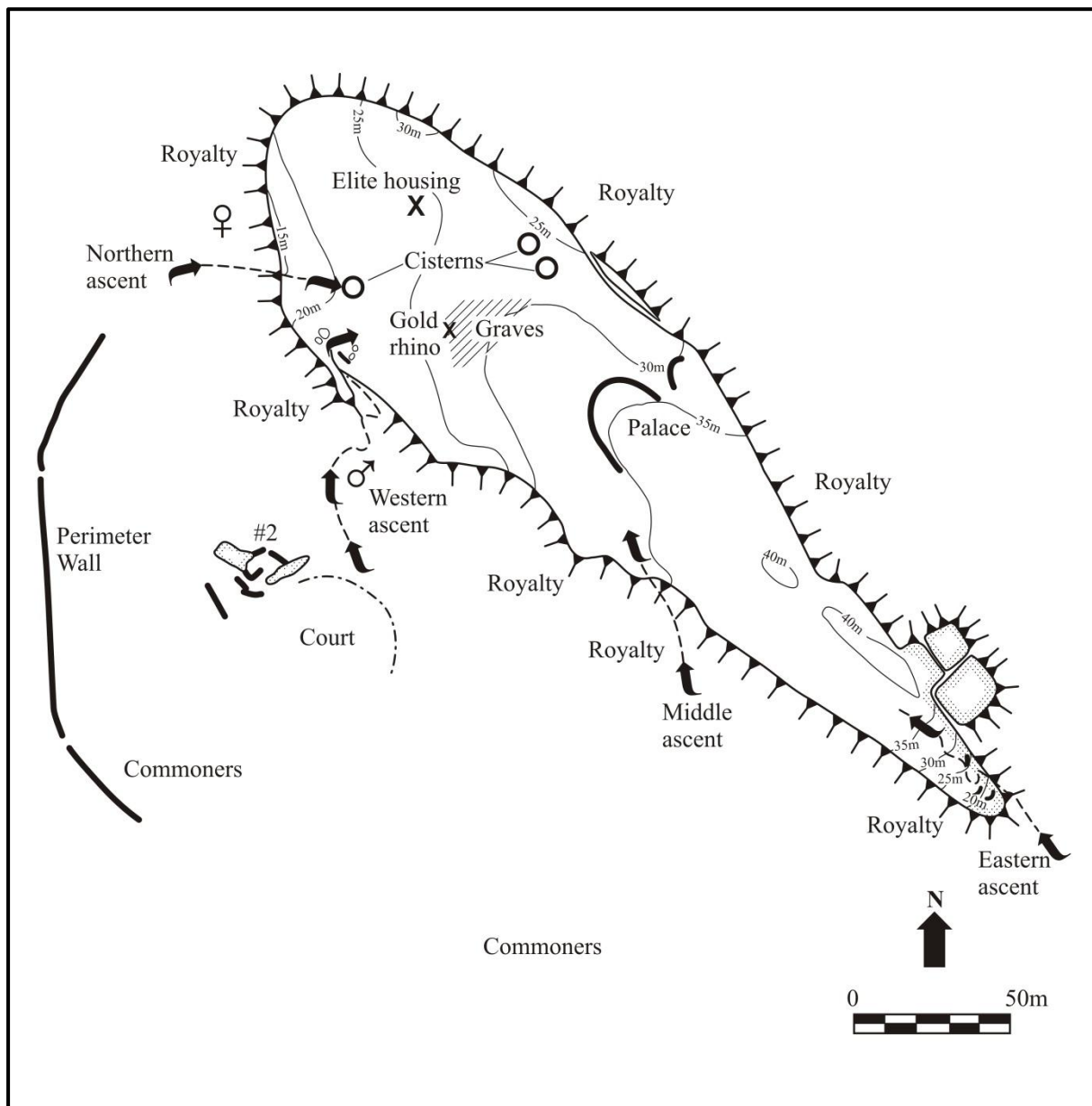


Figure 11: Mapungubwe settlement plan (Adapted from Huffman 2009b).

CHAPTER IV: METHODOLOGY AND DATA ANALYSIS

IV.1. Data analysis

Overall, this is not a theoretical study. Nevertheless, I employ existing theory about the relationship between ceramics and group identity. First, Bantu-speaking groups can be connected to various Iron Age entities through their material culture. Because material culture incorporates an arbitrary but integrated and repetitive code of cultural symbols, it can reflect group identity (Evers 1988). Ceramic style is part of this integrated code. As a component of culture, style is learned and possessed within groups of people, and the correlation between design style and specific groups is well known (Huffman 1980, 1989). Because of the variability and abundance of ceramics, it is the main artefact category used to recognise groups in the archaeological record (Huffman 1989; Huffman & Herbert 1994/1995).

Ceramics have been used to define Iron Age entities for many years (e.g. Schofield 1948). Of importance is that material culture groups do not represent entities defined by blood or political organisations (for further discussion see Huffman 1989, 2002, 2007a). Material culture and language are connected. Language is the primary form of transmitting thoughts; therefore, there is a vital relationship between worldview, material culture and language (Huffman & Herbert 1994/1995). Ceramic facies also represents linguistic entities, which means that people producing ceramics of related facies must have spoken the same or related languages, as long as the makers and users were the same at the group level. We know from experimental studies (Huffman 1980) that certain approaches to ceramic analysis can be used to determine archaeological group identity. According to Huffman, ceramic analyses represent the application of specific theory to data, and a formal analysis has three components: theory—the choice of variables for a specific purpose; procedure—the formation of variables into types; and comparison—the calculation of relationships between samples.

Shepard (1961) noted that the significance and reliability of ceramic data depend in no small measure on the proper balance of methods and full correlation of results.

With Huffman's (1980) standardized procedure these concerns can be overcome. The reason for a formalized analysis is that the choice of variables in any procedure can be intuitive or standardized. Standardized procedures are superior in that they can be repeated. Standardized procedures can be based on parts or whole vessels. Due to the fragmentary nature of the sample, I will use whole vessels and fragments that are sufficiently large to determine profile. This might be limiting as in some instances fragments will not reveal the combination of different designs on one vessel. Huffman's standardized procedure uses multidimensional types, focusing on profile, position of decoration and decoration motif. When ceramic style is complex and the producers and users were the same, then multidimensional procedures can reveal Iron Age group identities.

IV.2. Data set

Mapungubwe and K2 were extensively excavated between 1933 and the late 1970s with smaller excavations later (Fouché 1937; Gardner 1963; Eloff 1979; Meyer 1998). Unfortunately, most early archaeologists did not rehabilitate their excavations. In preparation for World Heritage listing, SANParks commissioned the rehabilitation of Mapungubwe in 2003. I was a member of the project team and spent 12 months helping to retrieve the sample. Ultimately, the rehabilitation yielded some 32 000 diagnostic ceramic pieces.

This large sample would have formed the basis of my project, but for various reasons beyond my control this was not possible. The excavated material was taken to the Mapungubwe Museum at the University of Pretoria to curate. Later, the collection was taken over by SANParks. SANParks denied us the opportunity to study the material at the University of the Witwatersrand, which seriously limited the time available for study. The Mapungubwe Museum, however, graciously made space available in their laboratory. Nevertheless, I had to change the aim of my study from a complete definition of *TK2* pottery to a focus on material recovered from the palace and court areas.

IV.3. Limitations

Apart from access, another major limitation was poor stratigraphic control. As Rowe (1961) noted, stratigraphic control in any analysis is particularly important. In the case of the rehabilitation, horizontal control was possible. However, we were required to recover slumped deposit in steps; and so vertical control was limited. Moreover, I was a junior member of the project and could not insist on more detailed recording. As a result, the precise distribution of different facies and ceramic types on the hill and the Southern Terrace cannot now be determined.

IV.4. Ceramic Analysis

My analysis follows Huffman's formalized procedure based on multidimensional types formed by the intersection of profile, decoration layout and motif. The complete list of such types forms the definition of a facies, that is, a ceramic unit with space and time boundaries. The results will be compared at a gross level with other samples from the area, for example Pont Drift 1 (Hanisch 1980), Skutwater (van Ewyk 1987), Mtanye (Huffman 2008), Leokwe Hill (Calabrese 2007) and Mapungubwe itself (Meyer 1980).

The ceramic sample originated from the following locations (Figure 12):

Second palace area on Mapungubwe Hill

JS1

Gardner East

JS5

JS6

Court

JS2(b)

I now briefly describe the rehabilitated sections and the scope of work for the five locations.

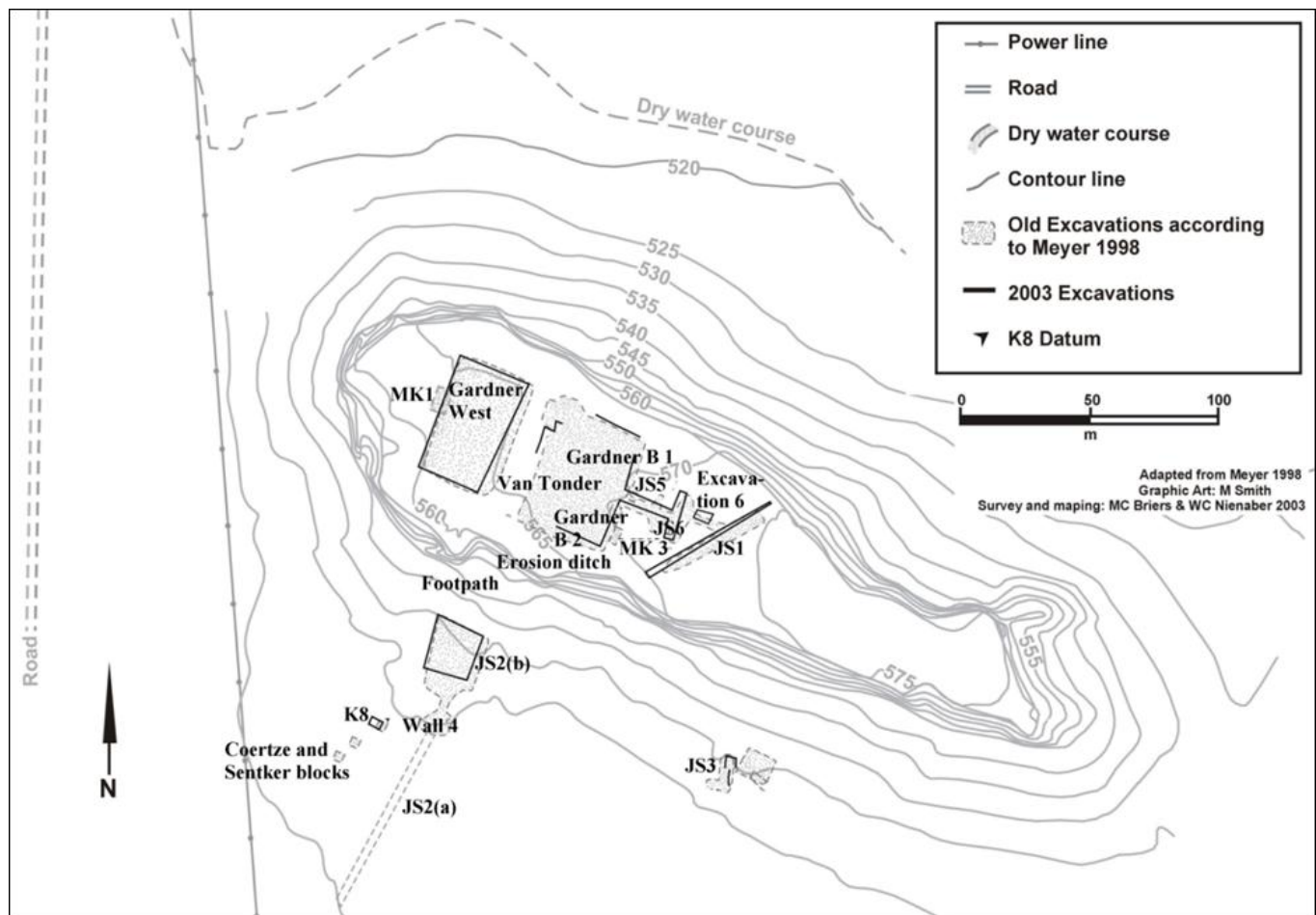


Figure 12: Sample localities (Adapted from Nienaber and Hutten 2006).

IV.5. Scope of work and terms of reference

The rehabilitation project was formulated with reference to the Mapungubwe (Vhembe/Dongola) National Park Archaeological Task Group (ATG). It consisted of the following:

- clean all old excavation profiles, trenches and dumps in a way suitable to enable documentation without disturbing any *in situ* deposits;
- screen all *ex situ* deposits originating from excavation profiles, trenches and dumps and recover culturally significant objects;
- use screened material to stabilize *in situ* deposits as per terms of reference;
- additional material for stabilization to be recovered from 1930s dump on northern side of Mapungubwe Hill;

- address the cultural complexity of the Mapungubwe Hill deposits by suitable rehabilitation and documentation means, taking the logistical difficulties of the locality into account.

This project resulted in the stabilization of the previous excavations and also the documentation of the stratigraphy exposed by the old excavations. For various reasons, the original excavators did not record most sections. To improve the recording, the walls were cleared somewhat to expose the stratigraphy. Re-exposing the walls also helped to prepare them for stabilisation. Because of restrictions by the ATG, *in situ* deposits could not be excavated as part of this process (Nienaber & Hutten 2006).

A slumped wall typically included a portion of intact original profile at the bottom with the crest eroded away to form a slope (Figure 13). To reveal the stratigraphy with a minimum loss of *in situ* deposit, the slumped material was removed, exposing the remainder of the original profile. The eroded slope above this was then excavated in steps, each exposing a section of profile.

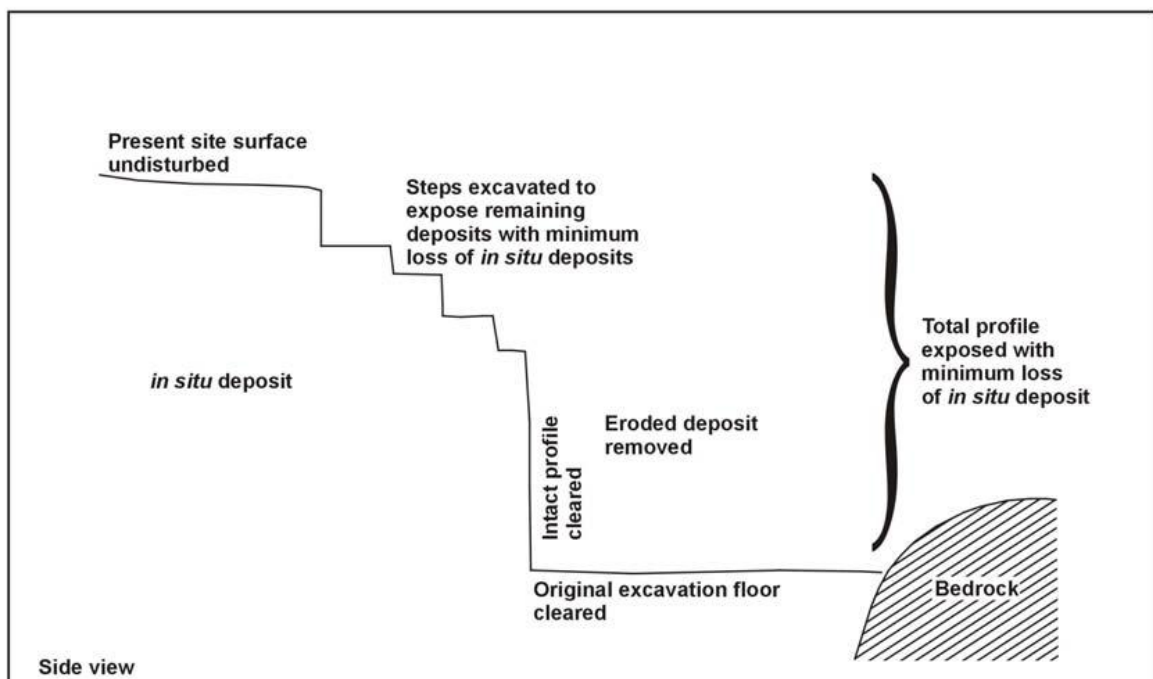


Figure 13: Section of rehabilitated wall (Adapted from Nienaber and Hutten 2006).

IV.5.1 JS5 and JS6

During 1934, Jones and Schofield excavated the JS5 trench perpendicular to JS4, effectively linking JS4 with JS6 (which was excavated later in the same season). The JS5 trench was expanded in a southerly direction by trench JS5(a) (Nienaber & Hutten 2006).

IV.5.2 JS2(b)

This excavation is located to the south of the hill between the cliff face and the series of fallen sandstone blocks that divides the Southern Terrace from the southern slope of Mapungubwe Hill. The first excavation in this part of the site was TB1 in 1933 (Fouché 1937). It must be assumed that this excavation was conducted by Fouché himself since Jones and Schofield only started excavating the site in 1934 (Nienaber & Hutten 2006).

IV.5.3 JS6

This trench was excavated in 1934 to further explore a so-called retaining wall uncovered by Van Riet Lowe in 1933 (Fouché 1937). It is unsure to which wall it refers. The trench also investigated the semi-circular depression on the summit of Mapungubwe referred to as the “Bowl”.

IV.5.4 JS1

JS1 (oriented approximately east-west on the south-eastern side of the hill) was excavated during the field season of 1934 by Jones and Schofield. It was in essence an exploration trench dug at the start of Fouché’s investigation. It was supposed to cut through the thickest part of the deposit on the summit (Fouché 1937).

During the 1934 excavation, it was expanded northwards (Feature JS1) to explore the wall it exposed (Nienaber & Hutten 2006).

These five areas produced the samples for my study.

CHAPTER V: RESULTS

My sample totalled 16 841 ceramics, producing 177 vessels and fragments sufficiently large for analysis. Because of the variety of decoration motifs they presented, I included bowls in the analyses. I recognised six facies. Numbers on the vertical access refers to decoration position and numbers on the horizontal access to the number of vessels identified.

V.1 Ceramic facies

The earliest ceramics consist of *Happy Rest* (Figure 14) with one stylistic class (necked jars with multiple bands in the neck) followed by *Leokwe* with one class (necked jar with a single band of stamping in the neck and alternating triangles of stamping on the shoulder) (Figure 15).

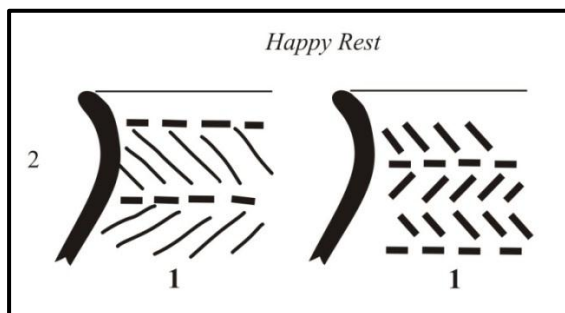


Figure 14: *Happy Rest* type.

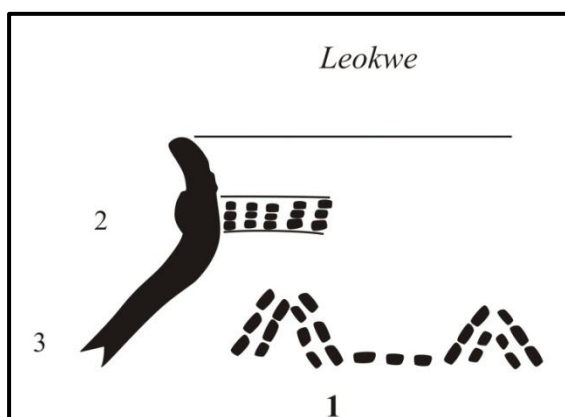


Figure 15: *Leokwe* type.

The next facies consist of *K2* with only one stylistic class (Figure 16): a recurved jar with hatched triangles in the neck.

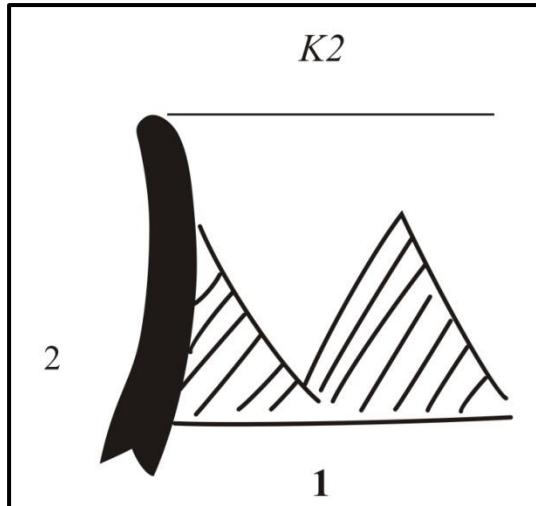


Figure 16: *K2* Type.

The third facies consist of *Eiland* with three stylistic classes (Figure 17):

1. recurved jars with cross hatched arcades in the shoulder with ladder stamping;
2. recurved jars with various decorations in the neck and on the rim, dominated by ladder stamping;
3. recurved jars with various decorations in position one dominated by cross hatching.

The fourth facies consist of *TK2* with five stylistic classes from the rehabilitation material (Figure 18):

1. recurved jars with incisions in position 1;
2. beaker with decoration in positions 1 and 2;
3. recurved jars with incised arcades and triangles as well as incised bands in position 2;
4. recurved jars and beakers with various decorations in position 3 dominated by incised arcades and triangles as well as incised bands;
5. constricted bowls and recurved jars with incised triangles in position 4.

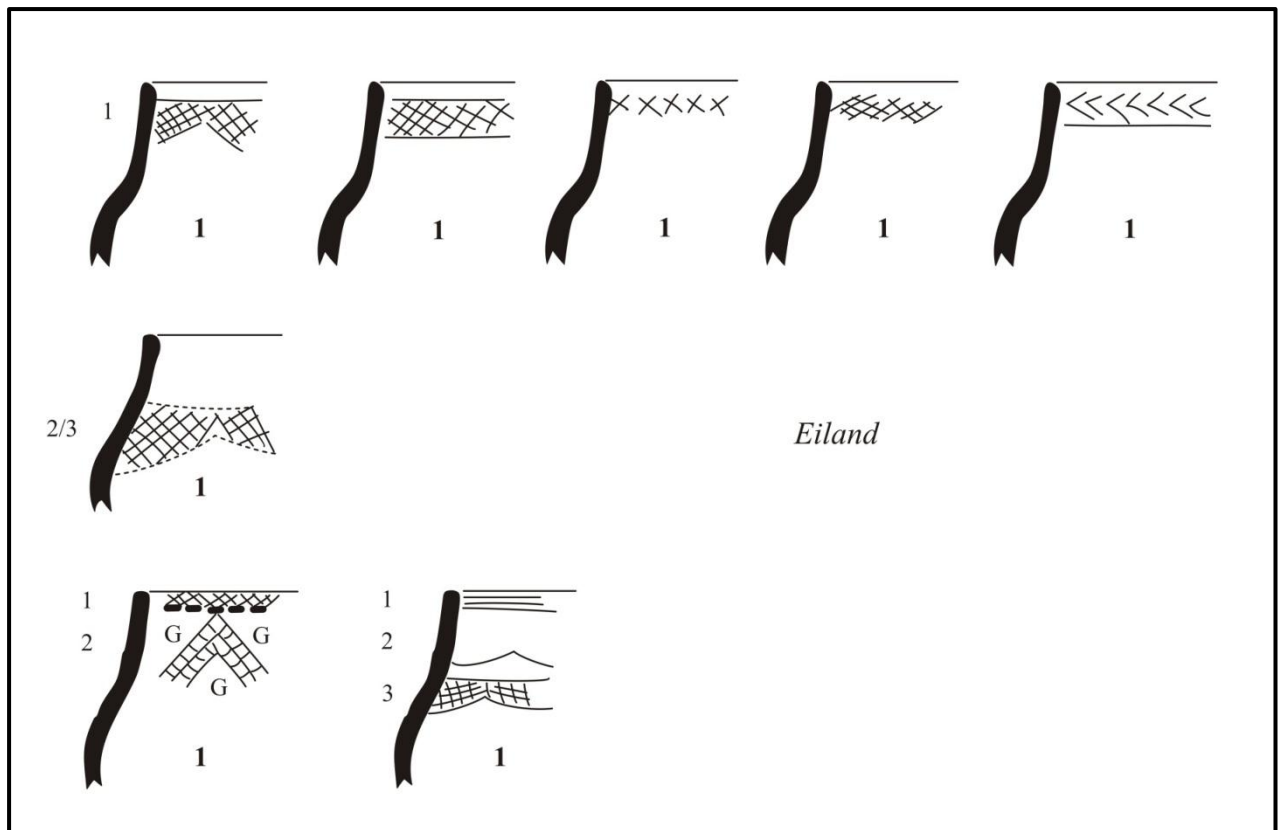


Figure 17: *Eiland* types.

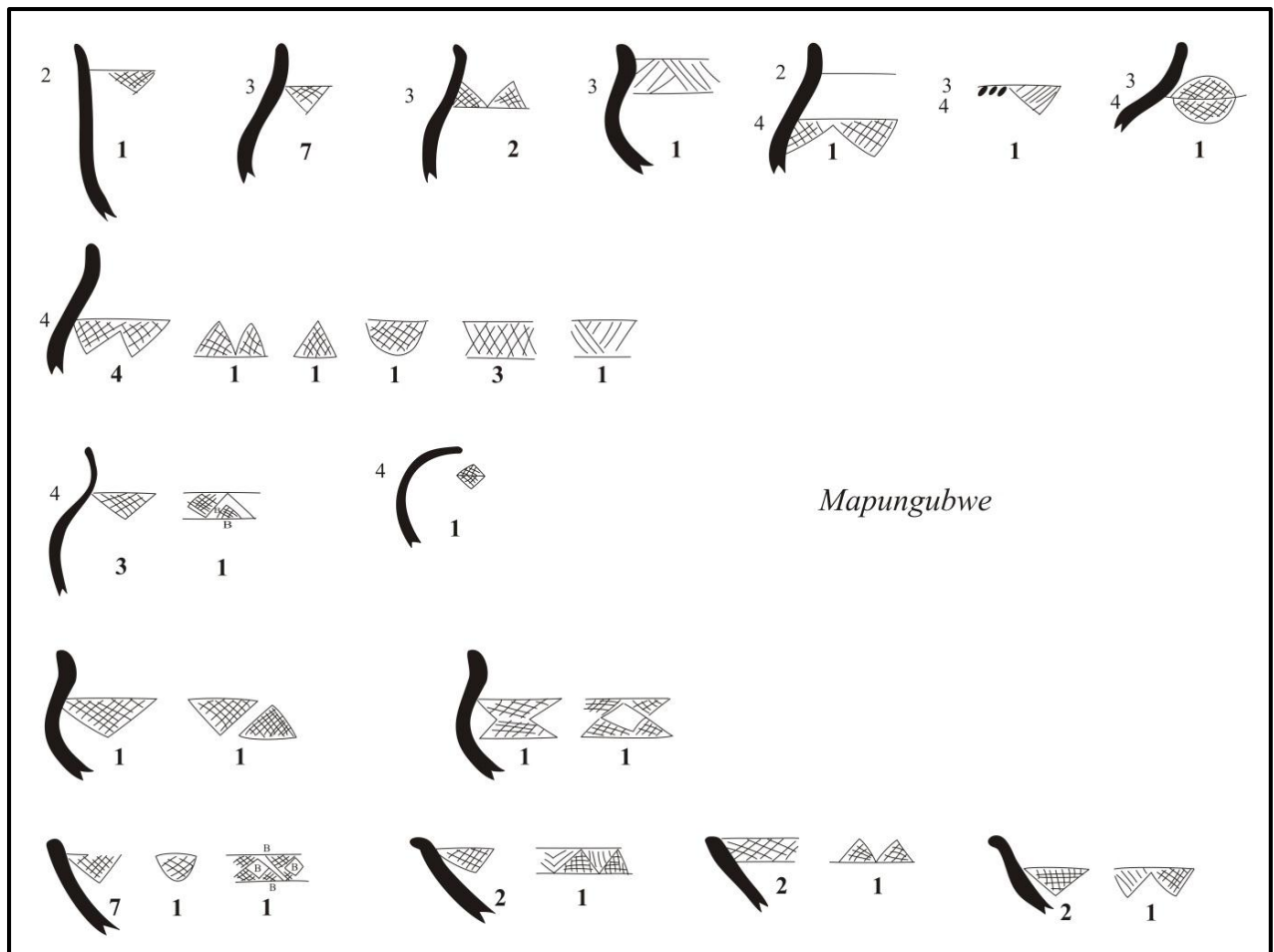


Figure 19: *Mapungubwe* types including bowls.

V.2 Distribution

The ceramics that were analysed from the rehabilitation project indicate at least five activity horizons in the hilltop palace and in the court area down below.

V.2.1 Palace

JS1

Three ceramic traditions are represented: *K2*, *TK2* and *Mapungubwe*. As expected here at the back of the palace, *Mapungubwe* has the highest number followed by *TK2* and *TK2/M* (types that cannot be positively assigned to either *TK2* or *Mapungubwe*). The only *K2* vessel was found in this area (Figure 20).

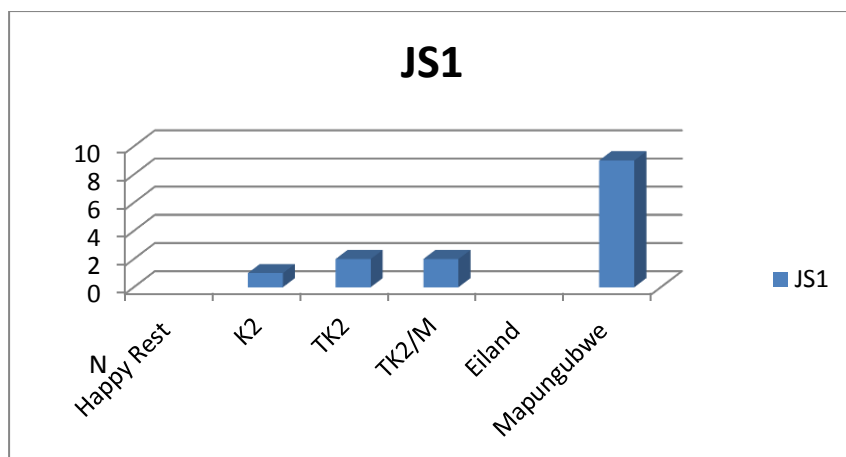


Figure 20: Distribution of ceramic facies in JS1.

JS5

Four ceramic facies were found in this location at the front of the palace. They belong to *Happy Rest*, *TK2*, *Eiland* and *Mapungubwe* (Figure 21). Finding the first three under the palace area conforms to existing data from the hill (Meyer 1980) and establishes when the hill was used as a rainmaking site. *TK2* is the most represented with *Mapungubwe* next.

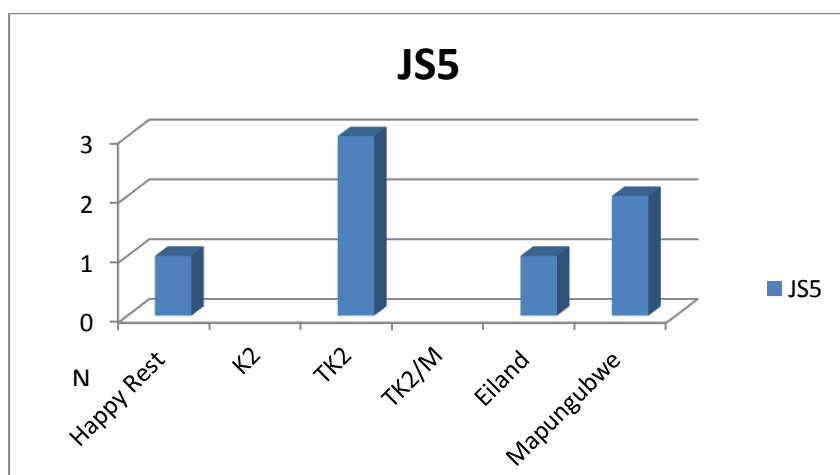


Figure 21: Distribution of ceramic facies at JS5.

JS6

The sample for JS6 was small, with only one *TK2* vessel (Figure 22).

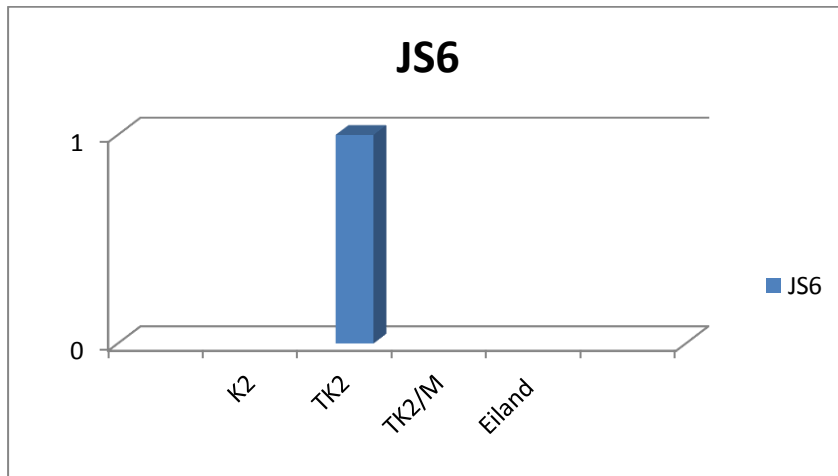


Figure 22: Distribution of ceramic facies in JS6.

Gardner East

Again the sample was small, consisting of one *TK2/Map* vessel and six *Mapungubwe* vessels (Figure 23).

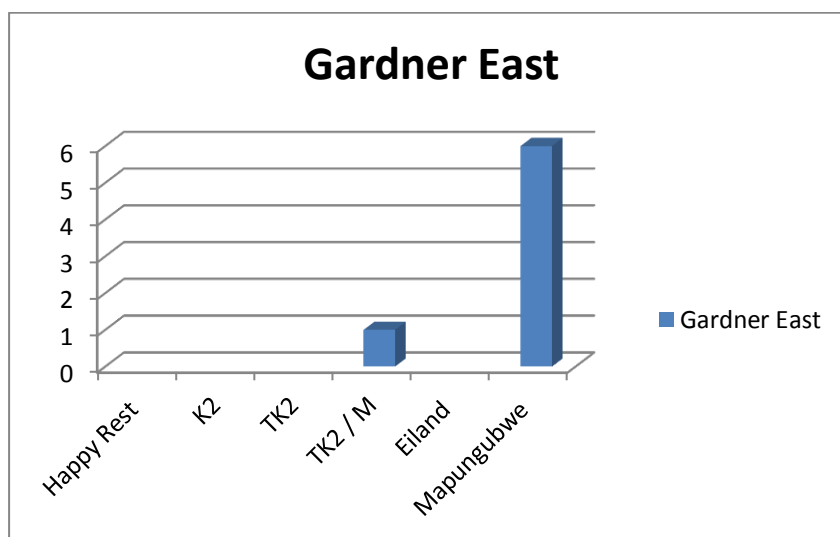


Figure 23: Distribution of ceramic facies at Gardener East.

V.2.2 Court

JS2b

JS2b contained the largest ceramic sample from all the locations and all five ceramic facies were present (Figure 24). *TK2* dominates here.

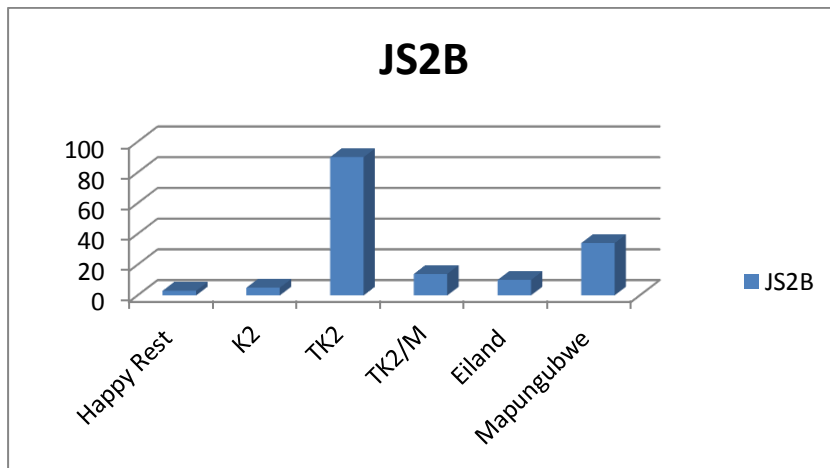


Figure 24: Distribution of ceramic facies at JS2b.

It is noteworthy that the court area has a similar series of facies as the second palace on the hill (Figure 25). I consider this point further in the next chapter.

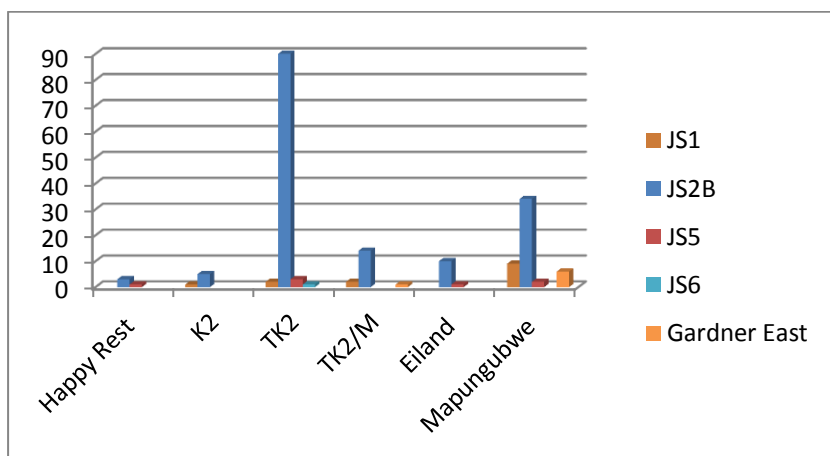


Figure 25: Distribution of ceramic facies in the five localities.

CHAPTER VI: DISCUSSION

The purpose of this chapter is to collate available data with my results to answer the research questions. I consider lapa surfaces, the sequence on Mapungubwe Hill, then ceramic evidence and lastly the re-classifications of other sites. In the process, I repeat some earlier points.

VI.1 Lapa surfaces

Towards the end of the occupation at K2, people started changing the way they treated the ground in the residential zone. More specifically, they began to smear a thin lapa surface around grain bins and houses. Although the material varied, these thin lapa surfaces became common at other settlements (Huffman 2007b), as well as on the Southern Terrace and Mapungubwe summit (Meyer 1980; Nienaber & Hutten 2006). Moreover, such surfaces became part of the archaeological signature of rainmaking activity at the same time on hills such as EH (Schoeman 2006b).

VI.2 Mapungubwe occupation sequence

At the end of the occupation of the K2 capital, people started making *TK2* ceramics. When the site was abruptly abandoned at about AD1220, there was an immediate increase of K2 people at Mapungubwe. A natural amphitheatre housed the new court at the bottom of the hill and the leaders moved on to the hilltop.

Before this time, farming communities had used the hill for rainmaking. Thin lenses in the bottom layers contain *Happy Rest* (Meyer 1980), and the north dump also yielded this early pottery. Furthermore, the rehabilitation project uncovered a rock cistern with a manufactured cupule inside (Nienaber & Hutten 2006). Two more cisterns are located on the west end, and numerous cupules are also scattered over the bedrock. Some may have functioned as mortars, while others were beyond doubt post sockets for later houses because they form circles. The remainder, however, were most likely associated with rainmaking.

When the Transitional occupation started at Mapungubwe, the first king lived on the western end of the hill not far from the three cisterns (Gardner 1963; Huffman 1996b). At the same time, rainmakers were active in the centre because lapa surfaces, similar to those found on other rainmaking hills, occur 50 to 75 m upslope. These lapa surfaces are associated with *TK2* pottery. On the Southern Terrace in JS2b lapa floors are found underneath stone walling (Meyer 1997). The *TK2* ceramics and numerous plastered lapa floors all date to Meyer's (1980) Phase III and IV. Several *TK2* vessels were found on the veranda of the hut (Figure 26) excavated by Gardner (1963: plate VIII, LV), and this first occupation clearly dates to the Transitional period. Somewhat later, the first stonewalled palace appears on top of the rainmaking area, demonstrating a change in ideology and practice. Trench JS1 is a good example where four separate dolerite lapa surfaces lay on top of at least one red mudstone lapa floor, all beneath the walling (Figure 27). This occupational sequence is clearly manifested at K8 (Figure 28) on the Southern Terrace.

Calabrese (2007) disputes the conclusion that sacred leadership started at Mapungubwe and argues that it emerged first at Leokwe. Studies like that of du Piesanie (2008) show that this is not the case, however, and a better understanding of *TK2* ceramics now further refutes this claim. Instead of the first elite residence, Leokwe Hill was a rainmaking site (Huffman 2007b).

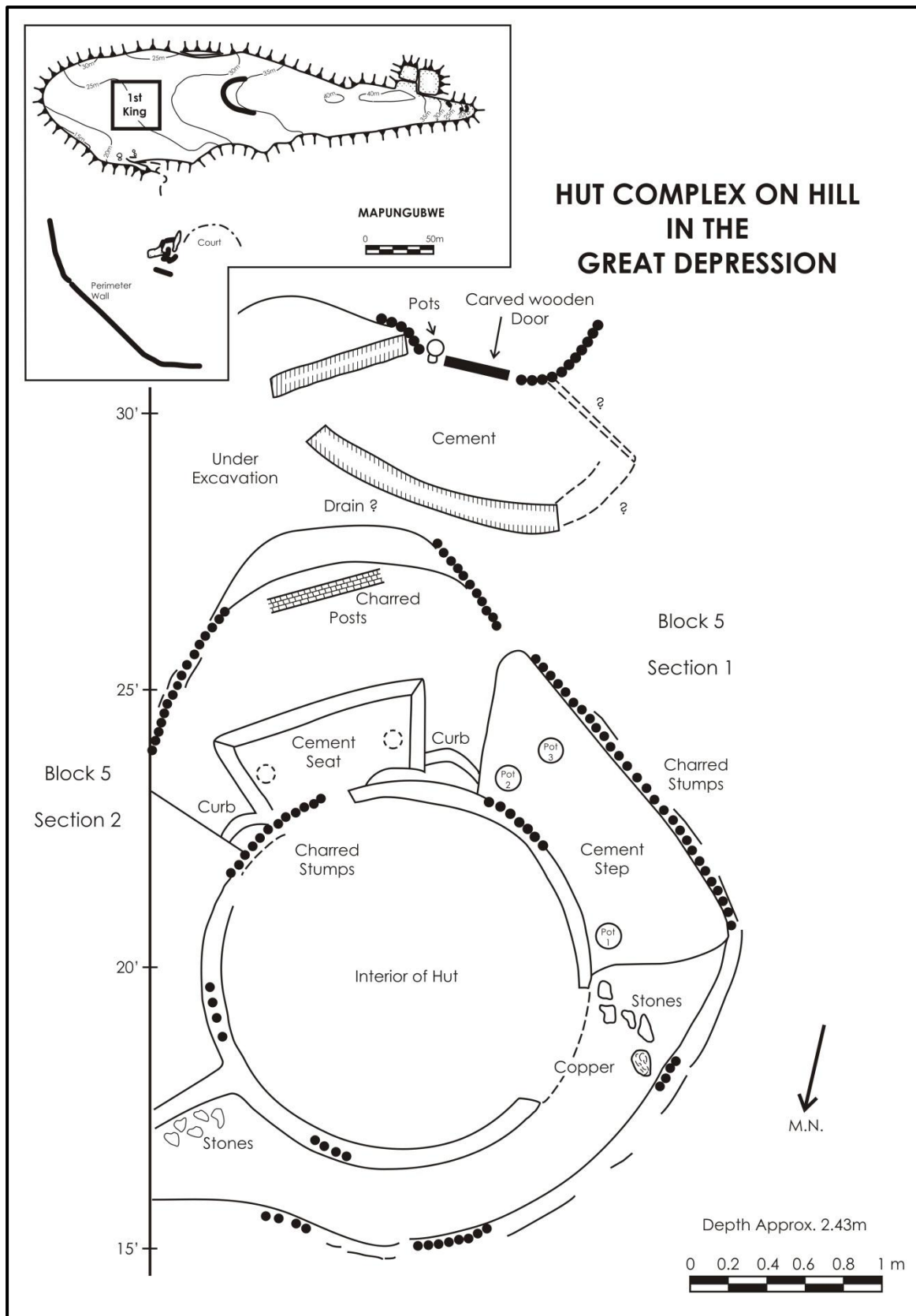


Figure 26: Hut complex associated with the first King. After Gardner (1963). (Adapted from Huffman 2009b).

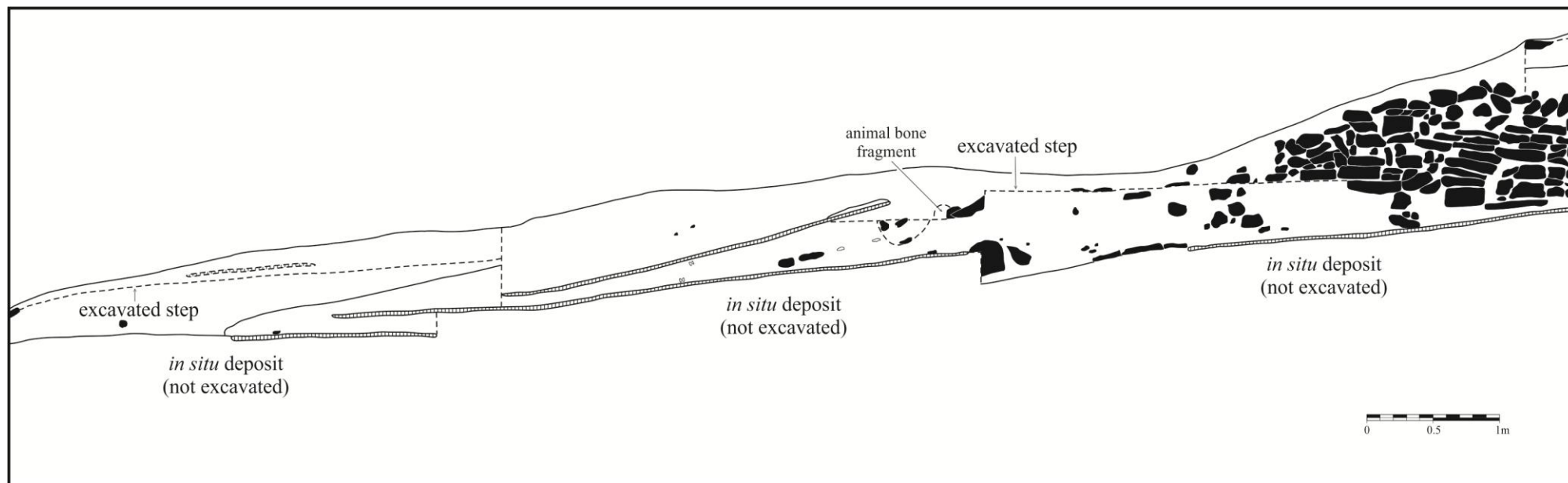


Figure 27:JS1. Southwestern wall (adapted from Nienaber & Hutten 2006: Figure 210b – 215b).

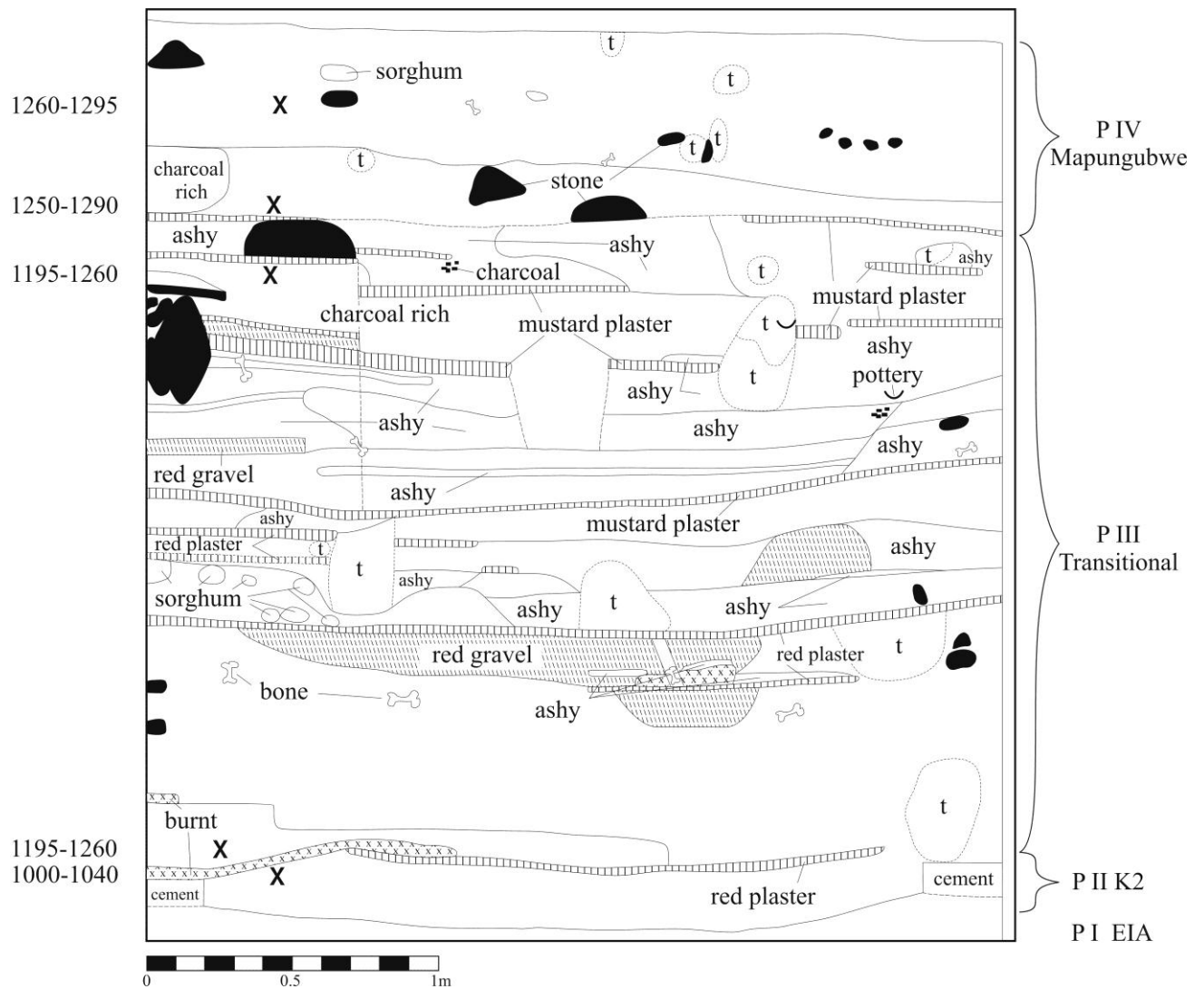


Figure 28 Eastern section of K8 from Nienaber & Hutten 2006: 93. Phases modified from Meyer 1998. (Adapted from Huffman 2008).

VI.3 Ceramic evidence

Huffman (2007a) first formalised the distinction between *K2* and the transitional step to *Mapungubwe*. My analysis of the rehabilitation material shows a higher frequency of *TK2* especially in JS2b, the court area, followed by *Mapungubwe* ceramics (Figure 24).

TK2 ceramics mark the first occupation layer on the Southern Terrace where it dominates the JS2b collection. In Block K8 it dominates levels 15 to 4. At the same occupational time, *TK2* also dominate levels IV and III on the hilltop, while *Mapungubwe* dominates levels I and II (Figure 29). The same scenario repeats itself at the Southern Terrace in levels IV and III (Figure 30). It is noteworthy that *TK2* types continued into level II and even into level I.

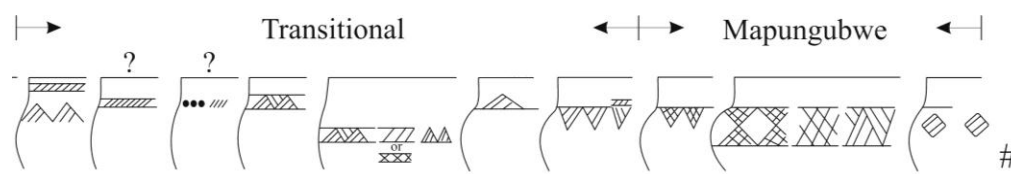
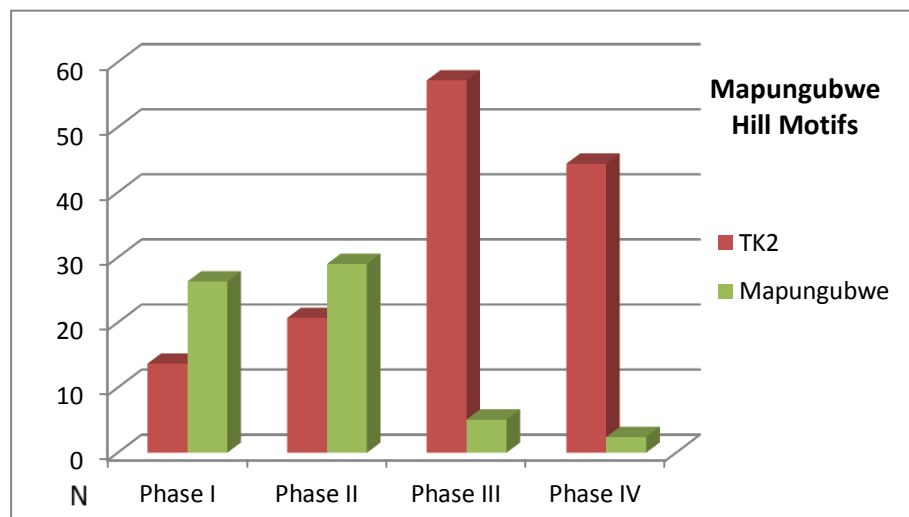


Figure 29: Mapungubwe Hill motifs compiled from Meyer 1980, diagrams 7-10.

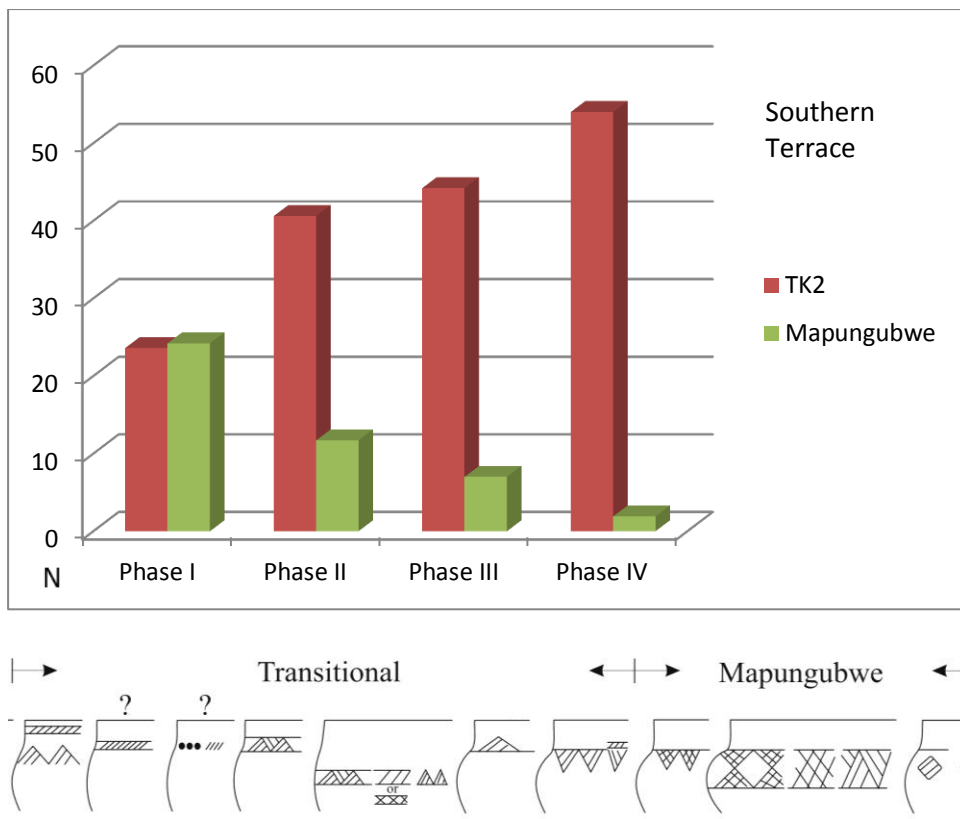


Figure 30: Southern Terrace motifs compiled from Meyer 1980, diagrams 7-10.

The same distribution is repeated at Leokwe (Figure 31) and Skutwater (Figure 32) where *TK2* types dominate both assemblages. This distribution has ramifications for the classification of sites and other issues.

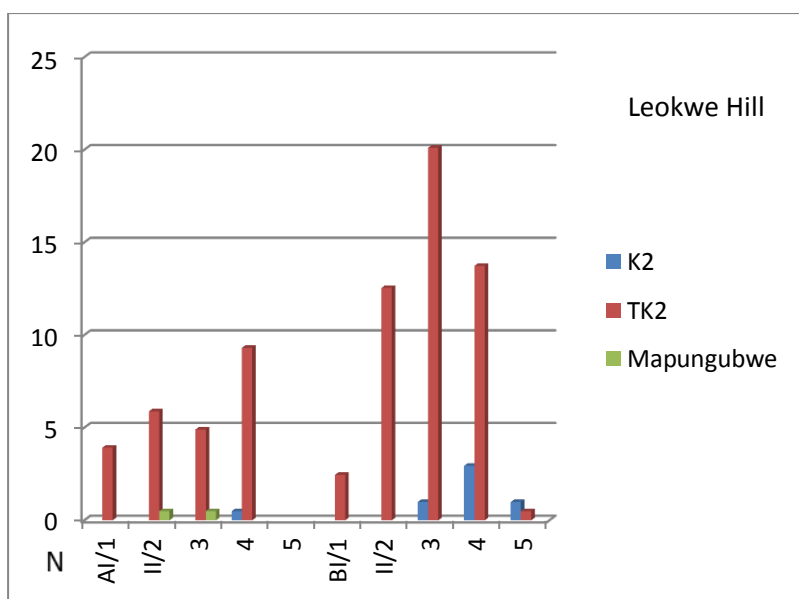


Figure 31: Ceramic facies at Leokwe, compiled from Huffman 2007b.

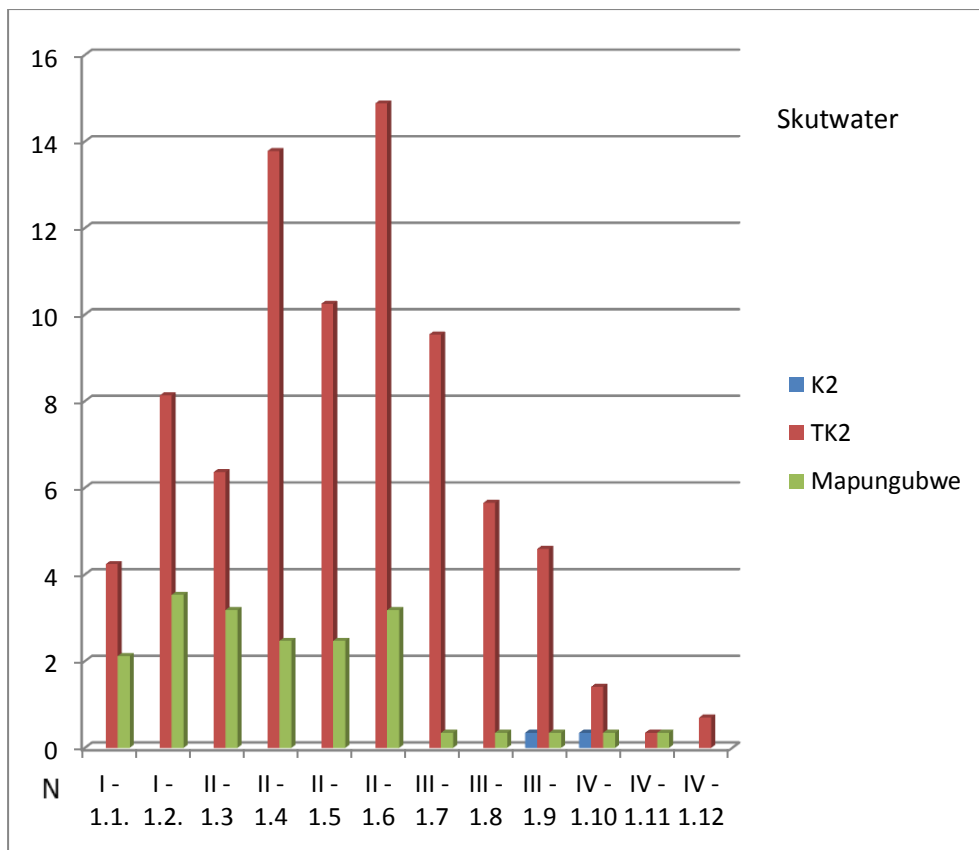


Figure 32: Ceramic facies at Skutwater, compiled from van Ewyk 1987.

VI.4 Re-classification of known sites

A better understanding of *TK2* ceramics enables us to reassess assemblages that were previously identified either as *K2* or *Mapungubwe*. The results are presented in Figure 30.

Moreover, a few *TK2* types (e.g. hatched triangles pointing down in position 4) are not exclusive: some continue into the *Mapungubwe* period. Although a new finding, this should not be a surprise since some *K2* types (e.g. a simple hatched band in position 3) continue as well. *Mapungubwe* types, however, appear to be exclusive. Types of the two facies on the same site may therefore not reflect repeated occupations. On the other hand, excavations show that some sites with both types, such as Mutshilachokwe (Manyanga 2007), are multicomponent. The survey data for the valley needs to be re-examined with these points in mind.

Finally, some sites such as Mtanye (Huffman 2008) are located some distance from the capital. This is also the time when Mapungubwe's impact is first felt at Great Zimbabwe. Indeed, Zimbabwe Period III may represent the establishment of a junior dynasty from Mapungubwe (Huffman 2009b). Because *TK2* pottery most likely evolved within the immediate Mapungubwe landscape, its distribution may well mark the spread of the Mapungubwe state.

Table 3: Distribution of TK2 sites that were previously identified as K2 or Mapungubwe.

Facies	Site										
	Pontdrift	Skutwater	K2	Mapungubwe	Weipe	Bobonong	Mtanye	Leokwe	Baobab	VK2	Castle Rock
Mapungubwe		x	x	x	x		x				
TK2	X	x	x	x	x	x	x	x	x	X	x
K2	X							x			
Leokwe								x			x
Zhizo	X		?								
Happy Rest				x				x			

CHAPTER VII: CONCLUSIONS

The main processes and events that led to class distinction and sacred leadership in the Limpopo Valley are well known. Recent research nevertheless advances our understanding of the development of social complexity at K2 and Mapungubwe and the social process that led to class distinction and sacred leadership. Furthermore, our understanding of the full definition of *TK2* ceramics, now well dated to between AD 1200 and 1250, helps us to re-evaluate the settlement sequence at the Mapungubwe capital.

At the end of K2, *TK2* ceramics and lapa floors appear in the archaeological record. Some burials at K2 had classic *TK2* ceramics associated with them as well as in the top occupational layers there. K2 people then moved over to Mapungubwe. At first, traditional rainmakers appear to have been active in the centre of the hilltop while the first king lived on the western end. Several vessels on the veranda of the hut complex in that area clearly date to the Transitional period.

Rain control is an essential part of political power in the both the Central Cattle Pattern and elite Zimbabwe Pattern. In the Zimbabwe Pattern the rainmaking area is at the back of the palace and therefore located inside the settlement. In this pattern the sacred leader is the rainmaker, praying to God through his ancestors. The multiple droughts between AD 1200 and 1250 may have contributed to the change in rainmaking. Whatever the case, the new sacred leader took over rain control, and he had the first stonewalled palace constructed on top of the central rainmaking area. This enclosure provided leaders with ritual seclusion. In terms of ideology, this third spatial shift marks the full development of sacred leadership that began when K2 people moved to Mapungubwe. Classic *Mapungubwe* pottery and thick daga floors characterise this final period. After sacred leaders took over rainmaking, professional rainmakers no longer used rainmaking hills near the capital.

The newly defined *TK2* facies also gives us a better understanding of population dynamics in the valley. It is now clear that *Transitional* pottery characterises the first true occupation of Mapungubwe Hill although Early Iron Age shards mark the earlier use of the hill for rainmaking rituals.

My analyses of the pottery from the Mapungubwe rehabilitation project enable us to re-evaluate assemblages that were previously identified as *K2* or *Mapungubwe*. Future surveys will also benefit from this better understanding of *Transitional* pottery. In addition to dynamics within the Limpopo Valley, my study shows that sites such as Mtanye in Zimbabwe, with a *Transitional* component, may well mark the initial spread of the Mapungubwe state.

REFERENCES

- Calabrese, J.A. 2000. Interregional interaction in southern Africa: Zhizo and Leopard's Kopje relations in northern South Africa, southwestern Zimbabwe and eastern Botswana, AD 1000 to 1200. *African Archaeological Review* 17(4): 183-210.
- Calabrese, J.A. 2007. The emergence of social and political complexity in the Shashi-Limpopo Valley of Southern Africa, AD 900 to 1300. Ethnicity, class, and polity. (BAR International Series 1617). Oxford: Archaeopress.
- Denbow, J. R. 1979. *Cenchrus ciliaris*: an ecological indicator of Iron Age middens using aerial photography in eastern Botswana. *South African Journal of Science* 75(9): 405-408.
- Denbow, J.R. 1982. The Toutswe Tradition: a study in socioeconomic change. In: Hitchcock, R. & Smith, M. (eds.), *Settlement in Botswana*, pp. 73-86. Johannesburg: Heinemann.
- Denbow, J.R. 1983. Iron Age economics: herding, wealth and politics along the fringes of the Kalahari Desert during the Early Iron Age. Doctoral thesis, Indiana University.
- Denbow, J.R. 1986. A new look at the later prehistory of the Kalahari. *Journal of African History* 27: 3-29.
- Dreyer, J.J.B. 1992. The Iron Age archaeology of Doornpoort, Winburg, Orange Free State. *Navorsinge van die Nasionale Museum Bloemfontein Human Sciences* 8: 261-390.
- Du Piesanie, J. 2008. Understanding the socio-political status of Leokwe society during the Middle Iron Age in the Shashe-Limpopo basin through a landscape approach. Masters dissertation, University of the Witwatersrand, Johannesburg.

- Eloff, J.F. 1979. Die Kultuur van Greefswald. Pretoria: Universiteit van Pretoria.
Ongepubliseerde Verslag aan die Raad vir Geesteswetenskaplike
Navorsing, Volume 3.
- Eloff, J.F. & Meyer, A. 1981. The Greefswald sites. In: Voigt, E.A. (ed.), Guide to
archaeological sites in the Northern and Eastern Transvaal, pp. 7-22. Pretoria:
Transvaal Museum.
- Evers, T.M. 1988. The recognition of groups in the Iron Age of Southern Africa.
Doctoral thesis, University of the Witwatersrand, Johannesburg.
- Fouché, L. (ed.). 1937. Mapungubwe: ancient Bantu civilization on the Limpopo.
Cambridge: Cambridge University Press.
- Gardner, G.A. 1955. Mapungubwe 1935-1940. South African Archaeological Bulletin
10: 73-77.
- Gardner, G. A. 1963. Mapungubwe: Volume II. Pretoria: J.L. Van Schaik.
- Hammond Tooke, W.D. 1993. The roots of Black South Africa. Johannesburg:
Jonathan Ball Publishers.
- Hanisch, E.O.M. 1980. An archaeological interpretation of certain Iron Age sites in
the Limpopo/Shashi valley. Masters Dissertation, University of Pretoria,
Pretoria.
- Hanisch, E.O.M. 1981 Schroda: a Zhizo site in the Northern Transvaal. In Voigt, E.
A. (ed.), A guide to archaeological sites in the Northern and Eastern
Transvaal. pp. 37-54. Pretoria: Transvaal Museum.
- Huffman, T.N. 1980. Ceramics, classification and Iron Age entities. African Studies
39(2): 123-174.
- Huffman, T.N. 1982. Archaeology and ethnohistory of the African Iron Age. Annual
Review of Anthropology 11: 133-150.
- Huffman, T.N. 1986a. Archaeological evidence and conventional explanation of
southern Bantu settlement patterns. Africa 56: 280-298.

- Huffman, T.N. 1986b. Iron Age settlement patterns and the origins of class distinction in southern Africa. In Wendorf, F. & Close, E. (eds.), *Advances in World Archaeology* 5: 291-338.
- Huffman, T.N. 1989. Ceramics, settlements, and Late Iron Age migrations. *African Archaeological Review* 7: 155-182.
- Huffman, T.N. 1993. Broederstroom and the Central Cattle Pattern. *South African Journal of Science* 89: 220-226.
- Huffman, T.N. 1996a. Archaeological evidence for climatic change during the last 2000 years in Southern Africa. *Quaternary International* 33: 55-60.
- Huffman, T.N. 1996b. *Snakes and crocodiles: power and symbolism in ancient Zimbabwe*. Johannesburg: Witwatersrand University Press.
- Huffman, T.N. 2000. Mapungubwe and the origins of the Zimbabwe culture. In M. Leslie & Maggs, T. (eds.), *African naissance: the Limpopo Valley 1 000 years ago*. South African Archaeological Society Goodwin Series 8: 14-29.
- Huffman, T.N. 2001. The Central Cattle Pattern and interpreting the past. *Southern African Humanities* 13: 19-35.
- Huffman, T.N. 2002. Regionality in the Iron Age: the case of the Sotho-Tswana. *Southern African Humanities* 14: 1-22.
- Huffman, T.N. 2005. *Mapungubwe: Ancient African Civilisation on the Limpopo*. Johannesburg: Witwatersrand University Press.
- Huffman, T.N. 2006. *The Origins of Mapungubwe Project progress report, 2005 & 2006*. Johannesburg: Archaeological Resources Management.
- Huffman, T.N. 2007a. *Handbook to the Iron Age. The archaeology of pre-colonial farming societies in Southern Africa*. Pietermaritzburg: University of KwaZulu-Natal Press.
- Huffman, T.N. 2007b. Leokwe and K2: ethnic stratification during the Middle Iron Age in Southern Africa. *Journal of African Archaeology* 5(2): 3-28.

- Huffman, T.N. 2008. Zhizo and Leopard's Kopje: test excavations at Simamwe and Mtanye, Zimbabwe. In S. Badenhorst, P. Mitchell & Driver, J.C. (eds.), *Animals and people: archaeozoological papers in honour of Ina Plug*, pp. 200-214. BAR Series, 1849. Oxford: Archaeopress.
- Huffman, T.N. 2009a. A cultural proxy for drought: ritual burning in the Iron Age of Southern Africa. *Journal of Archaeological Science* 36: 991-1005.
- Huffman, T.N. 2009b. Mapungubwe and Great Zimbabwe: The origin and spread of social complexity in Southern Africa. *Journal of Anthropological Archaeology* 28: 37-54.
- Huffman, T.N. 2010a. Debating the Central Cattle Pattern: a reply to Badenhorst. *South African Archaeological Bulletin* 65: 164-174.
- Huffman, T.N. 2010b. Intensive El Niño and the Iron Age of south-eastern Africa. *Journal of Archaeological Science* 37: 2572-2586.
- Huffman, T.N. & Herbert, R.K. 1994/1995. New perspectives of Eastern Bantu. *Azania* 29-30: 27-36.
- Huffman, T.N. & Murimbika, M. 2003. Shona ethnography and Iron Age burials. *Journal of African Archaeology* 1(2): 237-246.
- Kinahan, J., Kinahan, J.H.A. & Van Waarden, C. 1998. The archaeology and symbolic dimensions of a thirteenth century village in eastern Botswana. *Southern African Field Archaeology* 7: 63-71.
- Kuper, A. 1980. Symbolic dimensions of the southern Bantu homestead. *Africa* 50: 8-23.
- Kuper, A. 1982. *Wives for cattle: bridewealth and marriage in Southern Africa*. London: Routledge & Kegan Paul.
- Kusimba, C.M. 1999. *The rise and fall of Swahili states*. Walnut Creek: AltaMira.
- Loubser, J.N. 1991. The Ethnoarchaeology of Venda-speakers in Southern Africa. *Navorsinge van die Nasionale Museum Bloemfontein* 7 (8):145-164.

- Loubser, J.H.N. 1994. Ndebele Archaeology of the Pietersburg area. *Navorsing van die Nasionale Museum Bloemfontein* 10(2): 61-47.
- Maggs, T. 1976. Iron Age communities of the southern Highveld. (Occasional Publication 2) Pietermaritzberg: Natal Museum.
- Maggs, T.M.O'C. 2000. African naissance: an introduction. In Leslie, M. & Maggs, T. (eds.), *African naissance: the Limpopo Valley 1 000 years ago*. South African Archaeological Society Goodwin Series 8: 1-3.
- Manyanga, M. 2007. Resilient landscapes: socio-environmental dynamics in the Shashi-Limpopo basin, southern Zimbabwe c. AD 800 to the present. (Studies in Global Archaeology 11). Uppsala: Department of Archaeology and Ancient History.
- Mashimbye, P.M. 2007. Investigating herding strategies in the Shashe-Limpopo basin during the Middle Iron Age. Honours thesis, University of the Witwatersrand, Johannesburg.
- McCarthy, T & Rubidge, B. 2005. *The story of earth and life: a Southern African perspective on a 4.6-billion-year journey*. Cape Town: Struik.
- Meyer, A. 1980. 'n Interpretasie van die Greefswald Potwerk. Master's dissertation, University of Pretoria.
- Meyer, A. 1997. Settlement sequence in the central Limpopo Valley: the Iron Age sites of Greefswald. *Research by the Natural Cultural History Museum* 6: 9 - 42.
- Meyer, A. 1998. *The archaeological sites of Greefswald*. Pretoria: University of Pretoria.
- Meyer, A. 2000. K2 and Mapungubwe. In M. Leslie & Maggs, T. (eds.), *African naissance: the Limpopo Valley 1 000 years ago*. South African Archaeological Society Goodwin Series 8: 4-13.
- Mucina, L. & Rutherford, M.C. 2006. *The vegetation map of South Africa, Lesotho and Swaziland*. Pretoria: SANBI.

- Murimbika, M., 2006, Sacred powers and rituals of transformation: an ethnoarchaeological study of rainmaking rituals and agricultural productivity during the evolution of the Mapungubwe state, AD 1000 to AD 1300. Doctoral thesis, University of the Witwatersrand, Johannesburg.
- Nienaber, W.C. & Hutten, M. 2006. The 2003 Mapungubwe stabilization project. Pretoria: University of Pretoria.
- Pistorius, J.C.C. 1992. Molokwane: an Iron Age Bakwena village. Johannesburg: Perskor Printers.
- Prinsloo, L.C., Tournié, A., & Colomban, P. 2011. A Raman spectroscopic study of glass trade beads excavated at Mapungubwe hill and K2, two archaeological sites in southern Africa, raises questions about the last occupation date of the hill. *Journal of Archaeological Science* 38: 1-14.
- Rowe, J.H. 1961. Stratigraphy and seriation. *American Antiquity* 26(3 Part 1): 324 - 330.
- Schapera, I., 1971. Rainmaking rites of Tswana tribes. Cambridge: African Studies Centre.
- Schoeman, M.H., 2006a. Clouding power? Rain control space, landscapes and ideology in Shashe-Limpopo state formation. Doctoral thesis, University of the Witwatersrand, Johannesburg.
- Schoeman, M.H., 2006b. Imagining rain-places: rain-control and changing ritual landscapes in the Shashe-Limpopo confluence area, South Africa. *South African Archaeological Bulletin* 61: 152–165.
- Schoeman, M.H. 2009. Excavating the 'waterpits in the mountain': the archaeology of Shashe-Limpopo confluence area rain-hill rock tanks. *Southern African Humanities* 21: 275-298.
- Schofield, J.F. 1948. Primitive pottery. (Handbook Series 3). Cape Town: South African Archaeological Society.
- Shepard, A.O. 1961. Ceramics for the archaeologist. Carnegie Institution of Washington, Publication 609. Washington D.C.

- Simmonds, N.W. (ed.). 1976. Evolution of crop plants. London: Longmans.
- Smith, J. 2005. Climate change and agropastoral sustainability in the Shashe-Limpopo basin from AD 900. Doctoral thesis, University of the Witwatersrand, Johannesburg.
- Smith, J., Lee-Thorp, J. & Hall, S. 2007. Climate change and agropastoralist settlement in the Shashe-Limpopo river basin. *South African Archaeological Bulletin* 62: 115-125.
- Tyson, P.D., Karlen, W., Holmgren, K. & Heiss, G. 2000. The Little Ice Age and Medieval Warming in South Africa. *South African Journal of Science* 96: 121-126.
- Tyson, P.D. & Lindesay, J.A. 1992. The climate of the last 2000 years in southern Africa. *The Holocene* 2: 271-278.
- Van Ewyk, J.F. 1987. The prehistory of an Iron Age site on Skutwater. Master's dissertation, University of Pretoria.
- Van Waarden, C. 1989. The granaries of Vumba: structural interpretation of a Khami period commoner site. *Journal of Anthropological Archaeology* 8: 131-57.
- Vogel, J.C. 2000. Radio carbon dating of the Iron Age sequence in the Limpopo Valley. In M. Lesley & Maggs, T. (eds.), *African naissance: the Limpopo Valley 1 000 years ago*. South African Archaeological Society Goodwin Series 8: 51-57.
- Vogel, J.C. & Calabrese, J.A. 2000. Dating of the Leokwe Hill site and implications for the regional chronology. In M. Lesley & Maggs, T. (eds.), *African naissance: the Limpopo Valley 1 000 years ago*. South African Archaeological Society Goodwin Series 8: 47-50.
- Voigt, 1983. Mapungubwe: An archaeozoological interpretation of an Iron Age community. Pretoria: Transvaal Museum.
- Whitelaw, G. 1994. KwaGandaganda: settlement patterns in the Natal Early Iron Age. *Natal Museum Journal of Humanities* 6: 1-64.

- Wood, M. 2000. Making connections: relationships between international trade and glass beads from the Shashe-Limpopo area. In M. Lesley & Maggs, T. (eds.), *African naissance: the Limpopo Valley 1 000 years ago*. South African Archaeological Society Goodwin Series 8: 79-90.
- Wood, M. 2005. Glass beads and pre-european trade in the Shashe-Limpopo region. Masters dissertation, University of the Witwatersrand, Johannesburg.
- Wood, M. 2011. A glass bead sequence for Southern Africa from the 8th to the 16th century AD. *Journal of African Archaeology* 9(1): 67–84.