UNDERSTANDING THE SOCIO-POLITICAL STATUS OF LEOKWE SOCIETY DURING THE MIDDLE IRON AGE IN THE SHASHE-LIMPOPO BASIN THROUGH A LANDSCAPE APPROACH

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2008

ABSTRACT

Calabrese (2005) identified two distinct ceramics styles in the Shashe-Limpopo basin at the same time – *Leokwe* and *K2*. This is the first record of ethnicity in the Iron Age of southern Africa.

With this identification come new avenues for research. How these groups interacted, and their relative status through time is the focus of my research.

According to Calabrese, some Leokwe groups maintained a higher, or at least equal status on initial contact with K2, before K2 became the dominant political group. He bases this claim on the identification of what he terms '*Elite Symbolic Objects*' at sites, such as Castle Rock.

Using GIS, it is clear that the locale of sites differ within the landscape. Specifically, locations vary through time on the escarpment and floodplain and their relationship to primary and secondary resources. This variation suggests that access to resources was controlled, and this implication influences ones assessment of the relative status of K2 and Leokwe groups.

Additionally, new excavations at Castle Rock call into question the validity of '*elite symbolic objects*' in determining status.

DECLARATION

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

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J.J. DU PIESANIE

1 September 2008

AKNOWLEDGEMENTS

Special thanks to all individuals involved in the '*Origins of Mapungubwe Project*' is necessary. Specifically, the Honours students of 2007 who helped increase my survey sample.

Thank you to Prof. T.N. Huffman who guided me through this process and assisted in keeping my thoughts focused. Dr. Amanda Esterhuysen is also owed a debt of thanks for discussing and helping me understand some theoretical problems associated with my research.

A great amount of gratitude to the Venter family for looking after us while working in the Limpopo. Finally, thank you to the NRF for the financial support throughout this project.

TABLE OF CONTENTS

ABSTRACT ..... **i**
DECLARATION ..... **ii**
AKNOWLEDGEMENTS ..... **iii**
TABLE OF CONTENTS **4**
LIST OF FIGURES **5**
LIST OF CHARTS **7**
LIST OF TABLES **8**
CHAPTER I: INTRODUCTION **9**
Plan of Presentation 11
CHAPTER II: ARCHAEOLOGICAL BACKGROUND TO RESEARCH IN THE SHASHE-LIMPOPO BASIN **13**
Environmental Background 13
Archaeological Research 13
Religious / Initiation / Fertility Paraphernalia 20
Figurines 20
Metallurgy and Metals 20
Craft Production 21
Exotic Goods 22
Monumental Architecture, Monuments and Settlement Layouts 22
Faunal Remains 22
CHAPTER III: ETHNICITY AND INTERACTION IN THE MIDDLE IRON AGE **24**
Ethnicity 24
Primordialism Model 24
Instrumental Model 25
The Internal African Frontier Model 27
CHAPTER IV: METHODOLOGY AND DATA ANALYSIS **29**
Data Analysis 29
Data Set 30
Analysis 30
CHAPTER V: CASTLE ROCK RE-VISITED **55**
Introduction 55
Castle Rock Revisited: The 2007 Excavation 57
Excavation Procedures 59
Excavation Trenches 59
General Stratigraphy 65
Material Culture 65
Castle Rock: Chapter Summary 76
CHAPTER VI: TIME AND PLACE: UNDERSTANDING THE SPATIAL DATA OF SITE LOCATION **77**
Introduction 77
Opposing Models 77
Equal Interaction 77
Ethnic Stratification 78
Population 78

Spatial Distribution.....82
Ceramics.....89
Castle Rock.....89
Cattle Posts and Social Complexity.....92
Data and The Frontier Model.....95
CHAPTER VII: CONCLUSION.....97
REFERENCES.....99

LIST OF FIGURES

Figure 1.1: Map of Shashe-Limpopo Confluence Area indicating the distribution of the prominent Iron Age sites..... 10
Figure 1.2: Map indicating the research area..... 11
Figure 2.1: Map of southern Africa indicating migration routes of different Iron Age Traditions..... 15
Figure 2.2: Definitions of ceramic unit typologies Zhizo, and Leokwe 17
Figure 2.3: Definitions of ceramic unit typologies K2 and Transitional K2..... 18
Figure 4.1: Map showing the distribution of identified Middle Iron Age sites in the basin..... 29
Figure 4.2: Distribution of known Zhizo sites in the Shashe-Limpopo basin..... 32
Figure 4.3: Map indicating the location of the Little Muck Cluster and the site Baobab..... 33
Figure 4.4: Distribution of known Leokwe sites in the Shashe-Limpopo basin..... 36
Figure 4.5: Excavation area of Box Canyon (2229 AB 223-225)..... 37
Figure 4.6: Map indicating clusters of Leokwe sites including Box Canyon..... 38
Figure 4.7: Distribution of known K2 sites in the Shashe-Limpopo basin..... 40
Figure 4.8: Cluster of K2 sites around the vlei in relation to Leokwe sites..... 41
Figure 4.9: K2 sites around secondary agricultural land along the Kolope River in relation to Leokwe sites..... 43
Figure 4.10: Distribution of known Transitional K2 sites in the Shashe-Limpopo basin..... 45
Figure 4.11: Site plan for Weipe 508..... 46
Figure 4.12: Transitional K2 sites on Hamilton orientated toward cattle..... 47

Figure 4.13: Different agricultural areas during the Transitional K2 period……. 48
Figure 4.14: Distribution of known Mapungubwe sites in the Shashe-Limpopo basin…… 51
Figure 4.15: Map showing distribution of Mapungubwe sites in relation to the vlei, downstream agriculture, and cattle posts…… 52
Figure 5.1: Location of Castle Rock in relation to the Limpopo and Kolope Rivers, and surrounding Middle Iron Age sites…….. 55
Figure 5.2: Calabrese's (2005) map of the location of the surface feature and excavation conducted in 1999……. 56
Figure 5.3: View of Castle Rock from the south. Note fish farm in foreground……. 57
Figure 5.4: Map of Castle Rock showing location of surface features and excavation trenches, including Calabrese's 1999 excavation……. 58
Figure 5.5: Trenches I and III excavated down to bedrock in Kraal 1. Lodge in background…… 60
Figure 5.6: Floor plan of Squares B & C of Trench I showing the bottom of Stratum 1…… 61
Figure 5.7: Area excavated in Trenches I & III in Kraal 1…… 62
Figure 5.8: Excavated squares of Trench II in Kraal 4…….. 63
Figure 5.9: Area excavated in Trench II in relation to the 1999 excavation…….. 64
Figure 5.10: Castle Rock figurines collected during surface collection and excavation…….. 66
Figure 5.11: Section drawings of the west walls of Trenches I and III. Above I / C, below III / A…… 67
Figure 5.12: *Leokwe* shards from Castle Rock…… 69
Figure 5.13: *Leokwe* shards from Castle Rock…… 70
Figure 5.14: *Transitional K2* shards from Castle Rock…….. 71
Figure 5.15: Examples of the ceramic facies found at Castle Rock: (above) *Transitional K2* (from burials) and (below) *Leokwe*…….. 73
Figure 5.16: Spindle Whorl from the surface around Kraal 7……. 74
Figure 5.17: Castle Rock burial 1 (B1)……. 75
Figure 6.1: Maximum Zhizo population at any one time…….. 79

Figure 6.2: Maximum population during the K2-Leokwe period……. 80
Figure 6.3: Population during the Transitional K2 Period……. 81
Figure 6.4: Primary activity areas in the Shashe-Limpopo basin …… 84
Figure 6.5: Leokwe Hill, Area B, plan view showing features and excavations…….. 85
Figure 6.6: Evidence of 'extra' kraals at Box Canyon…… 86
Figure 6.7: K2-period homesteads around the Kolope delta, defining the vlei area…….. 90
Figure 6.8: Distribution of Middle Iron Age sites around the vlei…… 91
Figure 6.9: Vumba site plan…… 93
Figure 6.10: Weipe 508 site plan…… 94
Figure 6.11: Cattle Posts on Hamilton……. 94

LIST OF CHARTS

Chart 4.1: Elevation of Zhizo sites…….. 31
Chart 4.2: Elevation of Leokwe sites…… 34
Chart 4.3: Distance of Leokwe sites from the Kolope River……. 35
Chart 4.4: Distance of Leokwe sites from the Limpopo River……. 35
Chart 4.5: Elevation of K2 sites…… 39
Chart 4.6: Distance of K2 sites from the Limpopo River……. 42
Chart 4.7: Distance of K2 sites from the Kolope River……. 42
Chart 4.8: Elevation of Transitional K2 sites…… 49
Chart 4.9: Distance of Transitional K2 sites from the Limpopo River…… 49
Chart 4.10: Distance of Transitional K2 sites from the Kolope River……. 50
Chart 4.11: Elevation of Mapungubwe sites…….. 53
Chart 4.12: Distance of Mapungubwe sites from the Limpopo River…… 53
Chart 4.13: Distance of Mapungubwe sites from the Kolope River…… 54
Chart 6.1: Elevation of sites occurring during the Middle Iron Age…… 82
Chart 6.2: Elevation of sites during the Middle Iron Age according to defined divisions…… 83
Chart 6.3: K2, Leokwe and Transitional K2 sites within 4km of the Limpopo River 87
Chart 6.4: K2, Leokwe and Transitional K2 sites within 4km of the Kolope River…. 88

LIST OF TABLES

Table 5.1: Comparison of '*elite symbolic objects*' from Kraal 4 (Trench II) in 2007 64

Table 5.2: Ceramic counts from all contexts…….. 68

Table 5.3: Decoration techniques in the 2007 Castle Rock sample…… 72

Table 6.1: Comparison of '*elite symbolic objects*' found at Castle Rock Trench II… 91

CHAPTER I: INTRODUCTION

The Shashe-Limpopo basin (Figure 1.1 & 1.2) is important because a hierarchical and stratified society developed there that predated Great Zimbabwe. This area generates international interest because of the links between trade and agriculture and the role they played in the development of class divisions and sacred leadership (Huffman 1982, 1996b).

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) of the area. Completed works include that of J. Calabrese (2000, 2005) on ethnicity, J. Smith (2005) on herding strategies and climate, M. Wood (2000; 2005) on glass beads, M. Mashimbye (2007) on phytoliths and finally M. Murimbika (2006) and M.H. Schoeman (2006) on ethnographic and archaeological aspects of rainmaking. Current research includes human diet (A. Raath), faunal remains (M. Kloppers, K. Fatherley), Transitional K2 ceramics (J. van der Walt), and herding strategies (E.O.M. Hanisch). As a result of this research there are now approximately 850 sites on record, 16 have been excavated and roughly 60 ^{14}C dates are available (Huffman 2007b).

I was involved in the intensive survey of the basin during the 2005, 2006 and 2007 field seasons. In 2007, the team specifically gathered information for my research. I have also been involved in the excavation of several key sites (Figure 1.1), specifically, VK (Khami); KK (Khami and Leokwe); Weipe 508 (Mapungubwe and Transitional K2); VK2 (Transitional K2) and Castle Rock (Chapter V).

My aim is to examine social and political complexity through a landscape approach. T.N. Huffman (1982) introduced these concepts, and then J. Calabrese (2000, 2005) investigated them further. Calabrese shows that K2 and Leokwe peoples lived together in the basin. He thus identifies the first instance of ethnicity and ethnic interaction, opening the doors on new research avenues.

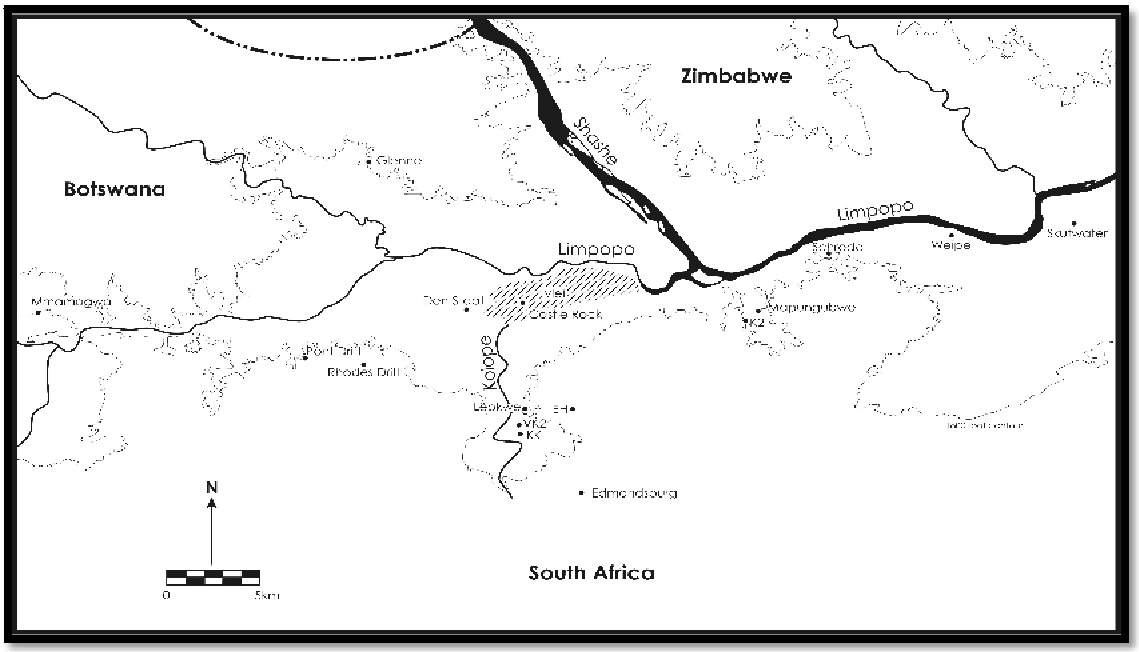

Figure 1.1: Map of Shashe-Limpopo Confluence Area indicating the distribution of the prominent Iron Age sites (Courtesy of W. Voorveldt)

The research question I pose, in light of Leokwe and K2 groups co-existing, is whether one can determine the relative status of groups based on their locations in the landscape, specifically, their access to natural resources. This is not a new concept. Hodder (1978) shows that settlement arrangements within a region may reflect potentially different systems of interaction and exchange.

Kopytoff's (1987) African Frontier Model is an essential tool for understanding the processes of ethnic interaction in past African societies. Using Kopytoff's (1987) frontier model and what he terms '*Elite Symbolic Objects*', Calabrese concluded that some Leokwe people were senior to K2 people before the K2 capital rose to power. Other than Leokwe Hill itself, Calabrese's primary evidence comes from the Leokwe site of Castle Rock, situated on the farm Den Staat.

I use Geographic Information Systems (GIS), to help clarify the relative status of K2 and Leokwe based on their settlement locations and access to resources. Furthermore, I use data from new excavations at Castle Rock to assess the list of '*elite symbolic objects*' and the adequacy of using them as direct correlates for group status in the context of the Leokwe debate.

Figure 1.2: Map indicating the research area.

Plan of Presentation

Chapter II reviews previous research. It introduces the sequence of events from AD 900 with the identification of Zhizo ceramics, up to and including the rise of complex society at Mapungubwe at AD 1250. This chapter introduces contemporary thought on the prehistoric processes, and places my data in context.

Chapter III presents theoretical issues surrounding the concept of ethnicity and the use of this term in understanding past groups. I also consider Kopytoff's African Frontier Model for interpreting interaction between K2 and Leokwe groups.

Chapter IV presents the spatial data of archaeological sites dating to the Middle Iron Age. The sites are analysed according to their stylistic affiliation and presented chronologically, starting with Zhizo sites and ending with Mapungubwe. This chapter highlights their position in terms of agriculture, pasturage and their access to resources.

Chapter V reports the new excavation at Castle Rock. I emphasise stratigraphy and material culture to test the validity of using '*elite symbolic objects*' as indicators for status in the context of the Leokwe debate.

Chapter VI discusses spatial data and correlates it with various results from the analysis of spherulites, fauna and settlement organisation.

Chapter VII summarises the findings and the extent to which they answer the research question.

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

Environmental Background

The Shashe-Limpopo basin lies within the Limpopo Mobile Belt (McCarthy & Rubidge 2005) between the Kaapvaal and Zimbabwe cratons. Overall, the terrain consists of sedimentary rocks interrupted by mafic intrusions. The basin is only about 600m above sea level, and thus lies within a rainfall trough (Figure 2.1). The soil supports an open, deciduous tree savannah with a mixture of Mopane (*Commiphora-combretum*) and Baobabs (*Adonsonia digitata*). Climatically, the area is semi arid and hot with an annual rainfall of roughly 350mm. The rainy season spans the summer months from October to March, but the majority of rain falls between January and February, with only 1mm to 10mm of rain during winter (Smith 2005). A large vlei, next to the confluence is fed by backwater flooding of the Limpopo and downstream flooding of the Kolope. This vlei supports a huge stand of elephant grass (*Sporobolus pyramidalus*), making the area appealing to large herds.

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 vessels as possible (Meyer 1998).

The University of the Witwatersrand's recent involvement started in the 1990s, with intensive surveys and several postgraduate projects. To record sites, the research teams used a GPS unit calibrated to WGS 84. Where possible the location marked the central cattle kraal. To identify the associated material culture group, we identified the ceramic facies following the classification in Huffman (2007a). It is a standard convention to name a facies after the first place it was found, because it is

a separate research question whether the facies can be connected to a present-day group of people. For this reason, it is also a convention to name the people after the pottery.

There are sound theoretical reasons why pottery can be used as a proxy for people. Firstly, material culture can express group identity because it forms a repeated code of cultural symbols. Ceramic products are also involved with cultural dynamics and therefore are useful in the identification of groups. Of importance is that material culture groups do not represent entities defined by blood or political organisations (for further discussion see Huffman 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. What this means is that ceramic style and the larger design field are the result of patterned behaviour and therefore learned and created by people. If the makers and users belong to the same material culture group, it follows that the distribution of style must also represent the distribution of a group of people who speak the same language. It is this link between language and material culture that helps identify the movements of groups (Huffman 2007a).

We now know that agropastoralists first moved into the Shashe-Limpopo confluence at approximately AD 400 (Figure 2.1). The influx of *Happy Rest* pottery at this time marks the spread of Eastern Bantu speakers (Huffman 1986b). After this initial intrusion, agropastoralists appear to have abandoned the area until AD 900 because of adverse climatic conditions (Huffman 1996b).

The appearance of *Zhizo* pottery (Figure 2.2) marks the second phase of occupation, from AD 900 to 1000. It was once thought that Zhizo people moved into the basin to practise agriculture because the climate had improved (Huffman 1996b). Smith's (2005) isotopic research, however, negates this interpretation: the climate had not improved. Zhizo people therefore entered the basin for other reasons. The location of settlements as well as ivory chippings and exotic goods at Schroda (Hanisch 1980, 1981; Voigt 1983) suggest the ivory trade was the main attraction.

Toward the end of Zhizo occupation, the climate improved considerably. This climatic shift is evident at the site Baobab on Edmonsberg where at least 28 grain-bin foundations testify to successful agriculture.

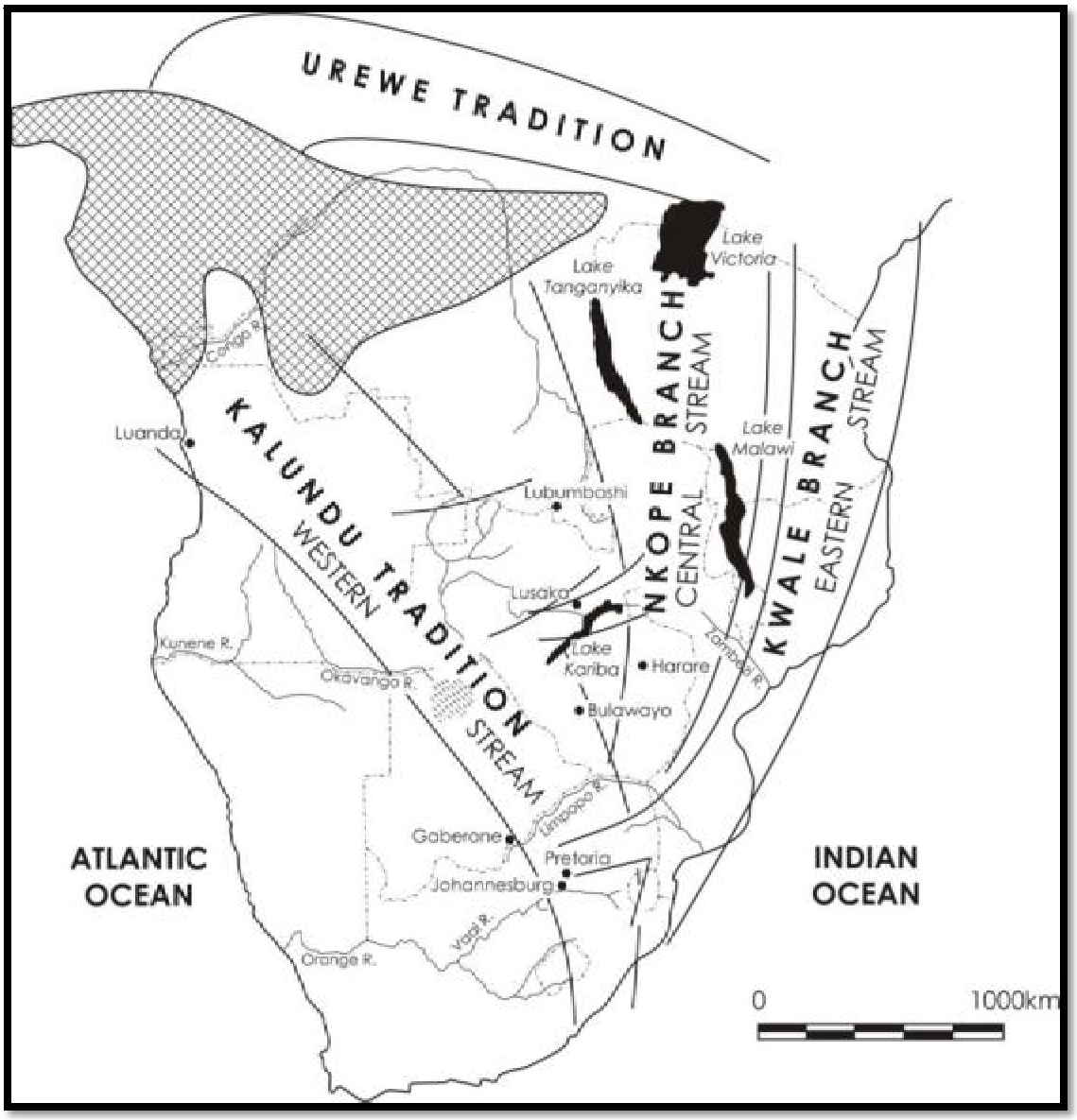

Figure 2.1.: Map of southern Africa indicating migration routes of different Iron Age Traditions (Adapted from Huffman 2007a)

After approximately 100 years, the chiefdom at Schroda shifted west to Botswana where archaeologists identify the group as Toutswe (Denbow 1979, 1982, 1983, 1986). At the same time, Leopard's Kopje people moved into the basin from the south. Based at the site K2, Leopard's Kopje people took over the ivory trade and, it is suggested, caused the Zhizo chiefdom to leave (Huffman 1982, 2000). Climatically, the next 200 years (AD 1000 – 1220) had higher rainfall (Smith 2005).

The result of this was an emphasis on floodplain agriculture, allowing for population growth.

Calabrese (2005) demonstrates that *Zhizo* ceramics transformed into *Leokwe*. The key features of *Zhizo* ceramics include a rim / shoulder layout with triangles and hatched bands of comb-stamping. *Leokwe* continues the layout and decoration technique with multiple lines of stamping in the neck and stamped triangles in a new position on the lower shoulder (Figure 2.2). There is no doubt that *Leokwe* grew out of *Zhizo*.

Calabrese's important work showed that Leokwe and K2 were contemporary. Therefore, either some Zhizo people did not leave the basin or they returned to the area later. Either way, these two ceramic facies represent the first example of ethnic interaction in southern Africa. I return to this point later.

Because of intensive agriculture and surplus trade wealth, Leopard's Kopje society transformed from one based on social ranking at K2 to formal classes at Mapungubwe.

During this period of transition from AD 1200 to 1250, ceramic style changed into what is termed *Transitional K2* (Figure 2.3). These ceramics differ from classic *K2* where hatched bands and upright incised triangles in the neck are the key features to where triangles on the lower neck and upper shoulder, along with alternating triangles, are characteristic (Huffman 2007a). By about AD 1250, the *Transitional K2* facies changed into classic *Mapungubwe.* Key features defining *Mapungubwe* are dark burnish on bowls and cross-hatched triangles on the shoulder of jars. By this time, *Leokwe* pottery had completely disappeared.

This ceramic change parallels a change in settlement organisation. The move from K2 to Mapungubwe Hill marks a shift away from the Central Cattle Pattern (CCP) to the elite Zimbabwe pattern. In the CCP a ring of huts surround the cattle kraal. This pattern is associated with a linked set of beliefs about patrilineal descent, male hereditary leadership, bridewealth in cattle and a positive view of the ancestors. Most importantly, cattle are central to life, politically, economically and spiritually (Kuper 1980, 1982).

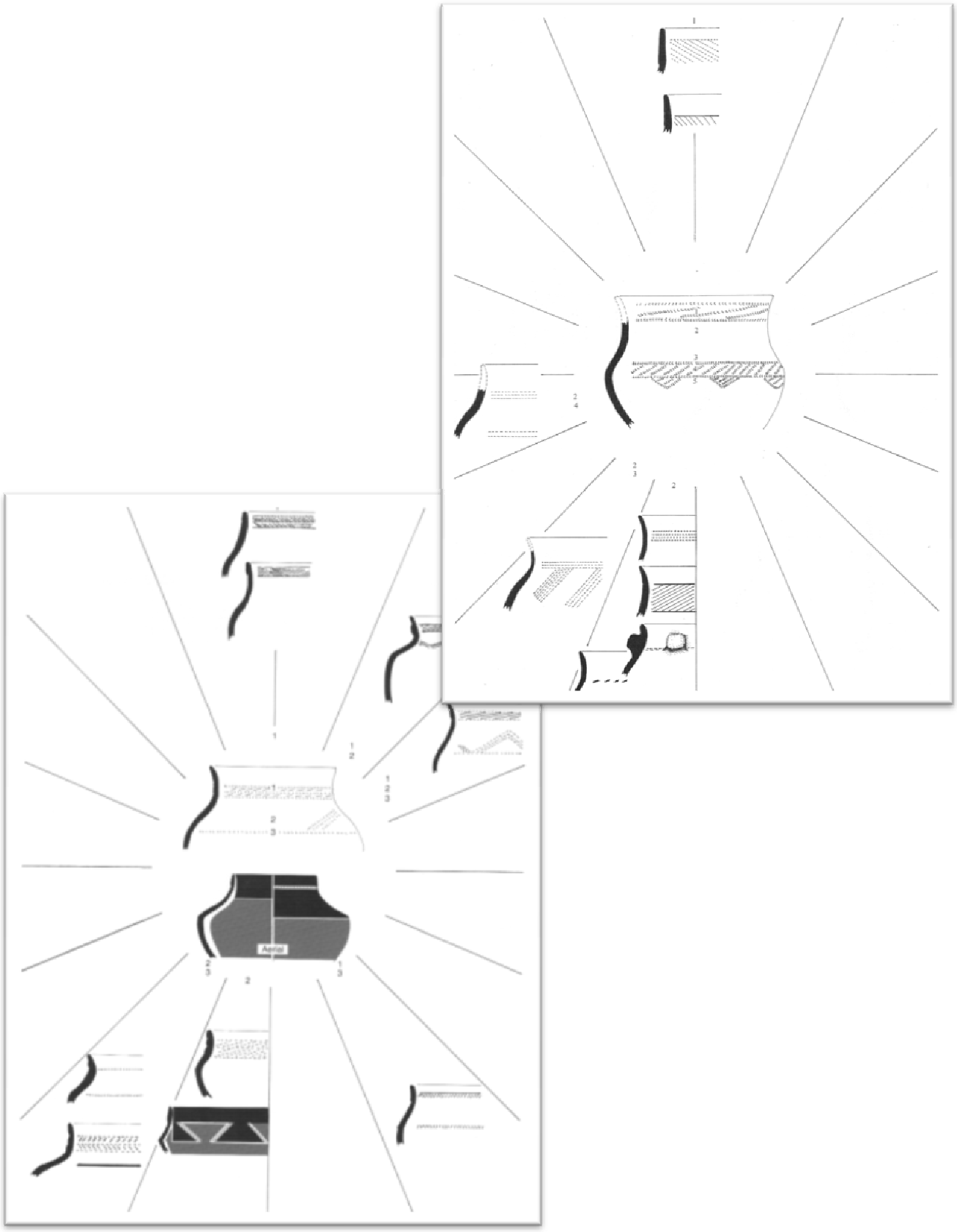

Figure 2.2: Definitions of ceramic unit typologies *Zhizo*, and *Leokwe* (Adapted from Huffman 2007a).

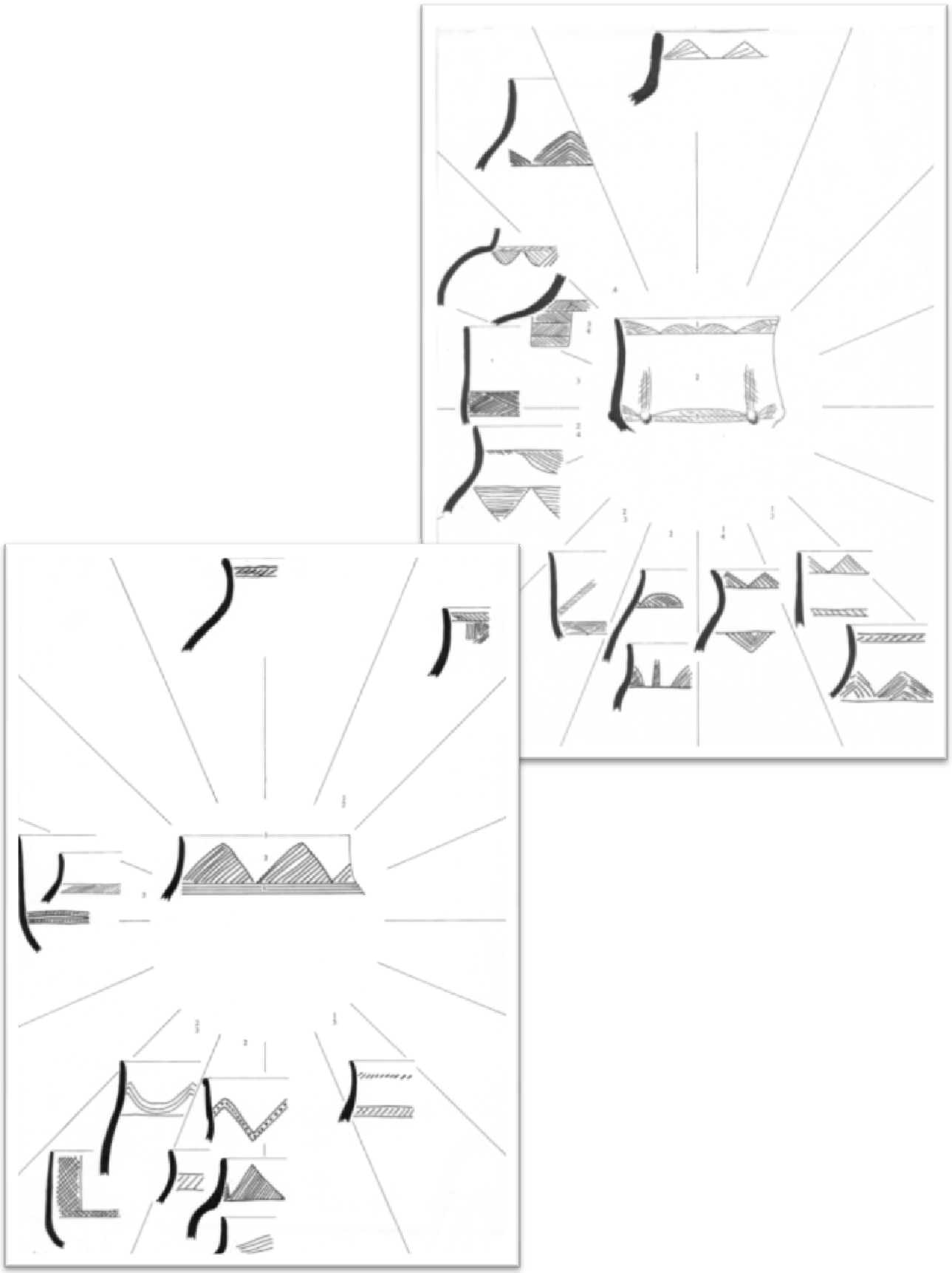

Figure 2.3: Definitions of ceramic unit typologies *K2* and *Transitional K2* (Adapted from Huffman 2007a).

When the society changed from social ranking to formal classes, the CCP was no longer suitable (Huffman 1982, 1986b, 1996a, 2000, 2005). This change 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 signals the crystallisation of sacred leadership (Huffman 1982, 1986b, 1996a, 2007b). The new settlement organisation at Mapungubwe is the first example of the Zimbabwe Pattern.

The shift to Mapungubwe Hill marks the final phase (AD 1220 – AD 1300) of the Middle Iron Age. By now, Mapungubwe had the first king, first palace and first sacred leadership. Furthermore, it was the capital of the first state in southern Africa.

At its peak, Mapungubwe housed a population of some five thousand people. Throughout the period, the vast quantities of glass trade beads (Wood 2000, 2005) attest to the success of trade, both internal and with the East Coast. At about AD 1300, however, Mapungubwe declined rapidly, and Great Zimbabwe became the new seat of power.

This brief outline provides a framework to consider Calabrese's interpretation of K2 and Leokwe relationships. I now consider his methodology for identifying status. According to Calabrese, at least some Leokwe people enjoyed elite status and participated in the political system. He constructed a list of '*elite symbolic objects*' to recognise status in the archaeological record (Calabrese 2005: 61). These items are: 1) religious / initiation / fertility paraphernalia; 2) figurines; 3) metallurgy and metals; 4) craft production; 5) exotic goods; 6) monumental architecture, monuments and settlement layout; and finally 7), faunal remains.

From the limited distribution of these items, it is possible to discern dominant and subordinate relationships. I comment on each category.

Religious / Initiation / Fertility Paraphernalia

Ethnographic research, such as Junod's (1927) ethnography of the Tsonga, suggests a hierarchical relationship between ancestors, the elite and commoners. This relationship manifests itself, for example, in many agricultural ceremonies and initiation schools (Junod 1927: 396; Stayt 1931: 254). These ceremonies and schools typically occur at elite sites. Further connections between chiefly authority and fertility are seen in the use of royal blood in rainmaking and fertility rituals amongst the Lovedu (Krige and Krige 1943: 167-168)

Figurines

Figurines are used as teaching aids in several initiation ceremonies, such as the *domba* in Venda society. Using *domba* as one example, Huffman (1996a: 148) notes that an unusual cluster of figurines inside a settlement almost always denotes an initiation centre that included girls. Calabrese (2005: 62) states:

> While it is not possible to state with absolute certainty what types or amounts of these [figurines] are necessary to identify initiation activities, I posit here that relatively more and more types of these will be found at elite sites.

Fortunately, figurines are highly durable. A cautionary note about figurines, however, is necessary. According to the ethnography, one type of female figurine was widely used at a domestic level as well as in initiations (Wood 2002: 92).

Furthermore, the *domba* initiation, for one, does not always occur at the capital. The leader hosts the ceremony only once, when he is inaugurated. Thereafter he passes the responsibility down to headmen. Thus, one must consider the context of figurines in some detail to assess their utility as elite objects.

Metallurgy and Metals

In Central Africa, traditional leadership had a strong relationship with metal-working. Chiefs, for example, were often metallurgist's themselves. According to De

Maret (1985: 79), kings of the Congo were both smiths and rainmakers, and he provides three examples where elites were buried with metal-working tools. This suggests a strong underlying connection between kingship, metallurgy and fertility. In a southern African context, Lemba smiths were prohibited from making copper ornaments for anyone except Venda royals (Stayt 1968 [1931]: 62). For Calabrese, this connection between elite and metallurgy results in elite control, real or ideal, over the production and distribution of non-utilitarian metals.

Calabrese cautions that the connection between elite and metallurgy is ambivalent. Vague ethnographical and historical data variously portray kings as actual metallurgists or as elites who exert control over the craft specialists. Regardless, Calabrese (2005: 63) states:

> From the above I conclude that there are obvious historical connections in sub-Saharan Africa between metallurgy, fertility and political leadership. This knowledge, however, is limited to ethnographic and historical data indicating that, at least in the recent past, kings or chiefs acted both as metallurgists and patrons of metallurgists, and archaeological data which suggest, at best, some degree of continuity between the historically documented past and the precolonial era.
>
> The strong archaeological and ethnographic associations between metallurgy, fertility and leadership in Africa has lead me to propose that nascent elites in the prehistoric southern Africa would have exerted, or attempted to exert, some form of control, real or ideal, over metal production and the subsequent distribution of finished copper and iron products. The products that interest us here are those used in the non-utilitarian, "expressive sphere" as defined by Childs (1991b), and which may have been used as emblems or markers of social identity, variously based on age/rank, status, or gender. Like other fertility-related paraphernalia, the relative status of a site can be determined, in part, by the differences in diversity, density, and abundance of these items at archaeological sites.

Craft Production

Calabrese (2005: 64) restricts this category to metal production. Following Friedman and Rowlands (1977), he posits that the production of metal is a likely correlate for elite status.

A cautionary note is necessary. Calabrese bases this premise on the notion that there is a symbolic link between elite and metal production. Without this link,

elites may have only controlled metal production. Significantly, within southern Africa, there is no historic evidence for this link.

Exotic Goods

Exotic goods represent the ability of elites to appropriate surplus social production to differentiate themselves from commoners. This differentiation facilitates structural imbalances in power relations through 'aggressive prestation'. This is not to say that exotic goods, most frequently glass beads, cause social differentiation. Rather, their use relates to extending differences in an already differentiated society. It is possible to determine the relative status of a site by the differences in diversity, density and abundance of these items (Calabrese 2005: 63-64).

Monumental Architecture, Monuments and Settlement Layouts

In reference to the layout of settlements, this category refers to the difference between the CCP and Zimbabwe Pattern. Following Huffman (1996a), the features associated with the Zimbabwe Pattern serve as indicators of elite status.

Faunal Remains

Calabrese (2005: 65) relates the quantity of cattle remains to elite status. Within southern Africa, differential access to cattle was the norm. Even now, cattle are associated with the ancestors and bridewealth. As a form of bridewealth the transference of cattle not only establishes new kinship relations but also access to fertility (Kuper 1982); thus, the more cattle the more alliances, status and power.

A problem to note it that it is difficult to differentiate cattle ownership in the archaeological record. It is known ethnographically that wealthy men loan cattle to poorer men. This not only creates an alliance network, but also a strategic move to maintain herd size (Kuper 1982).

Based on the distribution of these items and the prestige goods system they underlie, Calabrese (2005: 370-371) states:

> The prestige goods system, as seen in the distribution of glass trade beads and finished non-utilitarian metal items, was seen to penetrate only to the upper tiers of society. Lower status groups did not directly participate in the prestige goods economy, except perhaps as providers of raw materials and labour needed in the international trade upon which the prestige goods system relied. … Importantly, inclusion within this prestige goods system was not limited by ethnicity, and segments of both the Leokwe and Leopard's Kopje ethnic groups participated within it.

However, do the archaeological correlates, as defined by Calabrese (2005), signify political status?

My aim is to re-examine the use of these objects in the context in which they are found and the theoretical basis for Calabrese's interpretation of the relationship between Leokwe and Leopard's Kopje people. I turn now to a discussion of ethnicity and the African Frontier Model.

CHAPTER III: ETHNICITY AND INTERACTION IN THE MIDDLE IRON AGE

Ethnicity

'Ethnicity' and 'ethnic group' have been concepts in the literature of anthropology, sociology and archaeology for several years. Nevertheless, clarity and explicit definitions are still problematic. There are numerous definitions depending on the discipline and interests of the investigator. Furthermore, definitions change with time as well as political and social urgencies (De Vos & Romanucci-Ross 1995). The question is not which definition is correct, or most accurate, but which is more helpful in terms of the analysis (Cohen 1974). Fenton (2003: 3) provides an intellectual starting point:

> … ethnicity is about 'descent and culture' and ethnic groups can be thought of as 'descent and culture communities'. Now that is just a start and should be taken as that: a starting point and not a definition. A further step or two would be to say that ethnicity refers to the social mobilization of descent and culture, and the meanings and implications of classification systems built around them.

In the literature, two opposed approaches to ethnicity are dominant: the primordialist and instrumentalist schools (Bentley 1987; Fenton 2003). Primordialism concerns the affective power of cultural features, and instrumentalism concerns the manipulation of culture for political and economic interests (Bentley 1987).

Primordialism Model

Primordialist approaches are grounded in the psycho-cultural realm of shared sentiments, beliefs and values. It was initially a sociological term with no special connection to ethnicity (Fenton 2003). For primordialists, there exist objective entities with inherent features such as territory, language, recognizable membership and even common mentality (Fenton 2003: 73). Within this view, groups are *natural* divisions, therefore making classification objective. Geertz (1963: 259; cited in Calabrese 2005) presents primordialism as:

> ...immediate contiguity and kin connection mainly, but beyond them given-ness that stems from being born into a particular religious community, speaking a particular language, or even a dialect of a language, and following particular social practices. These congruities of blood, speech, custom, and so on, are seen to have an ineffable, and at times overpowering, coerciveness in and of themselves. One is bound to one's kinsman, one's neighbour, one's fellow believer, ipso facto; as the result not merely of personal affection, practical necessity, common interest, or incurred obligation, but at least in great part by virtue of some unaccountable absolute import attributed to the very tie itself.

Sense of obligation, therefore, is taken for granted, not a matter of calculation. This distinctive quality makes it different from contractual relationships (Fenton 2003).

Throughout the history of sociology, there has been a disjunction between concepts of sentiment and emotion versus rationality and calculation. To primordialists, identities belong to the realm of sentiment as a psycho-social bond (Fenton 2003). Social change disorientates and causes people to hold on to the fundamentals that define them as an individual and collective (Bentley 1987: 26).

Instrumental Model

An instrumental view of ethnicity, in contrast, involves calculation. It focuses on subjective, self-ascribed attributes and how these attributes are manipulated for political and economic gain (Barth 1969; Cohen 1969; Fenton 2003). To instrumentalists, people with common interests simply coalesce in pursuit of those interests (Bentley 1987).

Barth (1969) draws attention to questions of 'how' and 'why' ethnic groups emerge and the persistence of ethnic boundaries. Before Barth, isolation was the primary explanation for the creation and maintenance of cultural diversity. Barth (1969: 9) notes, however, that ethnicity exists precisely because of interaction. For Barth, ethnicity is the 'social organisation of intra-cultural difference'. In this circumstance, boundaries act as signals to denote membership and conversely, exclusion. Boundaries consist of overt signs or signals in features such as dress,

house-form and general lifestyle, which people can identify and use as reference for interaction.

Barth uses such boundaries to define ethnic groups. Cohen (1974) critises Barth's boundaries because the social content does not matter. As Barth (1969: 14 cited in Cohen 1974) states:

> … organizational vessels that may be given varying amounts and forms of content in different socio-cultural systems. They may be of great relevance to behaviour, but they need not be, they may provide all social life, or they may be relevant only in limited sectors of activity.

People act as members of ethnic categories because they identify themselves, and are in-turn also identified by others, with these categories. All this proves is that ethnicity exists (Cohen 1974).

The dominant models for ethnicity thus focus on two distinct concepts: innate values and beliefs versus conscious manipulation of social categories (Bentley 1987: 25).

However, there is also a tendency to synthesis these two approaches. Cohen (1974), for example, stresses the primacy of culture, but he also accepts that the function of ethnicity is to manipulate the system. For Cohen, therefore, manipulation can only occur within culturally prescribed limits.

From this perspective, ethnic groups can only exist in a pluralistic society. Cohen's definition includes two points: people who a) share some pattern of normative behaviour, and b) form part of a larger population, interacting with people from other collectivities within the same social system. Therefore, ethnicity is socially, as well as culturally determined. De Vos and Romanucci-Ross (1995: 350) define this synthesis concisely:

> Though contrastive attributions of ethnic characteristics from outside the group help shape the inner experience of ethnic belonging during ones life, it is the internally motivated instrumental and expressive uses of ethnicity that are the final determinants of who we say we are.

For Hammond-Tooke (2000) groups must have a sociological boundary. These boundaries must be political in nature with some form of power associated with it, no matter how vaguely defined. He considered how southern African archaeologists have used the concept of ethnicity and applied it to the Iron Age, specifically

regarding ceramic groups. Interpretation in archaeology of course, applies to the material cultural remains, which are always fragmentary and only give up their significance or meaning when viewed within a wider context of a cognitive and social system. Archaeologists use ethnicity to refer to the postulated culture-bearers, as well as a synonym for culture. Generally, the use of material culture is to express group identity, but this does not necessarily constitute ethnicity. Some researchers mistakenly believe that material culture represents entities defined by blood. In southern Africa, at least, stylistic groups will be larger and more general than bloodlines because of patrilineal marriage systems. Because women make the pots, potters in any one area would invariably come from different bloodlines (Huffman 1989; 2002; 2007a).

For Hammond-Tooke (2000), the term ethnicity or ethnic group is too theoretically loaded to be of any use to archaeological research. In addition to this, it lacks analytical rigour, and for all intent, it is better to replace it with the concept of material cultural units.

For this thesis, I accept that ethnicity is situational. To be ethnic, two or more cultural groups must live in the same territory as components of the same social system. Kopytoff's model has a bearing on the nature of their social system.

The Internal African Frontier Model

According to Kopytoff (1987), African political history is marked by growth, collapse and reconstruction. These processes occur internally, promoting the idea that any person can achieve higher status, despite prevalent hierarchies, by establishing a new polity somewhere else. Therefore, there was a constant tendency for fission in the structure of society.

To develop a new polity, people had to move far enough away from the homeland to be free of its influence. This new area is the 'frontier'. Following Kopytoff (1987), frontiers are political definitions of geographical space. The new society perceives the frontier as an institutional vacuum because of the absence of

the homeland's political control. Rarely, however, is the frontier empty. Rather, other polities are usually present and thus interaction is inevitable.

Traditional African perspectives of interaction are conditioned by the principle of precedence, that is, the relationship between first and later arrivals. From an emic perspective, authority is said to reside with first-comers because of their connection to the land as 'owners'. Through time, the rights of newcomers increase, creating the potential for political competition. In reality, however, first-comers are not always in a position of authority.

Clearly, there is a contradiction here. Society views frontiers as institutional vacuums, but it is usually already occupied. Therefore, there has to be some form of strategy to accommodate the contradiction.

As stated earlier, Kopytoff (1987) lists three main options derived from African ethnography. These are:

1. Displace the first-comers, so that only the new-comers remain;
2. Either the first or new-comers are incorporated as a result of a claim to genealogical superiority, and one group loses its identity; or
3. New-comers tame first-comers structurally, restricting them to specialised services based on their link to the land. Here, both identities remain.

According to Kopytoff (1987), Option 1 was rare in historic times. Instead, emigrant groups were usually absorbed by the first group, i.e. an example of Option 2.

For Calabrese (2005), this model is most useful because it is able, to some degree, to predict the series of dynamic, complex relationships between groups. However, archaeologists must use this model with caution. It should be restricted to situations where the separate groups can be readily determined through material remains.

Calabrese (2005) demonstrates that there are two distinct ceramic styles co-existing in the Shashe-Limpopo basin from roughly AD 1000 to 1200. Based primarily on Barth (1969), Calabrese interprets *Leokwe* and *K2* ceramics as boundary markers indicating two separate ethnic groups. I turn now to the relevant data concerning the nature of K2 and Leokwe interaction.

CHAPTER IV: METHODOLOGY AND DATA ANALYSIS

Data Analysis

I use Geographic Information System (GIS) ArcGIS 9.1 (ESRI©) to analyse the survey data. GIS is a tool for applying real world concepts in digital format. It requires two descriptors: 1) attribute records; and 2) location records. This combination sets GIS apart from other database systems (Conolly & Lake 2006).

GIS has five categories: 1) data acquisition; 2) spatial data management; 3) database management; 4) data visualisation and 5) spatial analysis. These five components are tools for understanding spatial information. Going beyond the limitations of cartography, GIS contributes to understanding spatial and even space-time relationships between natural and anthropogenic phenomena (Couclelis 1999).

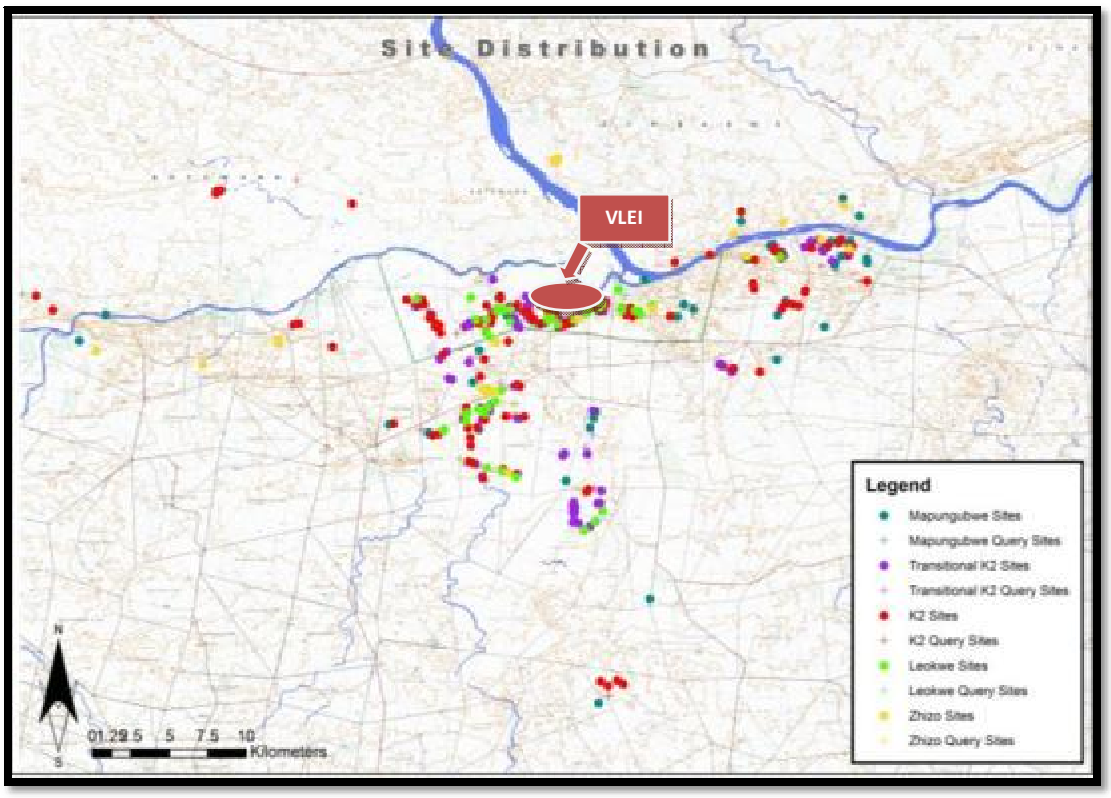

Figure 4.1: Map showing the distribution of identified Middle Iron Age sites in the basin.

GIS is not a simple input-output tool; rather it is the combination of hardware, software and the interpretation of people. The majority of archaeological

data have attributes that can be explored using GIS. These include: 1) spatial location; 2) morphology; 3) spatial association and interaction; 4) temporal relationships and 5) aspatial attributes (e.g. cultural affiliation, types of features, etc) (Conolly & Lake 2006).

I use the spatial characteristics of Middle Iron Age sites to understand their relationship to landscape, access to resources and pasturage versus agriculture. This assists in investigating the socio-political relationships between groups, specifically to answer the question of status between K2 and Leokwe groups.

Data Set

Some 987 sites, spanning all time periods, have been identified throughout the Shashe-Limpopo basin. For my purposes, only identifiable sites affiliated with the Middle Iron Age are relevant. Of the total, 534 sites have been classified as Zhizo, Leokwe, K2, Transitional K2, Mapungubwe or Leopard's Kopje (K2, Transitional K2, Mapungubwe). Due to the incomplete data set for neighbouring countries, I only use site information from South Africa (Figure 4.1).

Analysis

For analytical purposes, I first divided the landscape into different features, such as the vlei, escarpment and floodplains, and secondly, noted the distances to the main rivers, namely the Limpopo and Kolope (See Figure 4.1).

Assignments are based on elevation and position. For example, escarpment sites within 7 km of the Limpopo are located above the 540m contour while 560m – 580m elevations designate escarpment sites outside the 7km radius.

The vlei lies between the Kolope River delta and the Limpopo. It is underlain by basalt and fed by backwater flooding of the Limpopo (Figure 4.1).

Finally, I use archaeological features to differentiate between primary functions. Multiple grain-bin foundations, for example, demonstrate an emphasis on agriculture.

Zhizo Site Analysis

Of the total, 31 are Zhizo. From this, seven sites are excluded because they are either not in South Africa or do not have co-ordinates. This data set is further divided into Zhizo (n=16) and Zhizo Query (n=8). I have combined them for this analysis (Figure 4.2).

The first important result is that Zhizo sites do not cluster around the vlei. The only exception is one query on the eastern edge. It consists of a few shards and is probably not a homestead. Rather than the vlei, 58% occur on the escarpment. The remaining 42% occur below 540m. An exception to the broad pattern are sites 2229 AD 22, 23, 25 and 26 (Figure 4.3). Their proximity suggests they formed a single community that might have been a capital. This is the one cluster near cultivatable land.

The only other known example of an agricultural orientation is the site Baobab (2229 AD 6), on the Blyklip / Edmonsberg range. This is a single homestead overlooking the cultivatable floodplain of the Kolope. Heavy rains in 2000 have exposed several grain-bin foundations (now totalling 28) not visible when Calabrese (2005: 146) excavated here. Among other things, this site shows that rainfall had improved by AD 1000 (Huffman 2008).

In terms of distance to rivers, 88% lie within a 5km radius of the Limpopo and 29% within 5km of the Kolope River.

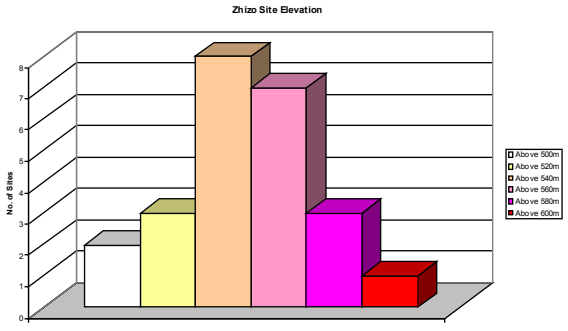

Chart 4.1: Elevation of Zhizo sites.

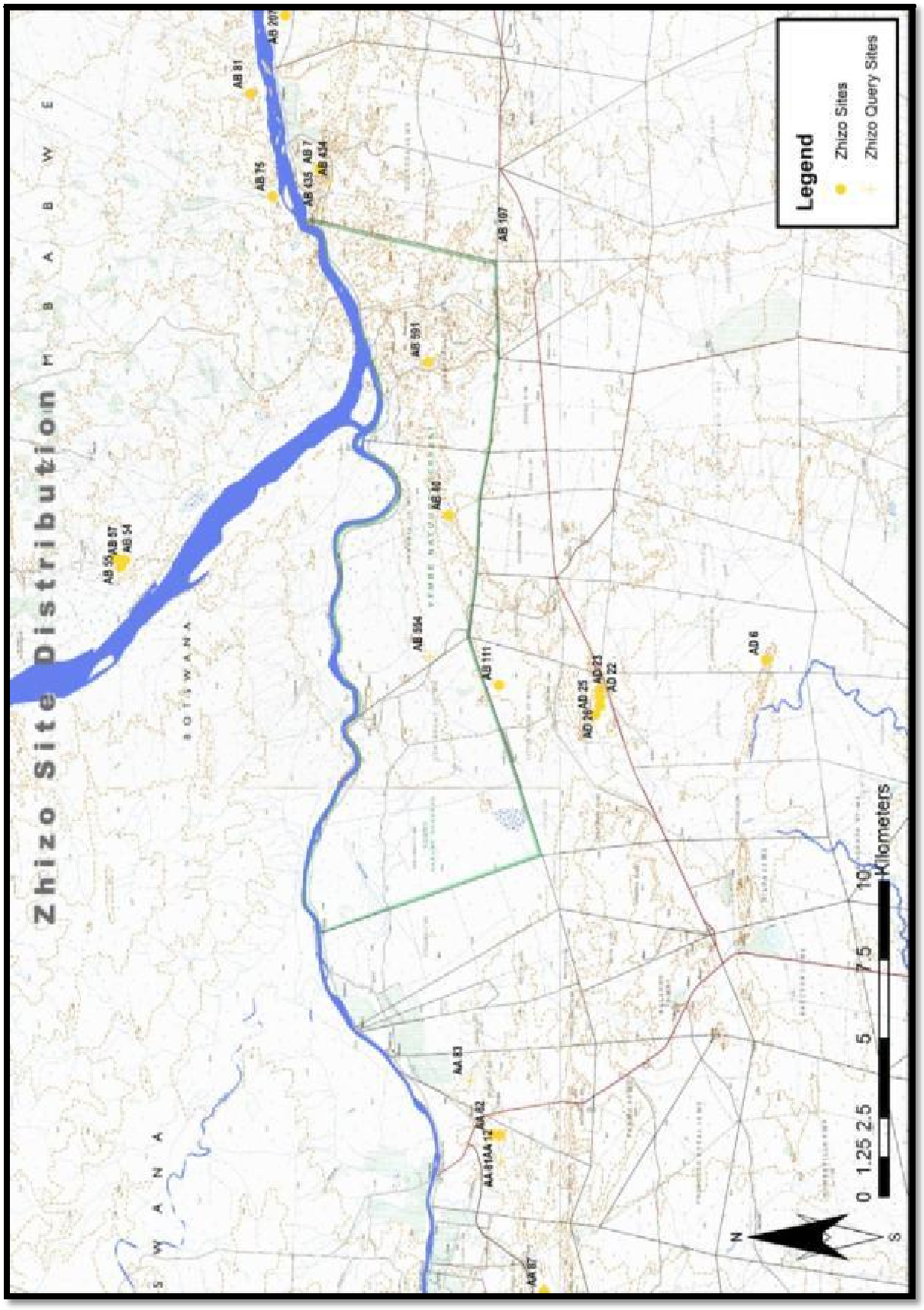

Figure 4.2. Distribution of known Zhzio sites in the Shashe-Limpopo basin

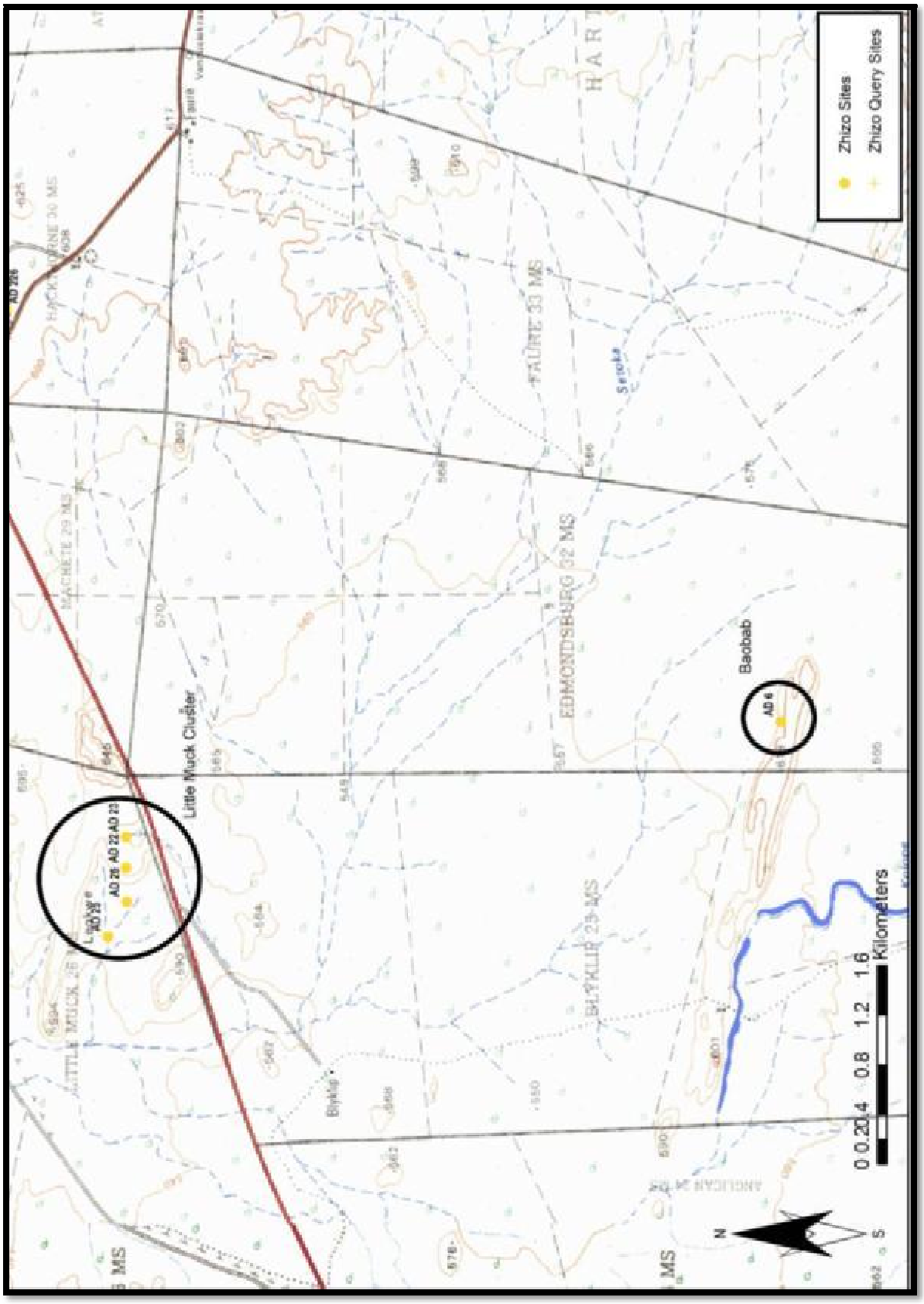

Figure 4.3. Map indicating the location of the Little Muck Cluster and the site Baobab

Leokwe Site Analysis

The number of Leokwe sites is 69; all are included. The sample includes 64 definite identifications and 5 Leokwe Query (Figure 4.4).

Of the 69 sites, 43% are located on the escarpment while 70% lie within 5km of the Limpopo and 50% within 5km of the Kolope (Chart 4.3). Additionally, 36% cluster around the vlei.

Leokwe sites form a distinct pattern on the landscape: 1) they are not near agricultural land; 2) they cluster in multiple homesteads and 3) they usually have an extra kraal. Box Canyon (2229 AB 223-225) provides a good example; this is one large site, with many homesteads. These homesteads, however, may not date to the same time. At the south end is a fountain that would have been a permanent source of water. Furthermore, the site is far from good agricultural land. The attributes of the landscape are more adept to the herding of cattle.

Additionally, there were *'extra kraals'*. That is, in addition to the normal arrangement, some kraals were built in isolated spots against rock outcrops. It was thus not possible to conform to the CCP (Figure 4.5). Extra kraals have also been recorded in the upper levels at Schroda and at Leokwe Hill B, as well as 2229 AB 280 and 2229 AB 590 (Figure 4.6).

Castle Rock is an exception in that it is located in the vlei. This area, however, is not good agricultural land. There are several kraals, with different cultural ascriptions, and all groups may have used the hill for herding purposes. I describe Castle Rock in detail in Chapter V.

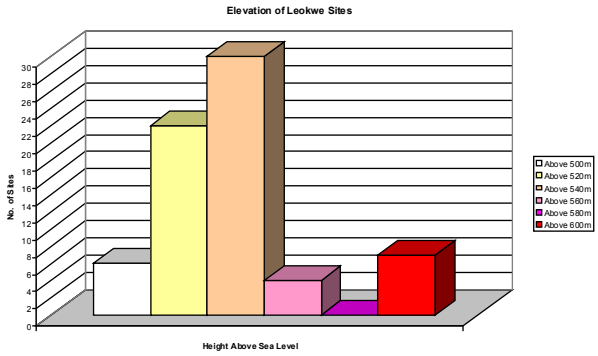

Chart 4.2: Elevation of Leokwe sites.

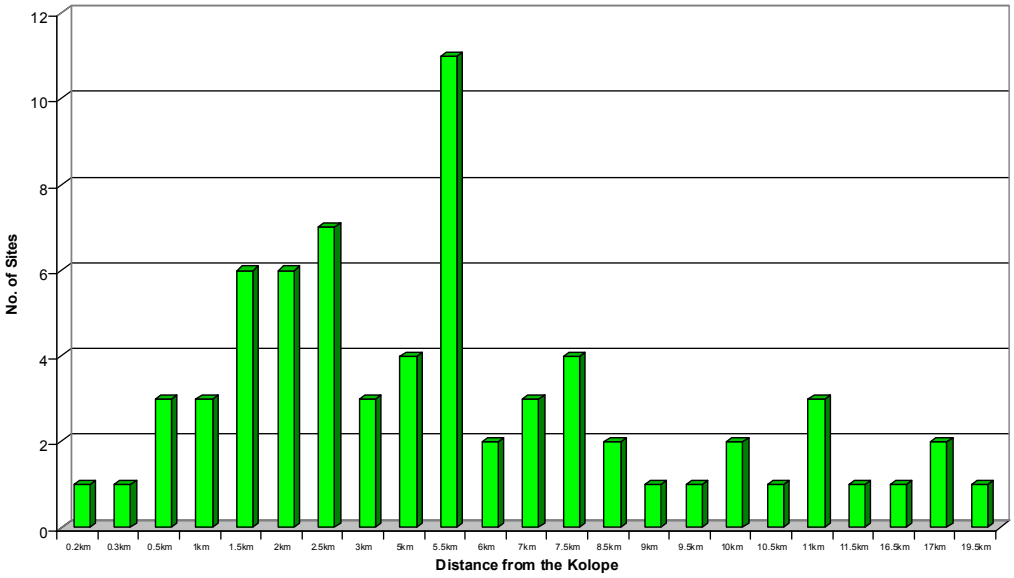

Chart 4.3: Distance of Leokwe sites from the Kolope River.

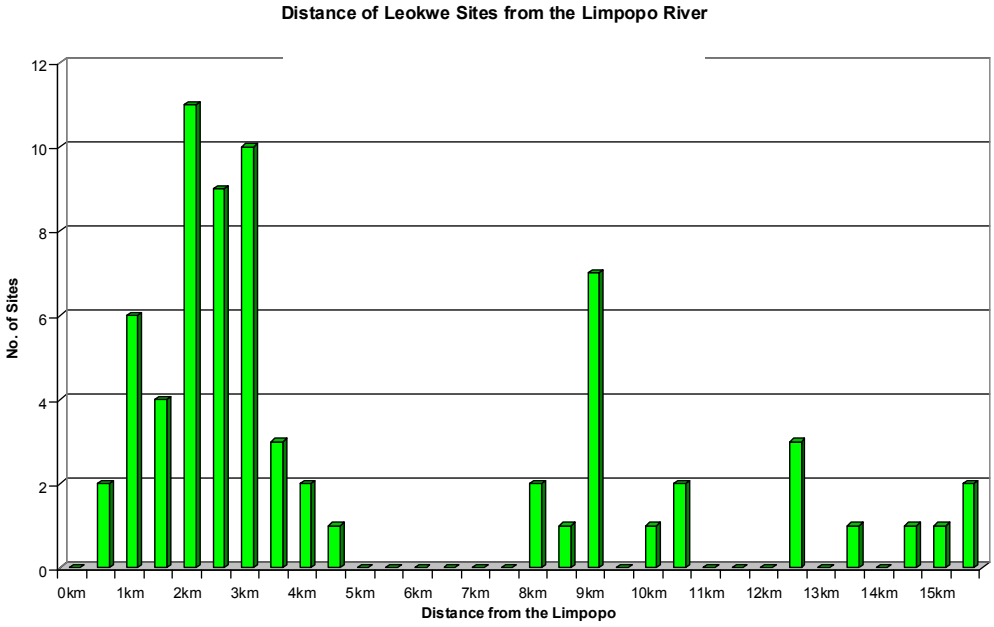

Chart 4.4: Distance of Leokwe sites from the Limpopo River.

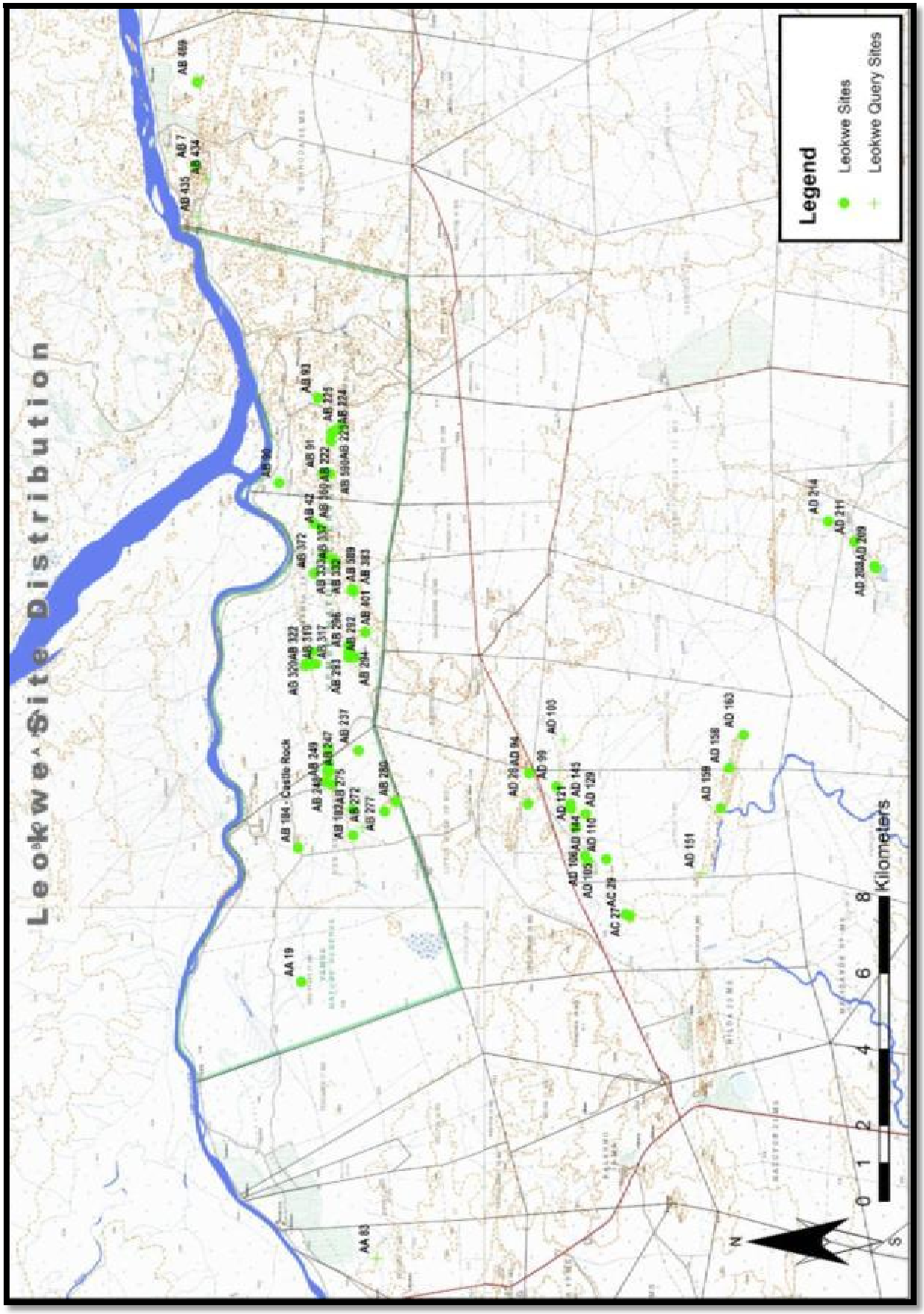

Figure 4.4: Distribution of known Leokwe sites in the Shashe-Limpopo basin.

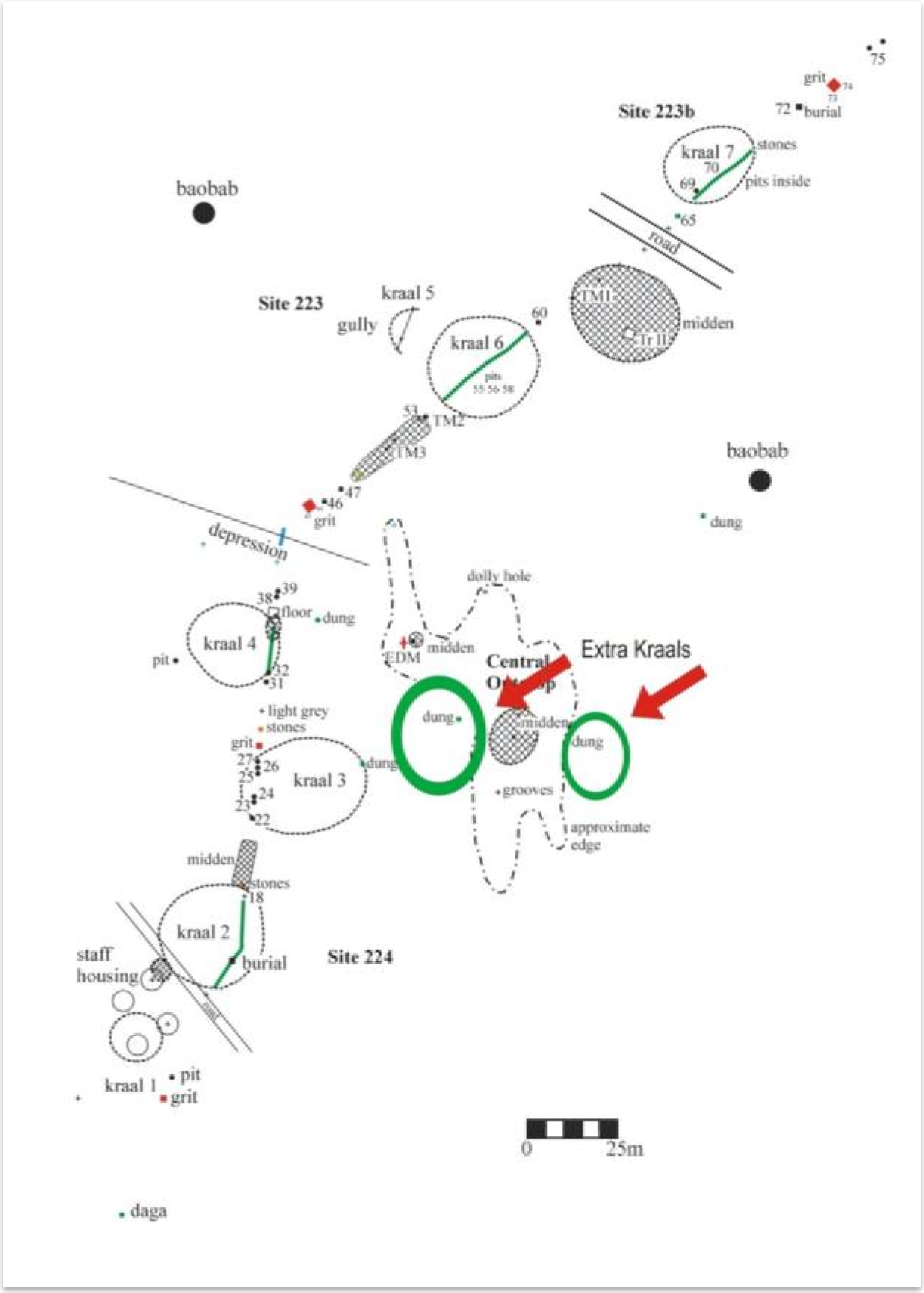

Figure 4.5: Excavation area of Box Canyon (2229 AB 223-225; Adapted from Huffman 2007a)

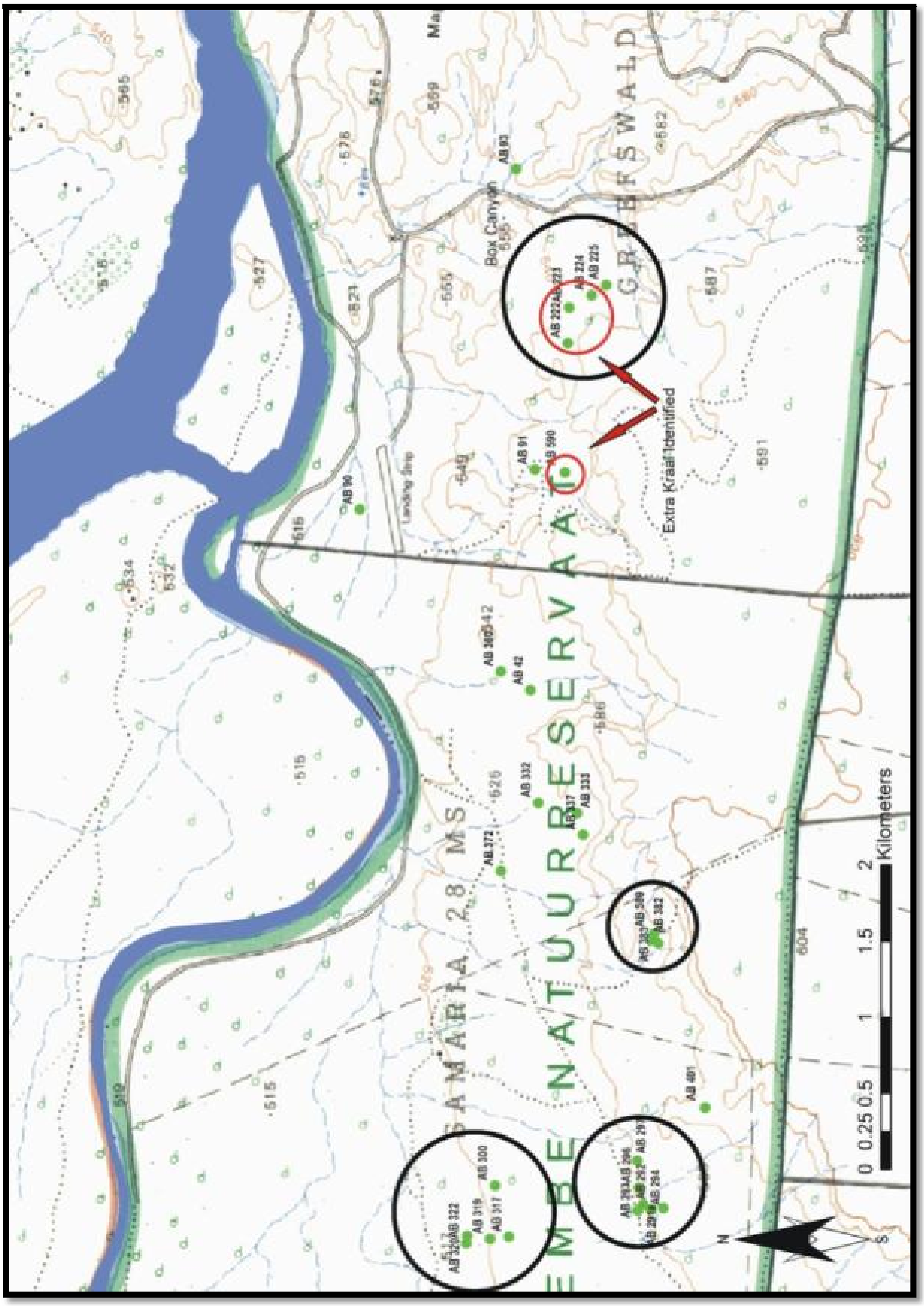

Figure 4.6: Map indicating clusters of Leokwe sites including Box Canyon.

K2 Site Analysis

There are 162 identified K2 sites. Of this total, 18 are excluded because they are either not in South Africa or lack adequate geographic information. There are 117 positive identifications and 27 K2 Query. I have combined them here (Figure 4.7.).

Some 78% are located on the floodplain, and 19% on the escarpment. Concerning the distance from rivers, 63% are within 5km radius of Limpopo and 54% of the Kolope (Chart 4.5, 4.6 & 4.7). At least 24% are clustered around the vlei.

For the first time, homesteads cluster along the cultivatable margins of the vlei. Where there is good preservation, we find the collapsed daga floors of grain-bin foundations. This is evident on Den Staat (Figure 4.8) where K2 settlements dominate the west end.

A few sites are at higher elevations, and these are mostly near secondary floodplains. Most of these secondary floodplains would not be suitable for agriculture unless rainfall was high (Figure 4.9).

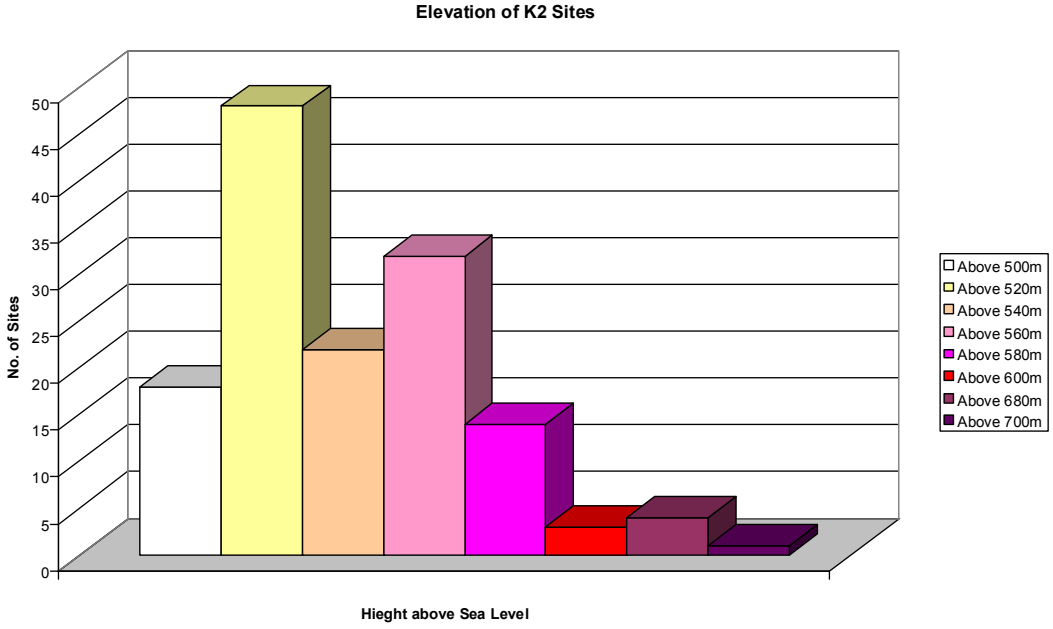

Chart 4.5: Elevation of K2 sites.

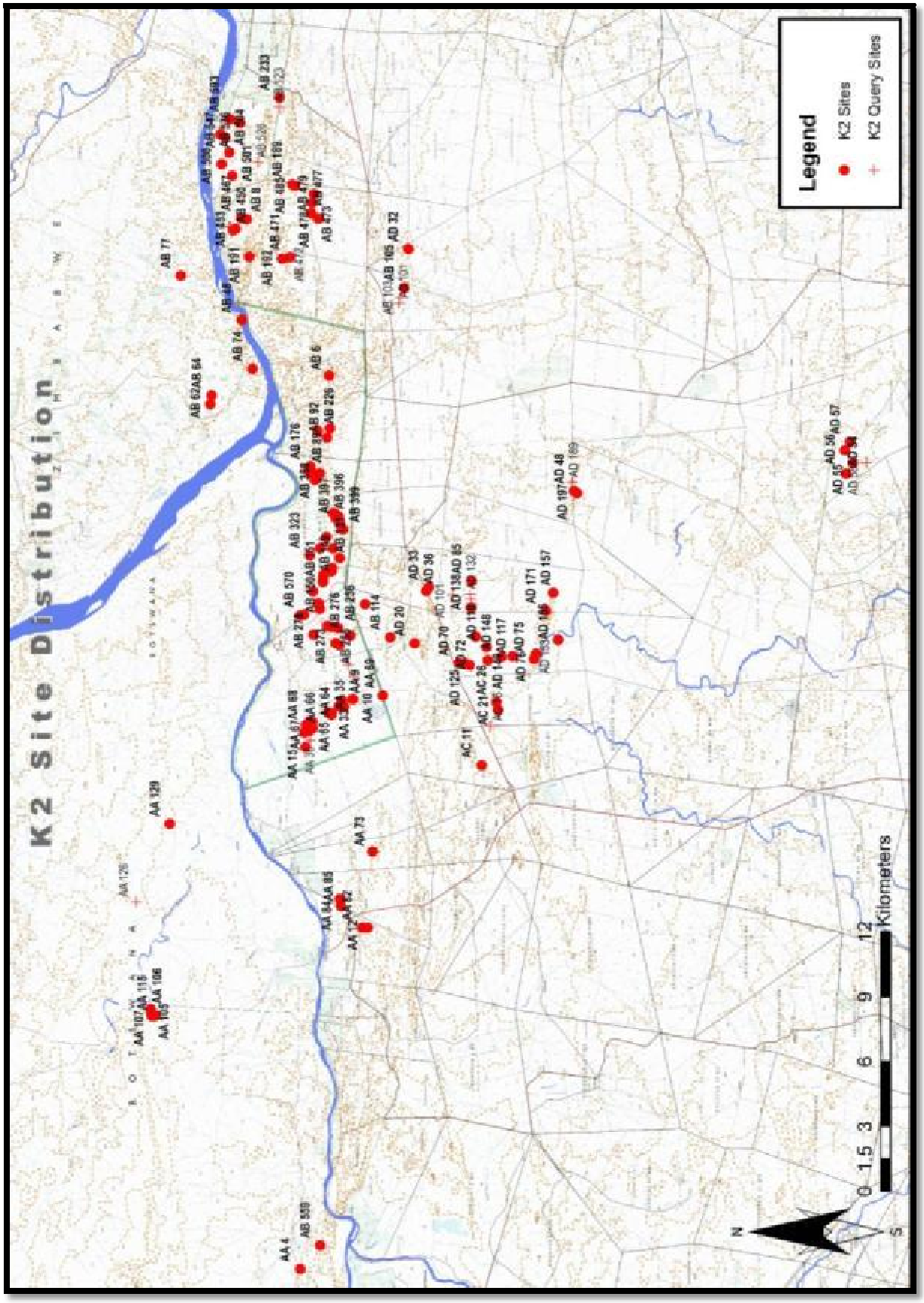

Figure 4.7: Distribution of known K2 sites in the Shashe-Limpopo basin.

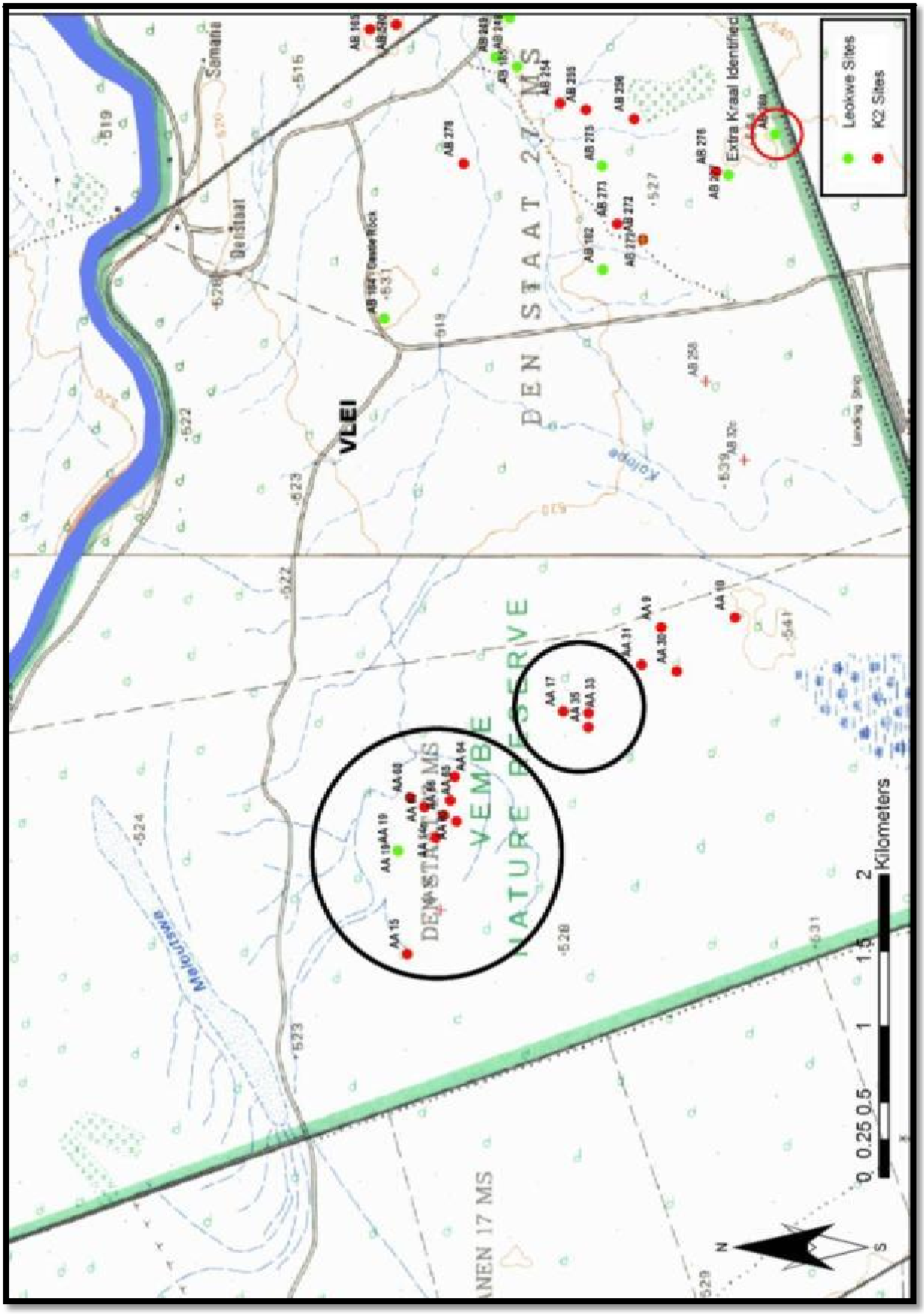

Figure 4.8: Cluster of K2 sites around the vlei in relation to Leokwe sites.

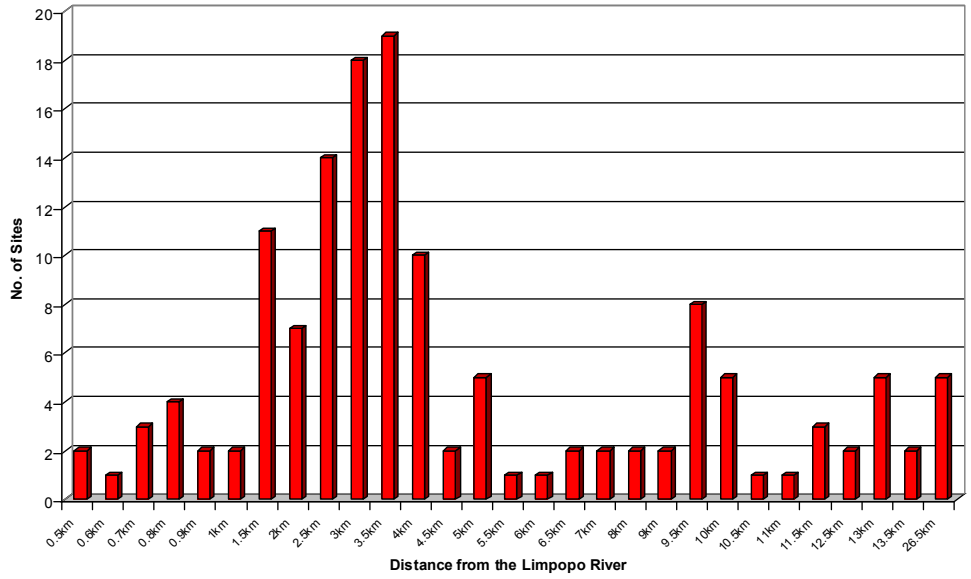

Chart 4.6: Distance of K2 sites from the Limpopo River

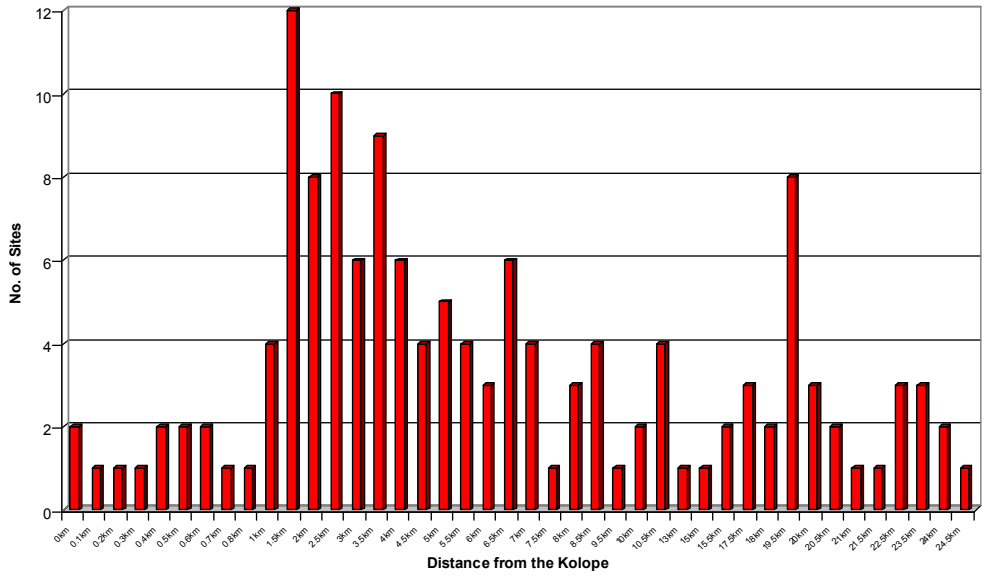

Chart 4.7: Distance of K2 sites from the Kolope River.

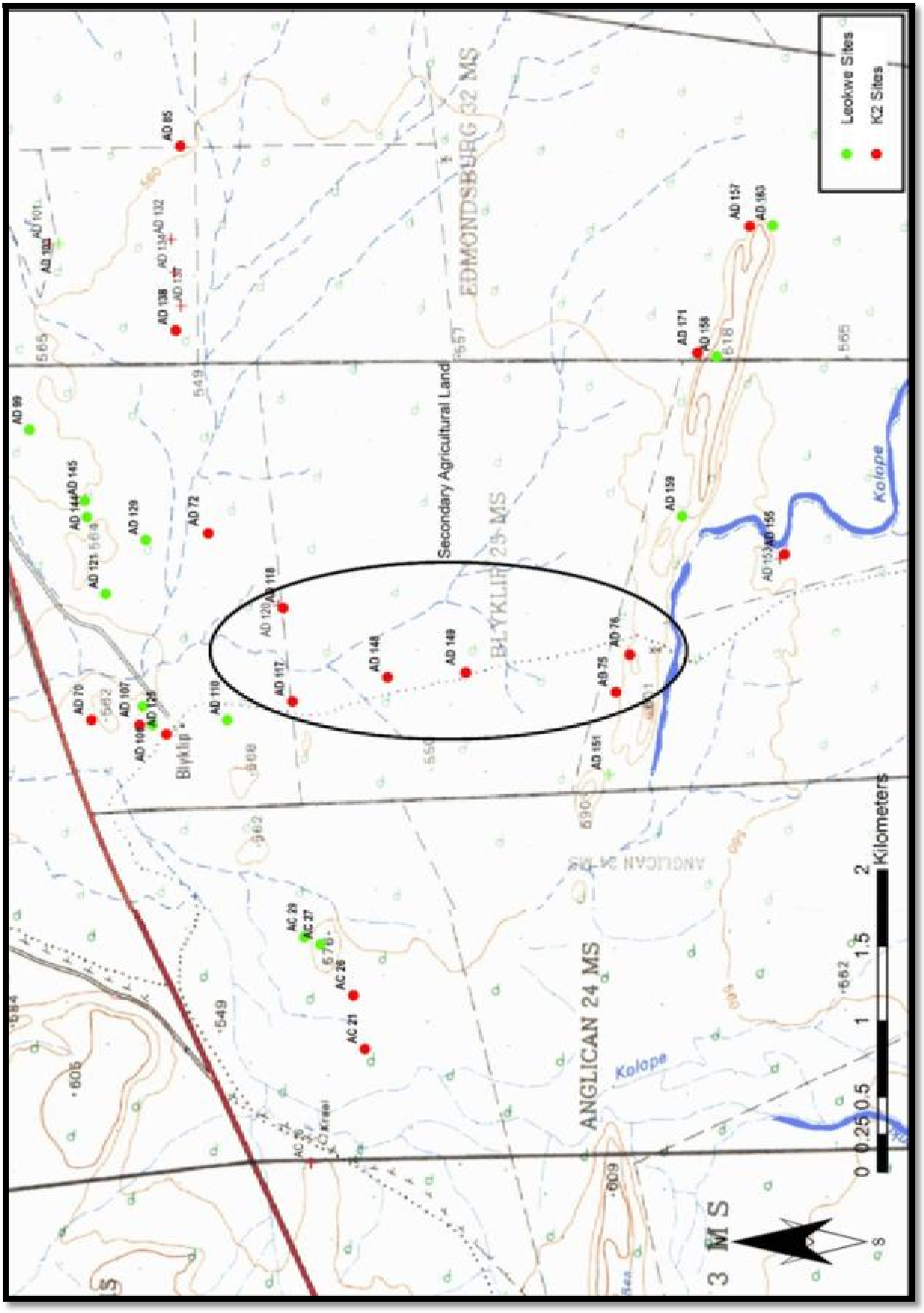

Figure 4.9: K2 sites around secondary agricultural land along the Kolope River in relation to Leokwe sites.

Transitional K2 Site Analysis

There are 125 identified Transitional K2 sites. All are used, including 10 Transitional K2 Query sites (Figure 4.10).

Of the total, 50% occur on floodplain levels and 50% on the escarpment. In terms of distance, 53% lie within a 5km radius of the Limpopo and 54% of the Kolope (Chart 4.8, 4.9 & 4.10). In addition, 28% are clustered around the vlei.

Significantly, the numbers of sites increase three fold from K2 times: from 40 to 125. Transitional K2 occupation was equally divided between floodplain and escarpment. There is a distinction between cattle and agriculturally orientated settlements. Cattle posts are predominantly located on spurs of the plateau, far away from agricultural land with few grain-bin foundations. The spur location provides access to both valley and plateau grasses. The farm Hamilton (Figure 4.12) provides several examples. Aerial photographs indicate that more cattle posts in that area remain to be recorded.

Agriculture sites occur at lower elevations near cultivatable soils. There appears to be a shift east to agricultural land downstream from the confluence (Figure 4.13) but further surveys are necessary to confirm this trend. Additionally, grain-bin remains change from the large foundations typical of K2 to smaller circular ones typical of the Mapungubwe period. A clear example of this is Weipe 508, where some 70 small grain-bins circle the central cattle kraal (Figure 4.11).

Furthermore, Leopard's Kopje people started to plaster the surfaces around houses and grain-bins. The excavations at VK2 (2229 AD 108) provide a good example of these 'lapa' surfaces.

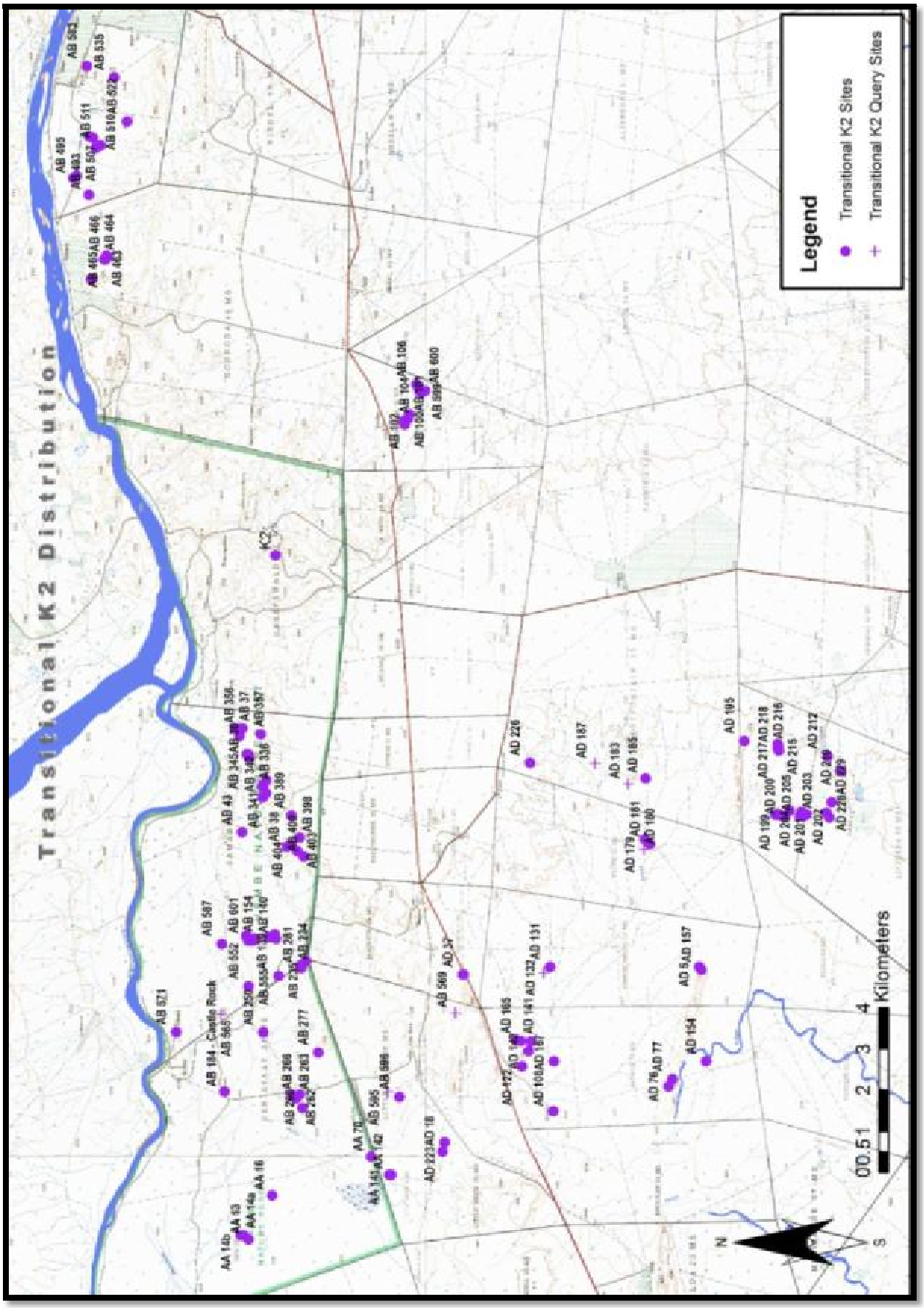

Figure 4.10: Distribution of known Transitional K2 sites in the Shashe-Limpopo Basin.

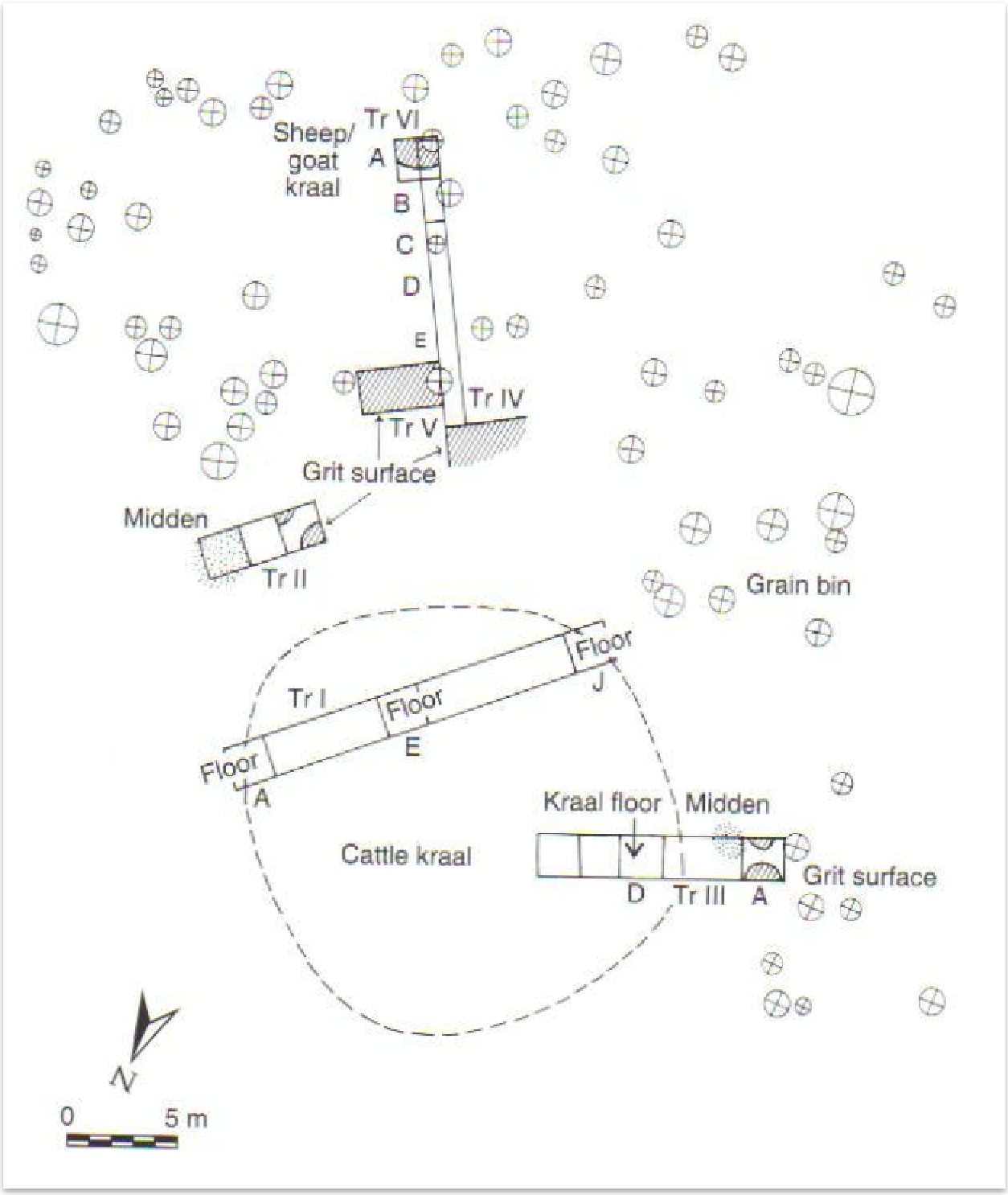

Figure 4.11: Site plan for Weipe 508 (from Huffman 2007a).

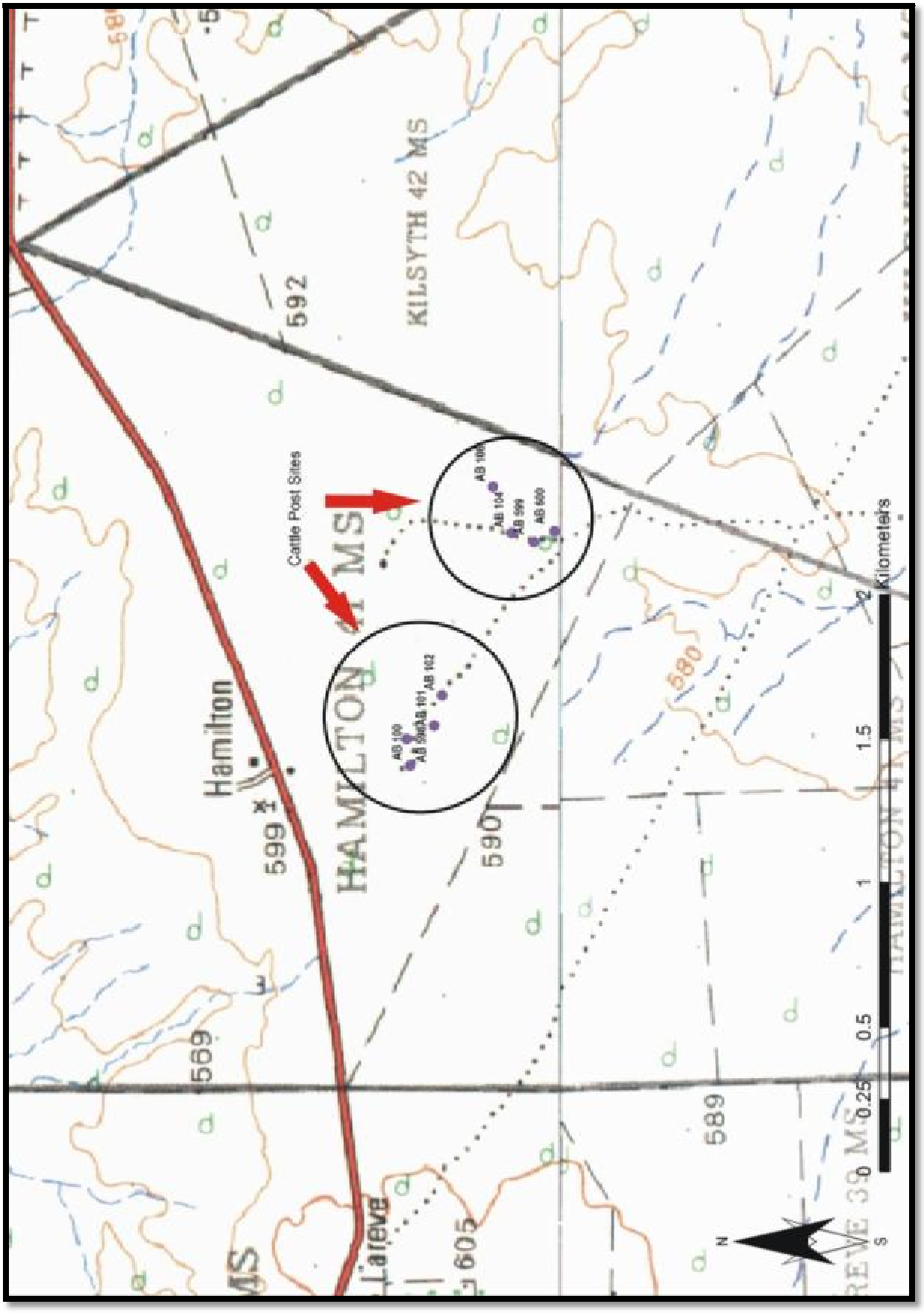

Figure 4.12: Transitional K2 sites on Hamilton orientated toward cattle.

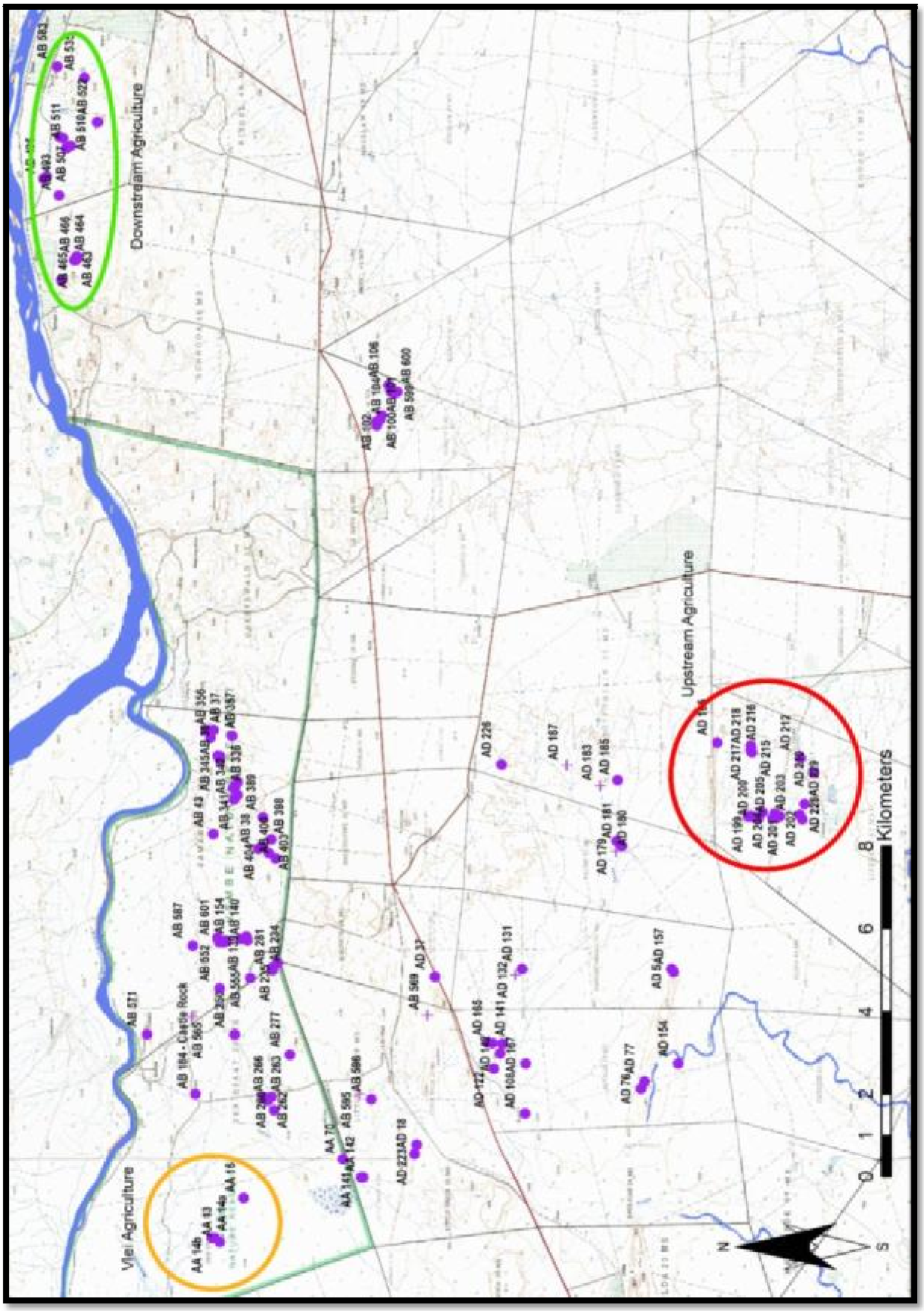

Figure 4.13: Different agricultural areas during the Transitional K2 period.

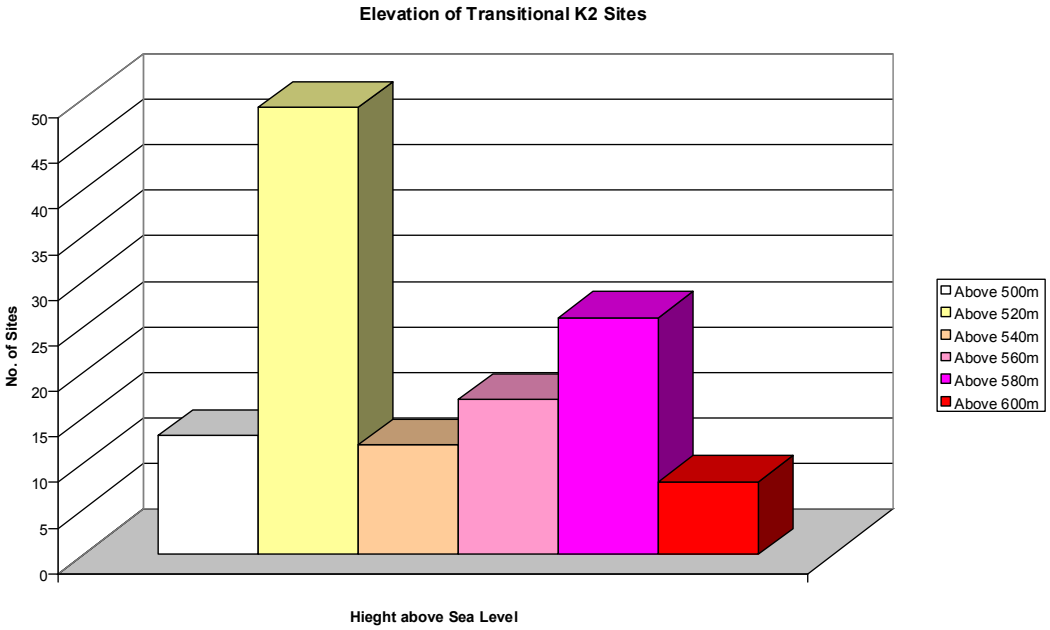

Chart 4.8: Elevation of Transitional K2 sites

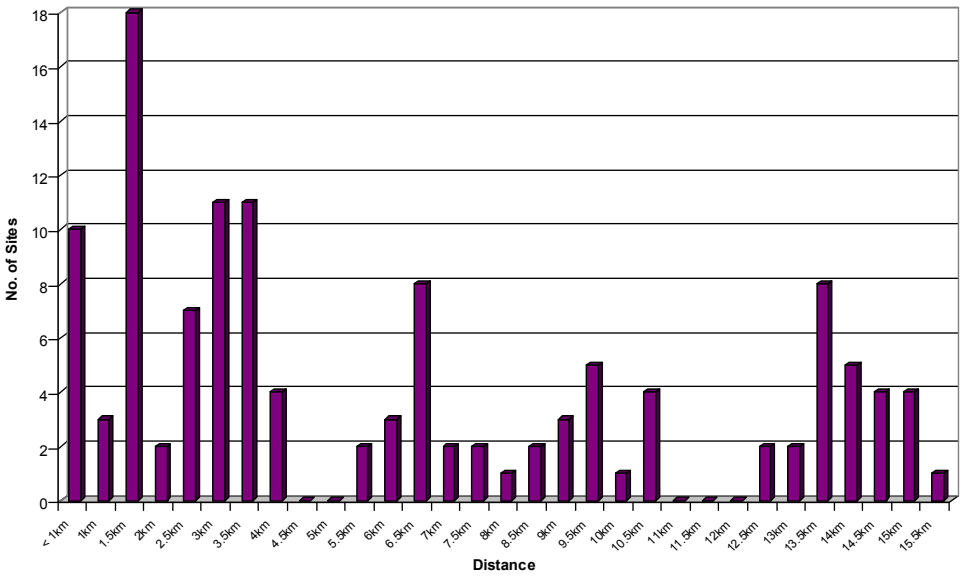

Chart 4.9: Distance of Transitional K2 sites from the Limpopo River

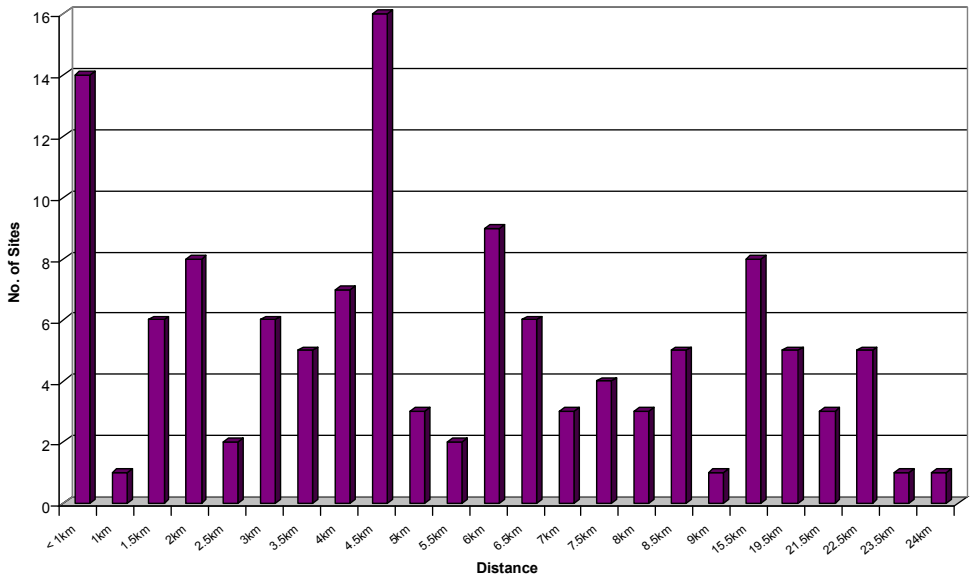

Chart 4.10: Distance of Transitional K2 sites from the Kolope River.

Mapungubwe Site Analysis

There are 122 Mapungubwe sites identified in the Shashe-Limpopo basin. I have excluded 17 because of insufficient data or location outside of South Africa. I combined the positive identifications with the 12 queries (Figure 4.14.).

Of the total, 88% occur within a floodplain and the remaining 11% on the escarpment. In terms of distance, 75% lie within a 5km radius of the Limpopo and 42% of the Kolope (Charts 4.11, 4.12 & 4.13); 28% cluster around the vlei.

Although escarpment numbers are low, they represent a cattle orientation. Some sites, such as those on Hamilton, document the continued use of older cattle posts (Figure 4.15). The lower number is probably a function of the survey limits.

In terms of agriculture, few Mapungubwe people live at the west end of the vlei. This area may nevertheless have been cultivated. The shift east may simply be a function of population growth. It may also be related to a new crop. Spindle whorls first appear in the Mapungubwe period, and cotton must have been grown in the vicinity. This point requires further investigation.

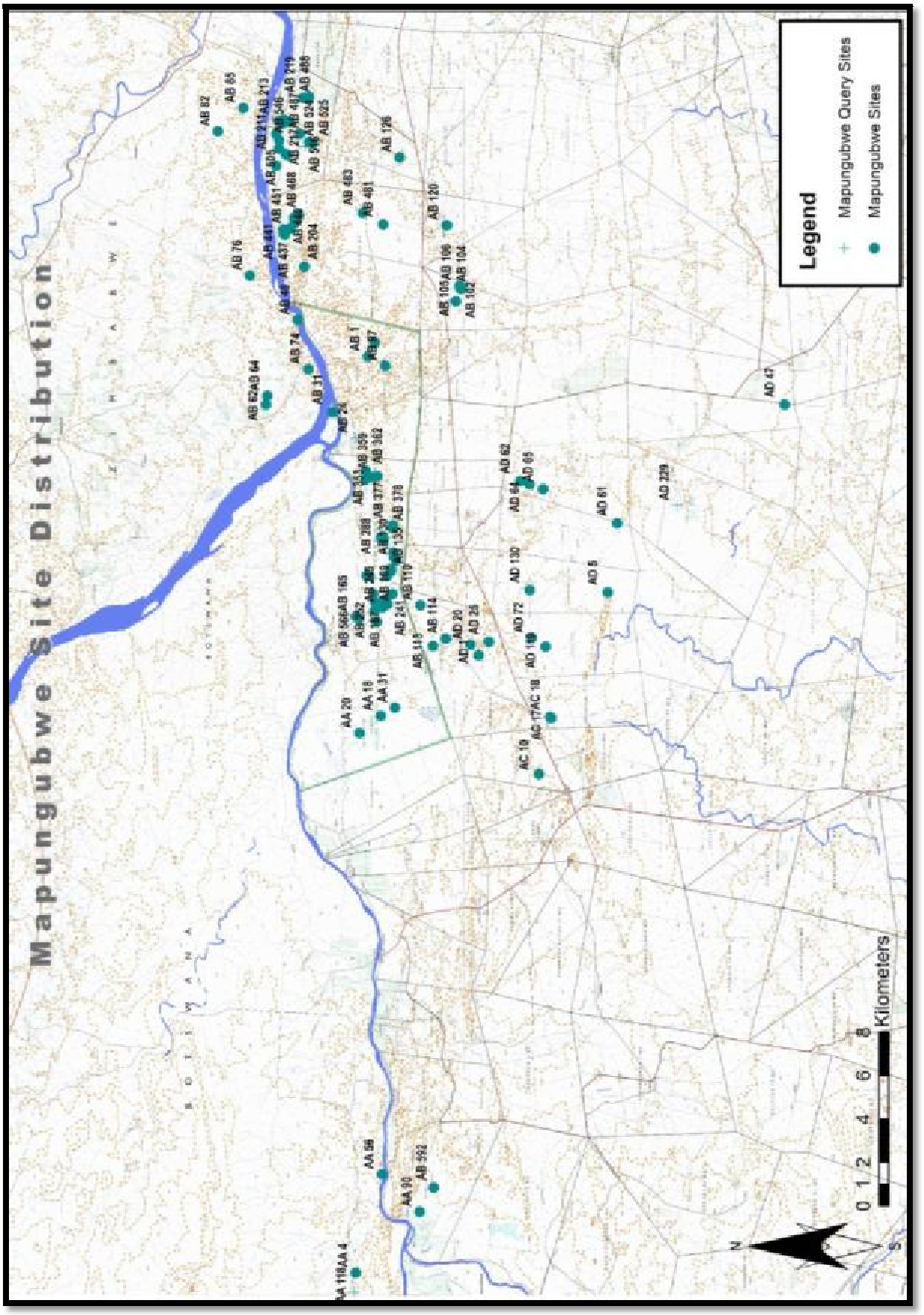

Figure 4.14: Distribution of known Mapungubwe sites in the Shashe-Limpopo basin.

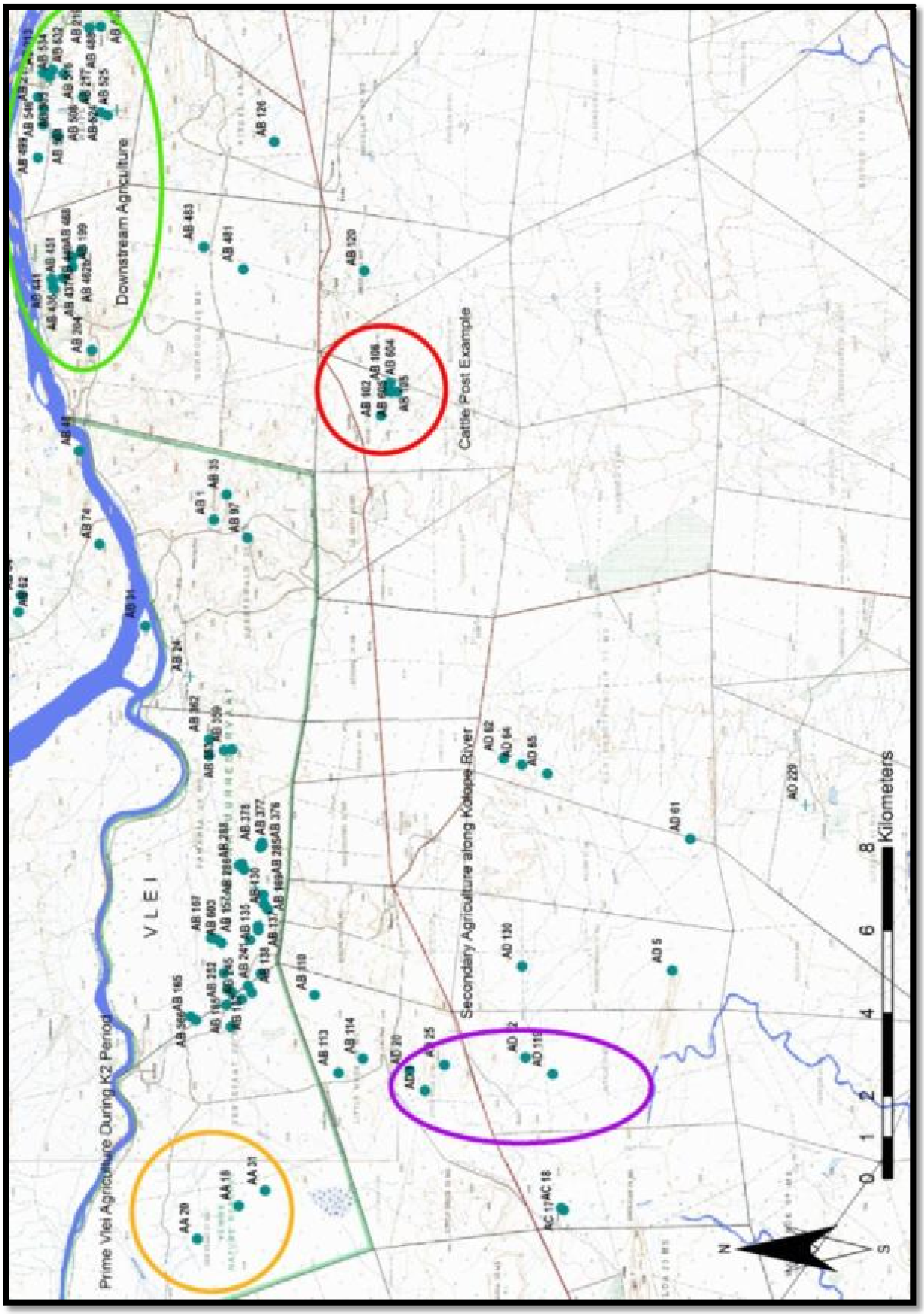

Figure 4.15: Map showing distribution of Mapungubwe sites in relation to the vlei, downstream agriculture, and cattle posts.

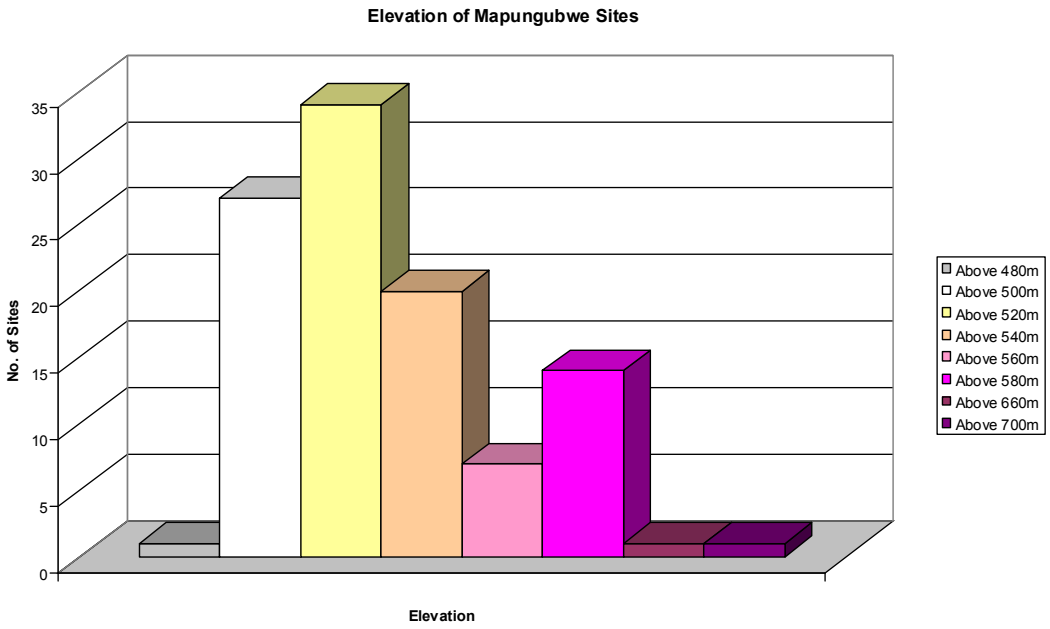

Chart 4.11: Elevation of Mapungubwe sites

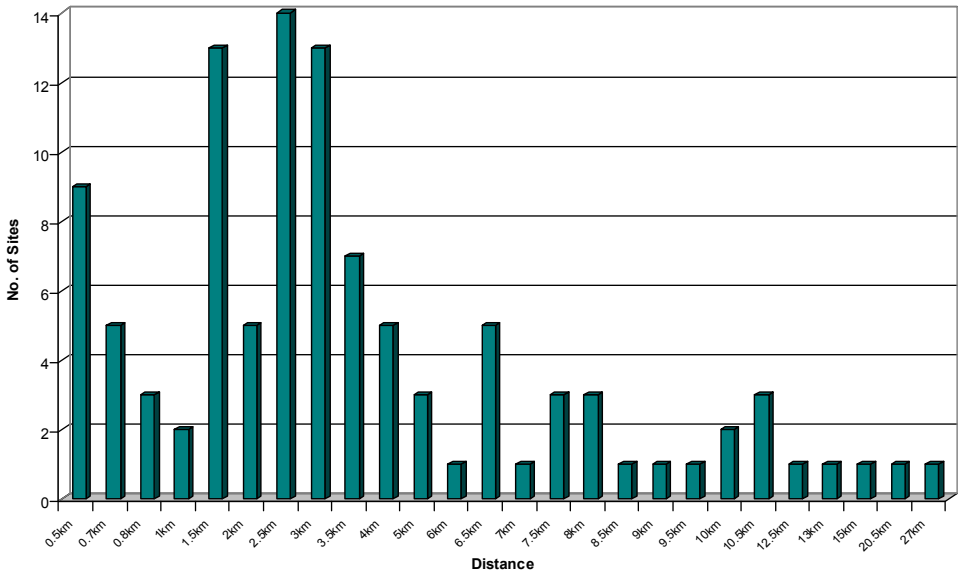

Chart 4.12: Distance of Mapungubwe sites from the Limpopo River

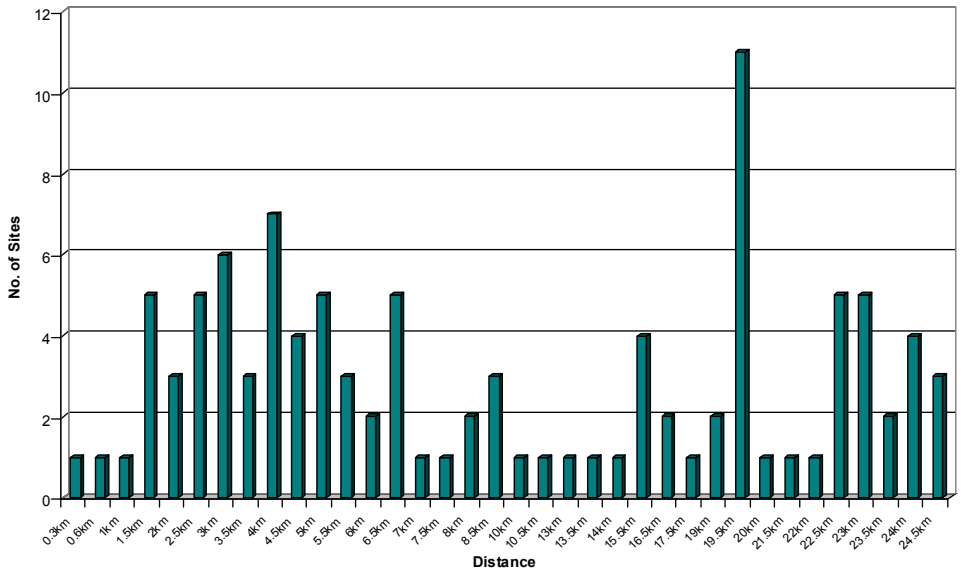

Chart 4.13: Distance of Mapungubwe sites from the Kolope River.

I presented broad results, and a few examples, to note general patterns. This assists in orientating oneself to the general distribution of Middle Iron Age sites in the basin. This information also indicates the general patterns of sites in terms of access to resources and specific land use. However, Castle Rock was somewhat of an anomaly. Calabrese (2005) relies heavily on the data collected from Castle Rock during his 1999 excavation to argue for some Leokwe groups having relatively higher status than K2 groups. His basis for this interpretation is the identification of '*elite symbolic objects*'. Because of this and its importance to the Leokwe debate, we excavated a few more trenches in 2007. I turn now to the results.

CHAPTER V: CASTLE ROCK RE-VISITED

Introduction

The site 2229 AB 184, also known as Castle Rock (22˚12′25″S; 29˚15′50″E), is an isolated hill that stands above the vlei on Den Staat (Figure 5.1). It is named after an unfinished lodge on the southern edge, started by the owner several years ago. As Calabrese notes, construction of this lodge has negatively impacted the archaeological deposit through grading, road construction and quarrying.

Recent farming activity has also affected the vlei around the hill. The owner converted the Kolope into a fish farm and created access through a number of causeways.

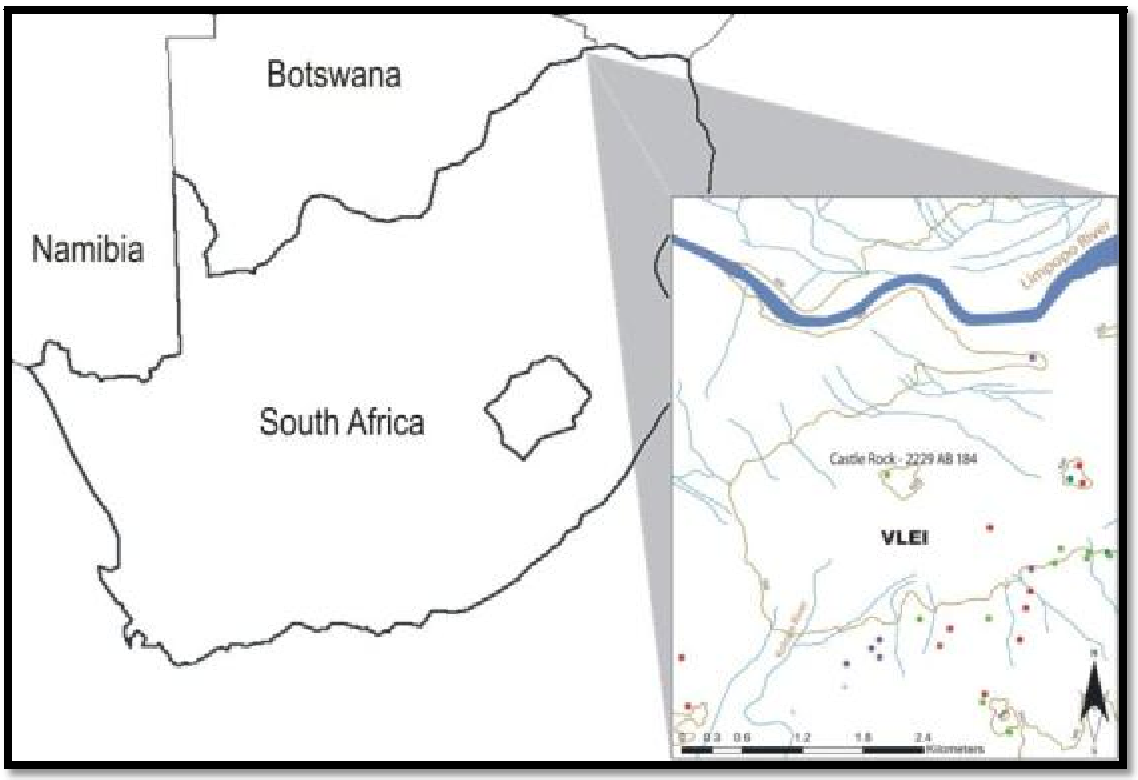

Figure 5.1: Location of Castle Rock in relation to the Limpopo and Kolope Rivers, and surrounding Middle Iron Age sites.

Calabrese first excavated here during June and July of 1999. He (2005: 159) thought the hill was favoured because of its proximity to fertile agricultural land, as well as the status aspirations of the people.

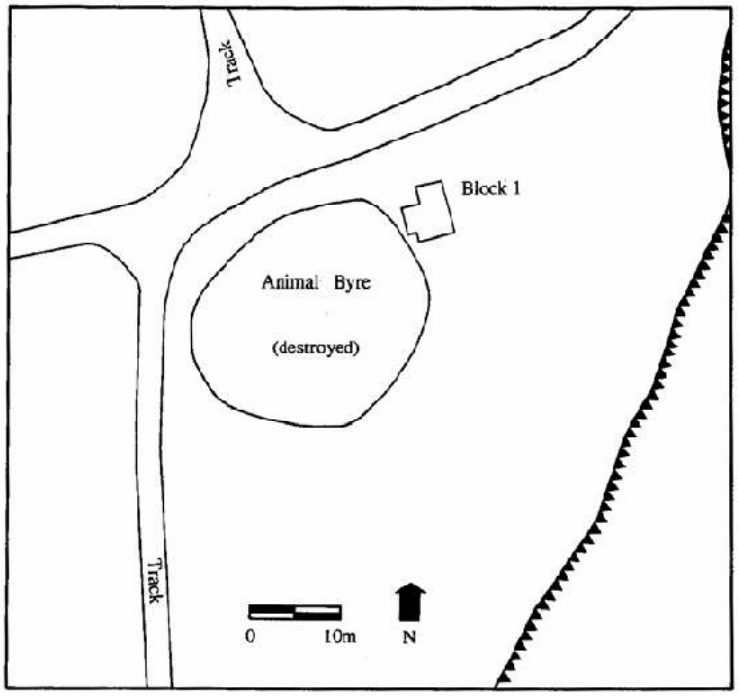

Figure 5.2: Calabrese's (2005) map of the location of the surface feature and excavation conducted in 1999.

His excavations revealed two stratigraphic levels. Stratum I consisted of a deflated dark greyish brown silt, and Stratum II was a more solid matrix with midden material. A radiocarbon sample from Stratum II calibrated to AD 1040 – 1160 (Pta 7969), and another from Stratum I to AD 1225 – 1280 (Pta 7966). The oldest date shows that the Leokwe deposit was contemporaneous with the site K2.

For Calabrese, Castle Rock represents one Leokwe occupation. He (2005: 192-193) states:

> … several potential archaeological correlates exist that are useful in differentiating ethnic-based societies from class-based societies in southern African prehistory. Among those correlates present at Castle Rock are glass trade beads, finished non-utilitarian metal items and probable supra-household figurines. It was proposed that the presence of these items and activities has the potential, when compared to similar data sets from other sites, to

> illustrate the ability of a site's residents to appropriate surplus social production in the context of manifesting elite identity.

Thus, for Calabrese, Castle Rock represents an early Leokwe occupation that demonstrates higher status.

Castle Rock Revisited: The 2007 Excavation

During 2006, our survey recorded several more surface features uncovered by the heavy rains in 2000. To clarify some issues with Calabrese's model it was necessary to re-examine the stratigraphy and recover more material culture. Because of the threat posed by the potential sale of the farm, it was necessary to proceed during the 2007 field season.

Honours students helped to re-excavate the site as part of a rescue operation (under the supervision of Prof. T.N. Huffman). Surface inspection revealed at least seven distinct kraals (Figure 5.4). Calabrese worked in Kraal 4. We placed Trench II next to his and two other trenches (I and III) in Kraal 1.

Figure 5.3: View of Castle Rock from the south. Note fish farm in foreground.

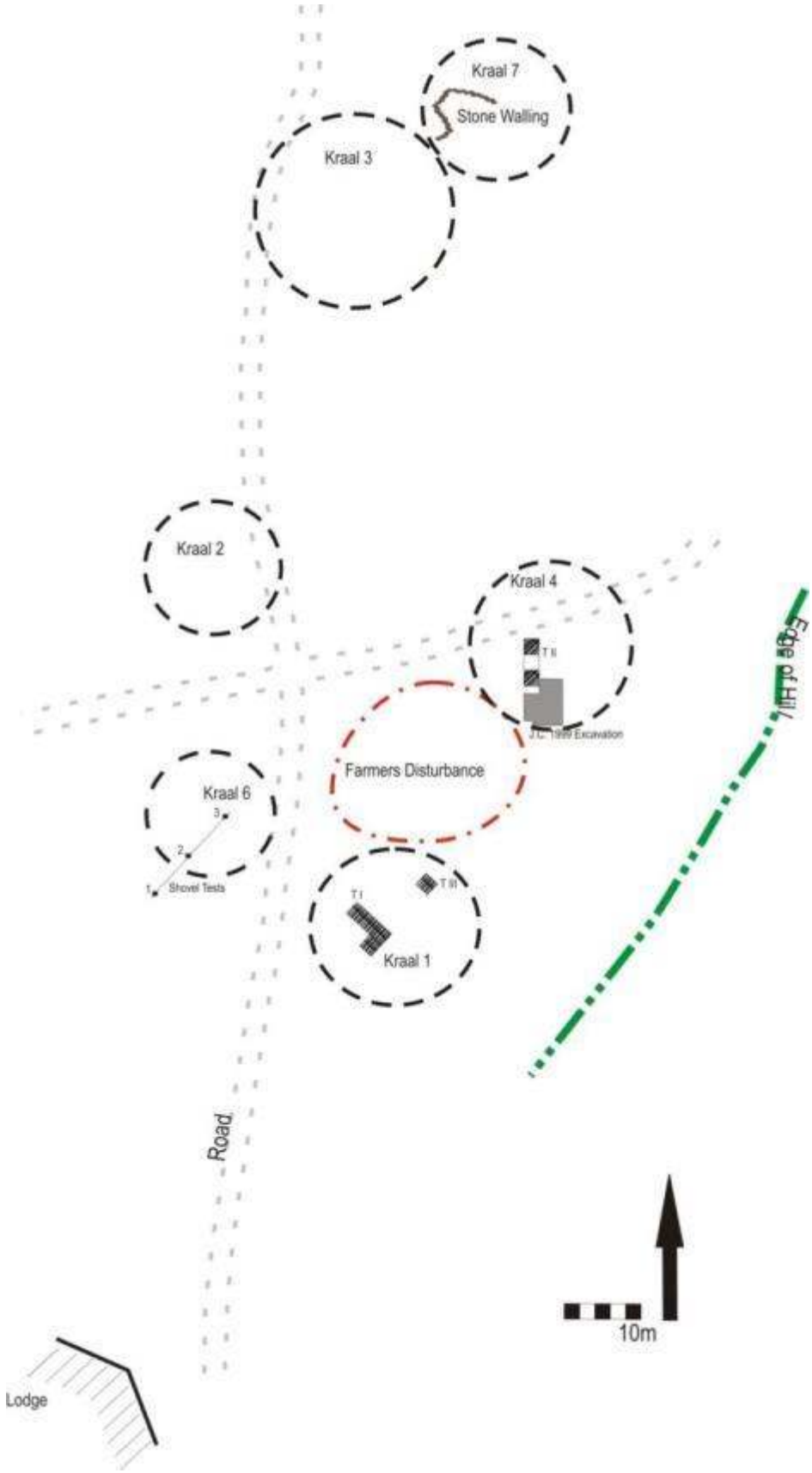

Figure 5.4: Map of Castle Rock showing location of surface features and excavation trenches, including Calabrese's 1999 excavation.

Excavation Procedures

Standard excavation techniques were employed. Once the features were identified, the site was mapped using a Nikon Total Station.

We divided out trenches into 2 x 2m squares and numbered them sequentially. The team excavated in arbitrary 10 – 20cm spits. We used a 5 x 5mm mesh and sieved each level. Artefacts that were not collected were returned to their original square.

Excavation Trenches

Kraal 1 - Trench I & III

The team excavated a total of a 24m^2 in Kraal 1 south of the borrow pit. Squares B-D were excavated to bedrock, but due to time constraints, Square D_2 was not. Instead, one half reached a depth of 20cm while the other half reached 50cm. Squares B and C consisted of a grey layer approximately 10cm thick, on top of 20cm of cattle dung that rested on bedrock (Figure 5.5, 5.6 & 5.7).

Trench III (one 2 x 2m square) was placed directly parallel to Trench I (Figure 5.5 & 5.7). The surface consisted of 5 – 6cm of soil with an extensive matrix of roots. Underneath was a layer of dung approximately 30cm thick, resting on bedrock.

Figure 5.5: Trenches I and III excavated down to bedrock in Kraal 1. Lodge in background.

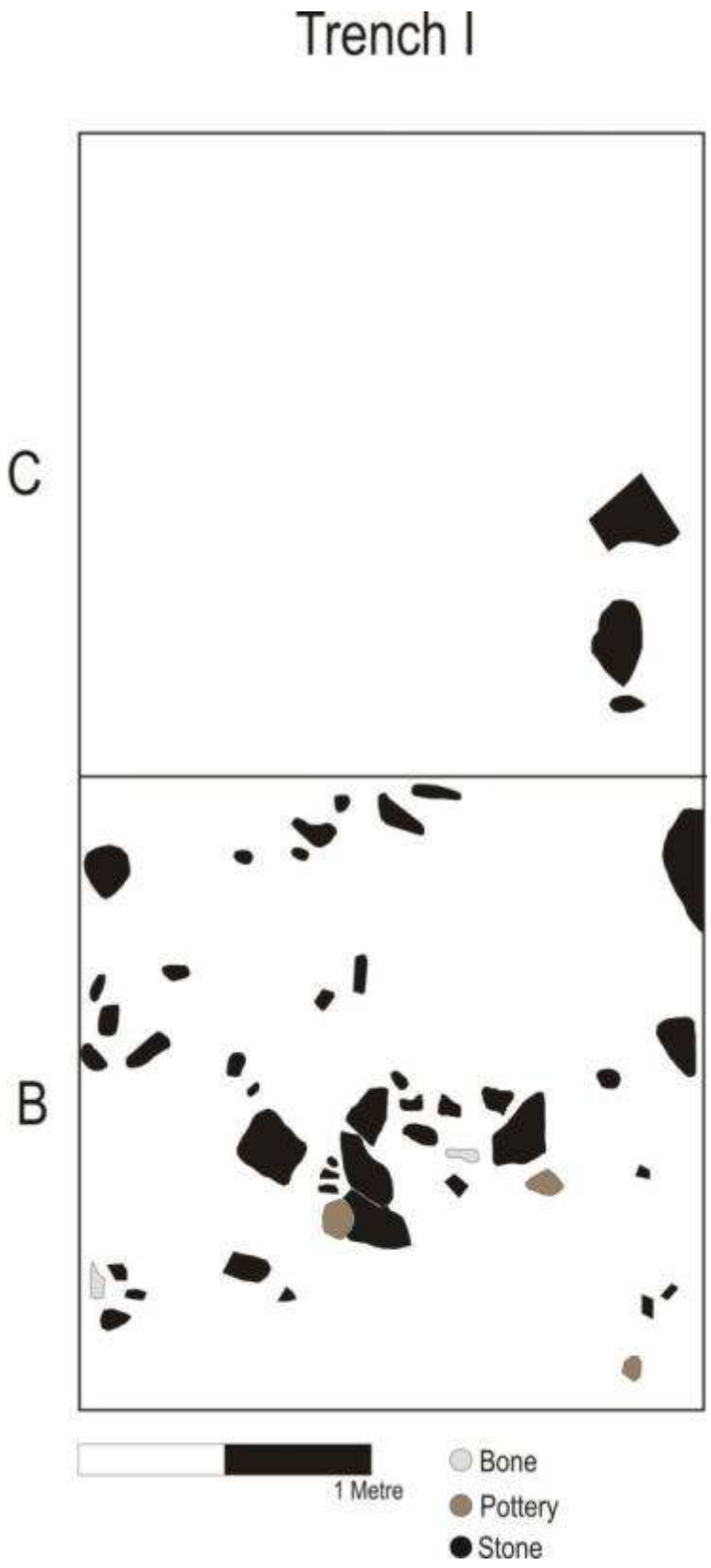

Figure 5.6: Floor plan of Squares B & C of Trench I showing the bottom of Stratum 1.

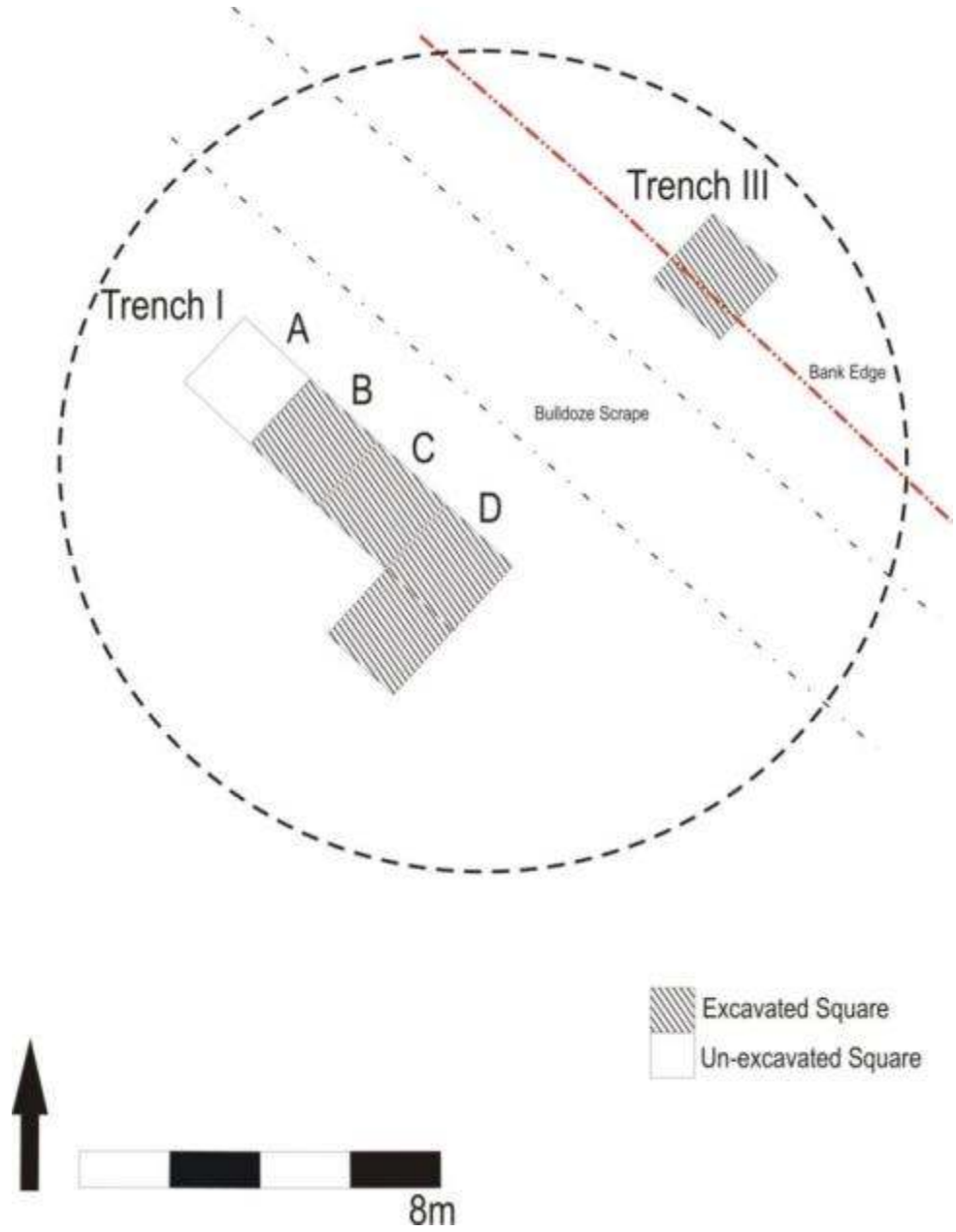

Figure 5.7: Area excavated in Trenches I & III in Kraal 1.

Kraal 4 - Trench II

Trench II encompassed two squares directly adjacent to the 1999 excavation (Figure 5.9). The surface level consisted of blue-grey soil about 6cm thick. Square E was not completely excavated due to time constraints: one half reached 20cm, and the other reached bedrock at 50cm. Square G contained two burials exposed in the road through the kraal.

Figure 5.8: Excavated squares of Trench II in Kraal 4.

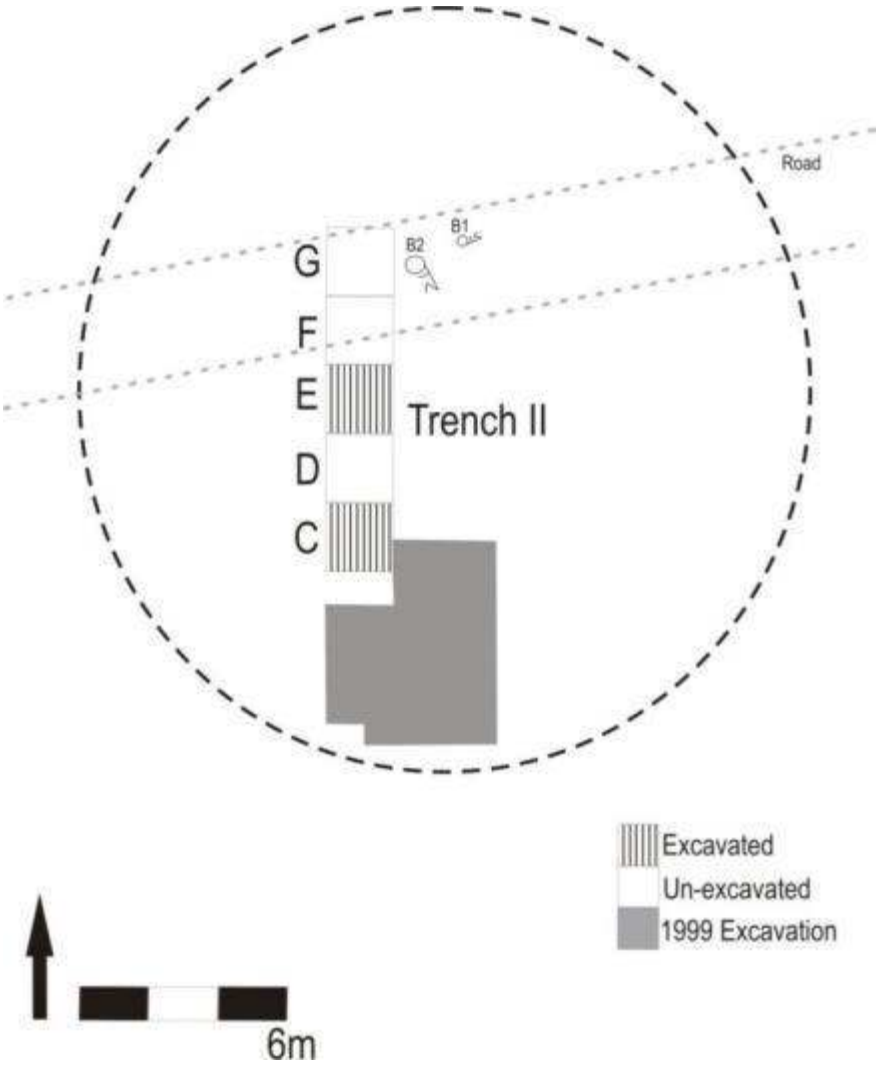

Figure 5.9: Area excavated in Trench II in relation to the 1999 excavation.

Table 5.1: Comparison of '*elite symbolic objects*' from Kraal 4 (Trench II) in 2007.

	Tr II C	Tr II E	Object
Stratum I	0	0	Glass Beads
	1	3	Shell Beads
(Transitional K2)	0	0	Metal
	0	0	Figurines
Stratum II	0	1	Glass Beads
	3	8	Shell Beads
(Leokwe)	0	0	Metal
	0	0	Figurines

Kraal 6

The team placed three shovel tests in Kraal 6 to the northwest of Trench I (Figure 5.4). The surface level consisted of grey soil 4 to 10cm thick in each test. Grey to grey-brown dung lay underneath in ST 2 and 3. The complete size of the kraal is not known.

General Stratigraphy

Much deposit is now missing. The remainder, regardless of the area, has two strata. The first stratum is a grey midden-like deposit with a maximum depth of 15cm. A noticeable change in texture and composition marked the interface with the lower stratum. The majority of archaeological material occurred at this interface.

The second stratum is more compact, and undisturbed by modern activity. Stratum II, in all excavation trenches, represents the remains of cattle kraals. Most extend to bedrock. There may have been a third stratum of material lying on bedrock, but this is not clear from our limited excavations.

Material Culture

Ceramics

The excavation yielded a total of 3840 ceramic shards. Of this total, 124 (3%) are decorated. Only 40 excavated pieces were sufficient for analysis. Dominant decoration techniques include stamping (27.5%), punctates (17.5%) and incision / excision (45%) (Table 5.2).

This number is insufficient for a detailed analysis. Nevertheless, it is clear that different facies characterise the two strata. Vessels with a rim / shoulder layout and wide bands of stamping dominate Stratum II, while burnished vessels with incised triangles on the shoulder occur in the upper layers.

Based on these features, the ceramic assemblages consist of *Leokwe* (Figure 5.12 & 5.13) in Stratum II and *Transitional K2* (Figure 5.14) in Stratum I. In addition,

Khami pottery occurs on the surface around Kraal 7 (Figure 5.4) and there clearly has been a Khami occupation as well.

Figurines

Three clay (A-C) and one stone figurine (D) came from the excavation and surface collection (Figure 5.10). The figurines have different repreentations: 1) animal; 2) female and 3) other. Figurine C represents an animal, while A and B appear to be female representations. Figurine B has a row of punctates on the midriff. Figurine D, out of stone, also bears a column of punctuate-like decoration. Its purpose is unclear.

Figure 5.10: Castle Rock figurines collected during surface collection and excavation.

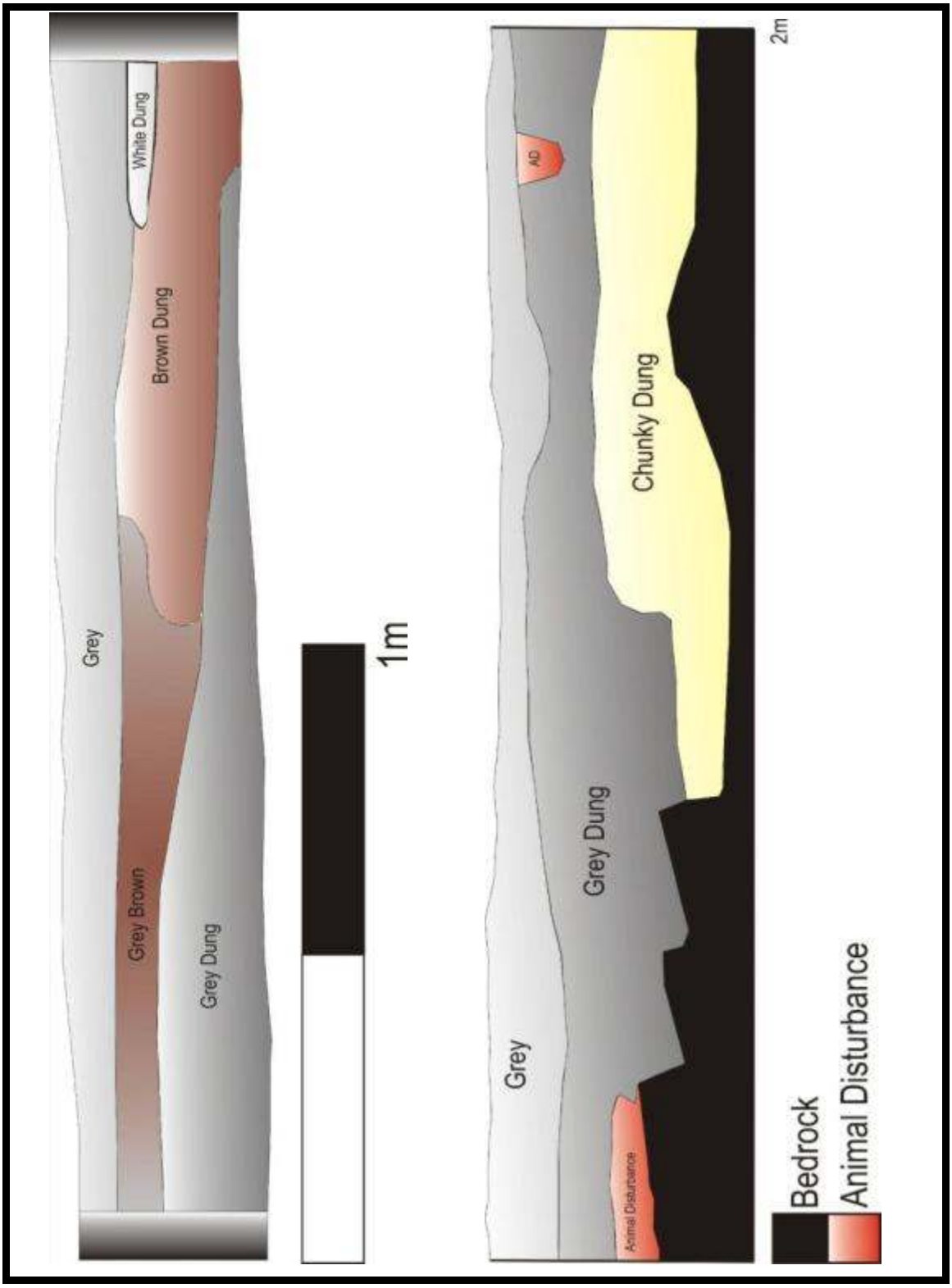

Figure 5.11: Section drawings of the west walls of Trenches I and III. Above I / C, below III / A.

Table 5.2: Ceramic counts from all contexts.

Provenance	Rims / Lugs	Decorated	Plain
I/B/S	2	1	16
I/B/1	14	6	112
I/B/2	8	2	102
I/C/1	10	6	172
I/C/2			
I/C/3			
I/D/S	2	1	26
I/D/1	29	19	528
I/D/2	6	6	88
I/D1/1	27	18	512
I/D1/2	1	4	49
II/Surface	14	11	13
II/C/S	1		13
II/C/1	9	5	188
II/C/2	5	17	106
II/C/3	8	1	85
II/E/S	4	3	108
II/E/1	9	5	294
II/E/2	20	6	291
II/E/3	16	2	115
II/G/1			
II/G/2	4	1	63
III/A/S	1		5
III/A/1	1		20
III/A/2	29	8	336
III/A/3	19	2	235
	239	124	3477

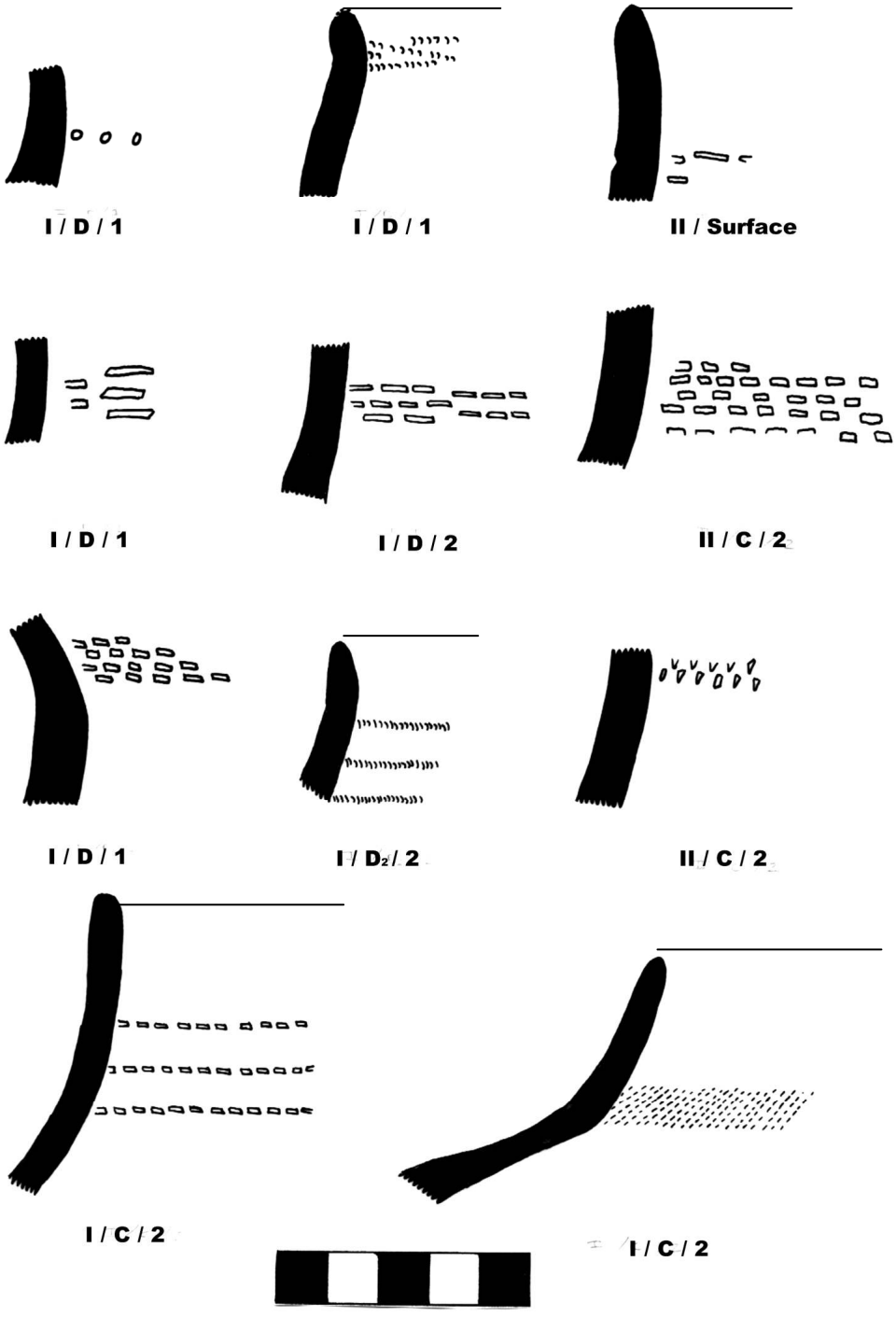

Figure 5.12: *Leokwe* shards from Castle Rock.

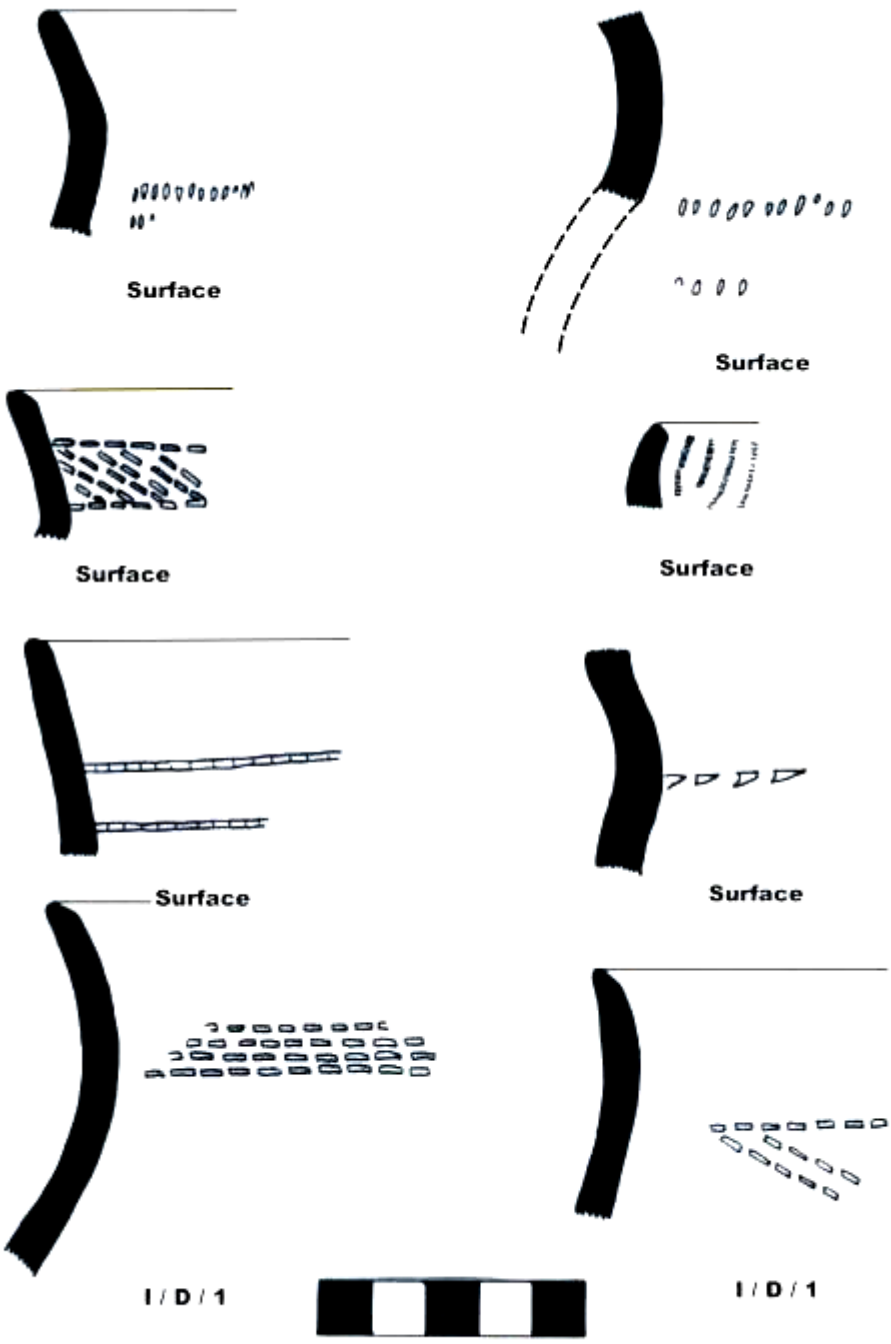

Figure 5.13: *Leokwe* shards from Castle Rock.

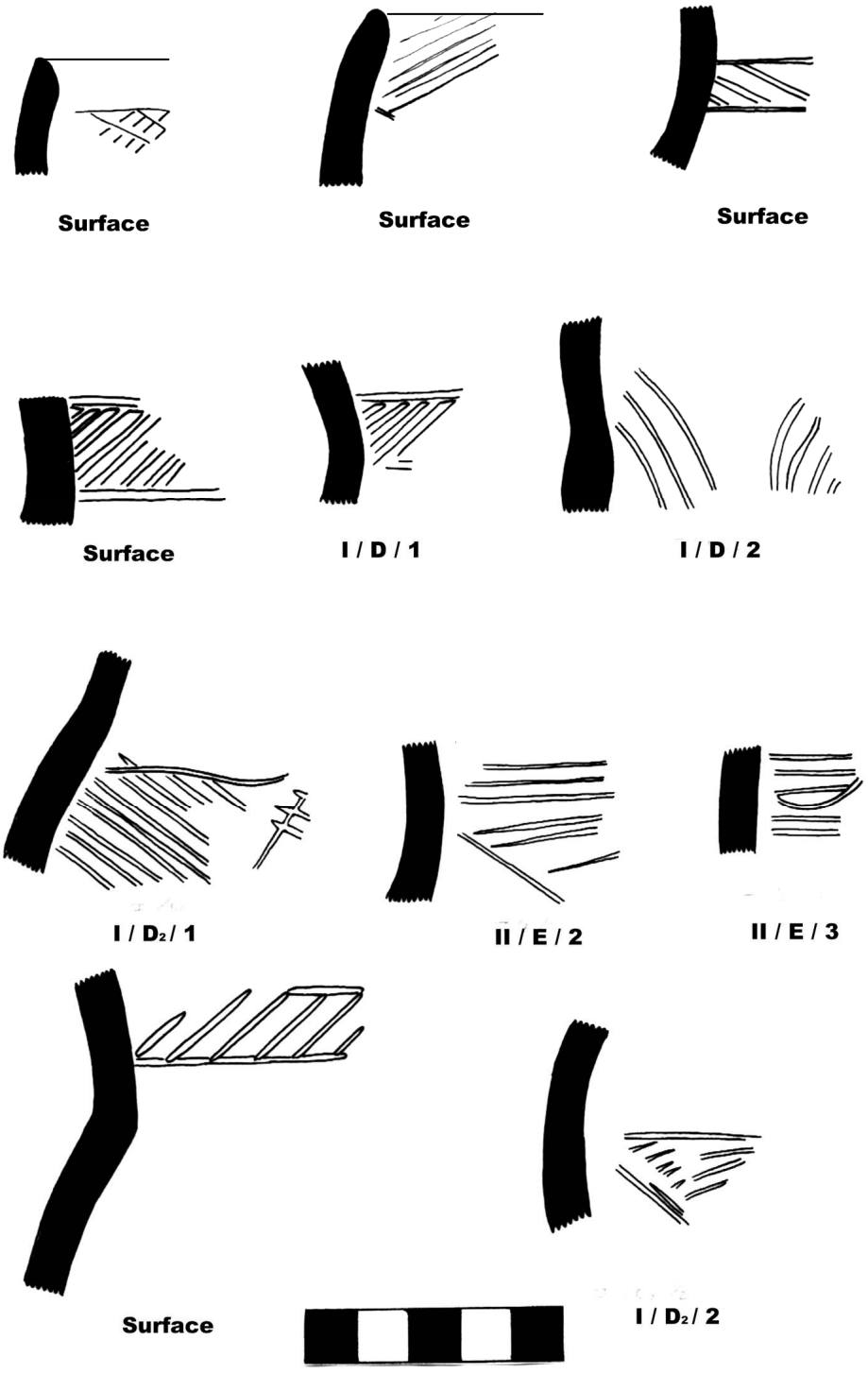

Figure 5.14: *Transitional K2* shards from Castle Rock.

Table 5.3: Decoration techniques in the 2007 Castle Rock sample.

Level	Incised		Stamped		Bead / Bangle Impres		Punct		F.nail Impres		Incised and Comb-Stamped		Comb-Stamp and F.nail Impres		Incised and F.nail Impres		Site Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	9	22.5	5	12.5	1	2.5	3	7.5	-	-	-	-	-	-	-	-	18	45
2	8	20	5	12.5	1	2.5	3	7.5	-	-	1	2.5	-	-	1	2.5	19	47.5
3	1	2.5	1	2.5	-	-	1	2.5	-	-	-	-	-	-	-	-	3	7.5
Total	18	45	11	27.5	2	5	7	17.5	-	-	1	2.5	-	-	1	2.5	40	100

Figure 5.15: Examples of the ceramic facies found at Castle Rock: (above) *Transitional K2* (from burials) and (below) *Leokwe*.

Figure 5.16: Spindle Whorl from the surface around Kraal 7.

Beads

A total of 42 beads were found during excavation. The majority are shell (n = 41). The shell beads were primarily fashioned from *Achatina sp.*, the giant land snail, and only a few are ostrich eggshell beads. The sample also includes one fragmented garden roller, as well as one garden roller bead mould.

Faunal Remains

Our excavations yielded a small faunal sample. K. Fatherley (In prep) analysed the sample as part of her MSc project. In total, there are 4456 pieces of bone. Some 627 could be identified and most belong to Bov II and Bov III classes. From the initial analysis, it is clear that herding remains dominate the assemblage.

Burials

Prof. Susan Pfeiffer analysed the two burials *in situ*. One individual was 4 to 6 years old, and the other 8 to 11. The remains were re-covered and left in place. Ceramics associated with the burials belong to *Transitional K2* (Figure 5.15). The burials thus represent an intrusion into the Leokwe-period kraal.

Figure 5.17: Castle Rock burial 1 (B1).

Castle Rock: Chapter Summary

Castle Rock contains the remains of at least three Iron Age occupations: Leokwe, Transitional K2 and Khami. Our Stratum II matches Calabrese's Leokwe occupation dated to between AD 1040 and 1160. Rather than a midden as Calabrese thought, Stratum I was a cattle kraal. There were at least two other Leokwe-period kraals, but it is not clear if they were contemporary.

Our Stratum I is a Transitional K2 occupation dated by Calabrese in his trench to between AD 1225 and 1280. In Kraal 4, our Stratum I probably derives from a midden. In oblique light, its blue-grey colour contrasts markedly with the underlying dung. Kraal 3 is most likely another Transitional K2 feature, but the midden seems too distant to be directly associated. Perhaps there were other Transitional K2 kraals. The Khami occupation probably dates to the 15th century.

Whatever the number of occupations, our findings provide a new framework to reassess the Leokwe period at Castle Rock. Rather, the new evidence from the recent excavations indicate that the majority of artefacts come from Stratum I, a Transitional K2 level. This in itself suggests that the interpretations made concerning Leokwe groups status based on the artefacts from Castle Rock may not be valid and that the use of Calabrese's '*elite symbolic objects*' is at the very least questionable.

CHAPTER VI: TIME AND PLACE: UNDERSTANDING THE SPATIAL DATA OF SITE LOCATION

Introduction

The purpose of this chapter is to collate available data to answer the research question. I present 1.) Population data; 2.) Spatial data with regard to access to resources and land use; 3.) Ceramic evidence; and 4.) Castle Rock data; comparing the results with the different models of social complexity to assess the plausibility of each model. I first summarise the opposing models for social interaction during the Middle Iron Age in the Shashe-Limpopo basin.

Opposing Models

Calabrese identified the existence of Leokwe people co-occurring with Leopards Kopje (K2). As mentioned earlier, this co-occurrence is the first instance of ethnic interaction, and a major contribution to Mapungubwe research. His interpretation of the nature of the interaction has spurred the present debate.

Equal Interaction

The most important social change in the Middle Iron Age is the shift from a ranked-based society to formal classes. Calabrese (2005) viewed this change with regard to the *'Prestige Goods System*' based extensively on the findings from Castle Rock. As noted in Chapter II, seven object categories document status: 1) religious / initiation / fertility paraphernalia; 2) figurines; 3) metallurgy and metals; 4) craft production; 5) exotic goods; 6) monumental architecture, monuments and settlement layout; and finally 7), faunal remains. These seven form the list of '*Elite Symbolic Objects*' that indicate the '*Prestige Goods System*'.

The class-based system, as a product of the '*Prestige Goods System*', was intertwined with the political system, undermining the traditional exchange system,

encouraging a process of secularization in which trade goods were viewed as wealth that replaced traditional forms of exchange. This new system involved only the upper tiers of society; lower status groups did not directly participate.
As Calabrese's (2005: 371) states:

> Importantly, inclusion within this prestige goods system was not limited by ethnicity, and segments of both Leokwe and Leopard's Kopje ethnic groups participated within it.

Thus, at the beginning stages of contact, both Leokwe and K2 people participated in the political sphere. It is only later when K2 people abandoned the capital and moved to Mapungubwe that Leokwe people became subordinate.

Ethnic Stratification

Following Hammond-Tooke (2000), Huffman sees ethnicity as situational (See Chapter III), and more often than not, involving relationships of dominance and subordination.

Based on the movement of different ceramic groups, specifically Zhizo into Botswana and the movement into the basin of K2 from the south, Huffman (1974, 2007a) suggests that K2 people were the dominant political authority. The remaining Zhizo people, now identified as Leokwe, owed their allegiance to them from the beginning.

To investigate the validity of these interpretations, I consider the archaeological data presented in this thesis.

Population

The number of inhabitants in the basin change through time. Following a standard procedure (Huffman 1986b), each homestead constitutes 50 people over 50 years. One problem is the archaeological difficulty in identifying the earliest settlements. Nevertheless, the procedure allows us to examine population dynamics.

The maximum Zhizo population at any one time was some 600 people in the basin plus an additional 350 at the capital (144 sites ÷ 2 x 50 + 350; Figure 6.1).

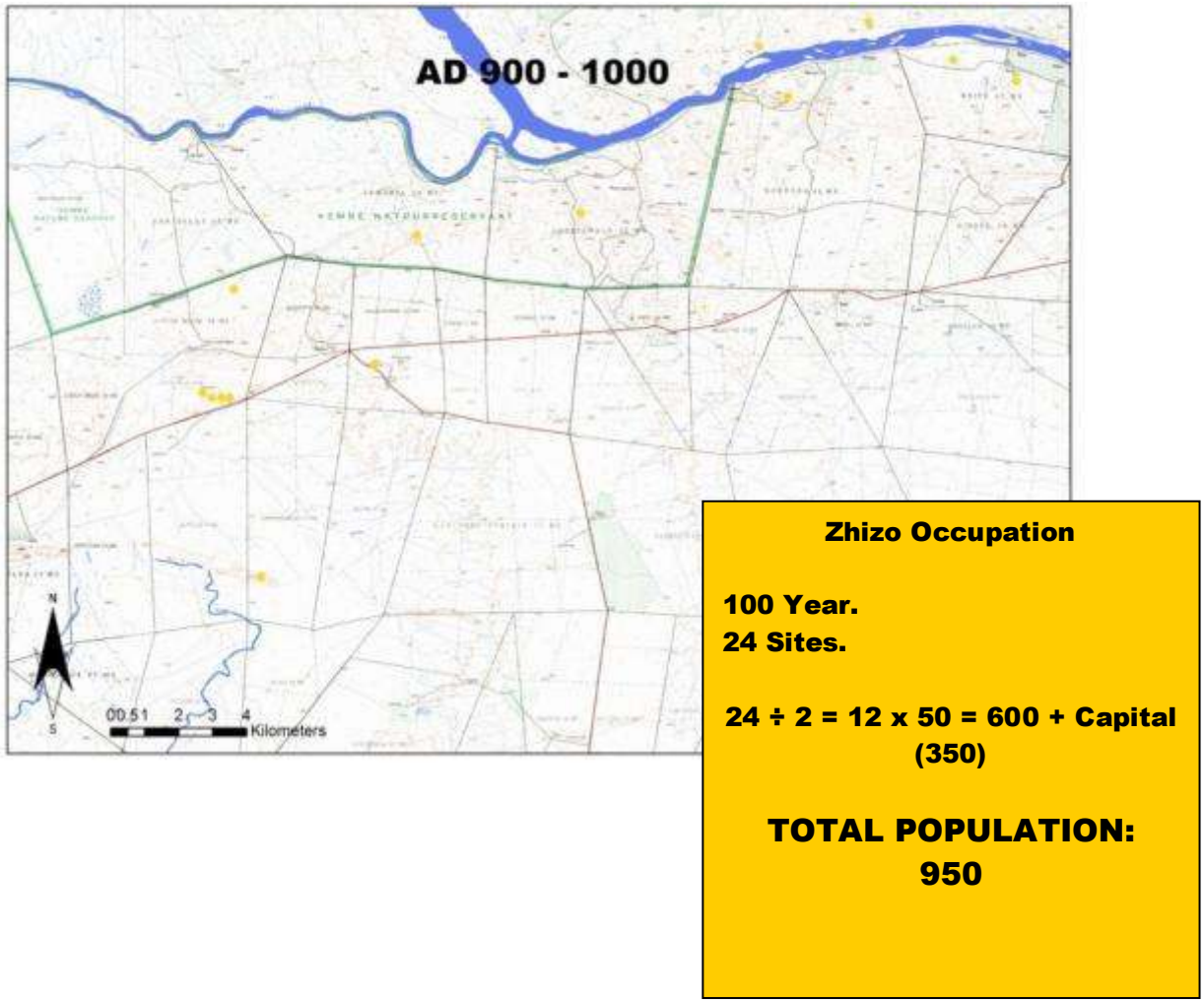

Figure 6.1: Maximum Zhizo population at any one time.

Leokwe people occupied the basin for 250 years. The 76 sites show that there were about 760 Leokwe people (76 ÷ 5 x 50). At the same time, K2 people also inhabited the basin. At the beginning, the K2 population was some 2150 strong. At its peak, the K2 population increased to 2800. Thus, during AD 1000 – 1220, the basin sustained over 3000 people at any one time (Figure 6.2).

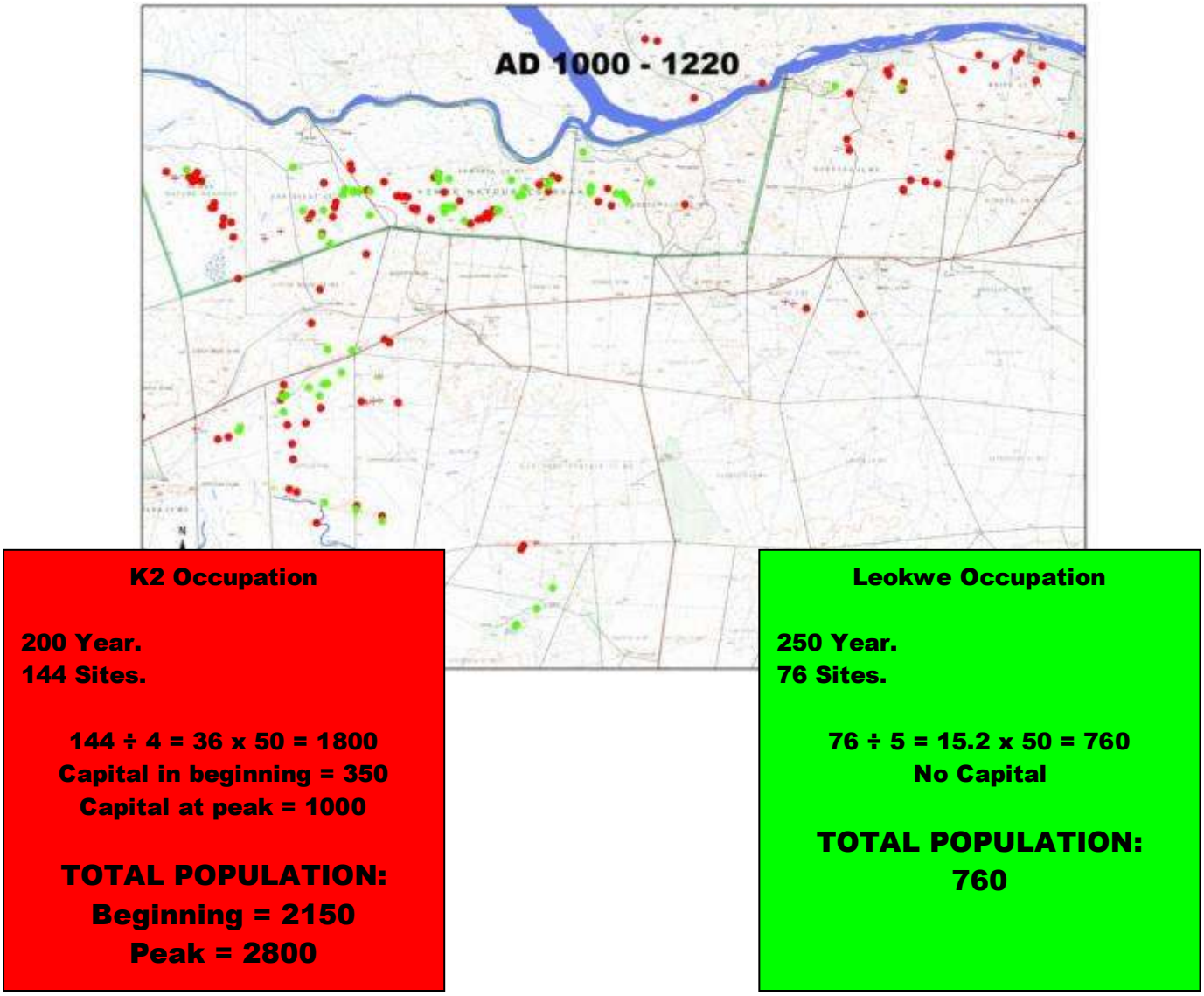

Figure 6.2: Maximum population during the K2-Leokwe period.

Transitional K2 occupied the basin for only about 50 years. In this short time, the number of sites increased dramatically. The Transitional K2 population was roughly 7750. This number includes 6250 people in the basin and an additional 1500 at the K2 capital (Figure 6.3).

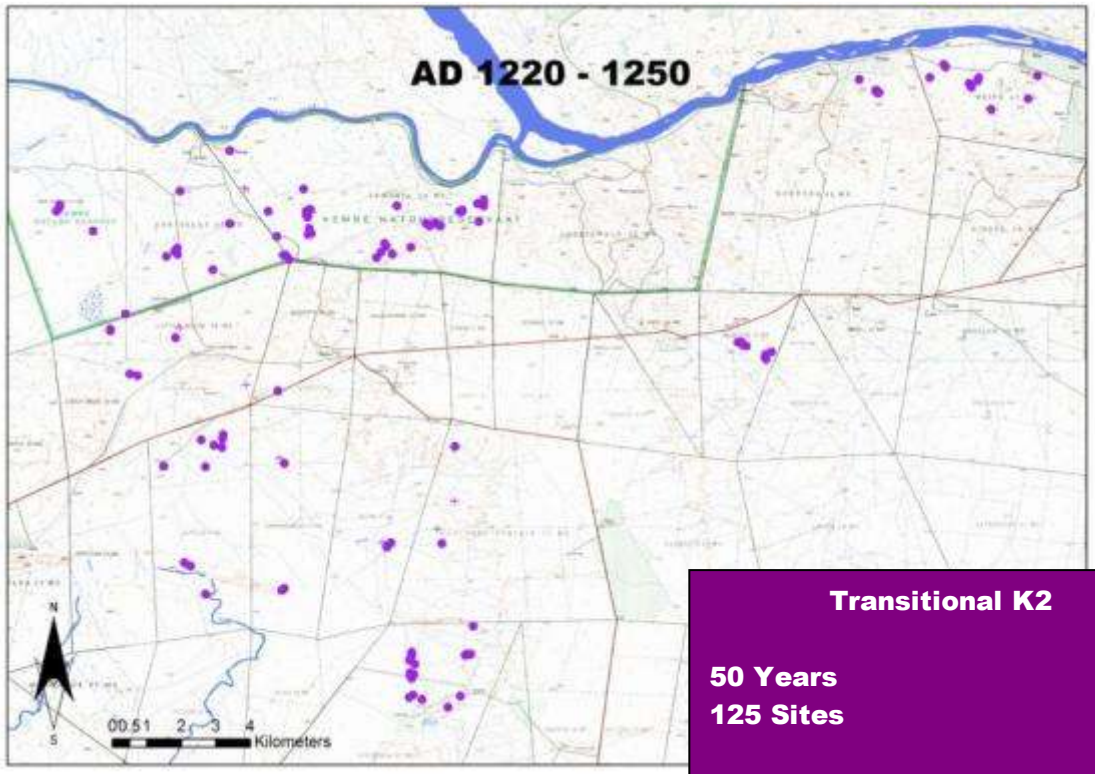

Figure 6.3: Population during the Transitional K2 Period.

These data show a marked change through time. First, Zhizo / Leokwe population decreased from 950 to 760. This decline makes sense if one accepts the movement of the Zhizo chiefdom to Botswana. Secondly, the emigrant K2 group outnumbered Zhizo people 2 to 1. Somewhat later, K2 was clearly dominant outnumbering Leokwe 3 to 1. The numerical superiority suggests that K2 was able to dominate from the beginning.

Calabrese finished his project before these data were available. For example (2005: 368):

> If the Leopard's Kopje groups had been able to dominate the Leokwe groups either militarily or otherwise, my expectation would be that their ceramic style, as a concrete boundary and expression of their ethnic identity, would have been subsumed far more rapidly. Rather, I propose that the initial Leopard's Kopje intrusion into the Shashi-Limpopo region was not numerically or militarily sufficient to oust the Leokwe people; they were thus obliged to enter into an accommodation. The need for accommodation was apparently great, as some Zhizo and later Leokwe peoples were incorporated into the prestige goods system and thus in all likelihood also participated in the political system.

Spatial Distribution

Considering the landscape, there is a clear distinction between the floodplain and escarpment. To distinguish between them, one has to consider the locale of each site. For my purposes, I used the 540m contour sites within a 7 km radius of the Limpopo, and 560m – 580m for sites outside this zone (Chart 6.2). These divisions help to distinguish between upstream, downstream and vlei agriculture.

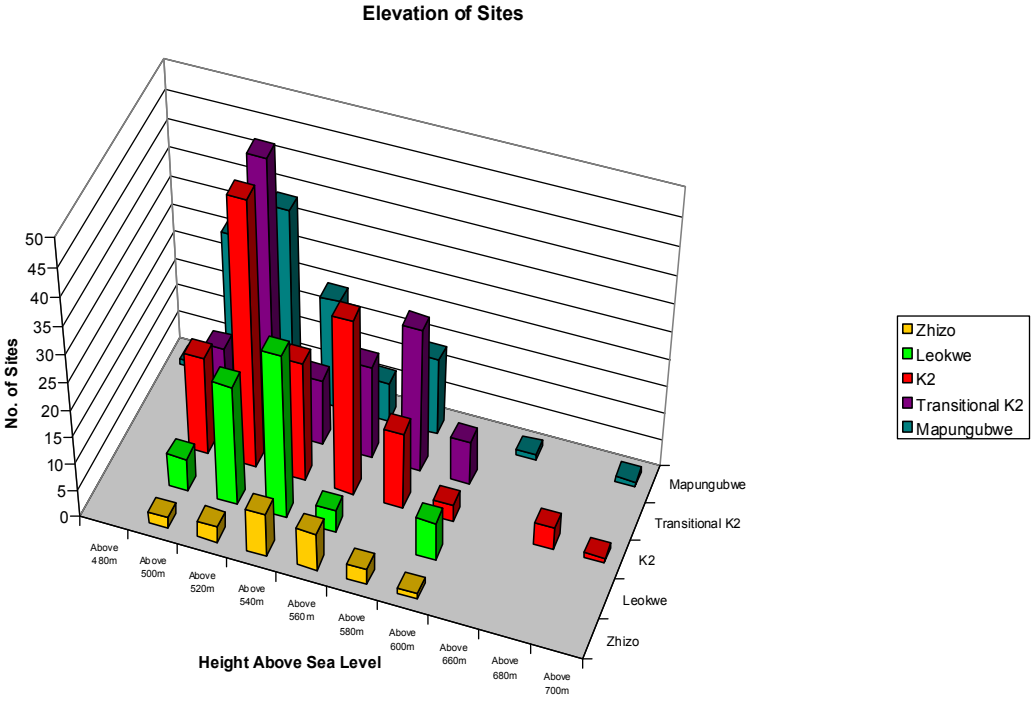

Chart 6.1: Elevation of sites occurring during the Middle Iron Age.

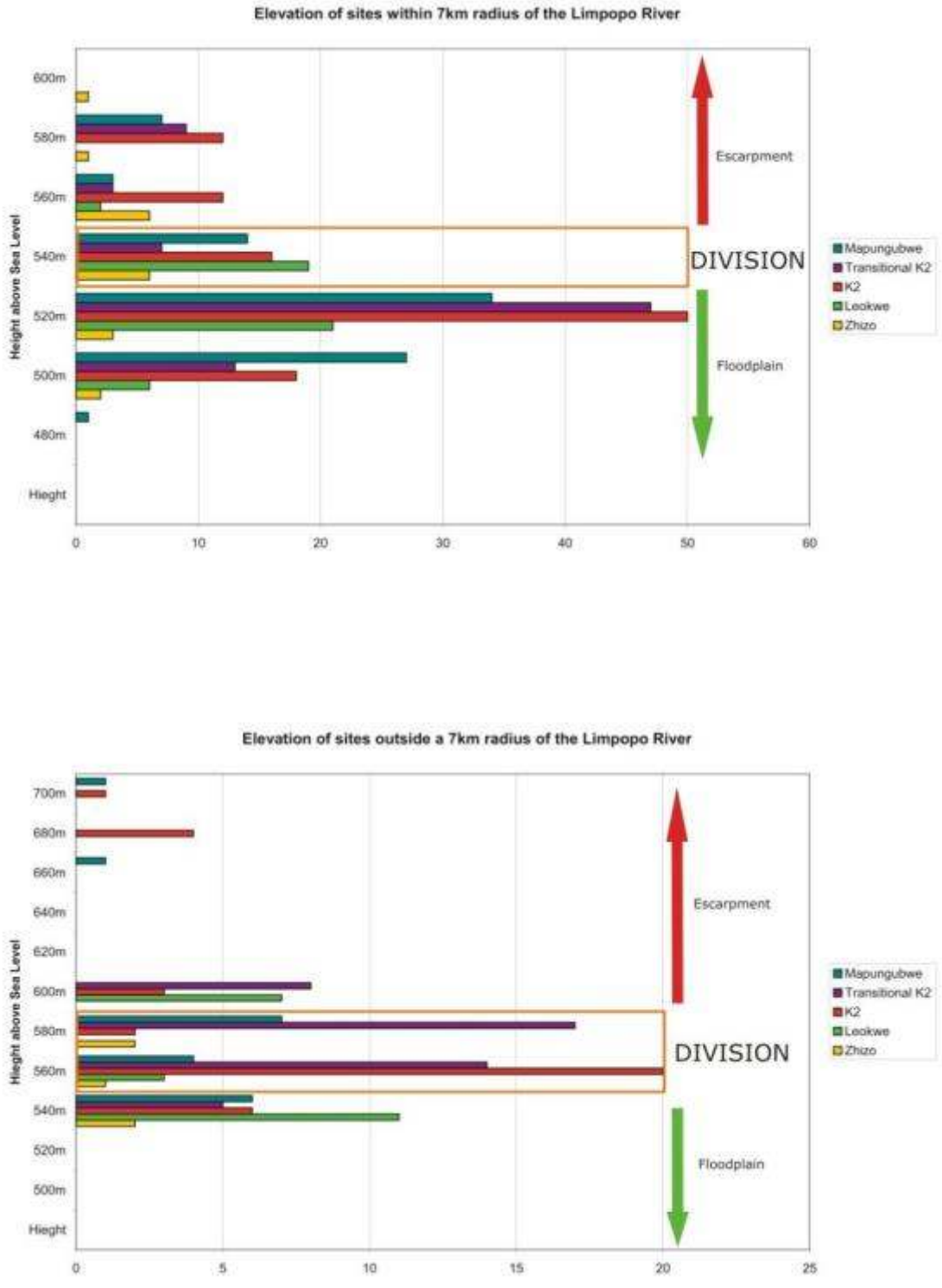

Chart 6.2: Elevation of sites during the Middle Iron Age according to defined divisions.

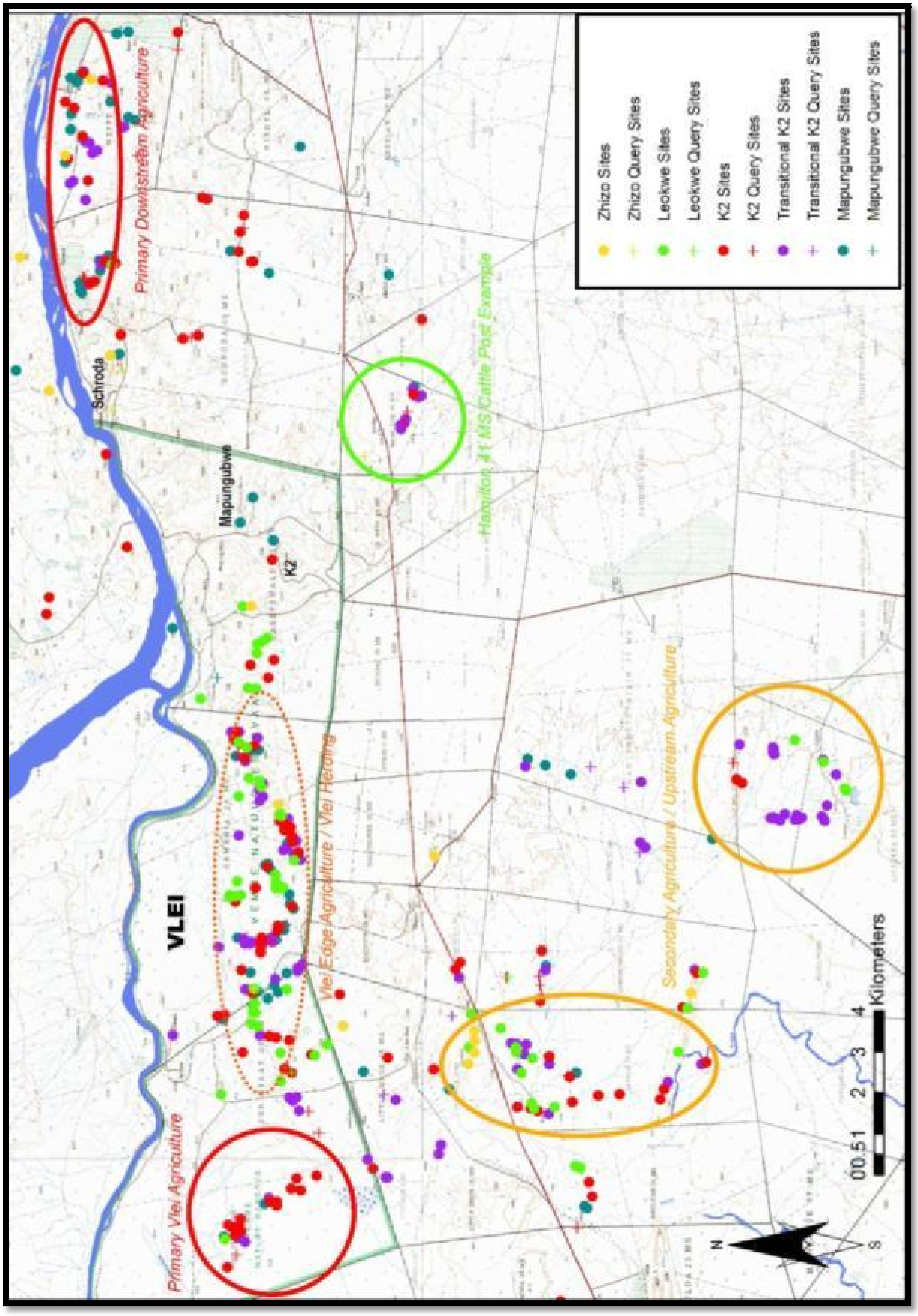

Figure 6.4: Primary activity areas in the Shashe-Limpopo basin.

These divisions show there is a change through time. As mentioned in Chapter I, Hodder (1978) suggests that these differences could be a reflection of potentially different systems of interaction and exchange. We know that climatically AD 900 – 1000 was similar to today, thus it is no wonder that most Zhizo sites were not orientated toward agriculture. Most, instead, were located on the escarpment. Only two site clusters were near suitable agricultural land (Figure 4.3).

From AD 1000 – 1200, the climate improved allowing people to occupy the basin for agricultural purposes. K2 sites completely dominated the vlei (Figure 6.4) and other good agricultural areas.

Leokwe sites tend to be further away from good agricultural land or on the margins. Either way, they were in secondary locations for agricultural purposes. Rather than agriculture, their locations suggest a cattle orientation. This is evident at Leokwe Hill B (Figure 6.5), Box Canyon (Figure 6.6) and Schroda, where there were extra kraals.

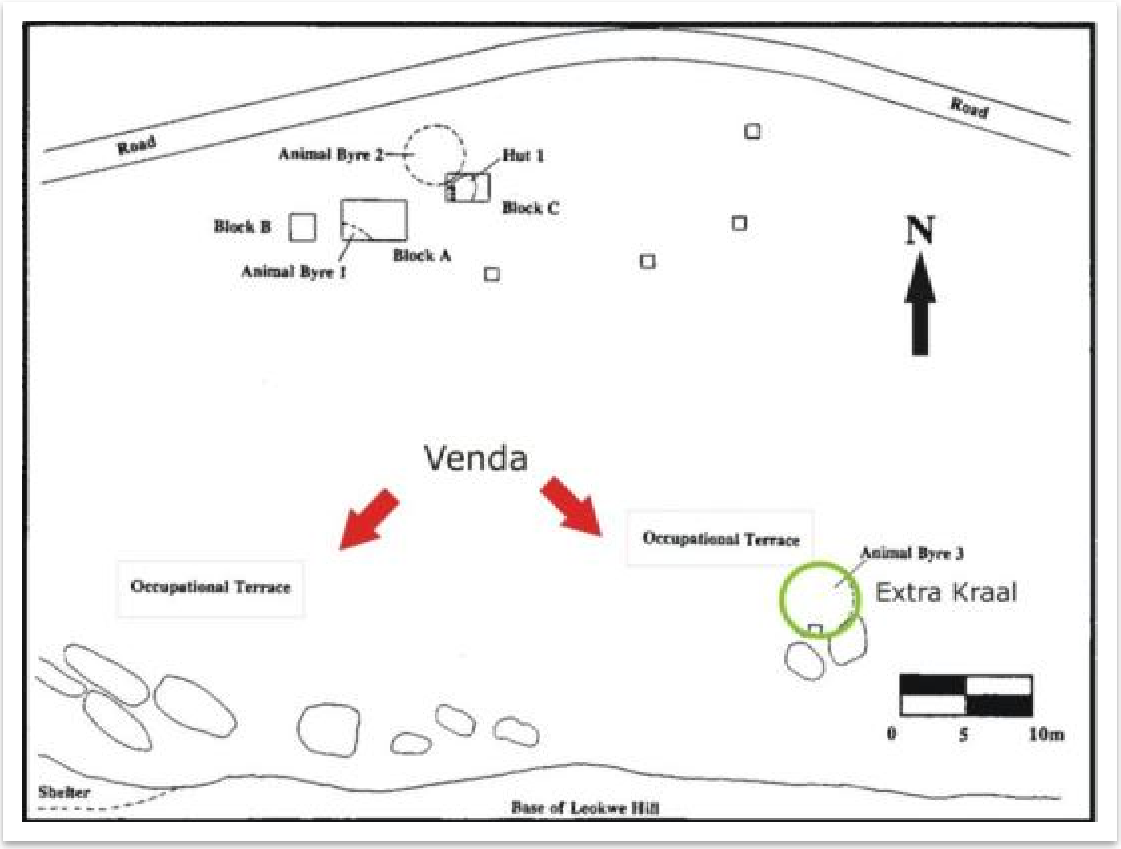

Figure 6.5: Leokwe Hill, Area B, plan view showing features and excavations (adapted from Calabrese 2000).

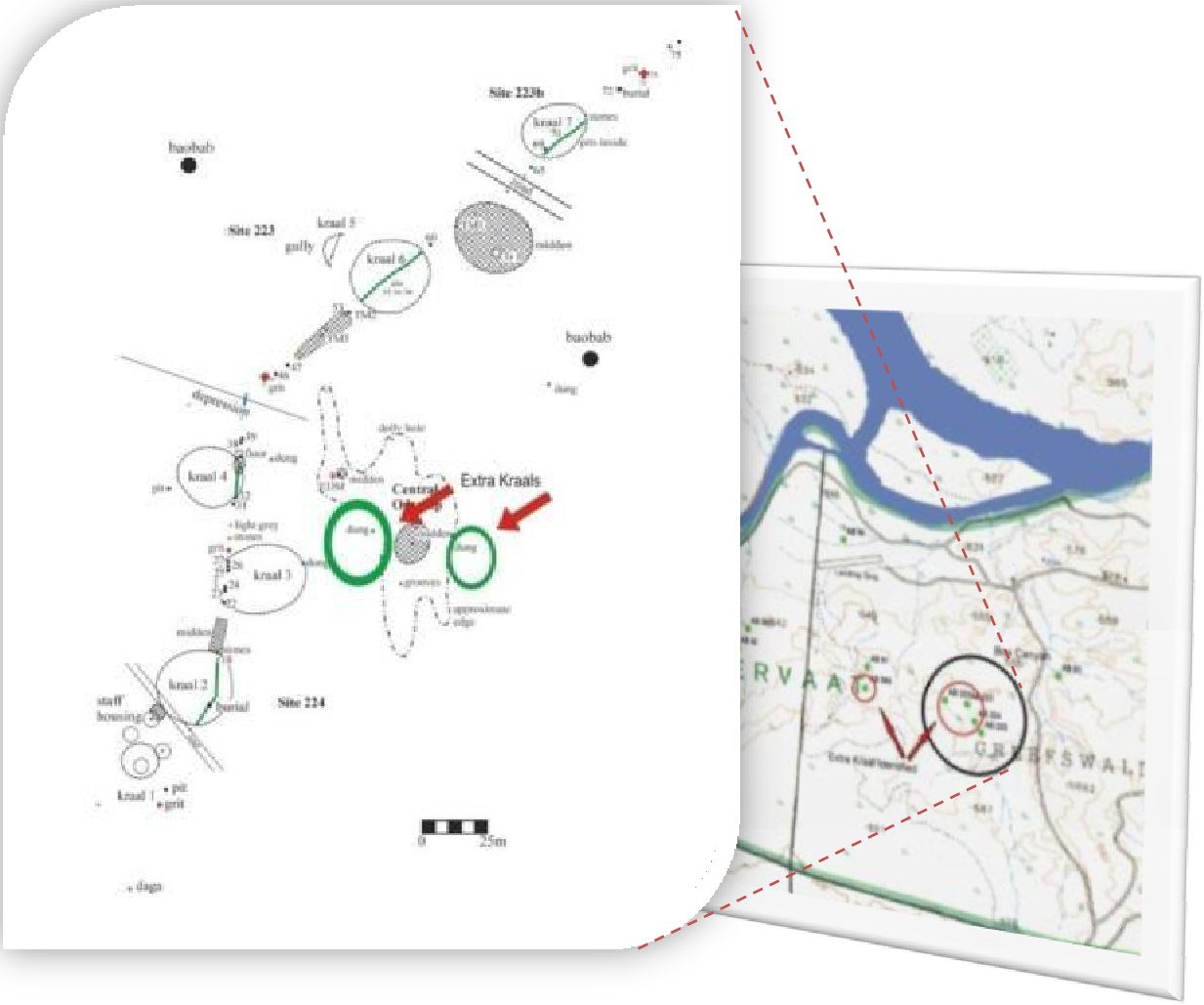

Figure 6.6: Evidence of '*extra*' kraals at Box Canyon.

According to Van Waarden (2004: 8), 4km is the maximum practical distance to water sources for agriculturalists, especially during the dry season. Ideally, one would want to live closer to avoid wasting energy.

In the Shashe-Limpopo basin, the Limpopo and Kolope were the primary resources for water. Based on its size, volume and permanence, the Limpopo was the primary resource and the Kolope second.

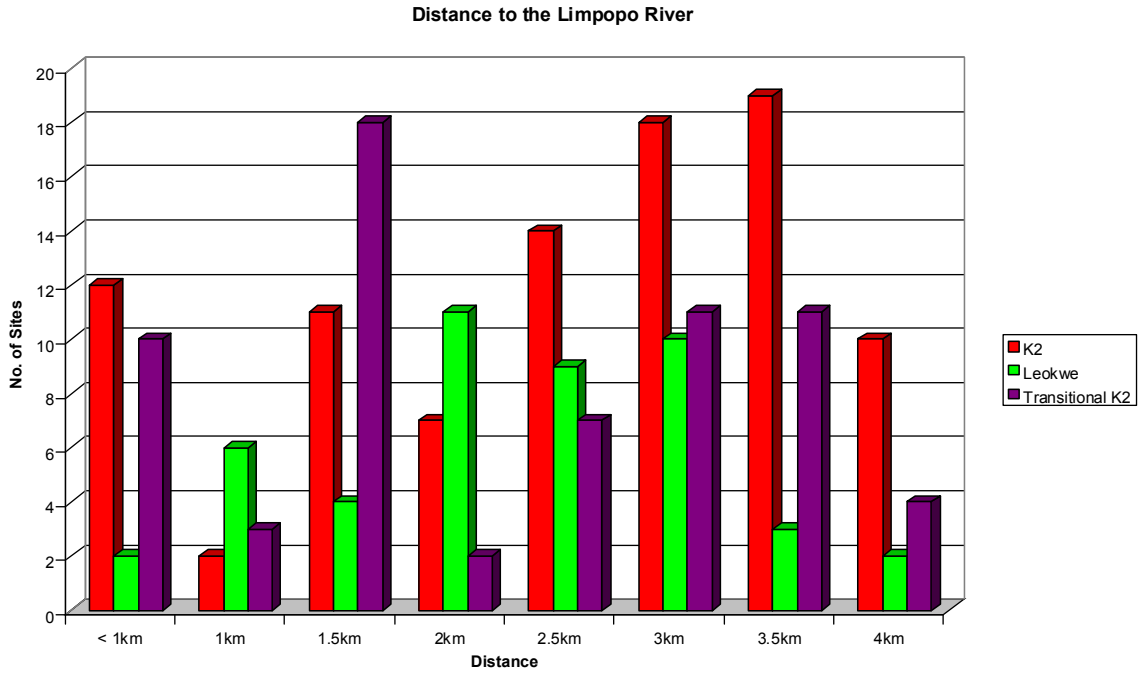

Chart 6.3: K2, Leokwe and Transitional K2 sites within 4km of the Limpopo River.

Following this rationale, it is evident that K2 sites dominate both rivers while most Leokwe sites were on the plateau some distance away. This supports the division between agriculture and cattle.

As support for a cattle orientation, Kloppers (pers. comm. 2007) and Fatherley (In prep) found evidence for the 'herdsmen pattern' in Leokwe sites. Herders receive low status parts of cattle. Their theses will present the full details. It is sufficient here to note that the 'herdsmen pattern' characterises the faunal assemblage at Box Canyon (2229 AB 223 & 224; Figure 4.5), Leokwe Hill B (Figure 6.5), and Castle Rock (Chapter V). It is significant that Castle Rock dates to the beginning of K2-Leokwe interaction.

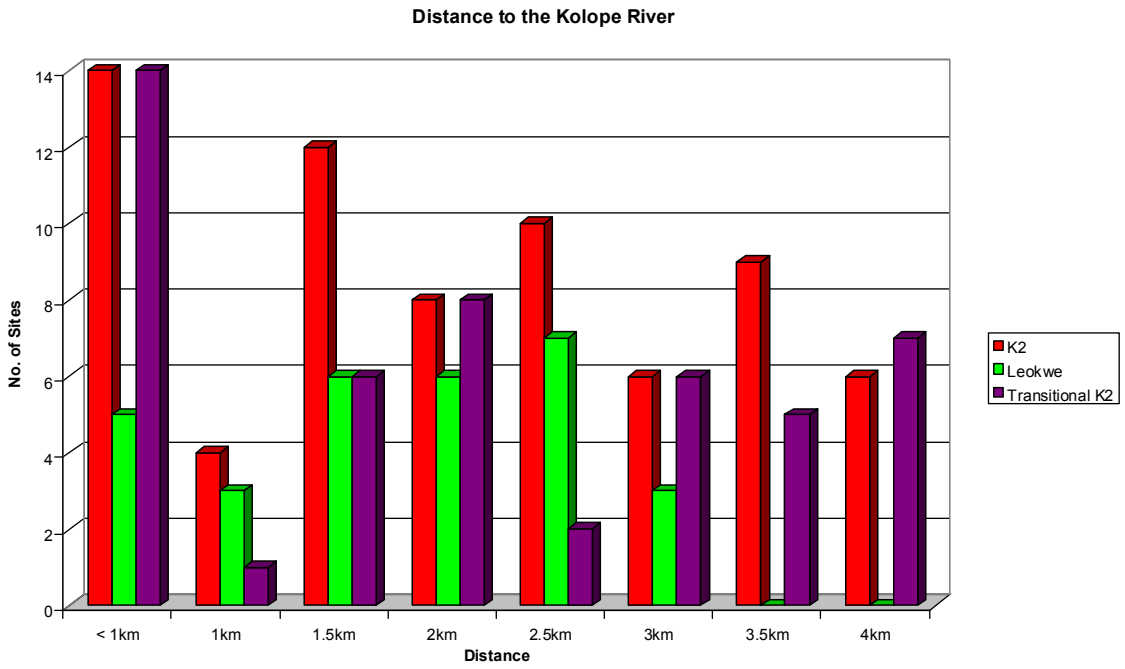

Chart 6.4: K2, Leokwe and Transitional K2 sites within 4km of the Kolope River.

Denbow (1982; 1983) examined the distribution of Toutswe sites in Botswana using a similar model in an attempt to discern if these settlement patterns could assist in the interpretation of social, economic, cultural and ecological processes. As Denbow noted, sufficient data was lacking, but by dividing Toutswe settlements into Class 1, 2, or 3, he (1983: 205) thought that patterns of socio-political organisation were developing in the region between AD 900 and 1300. During this period, higher level (Class 2 & 3) sites were primarily located somewhat further from productive resources at higher elevations, with the lower level (Class I) sites more optimally situated for food production.

This period is correlated with the influx of Leopard's Kopje to the east. The centralisation and change in settlement arrangements in the Toutswe region has been attributed to movement. Unfortunately, not much more could be said at the time, but this approach did indicate that settlement organisation within the landscape reflects socio-political factors.

Ceramics

Calabrese (2005) originally defined *Leokwe* from collections at Leokwe Hill B and Castle Rock. Due to multiple occupations at Castle Rock, it is better to use only ceramics from Leokwe Hill B to define the facies. This assemblage is more than sufficient (See Calabrese 2000).

Stylistically, the major differences in style and shape between *Zhizo* and *Leokwe* reflect the influences of *K2* on *Leokwe*, and not vice versa. This is comparative to the Toutswe group where there are a number of examples of *K2*-like beakers with *Toutswe* designs, and not vice versa (Huffman 2007a). This may be indicative of marriage transactions between the different groups, but the influence on design, position and shape is unidirectional. Therefore, all Leokwe sites, including Castle Rock, must have been subordinate to K2. This suggests that from the beginning, Leopard's Kopje people were dominant.

Castle Rock is the best documented early Leokwe site. I now turn to a discussion of our results.

Castle Rock

Castle Rock is not in a prime agricultural locality as was once thought. Rather, the vlei margins have agricultural potential. Instead of the margins, Castle Rock stands in the middle of the vlei (Figure 6.7 & 6.8). The vlei itself would have been wet during the summer, suggesting seasonal use. Smith's (2005) isotopic study indicates that cattle grazed throughout the year and did not need Mopane leaves as a winter browse.

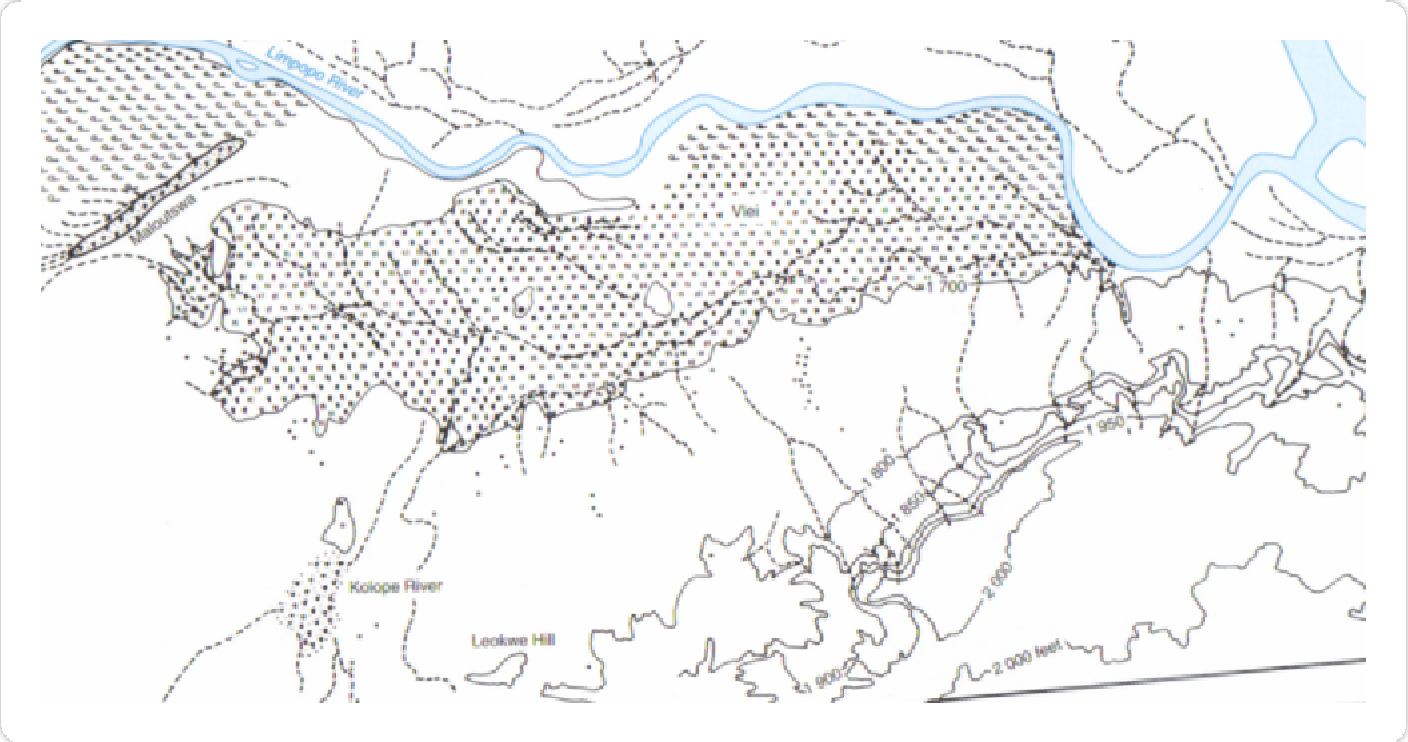

Figure 6.7: K2-period homesteads around the Kolope delta, defining the vlei area (from Huffman 2007)

Rather than agriculture, Castle Rock provides access to prime pasture. Mashimbye's (2007) Honours project provides support for this alternative. The basalt base of the vlei releases calcium that is absorbed by the vlei grasses. A high number of spherulites (crystals of calcium carbonate in the stomachs of ruminates; Canti 1997) in the Leokwe dung show that cattle were grazed on the vlei. Presumably, this was a winter activity, when the vlei could be burnt. This second use of Castle Rock requires further investigation.

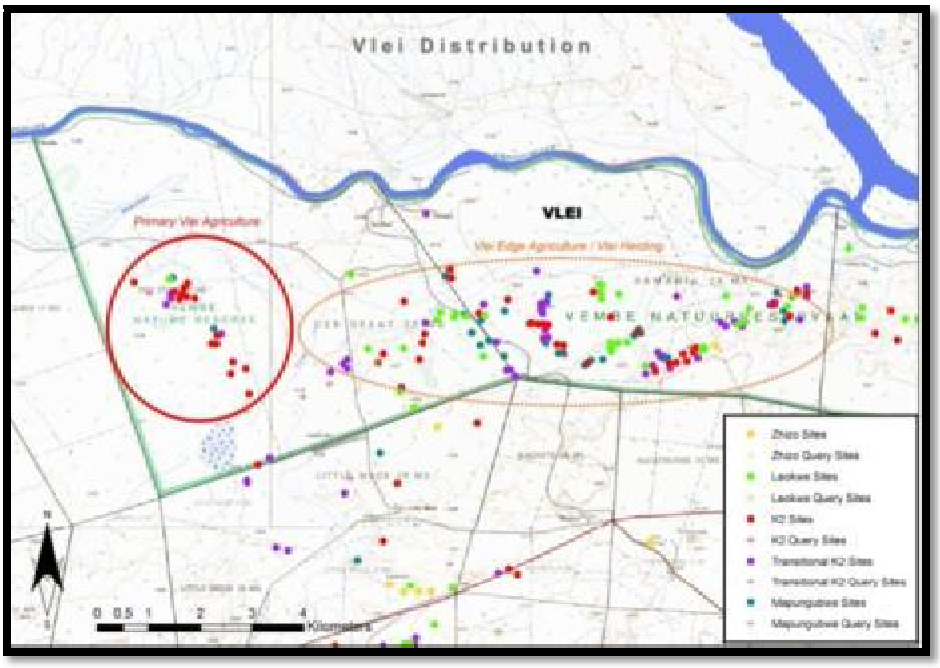

Figure 6.8: Distribution of Middle Iron Age sites around the vlei.

The later Khami occupation also challenges the proposed elite status of Castle Rock. Two (on Samaria and Den Staat) Khami-Period palaces stand on the mainland to the south, but there is no walling on Castle Rock itself. An elite location should be the same in both the CCP and Zimbabwe Patterns.

Table 6.1: Comparison of '*elite symbolic objects*' found at Castle Rock Trench II.

	Tr II C	Tr II E	Calabrese	Object
Stratum I	0	0	***34***	Glass Beads
	1	3	***201***	Shell Beads
(Transitional K2)	0	0	***7***	Metal
	0	0	***30***	Figurines
Stratum II	0	1	***6***	Glass Beads
	3	8	***94***	Shell Beads
(Leokwe)	0	0	***1***	Metal
	0	0	***6***	Figurines

In addition to location, the distribution of *'elite symbolic objects*' from both excavations requires reassessment. Significantly, most come from Stratum I, the Transitional K2 occupation and not the Leokwe levels. Indeed, some of the glass beads, as Wood (2005) shows, date to the Transitional K2 period (e.g. Indo-Pacific red-brown, Mapungubwe blue).

The new excavations provide a more detailed context for the *'elite symbolic objects'* and the *'Prestige Goods System'* as defined by Calabrese . This context, together with the spherulite, faunal and locational data, does not support an elite status for Castle Rock as originally suggested. Rather, it places significant doubt on interpretations made about Leokwe status in the larger landscape.

Cattle Posts and Social Complexity

The first division between agricultural homesteads and cattle posts correlated with ethnic stratification: Leokwe people herded cattle for K2 elite. By the Transitional K2 period, this division was no longer ethnically based. Rather, it was internalised and part of Leopard's Kopje society. This is evident in the equal distribution of Transitional K2 sites. Within this period, some homesteads were clearly orientated toward agriculture, such as Weipe 508 (Figure 6.9), and others toward cattle, such as those on Hamilton. This internal division continued through Khami period.

Van Waarden (1989) provides examples in Botswana. Vumba was a Khami-Period orientated toward agriculture. It contained two livestock kraals, a large one for cattle, and a smaller one for calves or small stock. Most importantly, an arc of 108 grain-bin foundations surrounded the houses (Figure 6.9).

The equivalent in the Shashe-Limpopo basin is Weipe 508. Weipe also had an arc of some 70 grain-bin foundations surrounding the central kraal and residential zone (Figure 6.10).

In contrast, Matanga was a cattle post (van Waarden 1987). Matanga consisted of 4 to 5 kraals, and few grain-bins. It was also located in the sweet veld about 7km away from permanent water.

In the Shashe-Limpopo basin, the cattle kraals on Hamilton provide older examples (Figure 6.11).

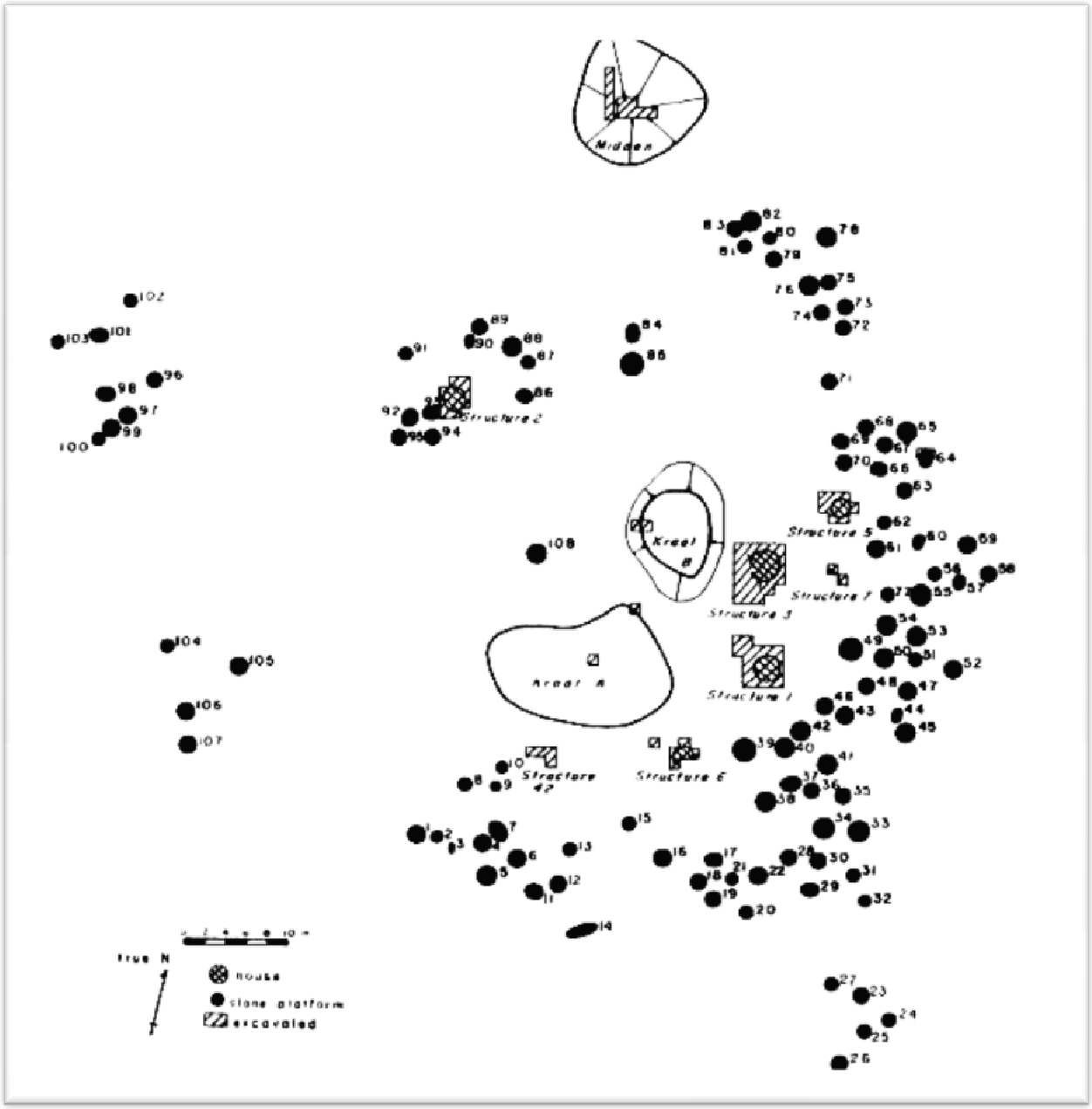

Figure 6.9: Vumba site plan (from van Waarden 1989).

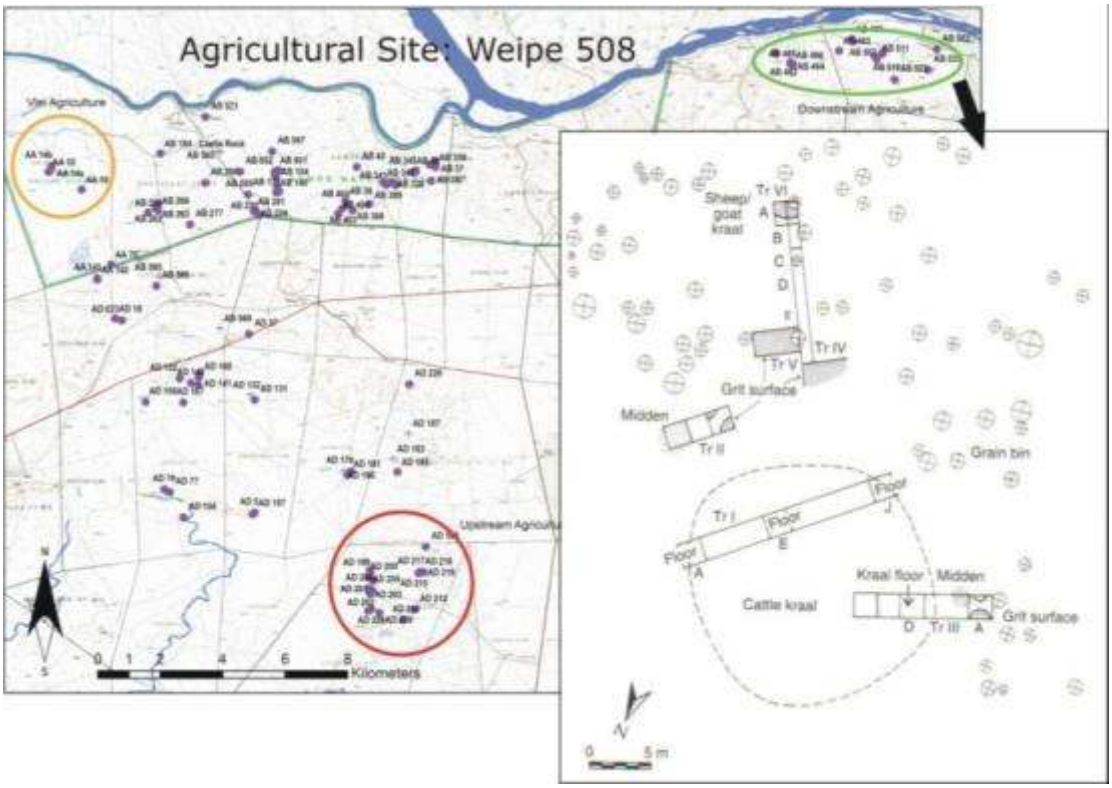

Figure 6.10: Weipe 508 site plan (adapted from Huffman 2007a).

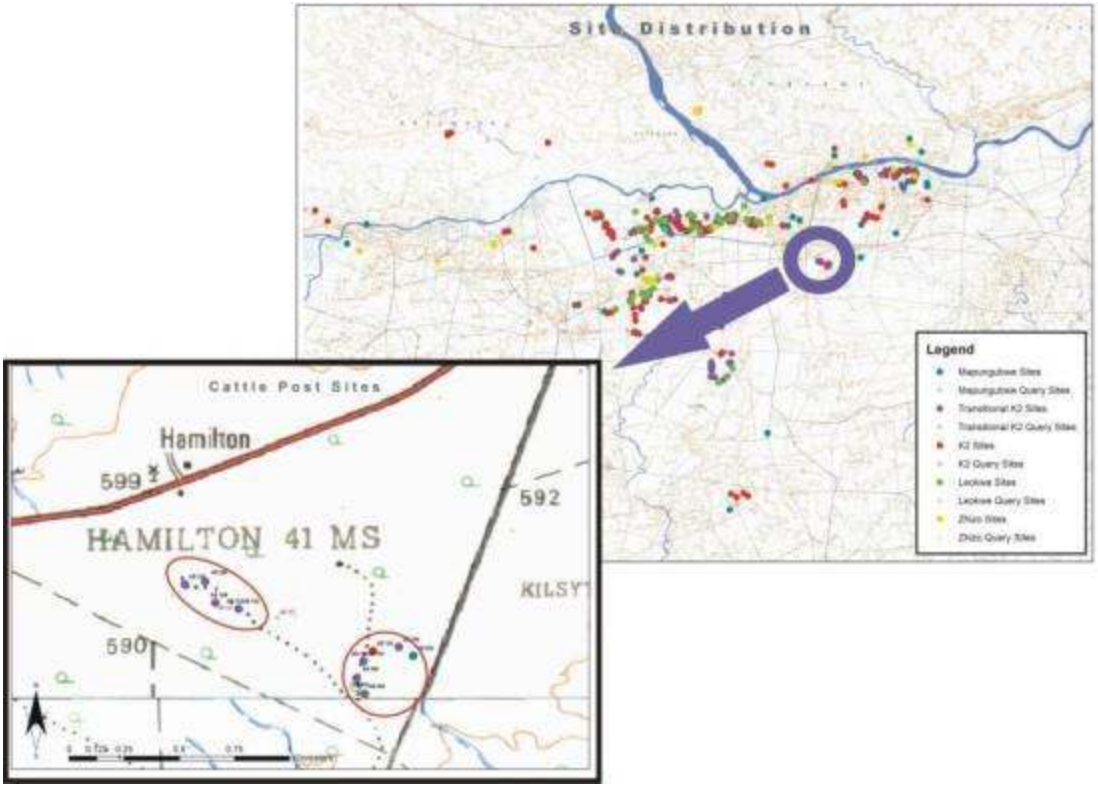

Figure 6.11: Cattle Posts on Hamilton.

Data and The Frontier Model

The previous discussion leads us to consider Kopytoff's Frontier Model. We do not know if any Middle Iron Age group left the metropole for political reasons. Nevertheless, his three possibilities provide a framework to assess the nature of Leokwe and K2 interaction.

As the distribution data indicate, Zhizo populations were relatively small, and they concentrated on hunting elephants for the ivory trade. Zhizo-Period glass beads in Doornkop sites to the south show that the parent communities already knew about the trade before K2 people moved north. Perhaps they moved on purpose (Huffman 2007a). Whatever the motive, K2 settlements greatly outnumbered Zhizo.

Calabrese questions Huffman's (1982, 2000) interpretation, but his own research has no bearing on the initial impact of K2 people: the Zhizo chiefdom moved west to the Toutswe area in response to the K2 movement. This interpretation is supported by the two-fold increase in Toutswe sites at about AD 1000, and the marked spatial boundary between Toutswe and K2 settlements along the Motloutswe River (Huffman 1982, 1986b, 2000). Following Hodder (1982), this physical boundary was probably the result of economic competition.

Calabrese's research is concerned with Zhizo people (now called Leokwe) who stayed behind. However, the shift west and the numerical superiority of K2 in itself suggest that K2 people were dominant from the beginning. Other data presented here support this conclusion.

Significantly, the distribution of sites indicate that access to primary resources and agricultural land was dominated by K2. Though Leokwe groups had access to agricultural land and resources, these were predominantly in second choice areas. This suggests that the dominant group controlled access.

Perhaps some of the most powerful data in answering the research question came from Castle Rock. Most '*elite symbolic objects*' occur in the Transitional K2 levels, not Leokwe. Further, the ceramic evidence (influenced by K2), location (for pasturage) and spherulite results (cattle grazing on the vlei) show that the Leokwe deposits are the remains of a cattle post. Fatherley's project will present conclusive evidence for the 'herdsmen pattern' in the faunal remains.

These data conform to Kopytoff's (1987: 55) third possibility: Newcomers (K2) tame First-Comers (Zhizo) structurally, restricting them to specialised services. As part of this possibility, Leokwe people could have been ritual experts without implying political power.

In all, the new data show that ethnic stratification characterised Leokwe and K2 relationships. Leokwe identity had disappeared by classic Mapungubwe times, but it is still unclear when this process began.

CHAPTER VII: CONCLUSION

The environment of the Shashe-Limpopo basin facilitated the rise of social complexity during the Middle Iron Age. Seasonal flooding promoted a good habitat for elephants and later allowed the increase in population. The interconnected role of cattle, trade, farming and religion played a part in the evolution of Mapungubwe. Calabrese's (2005) important research introduced the role of ethnicity and ethnic interaction into the mix.

As Calabrese (2005) shows *Zhizo* generates *Leokwe*, and *Leokwe* was contemporaneous with *K2*. Calabrese focused on the interaction between K2 and Leokwe people through '*Prestige Goods System*'. Though this point is not in contention, it is the supposition that Leokwe people, or at least corporate kin groups, maintained a relatively high status at first, that was questioned.

Castle Rock was important to his argument and that is why we re-investigated it in 2007. We had more favourable conditions and we were able to establish that there was more than one occupation. Furthermore, the new evidence supports the use of the hill as a cattle post.

In addition, I examined the spatial distribution of Middle Iron Age sites to determine their access to resources, specifically the escarpment versus the Limpopo and Kolope River floodplains. There was a definite shift in site location through time. Zhizo sites clearly had a unique distribution compatible with elephant hunting. Leokwe settlements occurred at higher elevations and along the Kolope, while K2 settlements concentrated at lower elevations and closer to the Limpopo. Transitional K2 settlements, marking the shift from the K2 capital to Mapungubwe, had 50% / 50% distribution.

At a micro-level the cultivatable fringes of the vlei was the most prized location. Mashimbye's (2007) project also indicates that the vlei was a prime herding area. Herdsmen would have burnt the vlei grass providing new shoots for winter grazing.

Generally, Leokwe sites cluster in areas unsuitable for agriculture. Best documented at the Box Canyon site, these areas were more suitable for herding cattle (Figure 6.5 & 6.6). Faunal studies (Klopper pers. comm. 2007; Fatherley In

prep) document the 'herdsmen pattern' at Leokwe sites, suggesting Leokwe people herded cattle for K2 elite.

All this information suggests that not only was access to resources controlled by K2 people, but Leokwe people also provided specialized services.

I suggest that Leokwe people were subordinate to K2 from the initial contact. As Calabrese (2005) suggests, Leokwe people may have provided ritual services based on their role as 'owners of the land'. Contrary to Calabrese's claim, however, ritual services do not automatically indicate elite status. In cases of multi-ethnic interaction, subordinate groups are often ritual experts.

Therefore, it is evident, following Kopytoff, that K2 (dominant) people tamed Leokwe (sub-ordinate) structurally.

REFERENCES

Barth, F. 1969. Introduction. In: Barth, F. (Ed.) *Ethnic Groups and Boundaries*: 9-38. London: George Allen & Unwin.

Bentley, G. 1987. Ethnicity and practice. *Comparative Studies in Society and History* 29(1): 24-55.

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. 2005. *Ethnicity, Class, and Polity: The Emergence of Social and Political Complexity in the Shashi-Limpopo Valley of Southern Africa, AD 900 TO 1300*. Doctoral Thesis, University of the Witwatersrand. Now available as BAR 1617 (2007).

Canti, M. G. 1997. The Micromorphological Identification of Faecal Spherulites from Archaeological and Modern Materials. *Journal of Archaeological Science* 25(5): 435-444.

Cohen, A. 1969. *Custom & Politics in Urban Africa*. London: Routledge & Kegan Paul.

Cohen, A. 1974. Introduction. The lesson of ethnicity. In: Cohen, A. (Ed.) *Two-Dimensional Man:ix-xxiv*. Berkeley and Los Angeles: University of California Press.

Conolly, J. and Lake, M. 2006. *Geographic Information Systems in Archaeology*. Cambridge: Cambridge University Press.

Couclelis, H. 1999. Space, Time, Geography. In Longley, P.A., Goodchild, M.F., Maguire, D.J. and Rhind, D.W. (Eds), *Geographic Information Systems* (Vol. I): *Principles and Technical Issues*. New York: John Wiley & Sons. Pp 29-38.

De Maret, P. 1985. The Smith's Myth and the Origins of Leadership in Central Africa. In: Haaland, R. & Shinnie, P. (eds) *African Iron Working*: 73-87. Oslo: Norwegian University Press.

Denbow, J. R. 1979. *Cenchrus ciliarus*: 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*: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.* Unpublished Doctoral Dissertation, Indiana University.

Denbow, J.R. 1986. A new look at the later prehistory of the Kalahari. *Journal of African History* 27: 3-29.

De Vos, G.A. and Romanucci, L. 1995. Ethnic Identity: a psychocultural perspective. In De Vos, G.A. and Romanucci, L. (Eds). *Ethnic Identity: Creation, Conflict, and Accommodation* (3rd Edition). California: AltaMira Press.

Fatherley, K. 2008. *Sociopolitical status of Leokwe people in the Shashe-Limpopo Basin during the Middle Iron Age through faunal analysis*. Unpublished Masters thesis, University of the Witwatersrand, Johannesburg.

Fenton, S. 2003. *Ethnicity*. Cambridge: Polity Press.

Fouché, L. (Ed) 1937. *Mapungubwe: Ancient Bantu civilization on the Limpopo*. Cambridge: Cambridge University Press.

Friedman, J. & Rowlands, M. 1977. Notes towards an epigenetic model of the evolution of 'civilization.' In: Friedman, J. & Rowlands, M. (Eds) *The Evolution of Social Systems*: 201-276. London: Duckworth.

Gardner, G. A. 1963. *Mapungubwe: Volume II.* Pretoria: J.L. Van Schaik.

Geertz, C. 1963. The integrative revolution: primordial sentiments and civil politics in the new states. In: Geertz, C. (Ed.) *The Interpretation of Cultures*: 255-310. New York: Basic Books.

Hanisch, E.O.M. 1980. *An archaeological interpretation of certain Iron Age sites in the Limpopo/Shashi valley*. Unpublished MA dissertation, University of Pretoria, Pretoria.

Hanisch, E.O.M. 1981 Schorda: a Zhizo site in the Northern Transvaal. In Voigt, E. A. (Ed). *A Guide to Archaeological Sites in the Nothern and Eastern Transvaal*. Pretoria: Transvaal Museum pp. 37-54.

Hammond-Tooke, W.D. 2000. 'Ethnicity' and 'Ethnic Group' in Iron Age southern Africa. *South African Journal of Science* 96: 421-422.

Hodder, I. 1978. *The Spatial Organisation of Culture*. London: Duckworth

Hodder, I. 1982. *Symbols in Action: Ethnoarchaeological Studies of Material Culture.* Cambridge: Cambridge University Press.

Huffman, T.N. 1974. *The Leopards Kopje Tradition*. Museum Memoir No. 6. Salisbury: National Monuments and Museums of Rhodesia.

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. New York: Academic Press, pp 291-338.

Huffman, T.N. 1989. Ceramics, settlements, and Late Iron Age migrations. *African Archaeological Review* 7: 155-182.

Huffman, T.N. 1996a. *Snakes and crocodiles: power and symbolism in ancient Zimbabwe*. Johannesburg: Witwatersrand University Press

Huffman, T.N. 1996b Archaeological evidence for climatic change during the last 2000 years in Southern Africa. *Quaternary International* 33:55-60.

Huffman, T.N. 2000. Mapungubwe and the Origins of the Zimbabwe Culture. *South African Archaeological Society Goodwin Series* 8: 14-29.

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: Wits University Press.

Huffman, T.N. 2007a. *A Handbook to the Iron Age: The Archaeology of Precolonial 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): 163-188

Huffman, T.N. 2008. Climate change during the Iron Age in the Shashe-Limpopo Basin, southern Africa. *Journal of Archaeological Science* 35(7):2032-2047

Junod, H. 1927. *The Life of a South African Tribe*. Vols. I and II. London: MacMillan & Co., Ltd.

Kopytoff, I. 1987. The internal African Frontier: the making of African political culture. In: Kopytoff, I. (ed.) *The African Frontier: The Reproduction of Traditional African Societies*: 3-84. Bloomington: Indiana University Press.

Krige, E. & Krige, J. 1943. *The Realm of a Rain Queen*. Cape Town: Juta & Co., Ltd.

Kuper, A. 1980. Symbolic dimensions of the Southern Bantu homestead. *Africa* 50(1):8-23.

Kuper, A. 1982 *Wives for cattle: bridewealth and marriage in southern Africa*. London: Routledge and Kegan Paul.

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, Sweden: Uppsala University.

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 and 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. 1998. *The Archaeological sites of Greefswald*. Pretoria: University of Pretoria.

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.

Schoeman, M. H. 2006. *Clouding Power? Rain Control, Space, Landscape and Ideology in Shashe-Limpopo Sate Formation.* Doctoral Thesis, University of the Witwatersrand, Johannesburg.

Smith, J. 2005. *Climate Change and Agropastoral Sustainability in the Shashe-Limpopo Basin from AD 900.* Doctoral Thesis, University of the Witwatersrand, Johannesburg.

Stayt, H. 1931. *The Bavenda*. London: Frank Cass & Co., Ltd.

Van Waarden, C. 1987. Matanga, a late Zimbabwe cattle post. *South African Archaeological Bulletin* 42: 107-124.

Van Waarden, C. 1989. The granaries of Vumba: structural interpretation of a Khami Period commoner site. *Journal of Anthropological Archaeology* 8: 355-370.

Van Waarden, C. 2004. The Agrarian Basis of the Kalanga State Butua. Paper submitted for publication in *Pula: Botswana Journal of African Studies.*

Voigt, 1983. *Mapungubwe: An Archaeozoological Interpretation of an Iron Age Community*. Pretoria: Transvaal Museum.

Wood, M. 2000. Making Connections: Relationships between International Trade and Glass Beads from the Shashe-Limpopo Area. *South African Archaeological Society Goodwin Series* 8: 79-90

Wood, M. 2002. Poupée de fertilité: an interview revisted. In Van Schalkwyk, J.A. and Hanisch E.O.M. (Eds) *Sculptured in clay: Iron Age figurines from Schroda, Limpopo Province, South Africa.* Pretoria: National Cultural History Museum.

Wood, M. 2005. *Glass Beads and Pre-European Trade in the Shashe-Limpopo Region.* Masters Dissertation, University of the Witwatersrand, Johannesburg.