THE IRON AGE SEQUENCE AROUND A LIMPOPO RIVER FLOODPLAIN ON BASINGHALL FARM, TULI BLOCK, BOTSWANA, DURING THE SECOND MILLENNIUM AD

by

WIM MORITZ BIEMOND

submitted in accordance with the requirements for
the degree of

MASTER OF ARTS

in the subject

ARCHAEOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROFESSOR J.C.A. BOEYENS

JANUARY 2014

DECLARATION

Student number: 7965206

I declare that

THE IRON AGE SEQUENCE AROUND A LIMPOPO RIVER FLOODPLAIN ON BASINGHALL FARM, TULI BLOCK, BOTSWANA, DURING THE SECOND MILLENNIUM AD

is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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SIGNATURE DATE
(Mr Wim Moritz Biemond)

Abstract

The study encompasses the reconstruction of the Iron Age sequence around the Limpopo River floodplain on Basinghall Farm during the second millennium AD. A survey uncovered 75 Iron Age sites, including three *Moritsane* and ten *Toutswe* facies sites for the Middle Iron Age and two Early *Moloko*, 16 Middle *Moloko* (*Letsibogo* facies) and 43 Late *Moloko* grain bin platform sites for the Late Iron Age. The local settlement sequence, which is based primarily on a ceramic analysis of surficial and excavated collections, is corroborated by radiocarbon dates, a glass bead sequence and comparative data from previous studies. The borders of the *Toutswe* chiefdom are shown to have extended 100 km to the south, while the *Eiland* sequence is refined to include an *Eiland*, a *Moritsane* and a redefined *Broadhurst* facies. New light is also shed on the local *Moloko* sequence and its correlation with historical Tswana groups in south-eastern Botswana.

Key words: Stylistic ceramic analyses, *Toutswe*, *Eiland*, *Moritsane*, Early *Moloko*, *Letsibogo* facies, Glass bead sequence, Iron Age sequence in Botswana.

Acknowledgements

I would like to express my thanks to the following people:

I greatly appreciate the support of my supervisor and mentor Prof. Jan Boeyens who guided my work and ideas to complete this study.

I particularly wish to thank Dr Maria van der Ryst for her encouragement, critical reading as well as editorial assistance.

Despite our differing interpretations, I am much indebted to Prof. Tom Huffman, whose widely acclaimed research into southern African Iron Age ceramics underpins this study.

I acknowledge Prof. Jim Denbow for his highly valued research work on the Iron Age of Botswana.

I acknowledge Dr Marilee Wood for her research work on the glass bead sequence for southern Africa and thank her for her contributions during a visit on an excavation trip at Basinghall.

I thank my family, in particular my mother Alice and my sister Wiebke, for their patience in all these years that I was studying.

I acknowledge the contributions of various UNISA students, friends and their families who were involved with the excavations. Jan van Niekerk and Pieter Snyman assisted in the organisation of the field trips during the four excavation seasons.

I also thank the following individuals and groups for their particular contributions:

Typing and electronic transformation

Stephan de Villiers, Jeannine Snyman and Hettie-Jane Herbst for preparing the initial electronic drafts from my handwritten notes.

Faunal analyses

Louisa Hutten

Radiocarbon dates

Quaternary Dating Research Unit of the CSIR
Centre for Applied Isotope Studies, University of Georgia, USA

Staff

I thank the staff of the Botswana National Museum for their assistance during my research in the laboratory.
I thank my staff on the farm who helped with the excavations and sorting of material.

Landowners of neighbouring farms allowed access to the sites.

I acknowledge funding from UNISA for the radiocarbon dates analysed by the Quaternary Dating Research Unit of the CSIR.

The final interpretations are my own responsibility, and I hope that the findings provide a better understanding of the Iron Age ceramic sequence in Botswana.

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CHAPTER 1

AIM, NATURE AND SCOPE OF THE RESEARCH

1.1 Introduction

The archaeological record demonstrates that virtually all Iron Age farming communities in southern Africa lived in settled villages. Their characteristic lifestyle and technologies included the herding of domestic animals, hoe cultivation, salt production, the manufacture and use of ceramics, as well as a range of metal-working activities, all of which contributed to active engagement in trade networks (Hall, M. 1987:1). The focus of this study is on ceramics and I shall address this aspect of Iron Age economies specifically. These communities used ceramics for many purposes, for example as cooking, eating, drinking and storage vessels for foods and liquids and for carrying and storing water. Pots were made by hand from clay, usually by the coil or ring method and fired in the open in shallow pit structures (Davison & Hosford 1978:294-302). The vessels often broke and were dumped on refuse middens, or the broken sections remained *in situ* and, by usually surviving the passage of time, represent an important source of information for archaeologists to excavate and study.

Different parts of a ceramic vessel were often decorated with distinctive motifs and combinations of motifs. Since these decoration themes can be used to group assemblages of potsherds into categories, and these categories into time series, they constitute fundamental criteria for distinguishing Iron Age ceramic units and cultural groups (Huffman 1982:134; 2002:1-4). Ceramic seriations are applied to distinguish the major subdivisions of the Iron Age sequence in southern Africa. The seriated sequences are also used to reconstruct the movement of groups of African farming communities into southern Africa (Huffman 2007:115).

The southern African Iron Age sequence can be divided into three broad successive time periods: the Early Iron Age (± AD 200 - AD 900), the Middle Iron Age (AD 900 - AD 1300) and the Late Iron Age (AD 1300 - AD 1850). The Early Iron Age extends from the arrival of the first farmers into the region until the formation of the *Zhizo* chiefdom at around AD 900. Most Iron Age archaeologists would argue that there are no antecedents in southern Africa for Early Iron Age ceramics; consequently their origins have been sought further north on the continent. David Phillipson (1977:128-139, 227-230) distinguishes a two-stream movement to the south, whereas Tom Huffman (1979:233-237, 2007:118) identifies three streams (Figure 1.1), which offers a more plausible synthesis for Early Iron Age settlements in southern Africa.

Huffman (2007:335-359) proposes that an Eastern Stream or *Kwale* Branch deriving from the *Urewe* Tradition spread southwards from eastern Tanzania along the coastlands of Mozambique into KwaZulu-Natal between about AD 200 and AD 300. Several generations later, at around AD 400, a Western Stream, labelled the *Kalundu* Tradition, moved from the Congo Basin through Angola and eastern Botswana into South Africa, evolving into *Eiland* as the final facies. Finally a Central Stream, the *Nkope* Branch of the *Urewe* Tradition, moved from the Great Lakes region south into Zimbabwe at AD 350

where it is represented by *Ziwa.* Its final phase is represented by the *Toutswe* chiefdom in eastern Botswana.

The Middle Iron Age is introduced with the formation of the *Zhizo* chiefdom at around AD 900, and lasted until the collapse of the *Toutswe* and *Mapungubwe* states at around AD 1290 (Huffman 2007:361-362). This can be regarded as the Golden Age of the southern African Iron Age sequence (Maggs 2000:1-3), not only because the *Mapungubwe*, *Eiland*, *Kgopolwe* and *Toutswe* people produced the finest and best-decorated ceramics but also because the era is associated with gold production and extensive trade links, as exemplified by the large quantities of imported glass beads that have been recovered from some elite sites (Wood 2005:87).

The Late Iron Age commenced with a southward movement of early Nguni speakers from southern Tanzania who arrived in KwaZulu-Natal at about AD 1100 (Figure 1.1). Archaeologically their arrival is reflected by the appearance of Blackburn ceramics. (Huffman 1989a:173, 2004:84, 2007:443-444). Somewhat later Sotho-Tswana groups, the bearers of *Moloko* ceramics, moved into southern Africa and settled in the Limpopo Province of South Africa and eastern Botswana (Huffman 2002:9, 2007:428-431). With the rise of the Great Zimbabwe state at AD 1300, followed by an expansion of the Khami state at AD 1450, some Shona groups, known today as the Kalanga, moved into eastern Botswana (Tlou & Campbell 1984:81-88). In Central Botswana an interaction zone formed between these Shona groups and the Tswana chiefdoms. With the expansion of Tswana chiefdoms from the North West Province (part of the former Transvaal) into central Botswana during the early historical period, pressure mounted in the region. Adverse climatic conditions and the upheavals caused by the *difaqane* in the 1820s resulted in turmoil among all groups. The Ngwato-Tswana ultimately emerged as the dominant group in central and eastern Botswana by AD 1900 under Khama III the Great (Tlou & Campbell 1984:114-118).

1.2 Research aim and scope

Archaeologists strive to organise their research according to three broad goals. By studying sites and their contents in the context of time and space the sequence of human cultures or cultural history (the *what*, *where* and *when*) can be reconstructed. From data obtained on the cultural sequence, past lifeways (the *how*) can be reconstructed and cultural processes (explaining *why* culture change takes place), can be studied. In practice these objectives usually complement each other, especially when archaeologists design their research to ask specific questions which they would like to resolve (Fagan 2009:26-32). An archaeologist studying the cultural history of an area attempts to describe the past cultures of that region through a study of sites and associated artefacts, features and structures in a temporal and spatial context. By investigating these results it is possible to construct local and regional sequences of cultures over time. Thus cultural history is reconstructed by building up local sequences of sites into regional or larger frameworks of changing cultures.

The research area, encompassing the Limpopo floodplain on Basinghall Farm in the southern Tuli Block, Botswana, is located on the western upper part of the Limpopo River. The inflow of three river systems (Notwane, Motlhabatsi, Bonwapitsi) into the

Limpopo within 30 km upwards of Basinghall produces high volumes of water discharge during heavy rains. The extensive meandering of the Limpopo in this region contributes to the formation of large floodplain deposits with fertile soils for crop production. The meandering channels over the relatively flat ground also produce inland pans that fill up during floods. The pans and deep river pools, the latter created by rock outcrops with non-permeable walls, provide important long-term resources for watering livestock during drier periods. Such a naturally functioning river floodplain system and the associated biota (Bayley 1995:153) provide an ideal environment for agro-pastoralist settlement.

A survey conducted on foot within two kilometres of the boundaries of the floodplain located 75 Iron Age sites. The field data suggested that the cultural succession comprises the *Diamant* ceramic facies for the Early Iron Age, the *Eiland* and *Toutswe* ceramic facies for the Middle Iron Age, and a Middle *Moloko* (*Letsibogo*) ceramic facies for the Late Iron Age.

Since the main aim of this research is to reconstruct the local settlement sequence and chronology around the Limpopo floodplain, I broadened my investigations into the earlier settlements of Basinghall through controlled but extensive surface collections of mainly ceramics, combined with Shovel Test Pits (STPs) and selective archaeological excavations over a period of two years. Ceramics retrieved through these investigations will be compared to other analysed ceramic assemblages with the aim of defining the Basinghall ceramics and refining the ceramic and settlement sequence around the floodplain. Newly obtained radiocarbon dates and glass bead data will be employed to calibrate and validate the ceramic sequence.

1.3 Previous archaeological research with reference to the local Iron Age sequence

Settlement localities along mountain ranges and on hilltops - where stone for the construction of walls and terraces are freely available - are more defendable against wild animals and enemies. These landscapes make settlement patterns easier to recognise and consequently more research has been undertaken on mountain ridges within a radius of 100-200 km around Basinghall. Studies have been done (Figure 1.2), for instance, to the east in the western Waterberg by Maria van der Ryst (2006) in shelters and by Jan Aukema in the Motlhabatsi River Basin (Huffman 1990:117-119), to the west in the Shoshong and Mogware Hills by Jim Denbow (1983) and Alinah Segobye (1994), and to the north in the Tswapong Hills by Kiyaga-Mulindwa (1992:386-390) and Catrien van Waarden (1998:115-156). To the south, in the densely populated area around Gaborone, a great deal of research has been undertaken, among others by Denbow (1981:66-74), Campbell, Holmberg and Van Waarden (1996:1-22), Lane (1996:11-23) and Segobye (1987:45-56).

In open bushveld and thickets, settlement patterns are not easily visible on aerial photographs, thus making the detection of sites more difficult. In this regard it should be noted that no archaeological investigations had been conducted at Basinghall or in the immediately adjacent area in Botswana prior to the commencement of the current project.

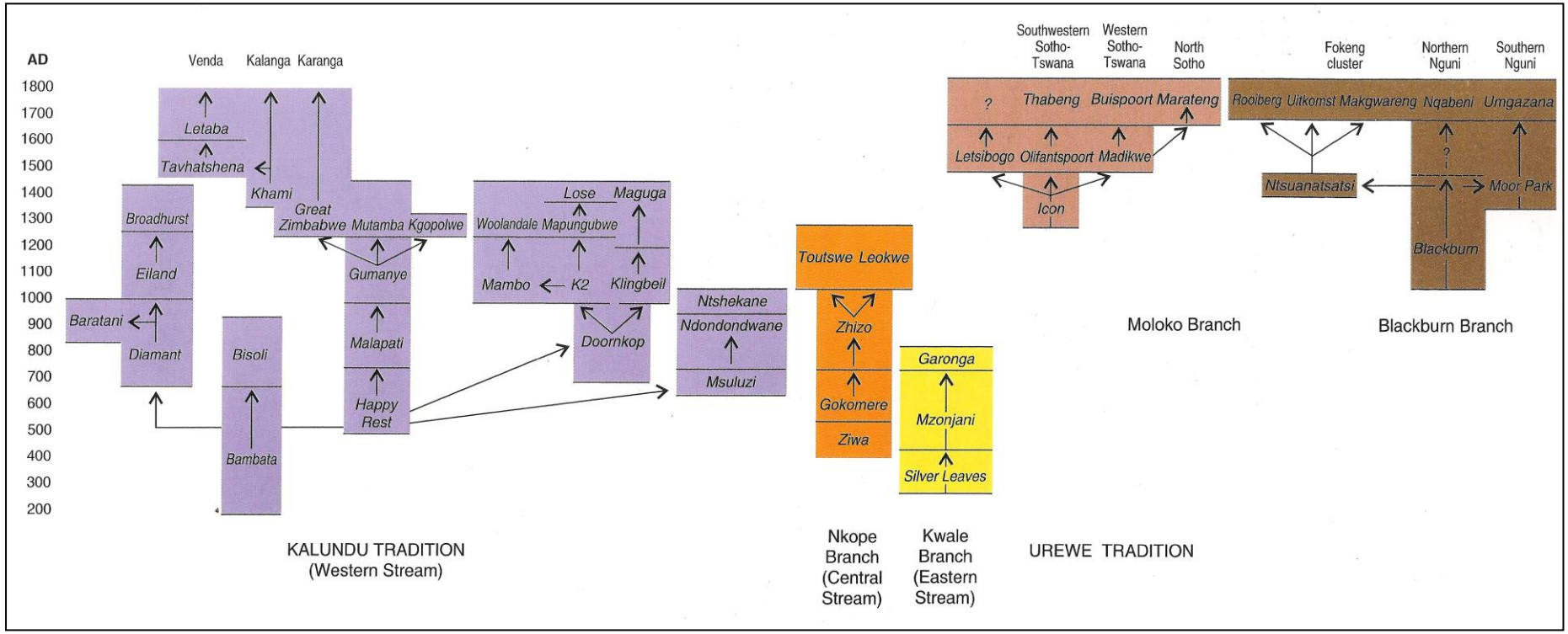

Figure 1.1: The ceramic facies in southern Africa (Huffman 2007:118).

As mentioned above, the pedestrian survey conducted at Basinghall located 75 Iron Age sites. The range of sites comprises different ceramic units that include *Diamant* (1), *Eiland* (3), *Toutswe* (10), Early *Moloko* (2), *Letsibogo* (16) and Late *Moloko* (43). Consequently previous research in areas around Basinghall will be discussed with reference to these facies.

People living in the region of the Congo Basin moved south-eastwards to arrive in the northern parts of South Africa around about AD 400 (Vogel & Fuls 1999:97), probably passing through eastern Botswana. This population movement, called the Western or *Kalundu* Stream (Figure 1.1), is associated with the *Happy Rest* ceramic facies representing the Early Iron Age (Huffman 2007:335). In Botswana remains of this early farmer facies are found at Maunatlala, dating to AD 400 (Denbow 1984:175-194), and at Goo-Tau in the Tswapong Hills in eastern Botswana (Campbell 1998:39). Out of the *Happy Rest* ceramic facies the *Diamant* and *Eiland* facies developed. The *Eiland* people were distributed in the region south of the Tswapong and the Soutpansberg mountain ranges, thus in the former Transvaal extending into south-eastern Botswana with the Magaliesberg mountain range as the southern boundary (Loubser 1991:163).

Across the Limpopo Aukema found ceramics similar to that of the *Happy Rest* facies dating to ± AD 650 at the base of the western Waterberg during his Motlhabatsi survey (Huffman 1990:117). This ceramic unit is followed by a second component, the *Diamant* facies, dating to around AD 800, with ceramics similar to the RU1 ceramics in the Rooiberg area (Hall, S 1981:31). A third, or *Eiland*, facies was identified by Aukema on the farm Wentzel (WL2) near the Motlhabatsi and Limpopo River confluence (Huffman 1990:117) (Figure 1.2). Dating to about AD 990, the associated ceramics from this site, which is situated approximately 40 km to the south of Basinghall, resemble RU2 ceramics (Hall, S 1981:38). Simon Hall (1981:27-40) recognised the abovementioned *Diamant* (RU1) and *Eiland* (RU2) facies during his research in the Rooiberg–Thabazimbi area.

The majority of sites found by Aukema during this survey are located in the higher-lying river valleys of the Waterberg in sourveld. The sites were mostly in the open and not on hilltops. The shift to poorer grazing land was probably not due to defensive considerations. He argued that the degraded veld resulted from overstocking, after which pioneer bush species invaded the lower-lying areas. This was followed by tsetse fly infestation from nearby endemic areas, which prompted people to move to higher-lying regions (Huffman 1990:117). The tsetse fly is restricted by altitude and its presence therefore impelled people to move away from the Limpopo River regions to the western Waterberg and to the Gaborone area (Fuller 1923:15-16).

In south-eastern Botswana the *Eiland* facies developed into a final *Broadhurst* facies (Denbow 1981:66-74). The *Eiland* facies recognised at Basinghall resembles RU2 ceramics as well as ceramics found at Moritsane (in the Gaborone area) (Figure 1.2) dating to the 13th century (Denbow 1981:66). Denbow (1981:72, 1986:3-29) also found *Eiland* ceramics near Molepolole, Odi, Broadhurst and Woodhill, while Campbell (1989, 1998:41) identified *Eiland* ceramics in the Central Kalahari Game Reserve and Sekoma Pan dating well into the 16th century and later. He suggests a continuation of the *Eiland* ceramic style into the Late Iron Age, probably with the Bakgalagadi as the potters.

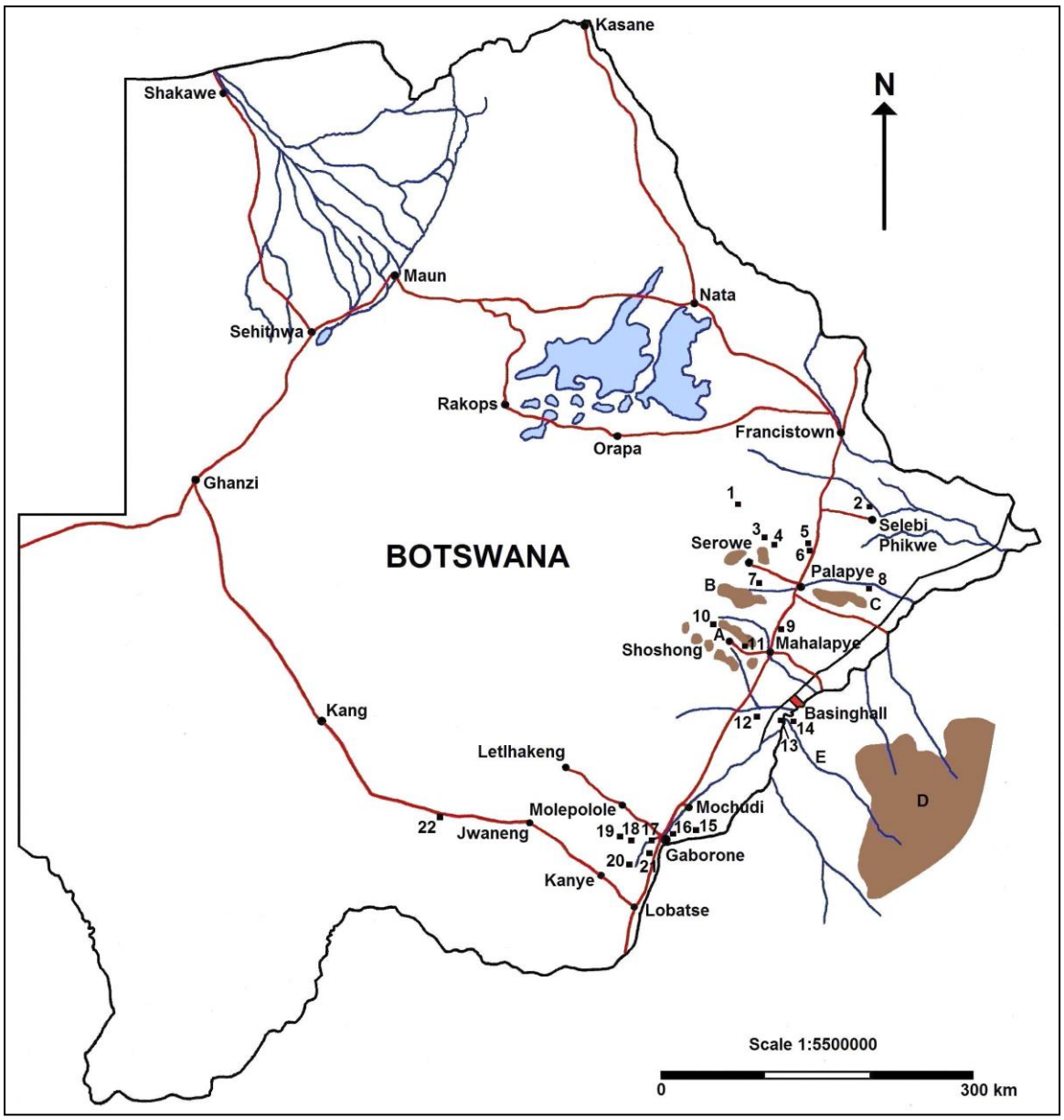

Figure 1.2: The research area and important archaeological sites: Shoshong Hills (A), Mogware Hills (B), Tswapong Hills (C), Waterberg Mountains (D), Motlhabatsi River (E), Bosutswe (1), Letsibogo Dam (2), Maiphetwane (3), Taukome (4), Toutswemogala (5), Thatswane (6), Kgaswe (7), Maunatlala (8), Lose (9), Sung (10), Manale Hill (11), Mmamabula Energy Project (12), Buffelsdrift (13), Farm Wentzel WL2 (14), Modipe Hill (15), Broadhurst (16), Moritsane (17), Phatana (18), Thamaga (19), Ranaka (20), Fikeng (21) and Sekoma Pan (22).

People living around the Great Lakes in East Africa moved southwards as the Central or *Nkope* Branch of the *Urewe* tradition. The *Nkope* Branch reached Zimbabwe by AD 350 to AD 400 as the *Ziwa* ceramic unit (Huffman 2007:356). In Zimbabwe the *Ziwa* facies evolved into the *Gokomere* facies and thereupon into the *Zhizo* facies. By about AD 750 some of the *Zhizo* people began spreading south-westwards and settled in the Serowe-Shoshong area, recognised as the *Taukome* facies (Denbow 1982:73-85).

At around AD 1020 - 1050, the *Zhizo* people were forced out of the Shashe-Limpopo Basin by new people (K2) who wished to take over the lucrative East Coast trade. The majority of the population moved westward to the Tswapong Hills, Palapye, Serowe, Shoshong and surrounding areas. This movement of *Zhizo* people into Botswana marks the rise of the *Toutswe* chiefdom (Calebrese 2000:188-189; 2005:4, 12). This region of Botswana is fairly dry with good grazing and is eminently suitable for cattle farming. An increasing focus on the raising of cattle in eastern Botswana coincides with the formation of the K2-Mapungubwe state. By AD 1050 three large towns, Toutswemogala, Bosutswe and Sung, had been established on hilltops, occupying six or more hectares each. The more prosperous and elite among the *Toutswe* people lived on higher hills while the less affluent built their villages on lower-lying surrounding hills. The commoners lived in much smaller villages on the plains below (Denbow 1984:34-36).

Village layout was always structured along the same pattern with a central cattle kraal surrounded by houses and granaries, while some grain pits were placed in the kraal (Denbow 1984:24-39). The *Toutswe* people seemed to have moved out of this region by AD 1280. The collapse of the Mapungubwe state by about AD 1290 is also set around this time (Huffman 2007:392). Based on earlier research the boundary of the Toutswe chiefdom was estimated to extend to the Palapye-Mahalapye-Shoshong area (Huffman 2007:391). The survey conducted at Basinghall, which lies approximately 100 km outside the known geographic spread of the *Toutswe* chiefdom, produced an additional sample of 10 *Toutswe* facies sites. A further survey west of Basinghall at the Mmamabula Energy Project (MEP) identified another eight *Toutswe* sites (Biemond 2008).

The Late Iron Age commenced sometime during the 14th century with the arrival of the proto-Sotho-Tswana groups from East Africa (Huffman 1989a:173-178). Current views are that the early Sotho-Tswana or *Moloko* people settled in the Mpumalanga and Limpopo provinces, spreading south-westward (Evers 1983:261-264; Mason 1983:261). The settlement at Icon in the Limpopo Province, dating to around AD 1330 (Hanisch 1979:72), is the earliest recorded type site and ceramic unit for the early *Moloko* phase (Huffman 2002:9). With a westward movement of the *Moloko* people along the Limpopo River valley into the North West Province interior and south-eastern Botswana, it is likely that they also would have settled around the Basinghall area. At Rietfontein 89 JP in the Marico, Boeyens (1998:108) found early *Moloko* phase ceramics dating to ± AD 1430. The ceramics are similar to RU3 recognised by Simon Hall (1981:49) at Rooiberg dating to ± AD 1470. Similar ceramics were also found in Botswana (Figure 1.2) at the base of the Modipe Hill site dating to ± AD 1475 (Labounty 1995:52), at Mochudi (Segobye 1987:51), and at Thamaga and Phatana (Van Waarden 1998:149). Some sites near Ranaka in Botswana seem to have ceramics of both the *Eiland* and Early *Moloko* facies, suggesting trade or possible production on site, which implies assimilation or intermarriage (Lane 1996:21). As will be demonstrated in Chapter 6, a settlement with a similar co-occurrence of Early *Moloko* and *Eiland* facies has been identified at Basinghall.

Out of the *Icon* facies the *Letsibogo*, *Madikwe* and *Olifantspoort* facies developed as the Middle *Moloko* phase (Huffman 2002:12). The *Letsibogo* facies is present in eastern Botswana (Campbell, Kinahan & Van Waarden 1996:52) and in the western Limpopo Province (Van Schalkwyk 2000:81). The *Letsibogo* facies (of which 16 sites have been

identified at Basinghall) dates from the 16th and 17th centuries and was originally recognised at the Letsibogo Dam in the Motloutse River (Huffman & Kinahan 2002/2003). Dates for *Moloko* sites in that area suggest that *Letsibogo* people had already been living there from the 15th century (Campbell, Kinahan & Van Waarden 1996:52).

Van Waarden (1989:131-157) has identified commoner *Khami* sites with clustered grain bin bases dating to the 15th century in eastern Botswana. These *Khami* commoner sites, which exhibit a central cattle kraal surrounded by houses and granaries, share the basic components identified at grain bin sites on Basinghall.

1.4 History of the region according to oral traditions and documentary witnesses

Oral traditions of the Bantu-speaking people are oral "messages" of the past that are transferred from one generation to the next, with genealogies, praise songs and poems constituting the most important records (Vansina 1985:193-194). Vansina (1985:196) argues that "[t]herefore oral traditions should be treated as hypotheses and as the first hypothesis the modern scholar must test before he or she considers others. To consider them first means not to accept them literally, uncritically. It means to give them the attention they deserve, to take pains to prove or disprove them systematically for each case on its own merits". A distinction is often made between oral traditions and oral histories. The first are narratives that extend back much further in the past, beyond living memory, while oral histories are the testimonies of individuals who personally experienced or witnessed events in their lifetime. The merit or reliability of oral traditions is questioned by many researchers, and it is argued that the further back in time the less reliable they become (Boeyens 2012:9-10). Spear (1981:166-171) divides oral traditions into three periods: the early mythical period or period of origin, the middle period which serves as the charter for the modern social order (e.g. the current division between lineages) and the recent period, which covers the last three or four generations and is also regarded as the most accurate.

The conventional oral historical view is that the Sotho-Tswana separated from Bantu-speaking people in the vicinity of the Great Lakes of East Africa and entered through western Zimbabwe - eastern Botswana into South Africa in three series of migrations (Schapera 1953:14). The first migration, whose participants settled in eastern Botswana, is represented by the Kgalagadi who interacted extensively with existing Sarwa (Bushmen) populations. The second wave of migration was by the ancestors of the modern Rolong and Tlhaping under Morolong. They settled in the upper reaches of the Molopo River, absorbing some of the Sarwa and Kgalagadi in the process (Schapera 1953:14). The third, and largest, migration brought the ancestors of all the other modern Sotho-Tswana tribes or chiefdoms. They settled in the North West Province at a place called Mabjanamatshwana, near present-day Brits in the Bankenveld, and broke up rapidly into separate clusters as the Hurutshe, Kwena and Kgatla (Schapera 1953:15). According to Ngcongco (1977:48) the Kwena and the Hurutshe shared the eland (*phofu*) as totem before their separation, hence acquiring the label as the Baphofu.

Oral traditions recount that the Ngwato were a section of the Kgabo-Kwena that seceded from the main Kwena body (Mogopa-Kwena) at about AD 1680-1700 (Parsons 1973:92).

The split took place in the Rathateng area just south of the Marico-Crocodile River confluence (80 km south of Basinghall). From here the Kgabo-Kwena moved into the Kweneng district of Botswana by the beginning of the 18th century, where they established the Mochudi village in about AD 1740 under chief Motshodi. In AD 1770 Motshodi's grandson Motswasele succeeded him and it was under the latter that the Ngwato broke away. Under Mathiba, the first independent Ngwato chief, they settled at the Shoshong Hills at about AD 1780. On arrival they encountered the Kaa as the dominant tribe in the region (Parsons 1973:96).

The Kaa are an early offshoot of the Rolong clan of chief Morolong who settled in the Marico district between the 13th and the 14th centuries. The Kaa separated from the main clan around AD 1500 and moved to the Gaborone area (Schapera 1945:109-111). By AD 1650 they moved to the Buffelsdrift area (30 km south of Basinghall) under chief Mmopane. After moving along the Limpopo River the Kaa finally settled in the Shoshong Hills and, on encountering the Khurutshe at the hills, conquered them. The Khurutshe are an early offshoot from the Hurutshe, forming the first Tswana group to dominate part of the central district after the decline and withdrawal of the *Khami* (Kalanga) in the area (Schapera 1975:1-5). Evidence for a *Khami* presence around AD 1600 in the study area is found in a *Khami* ruin at Marakalalo, a farm 50 km to the north of Basinghall. There are also several *Khami* sites in eastern Botswana (Van Waarden 1998:130-147). Following on the emergence of the *Khami* state after AD 1450 and the expansion of the Rozvi state, the Kalanga moved into the Central District, settling at the Shoshong Hills where they encountered the Khurutshe.

The general picture of settlement in the Central District during the nascent formation of the Ngwato state early in the 19th century was as follows: the Ngwato, Kaa, Khurutshe, Paleng-Kgalagadi and Talaote were all present in the Shoshong region. The Talaote from Kalamare village near Shoshong are a splinter group from the Nyayi Kalanga that adopted the Tswana language. To the north-east in the Tswapong region were four groups, namely the Tshweneng to the south and the Tswapong to the north of the Tswapong Hills, while the Seleka and Birwa lived around Ngwapa Hill (Ramsay et al. 1996:38). To the south were the Kwena of Sechele in the Kweneng district. These groups were scattered throughout Botswana in small clans on account of the upheavals and population movements caused by the *difaqane*. They only regrouped in the mid-19th century with the rise of the Ngwato kingdom as a sovereign state by AD 1849 under Sekgoma I (Parsons 1973:96). By 1899 the Ngwato state under Khama III included all of the present Central District, incorporating all the pre-*difaqane* inhabitants nominally as Bangwato.

Among the Tswana the beginning of the 19th century was marked by the impact of colonial expansion. In 1801 the Tlhaping, the southernmost Tswana chiefdom, were visited by the first formal colonial expedition to set out from the Cape Colony under Somerville and Truter (Bradlow & Bradlow 1979), with the renowned artist and draughtsman, Samuel Daniell, as one of the expedition members. By 1817 the earliest Christian missions had been established among the Tswana (Tlou & Campbell 1997:181-185). Over the next 30 years most of the other chiefdoms were visited sporadically by traders, hunters, explorers and missionaries.

The pioneer traveller Dr Andrew Smith passed through the study region in September 1835 (Lye 1975:264-274). He travelled from the Limpopo-Notwane River junction, crossing the Serorome (Bonwapitse) River to reach the Tropic of Capricorn that lies at the northern boundary of Basinghall Farm. He encountered "poor Baquan" (poor Bakwena) and was informed that they lived on the banks of the Limpopo where they formerly had planted sorghum, beans and melons (Kirby 1940:203). When he met them (most probably at what is now Basinghall Farm) they could not plant and reap crops on account of the instability caused as a result of regular raiding by the Ndebele (Matebele) of Mzilikazi. At the Tropic Dr Smith climbed a big tree, and on seeing the distant hills of Makwate and Bodungwe (which can be observed from Basinghall), he mistakenly believed the range to be the Shoshong Hills. He was informed that the Kaa lived at the Shoshong Hills where they obtained iron ore and that they were master iron smelters who traded axes and other iron tools to adjoining tribes for cattle, beads and sorghum. The "poor Baquans" used to acquire their beads from the Kalanga in exchange for karosses and sorghum. He was also informed that the trader Hume might have been the first "white man" to visit the Kaa at Shoshong in 1832 (Schapera 1945:113). Within the region Dr Smith described the inhabitants along the Limpopo as poor Kwena and Matebele, while the Kaa resided at Shoshong and the Ngwato at Serowe with the Babididi, a Tswana-speaking chiefdom, settled to the east (near Ellisras/Lephalale in South Africa).

Figure 1.3: A hunting trap drawn by Livingstone (1857). Remains of similar traps were identified at Basinghall.

Livingstone visited the Shoshong region in 1842/3 where he found the Kaa and the Talaote at Kalamare and the Ngwato near Serowe (Schapera 1945:115). The renowned hunter Gordon Cumming (1850) visited the Shoshong Hills in July 1844 and June 1845 and, on encountering the Kaa and Ngwato, wrote that they were regularly attacked by the Ndebele of Mzilikazi. Cumming, on his hunting expedition along the Limpopo River in 1845, travelled up to Ngwapa Hill. Whereas Oswall and Vardon, during their hunting trip in 1846, made no mention of any tsetse fly infestation in the vicinity of the study area, fly was present around Ngwapa Hill to the north (100 km north of Basinghall) (Fuller

1923:18). The explorer AA Anderson (1888:151) passed through the region in 1866 and encountered many cattle posts of the Ngwato along the Limpopo on his way to Shoshong.

By 1870 Khama III had taken over the chieftainship at the height of the Ngwato state (Ramsay et al. 1996:138). In 1885 the British Government declared a protectorate over what is today Botswana, then called the Bechuanaland Protectorate. A Bechuanaland Border Police Force (BBP) of 500 men was established to protect the territory along the Limpopo River from the Zuid-Afrikaansche Republic (ZAR or Transvaal state) (Burrett 2005:3-40). Three forts were established to the north of the study region and were linked by a telegraph line. The remains of one of the telegraph stations were identified on Basinghall Farm during the archaeological survey.

With the discovery of gold in the Tati district north-east of Francistown, Cecil John Rhodes and his British South African Company (BSAC) intended to annex Bechuanaland for its mineral wealth (Tlou & Campbell 1997:215). Rhodes' aim in 1891 was to build a railway line from the Cape Colony to Rhodesia via the Tati gold fields. King Khama III of the Ngwato granted the Tuli Block to the BSAC in 1895 for the purpose of constructing a railway line. The BSAC eventually decided that it was not viable because too many small rivers would have to be crossed in the process. The railway line was subsequently built more to the west in 1896 where it is still in use (Tlou & Campbell 1997:224). The Tuli Block area remained the property of the BSAC and it was subsequently decided to divide it into farms, which were sold to the public.

1.5 Conclusion

A review of previous research in the broader region, relevant oral traditions, as well as contemporary accounts and other written sources on the history of the region, were applied to make a preliminary assessment of the successive groups of people that could have settled at Basinghall since the second millennium AD. A main challenge of this study will be to use the results gathered from the survey and excavations at Basinghall to evaluate and integrate the data from the abovementioned evidential sources. Ceramic analyses, complemented by calibrated radiocarbon dates and a glass bead sequence, will be used to compile a settlement chronology for Basinghall.

In Chapter 2 an assessment of the various ceramic facies that can be applied to the Basinghall sequence is reviewed and defined. This framework constitutes the basis of the classification of ceramics recovered from surface collections and excavations at Basinghall in later chapters. Chapter 3 briefly describes the dynamics of a floodplain ecosystem. I then review the specific attributes of the associated landscape that induced African farming communities to settle around the Limpopo floodplain. The methodology employed in the survey is also set out in Chapter 3. Chapters 4 to 7 contain a description of the excavations that recovered ceramics from the different facies, which are presented under the rubric of the *Toutswe*, *Eiland/Moritsane*, Early *Moloko* and *Letsibogo* stylistic units. Chapter 8 reports on the investigations and excavations of the more recent grain bin sites. I discuss and contextualise the results obtained from the survey and excavations in Chapter 9. The concluding remarks in Chapter 10 comment on the chronological sequence and material culture of farmer communities who settled at Basinghall during the second millennium AD.

CHAPTER 2

TERMINOLOGY AND CONCEPTS

2.1 Introduction

People use material culture (artefacts) to express their identity in the form of repeated codes of cultural symbols. In ceramics these repeated designs form a style or a design field for a specific ethnic group that is recognisable to outsiders. People of a specific ethnic group use language to transmit their thoughts and worldviews. The distribution of people who speak the same language is therefore also linked to a similar distribution and expression of their style on condition that they belong to the same cultural group (Huffman 2002:1-4). Because of this critical link between language, ceramic style and spatial elements as expressed in settlement patterns and house design, we can recognise and trace the movements of particular ethnic groups through time.

One of the main objectives of a stylistic ceramic analysis is to determine archaeological identities (Huffman 1980:168; Calabrese 2005:1). This study aims to demonstrate how these underlying concepts informed the analyses of the ceramics from Basinghall and the identification of stylistic groups in the archaeological record. Where applicable, historical records, ethnography and oral traditions, as discussed in Chapter 1, section 1.4, will be used to evaluate or augment the results of the ceramic analyses.

2.2 Terminology

As ceramics represent an important part of people's culture in the past, this particular class of material culture creates an appropriate medium for expressing identity and, consequently, design style. Since ceramics display the most variability we use ceramic differences to create major subdivisions in the Iron Age sequence; therefore Iron Age terminology is largely concerned with ceramic typology (Huffman 2002:2-3).

Africanist archaeologists introduced a set of terms that have become widely used in the context of the Southern African Iron Age (Evers 1988:37-40). Summarised by Huffman (2002:6, 2007:117) the most important of these terms are:

Complex	=	two or more traditions
Tradition	=	a series of related ceramic units
Branch	=	a ceramic unit sequence within a tradition
Sub-branch	=	a ceramic unit sequence within a branch
Phase	=	time segments of related ceramic units in a tradition
Facies	=	a ceramic unit

Every ceramic unit, or facies, belongs to a larger cluster (a tradition) and is also placed in a time segment or phase (Huffman 2007:117). Developments within a facies through time could lead to new branches or sub-branches. A facies or ceramic unit is named after the site where the ceramics were first identified, and all similar ceramics are subsequently

named after the name or type site. For example, the *Eiland* facies was first identified at the Eiland Salt Works near Tzaneen (Mpumalanga). The facies name is also used to refer to the group of people who produced a particular ceramic style (Huffman 2007:117), so that the *Eiland* people would have produced the *Eiland* ceramic unit.

I discuss the *Toutswe*, *Eiland*, *Moritsane*, Early *Moloko* and *Letsibogo* facies by focusing on the characteristic stylistic types of each unit. Figure 1.1, Chapter 1, reflects the grouping of some of these facies within the Iron Age ceramic sequence for southern Africa as proposed by Huffman (2007:118). The diagram also illustrates the relationship between ceramic facies and the proposed links with historical groups.

In order to construct the relationship between Iron Age ceramic facies, a study of the ceramics associated with each group of people at different time intervals is done through a multidimensional stylistic ceramic analysis. This method is explained in the following section.

2.3 Stylistic ceramic analysis[1]

In the process of decorating a ceramic vessel three variables have to be taken into account, namely profile, decoration layout and motifs (Huffman 2007:111). The particular shape of a vessel (the profile) determines the extent of the surface that is available for the placement of decoration elements. For instance, the profile of a jar is more complex than that of a beaker or a bowl, with a surface area that allows more scope for complex decoration configurations. The choice of motifs has to be deliberated and the layout or organisation of a selection of motifs planned. Huffman (2007:111) explains that it is the specific combination of "one kind of profile, one possible layout and one set of motifs" that forms a stylistic type. Stylistic types consequently represent the various styles available in a potter's assemblage. It is important to note that at a facies level the stylistic types derived from this method of analysis apply to the scale of group identity (for example, the *Eiland* people) and cannot identify individual potters (Huffman 2007:112). The entire configuration produced by the application of these three components to the decoration of a vessel is used in drawing up a design structure for a particular ceramic expression, taking into account all possible combinations.

A series of related types in a ceramic assemblage, where the motifs and layouts of simpler types occur as components of the most complex type, is produced. These interrelated types form the design structure of the ceramic unit or facies (Huffman 2007:111). Design structures are used to recognise Iron Age units and, where applicable, facilitate the correlation of archaeological entities with historically known groups of people. Huffman (2007:111) recommends the reconstruction and analysis of whole vessels since "[s]herds are simply inadequate". In drawing up a design structure, sherd sections that allow for the reliable reconstruction of the vessel profile and the combinations of decorated positions that define the layout should be available. Ceramics from surface collections are invariably fragmentary, represent different vessels and are frequently out of context, which make a reliable classification at group level difficult. However, sherd samples can

[1] Note that my discussion of multidimensional stylistic analyses is based on *The Handbook to the Iron Age*, the seminal work produced by Tom Huffman (2007).

provide a key where "one or two traits may be particularly helpful in identifying a sample because they are unique to a group in a specific area at a certain time" (Huffman 1980:125). The main function of such a selection of key traits is merely to separate groups.

In the following section a stylistic ceramic analysis of the ceramic units that are appropriate to this study will be presented based on data obtained from previous work by archaeologists active in this particular field of research. The three-dimensional stylistic method of analysis, as developed by Huffman (2002:4-6, 2007:111-115), is applied to ceramics retrieved by previous researchers from several sites of a particular facies to produce a set of vessel types that describes the profiles, decoration motifs and the decoration layouts for each facies. Definitions and terminology that are used for the various vessel profiles, decoration motifs and layouts are based on nomenclature employed by archaeologists such as Calabrese (2005), Denbow (1983), Evers (1988), Hall (1981), Hanisch (1980), Huffman (2002, 2007), Krause (1990) and Rice (2005).

2.3.1 Vessel profile

Three main profile categories, which are further divided into 11 distinct vessel profiles, were identified during the course of this ceramic analysis. These categories comprise jars, beakers and bowls. The jars were further divided into recurved, long-necked, short-necked, collared constricted and constricted jars. Subdivisions were not assigned to beakers. Bowls were divided into collared, deep, thickened rim (out-sloping) and open bowls. Each of these vessel forms contains many variations in rim and lip profiles, which will not be discussed in this study. The 11 vessel profiles used in this synthesis are shown graphically in Figures 2.1, 2.2 and 2.3, and are described as follows:

Recurved jar
A necked globular vessel with the height greater than the mouth diameter, sometimes with a distinct shoulder. The rim profiles range from vertical to highly excurvate.

Long-necked jar
A globular vessel with the height greater than the mouth diameter. The neck and shoulder junction is distinct. The shape is best described in geometrical terms as an ellipsoid body with a cylindrical neck on top of it. The rim profiles vary from vertical to highly excurvate.

Short-necked jar
A globular vessel with height greater than the mouth diameter. The neck is very short or hardly present. The rim profiles range from vertical to highly excurvate.

Collared constricted jar
A spherical vessel with a constricted collared mouth. The vessel height is greater than the mouth diameter. The rim profiles range from moderately to highly incurvate.

Constricted jar
A simple spherical vessel with a constricted mouth. The vessel height is greater than the mouth diameter. The rim profiles range from moderately to highly incurvate.

Beaker
A smaller vessel with nearly vertical sides and a flat base with the height equal to or greater than the mouth diameter. The rim profiles range from vertical to slightly excurvate.

Collared bowl
A collared globular vessel with the mouth diameter greater than the height. The rim profiles range from vertical to excurvate.

Deep bowl
A hemispherical vessel with a mouth diameter greater than the height. The rim profiles range from vertical to moderately excurvate.

Thickened rim open bowl
A hemispherical vessel with out-sloping sides. The mouth diameter is much greater than the height of the vessel. The rims are thickened and flattened to various shapes and sizes.

Open bowl
A simple hemispherical vessel with the mouth diameter significantly greater than the height of the vessel. The rim profiles range from vertical to excurvate.

2.3.2 Decoration motif

The decoration motif is the most important variable in this method of analysis, according to which a combination of similar design motifs executed in the same decoration technique creates a design set or key. Thus the design sets for each facies in this study are classified into groups of decoration techniques, design elements and design motifs:

- The decoration technique is used to modify the surface of a vessel, for example incision or comb-stamping.
- A design element consists of a discrete portion of the decoration, for example a single incised line or arc or punctate line.
- A design motif comprises combinations of elements of one or more decoration techniques to form a pattern, for example a comb-stamped band filled with oblique stamping.
- Thus a set of similar design motifs employing the same decoration technique forms a design set or design key.

The decoration motifs for each facies are presented in a diagram and classified into different decoration techniques and design elements. Every motif is numbered and presented in tabular form for each facies, for example Figure 2.4 as key to the *Toutswe* facies. These keys were used to analyse the excavated decorated vessels and are discussed in more detail in subsequent chapters.

Vessel decorations are executed when the vessels are wet or dry before firing. The decoration techniques or surface enhancements are divided into two major categories, namely penetrating enhancements and additive enhancements.

Penetrating enhancements

Incision
Cutting lines into the surface of a vessel with a pointed implement.

Comb-stamping
Executed by using a comb-like implement to produce a repeated pattern of identical motifs. The individual tooth marks range from square to rectangular averaging between 1 mm and 3 mm in length.

Bangle impressions
Executed by the application of a bangle to the surface of the vessel to create a repeated pattern of identical motifs.

Fingernail impressions
Executed by the use of a fingernail or an implement that creates a fingernail-like imprint in the clay.

Stabbing
Executed by the use of a sharpened object to leave a small circular or similar-shaped impression in the clay in a random pattern.

Punctates
Executed by using an implement to punch depressions into the clay with a variety of instruments such as reeds and stalks or carefully crafted tools. The punctates range from a small circular or triangular shape to a dragged line. This technique is typical of the *Letsibogo* facies.

Additive surface enhancements

Appliqués
The application of small pieces of clay to the surface of the vessel. These may be spikes, flanges or handles and have an ornamental or a functional role.

Polychrome colours
The application of pigments to the decorated surface of the vessel before firing. The only pigments identified during this study are grey graphite and red ochre in a range of hues. Jars are mainly coloured on the outside, while bowls are coloured on both the in- and outside. Vessels coloured on the inside are marked on the diagrams by an encircled grey dot for graphite or red dot for ochre. Occasionally white limestone is also used as colouring, but because it has a low durability the archaeological visibility is also low. Some vessels are deliberately coloured black in a smoky fire. The soot residue on the vessels is burnished afterwards to get a shiny black appearance similar to modern blackened and burnished Zulu pots.

Soot blackening
Many vessels, but in particular jars, are stained black by soot adhering to the outer surface through cooking on an open fire. Some vessels are blackened on the inside

from overcooking (burning) of foodstuffs. Sherds with soot blackening were recorded as such during the analyses.

Burnishing
Burnishing can be defined as the smoothing of the surface of a vessel with a polishing stone. This is not a variable in the stylistic analyses method but the occurrence is recorded in this study according to categories of highly burnished (a very shiny appearance), burnished (showing signs of polishing) and unburnished.

2.3.3 Decoration layout

The location of various design motifs on a particular vessel form defines the decoration layout or placement. Most jar profiles exhibit lips, rims, necks, shoulders and bodies while beaker and bowl profiles have lips, rims and bodies, but no necks and shoulders.

Decoration layout positions for **jars** (Figures 2.1, 2.2) can be divided into:

- **position 1** – rim – subdivided into: **position 1a** – on top of the rim (lip)
  position 1b – on the side of the rim
- **position 2** – neck
- **position 3** – shoulder
- **position 4** – body

Decoration layout positions for **constricted jars** (Figure 2.2) can be divided into:

- **position 1** – rim – subdivided into: **position 1a** – on top of the rim (lip)
  position 1b – on the side of the rim
- **position 3** – shoulder
- **position 4** – body

(Occasionally a constricted jar can have a slight neck)

Decoration layout positions for **beakers** and **bowls** (Figures 2.2, 2.3) can be divided into:

- **position 1** – rim – subdivided into: **position 1a** – on top of the rim (lip)
  position 1b – on the side of the rim
- **position 4** – body

(Occasionally a bowl can have a slight neck and shoulder)

2.3.4 Developing a design structure

In drawing up a design structure for a specific facies we have to include types from at least two or more ceramic assemblages that are available for that particular facies (Huffman 2007:115). In these assemblages we combine the variables of each dimension as explained above, namely one type of profile, a single set of motifs and one possible layout configuration (Huffman 2007:111) in order to create a stylistic type or class for a particular facies. For example, the types or classes derived for the *Eiland* ceramic facies presented in Figures 2.8 and 2.9 are based on five collections.

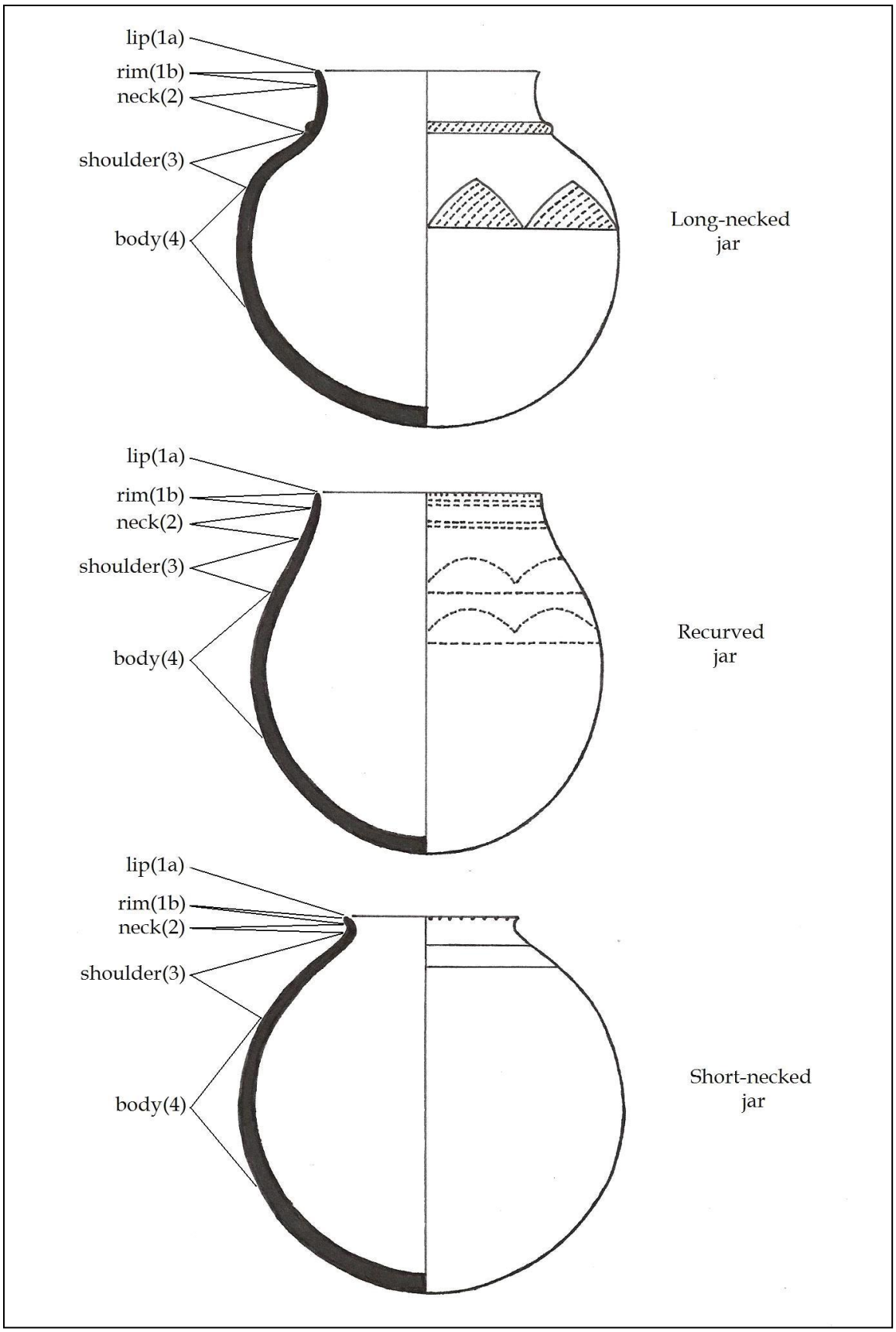

Figure 2.1: Jar profiles indicating the decoration layout areas.

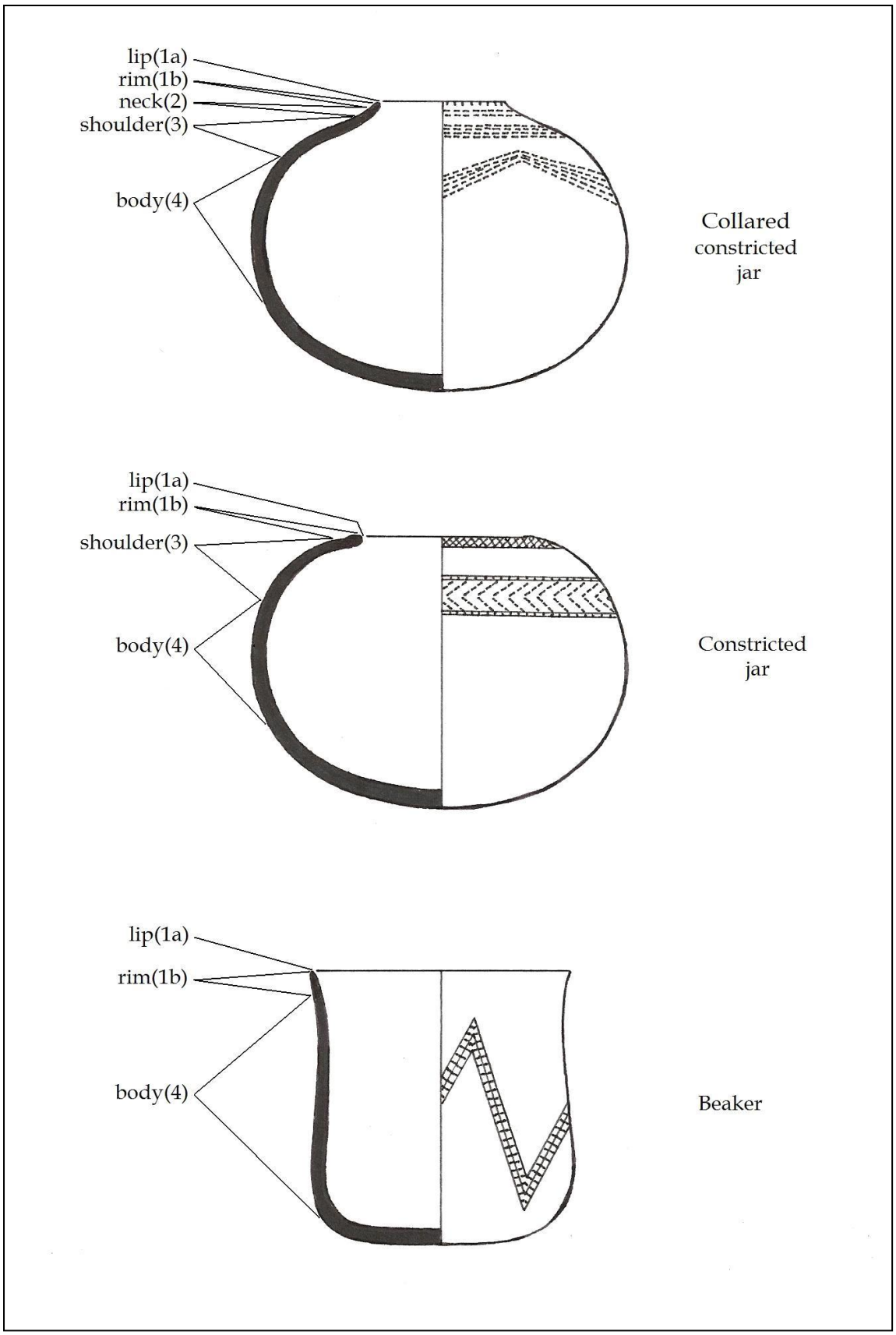

Figure 2.2: Constricted jar and beaker profiles indicating the decoration layout areas.

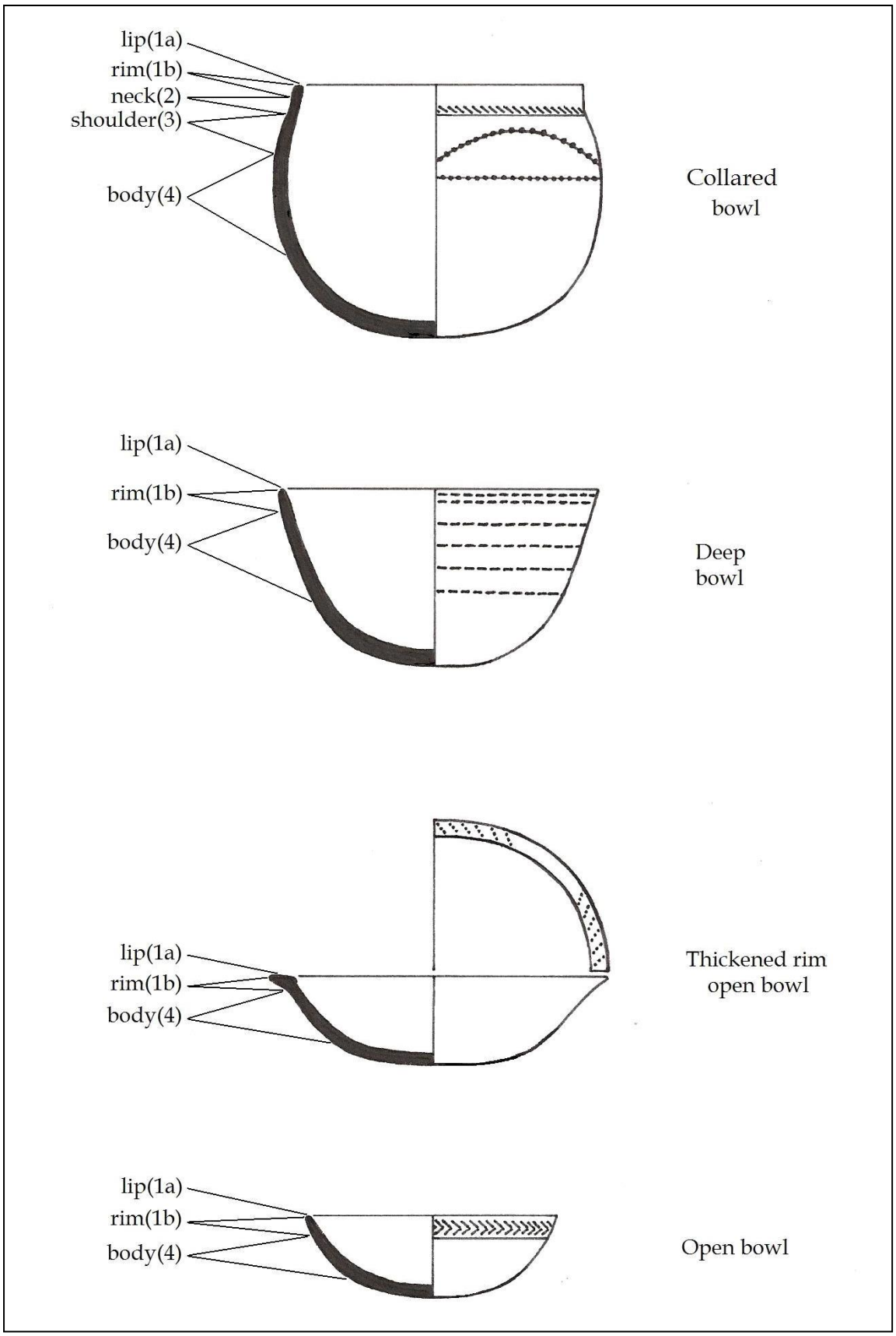

Figure 2.3: Bowl profiles indicating the decoration layout areas.

An analysis begins by selecting the most complex vessel. A jar has a more complex surface while a beaker or a bowl provides a less complex surface (see Figures 2.1, 2.2 and 2.3). A decorated jar presents four decoration layout positions with 15 possible combinations, namely layout position 1, 1:2, 1:2:3, 1:2:3:4, 1:2:4, 1:3, 1:3:4, 1:4, 2, 2:3, 2:3:4, 2:4, 3, 3:4, and 4. The most complex vessel displays the most motif positions on the most complex profile, namely a recurved jar with a layout position of 1:2:3 in the case of the *Eiland* facies. The most complex vessel is therefore placed in the centre of the wheel that depicts a particular design structure (see Figure 2.10).

Groups of vessels with similar combinations are considered to form types, for instance the ceramic types of the *Eiland* facies in Figures 2.8 and 2.9 represent the most common vessels in each group. The most common vessel for each type is illustrated using examples from the collections analysed. The more simple types occur as components of the most complex type and are arranged in a circle (starting at type 1 and ending at type 4) around the most complex vessel in the central position. This series of interrelated types produces the design structure for the ceramic facies, for example Figure 2.10 illustrates the *Eiland* design structure.

2.4 The *Toutswe* facies

The *Toutswe* facies was first identified at the Toutswemogala Hilltop settlement north of Palapye in Botswana. The site was excavated by Larry Lepionka (1979:62) and Jim Denbow (1983:158-168). The *Toutswe* chiefdom occupied the central and eastern parts of Botswana from ± AD 1000 to AD 1290. The pottery is characterised by comb-stamping and incisions on a narrow (sometimes applied) band in the neck, and with comb-stamped infilled triangles on the body of the vessels. Some bowls have broad comb-stamped rims.

Lepionka (1979:62-71) first excavated and classified the pottery from Toutswemogala. This collection was reanalysed by Denbow (1983:120-144 & 168-174), who used the ceramics from Toutswemogala and Taukome, a site 40 km west from Toutswemogala, to group the assemblages into nine classes of *Toutswe* ceramics. *Toutswe* followed on the 8th-century *Zhizo* facies of the first settlers of Taukome Hill. Evers (1988:43) refined the analysis incorporating ceramics from Thatswane, a hilltop settlement south-east of Toutswemogala.

I used the three-dimensional analysis method to redefine the *Toutswe* facies from data collected by the above-mentioned archaeologists. Firstly the dimension of shape, as the profile of the vessels, is defined as recurved jars (with or without an applied band in the neck), constricted jars, beakers, out-sloping bowls with thickened rims and open bowls.

The second dimension, namely the decoration motifs that have been used on a vessel, is divided into categories of patterns, decoration technique and direction. The infill of a band is considered to be a major motif for subdivisions and serves as a key to the *Toutswe* motifs, as described in Figure 2.4. Category I is composed of variations of bands subdivided into oblique incised bands orientated to the left (I A) or to the right (I B), vertical incised bands (I C), crosshatched incised bands (I D), oblique bands of comb-stamping orientated to the left (I E), or to the right (I F), oblique bands of punctates orientated to the left (I G) or to the right (I H) or vertical (I I) and bangle-impressed bands

(I J). Category II contains variations of horizontal incised lines (II A) or comb-stamped lines (II B), while categories III and IV are characterised by various aerial patterns and triangles. In category V the motifs are placed on the thickened rims of out-sloping bowls.

The third dimension of decoration layout on the vessel depends on the profile of the vessel as well as the decoration motif used. The basic classes derived from the above-mentioned layouts for the *Toutswe* facies are:

***Toutswe* Classes**

1 A recurved jar decorated on the lower neck with an applied band (2)
2 A recurved jar decorated on the lower neck (2)
3 A recurved jar decorated in the lower neck and on the shoulder (2 3)
4 A recurved jar decorated in the lower neck, on the shoulder and on the body (2 3 4)
5 A recurved jar decorated in the lower neck and on the body (2 4)
6 A recurved jar decorated on the shoulder and on the body (3 4)
7 A constricted jar decorated on the shoulder (3)
8 A beaker decorated on the body (4)
9 An out-sloping open bowl decorated on top of a flattened rim (1a)
10 An open bowl decorated on top or below the rim (1a or 1b)
11 An open bowl decorated on the body (4)

All these classes with their profiles and the most common motifs are illustrated in Figure 2.5. These interrelated types or classes form the design structure of the *Toutswe* facies in Figure 2.6.

2.5 The *Eiland* facies

Eiland facies ceramics are characterised by herringbone and crosshatched incisions with laddered borders and decoration-infilled arcades and triangles, often with red ochre colouring (Huffman 2007:229). The *Eiland* facies was first identified at the Eiland Salt Works near Tzaneen in the Mpumalanga Province (Klapwijk & Evers 1987:41-43). Similar ceramics were subsequently identified in collections excavated by various archaeologists in different regions of the former Transvaal (Moore 1981; Evers & Van der Merwe 1987:104; Loubser 1991:368). I used ceramics recovered from the Eiland Salt Works (Evers 1988:46-60), Bambo Hill near Polokwane (Evers 1988:46-60), Soutpansberg (Loubser 1991:443-445), Rooiberg RU2 (Hall 1981:35-40) and Kirstenbos in the Waterberg (UNISA collection) to create the *Eiland* facies design structure according to the three-dimensional method.

In the stylistic analysis of the *Eiland* ceramics the first dimension of shape, namely the profiles of the various vessels, is defined as recurved jars with slightly carinated shoulders, constricted jars, deep bowls and open bowls. The second dimension, the decoration motifs used on the vessel, is divided into categories of patterns, decoration techniques and direction. As indicated in Figure 2.7, category I is composed of variations of bands filled in by herringbone (I A), oblique incision (I B, I C) and crosshatching (I D). Category II depicts various incised lines, dots and oblique incised narrow bands, forming the well-known ‘stepladder’ design so characteristic of *Eiland*, and category III includes

arcades and triangular designs. Various applied enhancements to vessel surfaces are apparent in category IV.

The third dimension, the decoration layout on a vessel, depends on the profile as well as the decoration motif used. The ceramic types or classes derived from the different layouts for the *Eiland* facies are:

***Eiland* Classes**

1. A recurved jar decorated on the lip and on the rim (1ab)
2. A recurved jar decorated on the rim (1b)
3. A recurved jar decorated on the lip and in the neck (1a 2)
4. A recurved jar decorated on the rim and in the neck (1b 2)
5. A recurved jar decorated on the lip, in the neck and on the shoulder (1a 2 3)
6. A recurved jar decorated on the rim, in the neck and on the shoulder (1b 2 3)
7. A recurved jar decorated on the rim and on the shoulder (1b 3)
8. A recurved jar decorated in the neck (2)
9. A recurved jar decorated in the neck and on the shoulder (2 3)
10. A constricted jar decorated on the lip and on the rim (1ab)
11. A constricted jar decorated on the lip, on the shoulder and on the body (1a 3 4)
12. A constricted jar decorated on the shoulder and on the body (3 4)
13. An open bowl decorated on the rim (1b)
14. An open bowl decorated on the lip and on the body (1a 4)
15. An open bowl decorated on the lip, on the rim and on the body (1ab 4)
16. A deep bowl decorated on the rim and on the body (1b 4)
17. A deep bowl decorated on the body (4)

The above classes are illustrated in Figures 2.8 and 2.9, showing profiles and the key motifs. These interrelated classes form the design structure of the *Eiland* facies (Figure 2.10).

2.6 The *Moritsane* facies

Note that the following facies represents a new introduction in the Iron Age sequence. The *Moritsane* facies fills a gap between the *Eiland* and the *Broadhurst* facies that became apparent during my study of the ceramics from south-eastern Botswana.

Denbow (1981:66-73) recovered ceramics at Moritsane and Broadhurst in south-eastern Botswana, dating to the 13th and 14th centuries, that are similar to *Eiland*. He assigned these *Eiland*-alike ceramics to the final expression of the *Eiland* sequence. *Moritsane* ceramics are much finer and neater and have more herringbone motifs per centimetre than *Eiland* ceramics. In contrast, the *Broadhurst* ceramics identified at the Broadhurst, Fikeng and Phatana sites in south-eastern Botswana include mostly thickened rim vessels, and the decorations, mainly comb-stamped herringbone motifs, are much coarser. In my analysis and construction of the *Moritsane* facies design structure, I used material from the Moritsane site housed in the Botswana National Museum and ceramics from collections made by Denbow (1981:70) and Evers (1988:46-60).

Moritsane facies pottery is characterised by the prevalence of finer incised herringbone and crosshatched decorations with laddered borders and decoration-infilled arcades, often with the application of red ochre colouring. Well-made, finely decorated and burnished pottery characterises this facies with a refinement that is comparable to *Mapungubwe* ceramics. A discussion of the facies follows in Chapters 5 and 9.

The first dimension in the stylistic analysis of the *Moritsane* facies, namely shape, is defined as recurved jars with slightly carinated shoulders with or without thickened rims, constricted jars with or without thickened rims, open bowls with or without thickened rims and open bowls with flared rims decorated on top.

For the second dimension the decoration motifs used on the vessels are divided into categories of patterns, decoration techniques and direction as described in Figure 2.11. Category I is composed of variations of bands filled in by incised (I A) or comb-stamped (I B) herringbone motifs, oblique incised bands oriented to the right (I C) or to the left (I D), oblique comb-stamped bands oriented to the right (I E) or to the left (I F), a single row of crosshatching (I G) and multiple crosshatching (I H). Category II depicts various incised lines, dots and incised bands. In category III various spatial designs, including arcade and chevron motifs, are used, while various applied enhancements to the vessel surface are depicted in category IV.

Yet again the third dimension, the decoration layout on the vessel, depends on the profile as well as the decoration motif used. The ceramic types or classes derived from the different layout positions for the *Moritsane* facies are:

Moritsane Classes

1. A recurved jar decorated on the lip (1a)
2. A recurved jar decorated on the lip and on the rim (1ab)
3. A recurved jar decorated on the rim (1b)
4. A recurved jar decorated on the lip and in the neck (1a 2)
5. A recurved jar decorated on the lip, on the rim and in the neck (1ab 2)
6. A recurved jar decorated on the rim and in the neck (1b 2)
7. A recurved jar decorated on the rim, in the neck and on the shoulder (1b 2 3)
8. A recurved jar decorated on the rim and on the shoulder (1b 3)
9. A recurved jar decorated in the neck (2)
10. A recurved jar decorated in the neck and on the shoulder (2 3)
11. A constricted jar decorated on the lip (1a)
12. A constricted jar decorated on the rim (1b)
13. A constricted jar decorated on the lip and on the shoulder (1a 3)
14. A constricted jar decorated on the rim and on the shoulder (1b 3)
15. A constricted jar decorated on the shoulder (3)
16. An open bowl decorated on the lip (1a)
17. An open bowl decorated on the rim (1b)
18. An open bowl decorated on the lip and on the body (1a 4)
19. An open bowl decorated on a flattened lip, on the rim and on the body (1ab 4)
20. An open bowl decorated on the rim and on the body (1b 4)
21. An open bowl decorated on the body (4)

The various classes are illustrated in Figures 2.12 and 2.13, showing profiles and the key motifs. These interrelated classes form the design structure of the *Moritsane* facies (Figure 2.14).

2.7 The Early *Moloko* facies

Icon is currently considered to represent the earliest expression of Sotho-Tswana ceramics in South Africa. For reasons that are fully explained in Chapter 9, I have not used the ceramics from *Icon* as the basis for the development of a design structure for the Early *Moloko* facies. Instead I have used ceramics from contemporary sites located mainly in south-eastern Botswana and the North West Province of South Africa to develop a design structure for the Early *Moloko*. These Early *Moloko* ceramics display particular design elements that are clearly different from *Icon* ceramics. The pottery is characterised by a number of *Eiland* design elements that have been incorporated into the Early *Moloko* style, such as horizontal incised or punctated bands separated by colour (red ochre and graphite). Motifs common to *Eiland*, including herringbone, oblique incisions and crosshatched motifs, are sometimes used to fill in bands. As with the *Moritsane* facies, this unit has a distribution area that includes the North West Province and south-eastern Botswana but, importantly, with dates from ± AD 1300 to AD 1500.

Sites with such ceramics are Revil Mason's (1986:275-291) Roberts Farm phase sites in western Gauteng and also the Rietfontein and Bokkop sites in the Marico district investigated by Boeyens (1998:72, 106-109). Denbow (1981:71) recovered Sotho-Tswana ceramics with distinctive *Moritsane/Broadhurst* motifs from Baratani (Site 55-B1-8) in south-eastern Botswana. About a third or more of the ceramics from early 15th-century *Broadhurst* sites, such as Broadhurst, Fikeng and Phatana, can be attributed to Early *Moloko* ceramics (personal observation of collections from these sites held at the National Museum in Gaborone).

In the stylistic analysis of the above-mentioned Early *Moloko* facies the first dimension of shape, the profiles of the various vessels, is defined as recurved jars with or without thickened rims, constricted jars, deep bowls and open bowls. The second dimension, the decoration motifs applied to vessels, is illustrated in Figure 2.15. Category I contains variations of decorative motifs that have been utilised in bands: incised herringbone (I A) or comb-stamped herringbone (I B) bands, oblique incised bands (I C) and (I D), oblique comb-stamped bands (I E) and (I F), crosshatched bands (I G) and (I H) and bangle-impression bands (I I). Category II depicts various incised and comb-stamped lines, narrow oblique incised and punctate bands and lines together with a rim-notching motif. Category III illustrates spatial designs such as arcades and lozenges (III A) together with triangular (III B) and chevron designs (III C), which are filled in with colour (red ochre or graphite) or with motifs from the above-mentioned categories. The third dimension, the decoration layout on the vessel, depends on the profile as well as the decoration motif utilised. The basic ceramic types or classes derived from the layouts for the Early *Moloko* facies are:

Early *Moloko* Classes

1. A recurved jar decorated on the lip (1a)
2. A recurved jar decorated on the rim (1b)
3. A recurved jar decorated on the rim and in the neck (1b 2)
4. A recurved jar decorated on the rim, in the neck and on the shoulder (1b 2 3)
5. A recurved jar decorated on the lip, on the rim, in the neck, on the shoulder and with a repeat of the shoulder motif on the body (1ab 2 3 4)
6. A recurved jar decorated in the neck (2)
7. A recurved jar decorated in the neck and on the shoulder (2 3)
8. A recurved jar decorated in the neck, on the shoulder and with a repeat of the shoulder motif on the body (2 3 4)
9. A constricted jar decorated on the lip (1a)
10. A constricted jar decorated on the lip and on the rim (1ab)
11. A constricted jar decorated on the rim (1b)
12. A constricted jar decorated on the rim and on the shoulder (1b 3)
13. A constricted jar decorated on the shoulder (3)
14. An open bowl decorated on the lip (1a)
15. An open bowl decorated on the lip and on the rim (1ab)
16. An open bowl decorated on the rim (1b)
17. An open bowl decorated on the lip and on the body (1a 4)
18. An open bowl decorated on the rim and on the body (1b 4)
19. An open bowl decorated on the body (4)

The above classes with their characteristic profiles and the key motifs are illustrated in Figures 2.16 and 2.17. These interrelated classes form the design structure of the Early *Moloko* facies (Figure 2.18).

2.8 The *Letsibogo* facies

During the 16th century the *Letsibogo* facies developed as one of three Middle *Moloko* sub-branches, the other being *Madikwe* and *Olifantspoort* (Huffman 2002:12). *Letsibogo* facies ceramics are characterised by arcades, horizontal bands and lozenges bordered by dragged punctate lines or short grooves, and filled in with red ochre and graphite colouring. Highly decorated bowls are also characteristic of this facies. The *Madikwe* facies differs from the *Letsibogo* only insofar as that the horizontal lines and arcades are incised and infilled with oblique impressions.

About two decades ago the distinctive *Letsibogo* ceramic unit was recognised as a sub-branch of *Moloko* in south-eastern, central and eastern Botswana. The *Letsibogo* ceramic unit was named after the eponymous site during an archaeological survey prior to the building of the Letsibogo Dam near Selibe-Pikwe in eastern Botswana (Campbell et al. 1996; Huffman & Kinahan 2002/2003). My research on the ceramic collections in the National Museum in Gaborone confirmed that many more sites in central and eastern Botswana contain *Letsibogo* pottery. Material from the Letsibogo Dam housed in the National Museum in Gaborone has been studied for my analysis of the *Letsibogo* facies. Only a few reconstructable vessels could be identified in these collections necessitating the incorporation of additional ceramic types from the Basinghall Farm assemblages to

reconstruct the *Letsibogo* facies design structure. In addition, *Letsibogo* ceramics recovered in the immediate region of Basinghall during Phase 2 mitigations for the Mmamabula Energy Project have also been incorporated in the analysis (Biemond 2011).

The first dimension, the profiles of the various vessels associated with the *Letsibogo* facies, can be defined as recurved jars, constricted jars, deep bowls and open bowls. The second dimension, the decoration motifs placed on vessels, is illustrated and described in Figure 2.19. In category I, variations in the distinctive punctate bands and borders for the spatial designs are shown as horizontal punctate lines and bands (I A), horizontal dragged punctate lines and bands (I B), oblique punctate lines and bands (I C) and (I D), wedge-shape punctate lines and bands (I E), incised lines and bands (I F), chain-linked punctate lines and bands (I G), and rim notching (I H). Category II illustrates spatial designs that are repeated horizontally and vertically. They consist of incised arcades (II A) or punctate arcades (II B), incised lozenges and triangular designs (II C) or punctate lozenges and triangular designs (II D) and punctate triangular and chevron motifs (II E).

The third dimension, the decoration layout on the vessel, depends on the profile as well as decoration motifs that have been utilised. The basic ceramic types or classes derived from layout positions for the *Letsibogo* facies are:

Letsibogo Classes

1. A recurved jar decorated on the lip (1a)
2. A recurved jar decorated on the lip and on the rim (1ab)
3. A recurved jar decorated on the rim (1b)
4. A recurved jar decorated on the rim and in the neck (1b 2)
5. A recurved jar decorated on the lip, on the rim, in the neck and on the shoulder (1ab 2 3)
6. A recurved jar decorated on the rim, in the neck and on the shoulder (1b 2 3)
7. A recurved jar decorated on the rim, in the neck, on the shoulder and with a repeat of the shoulder motif on the body (1b 2 3 4)
8. A recurved jar decorated in the neck (2)
9. A recurved jar decorated in the neck and on the shoulder (2 3)
10. A recurved jar decorated in the neck, on the shoulder and with a repeat of the shoulder motif on the body (2 3 4)
11. A recurved jar decorated on the shoulder (3)
12. A recurved jar decorated on the shoulder and with a repeat of the shoulder motif on the body (3 4)
13. A constricted jar decorated on the lip (1a)
14. A constricted jar decorated on the lip and on the rim (1ab)
15. A constricted jar decorated on the rim (1b)
16. A constricted jar decorated on the lip and on the shoulder (1a 3)
17. A constricted jar decorated on the lip, on the rim and on the shoulder (1ab 3)
18. A constricted jar decorated on the rim and on the shoulder (1b 3)
19. A constricted jar decorated on the shoulder (3)
20. An open/deep bowl decorated on the lip (1a)
21. An open/deep bowl decorated on the lip and on the rim (1ab)
22. An open/deep bowl decorated on the rim (1b)

23. An open/deep bowl decorated on the lip and on the body (1a 4)
24. An open/deep bowl decorated on the lip or on the rim and on the body (1ab 4)
25. An open/deep bowl decorated on the rim and on the body (1b 4)
26. An open/deep bowl decorated on the body (4)

The above classes with their characteristic profiles and the most common motifs that have been utilised are illustrated in Figures 2.20 and 2.21. These interrelated classes form the design structure of the *Letsibogo* facies (Figure 2.22).

2.9 Conclusion

To be able to recognise a group of people through a ceramic style we have to select representative and valid variables that can be used to assign an archaeological assemblage to a specific cultural group. In an experiment, Huffman (2007:111) applied combinations of three pottery dimensions, namely profile, decoration motif and decoration layout, to several ceramic collections from villages of known groups. He convincingly demonstrated that ceramic style could be consistently defined and the ceramics assigned to the correct group. The ceramics appropriate to this synthesis were analysed by applying the method of three-dimensional stylistic ceramic analysis as developed by Huffman (2007:111-115). For the analyses I consulted earlier studies by other archaeologists in this field of research. I also explained the terminology and concepts used in this stylistic ceramic analysis. The ceramic types or classes that were constructed were applied in creating a design structure for each unit identified at Basinghall, namely the *Toutswe*, *Eiland*, *Moritsane*, Early *Moloko* and *Letsibogo* facies (Figures 2.5-2.22). In the following chapters the data will be applied to identify and compare the ceramic samples from Basinghall Farm.

In the next chapter I briefly discuss the dynamics of the Limpopo River floodplain, explaining why it constituted a favourable environment for the people of the above-mentioned facies to settle in.

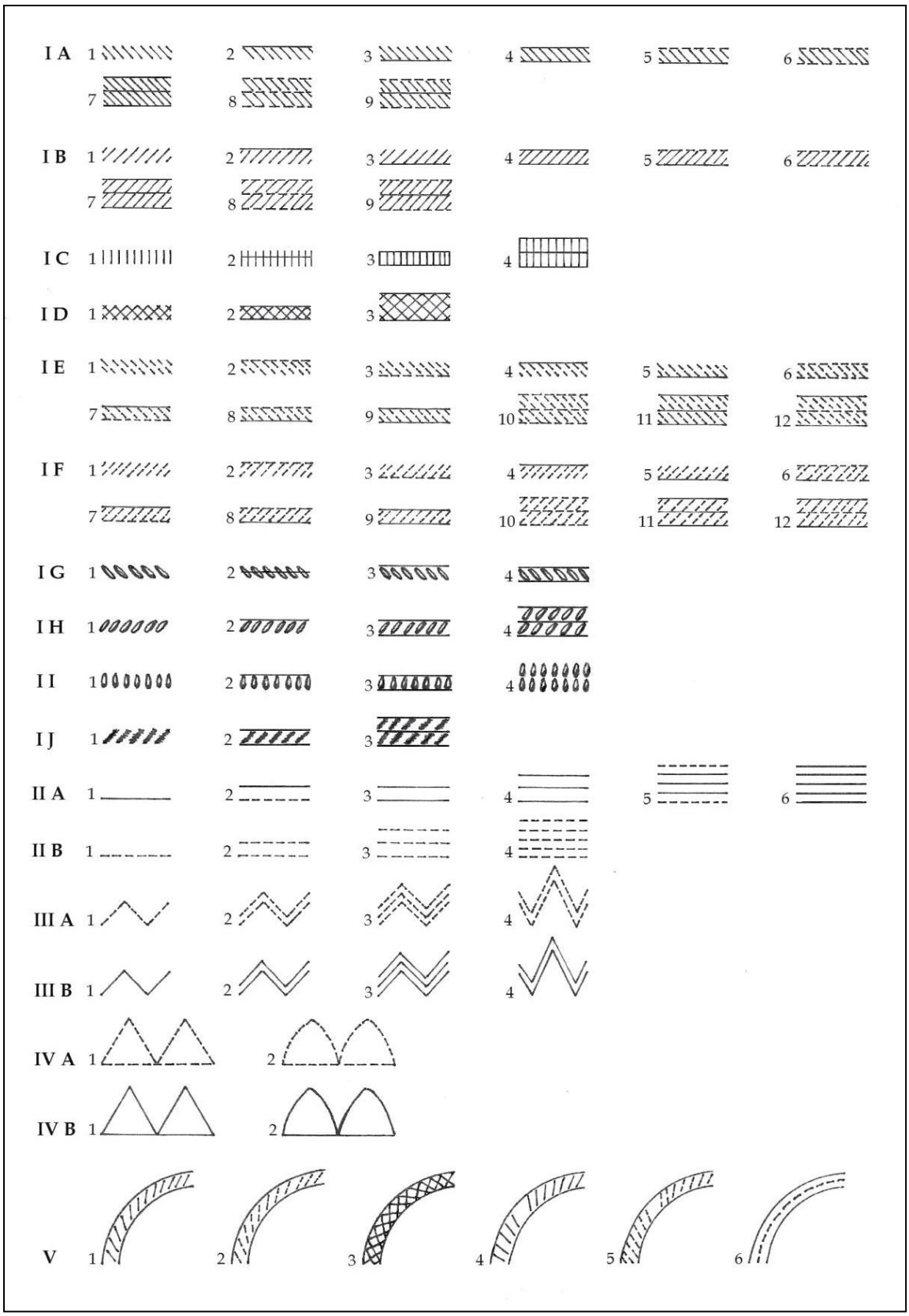

Figure 2.4: Key to the *Toutswe* motifs.

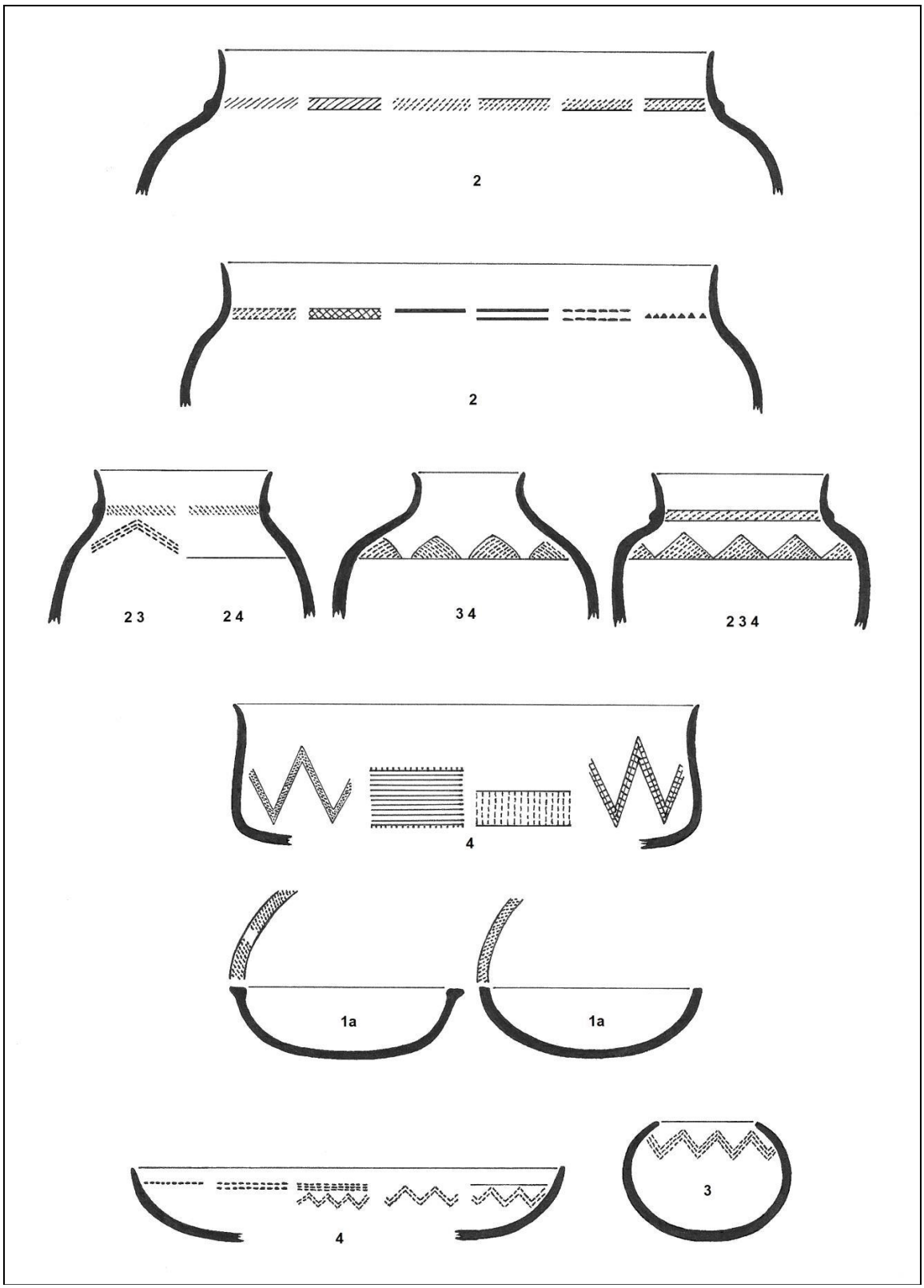

Figure 2.5: *Toutswe* ceramic types.

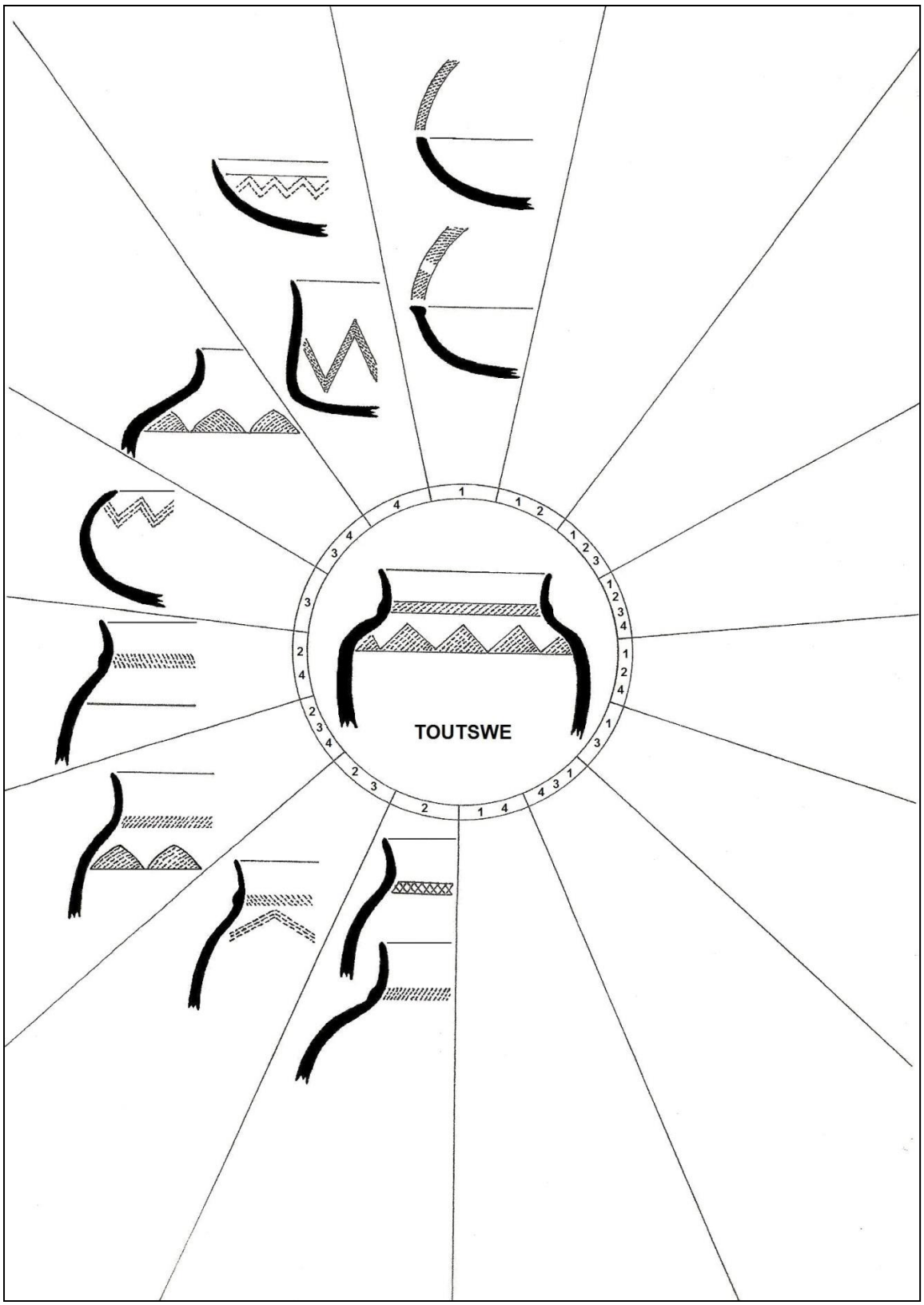

Figure 2.6: The *Toutswe* design structure.

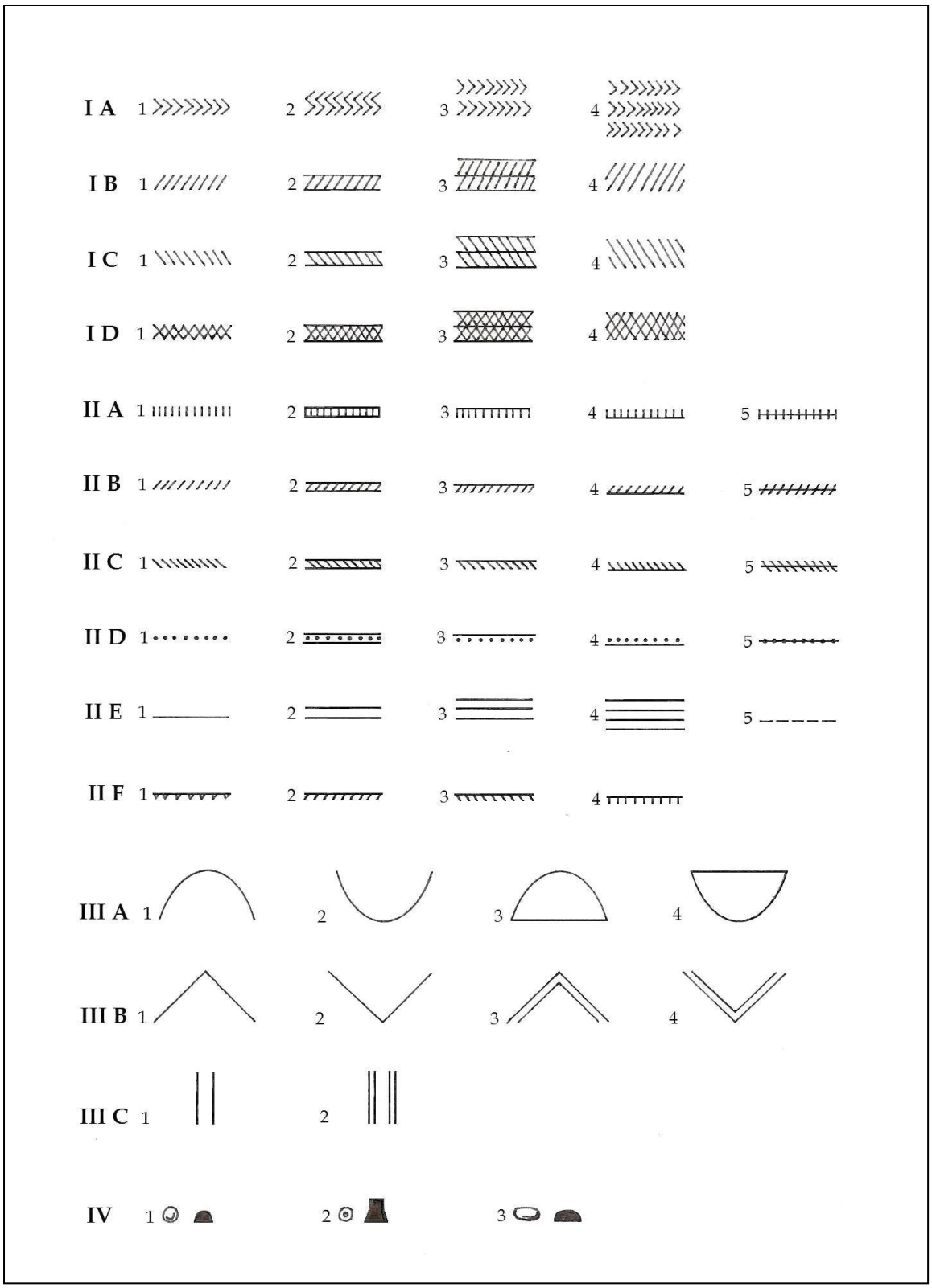

Figure 2.7: Key to the *Eiland* motifs.

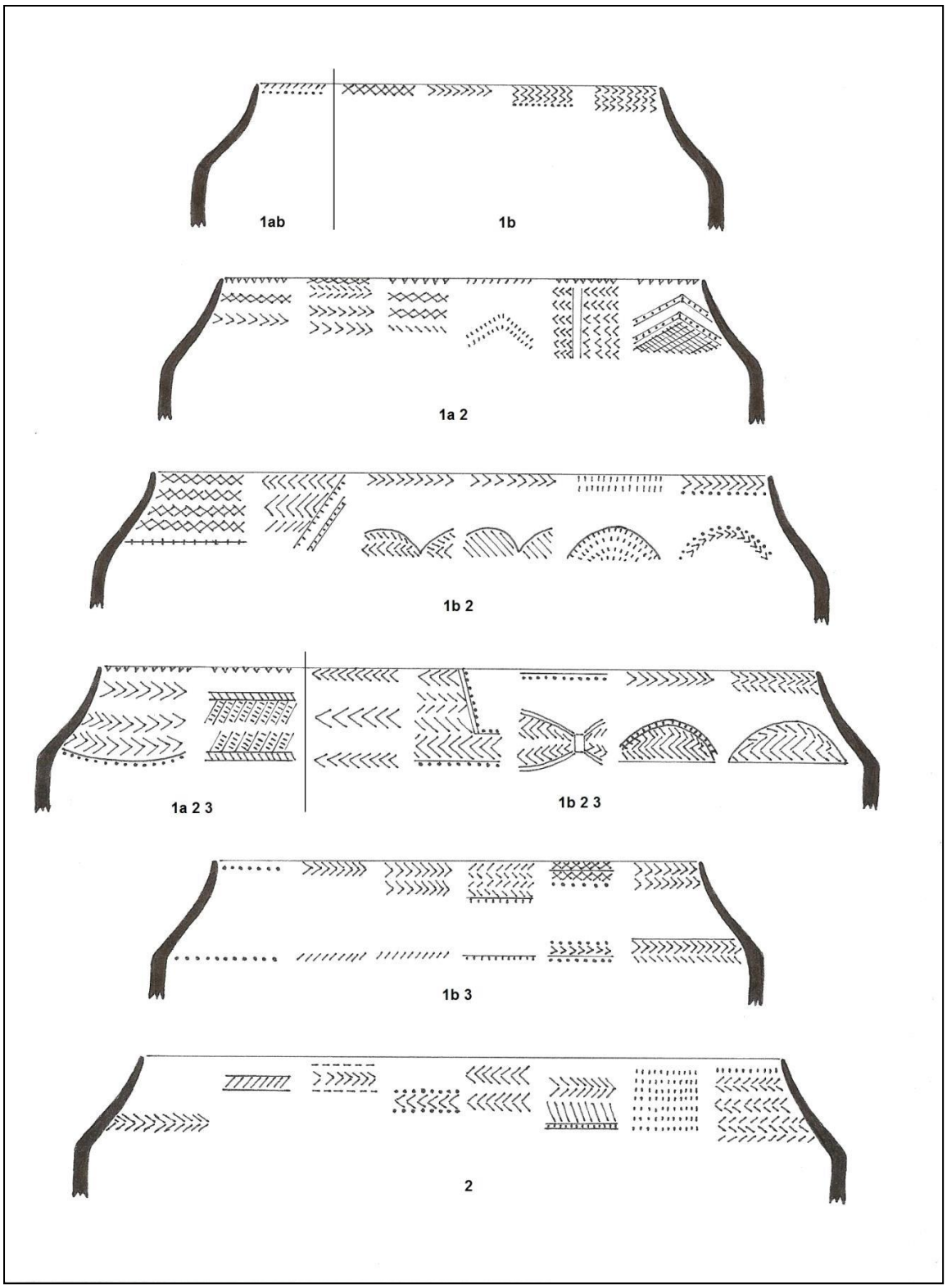

Figure 2.8: *Eiland* ceramic types.

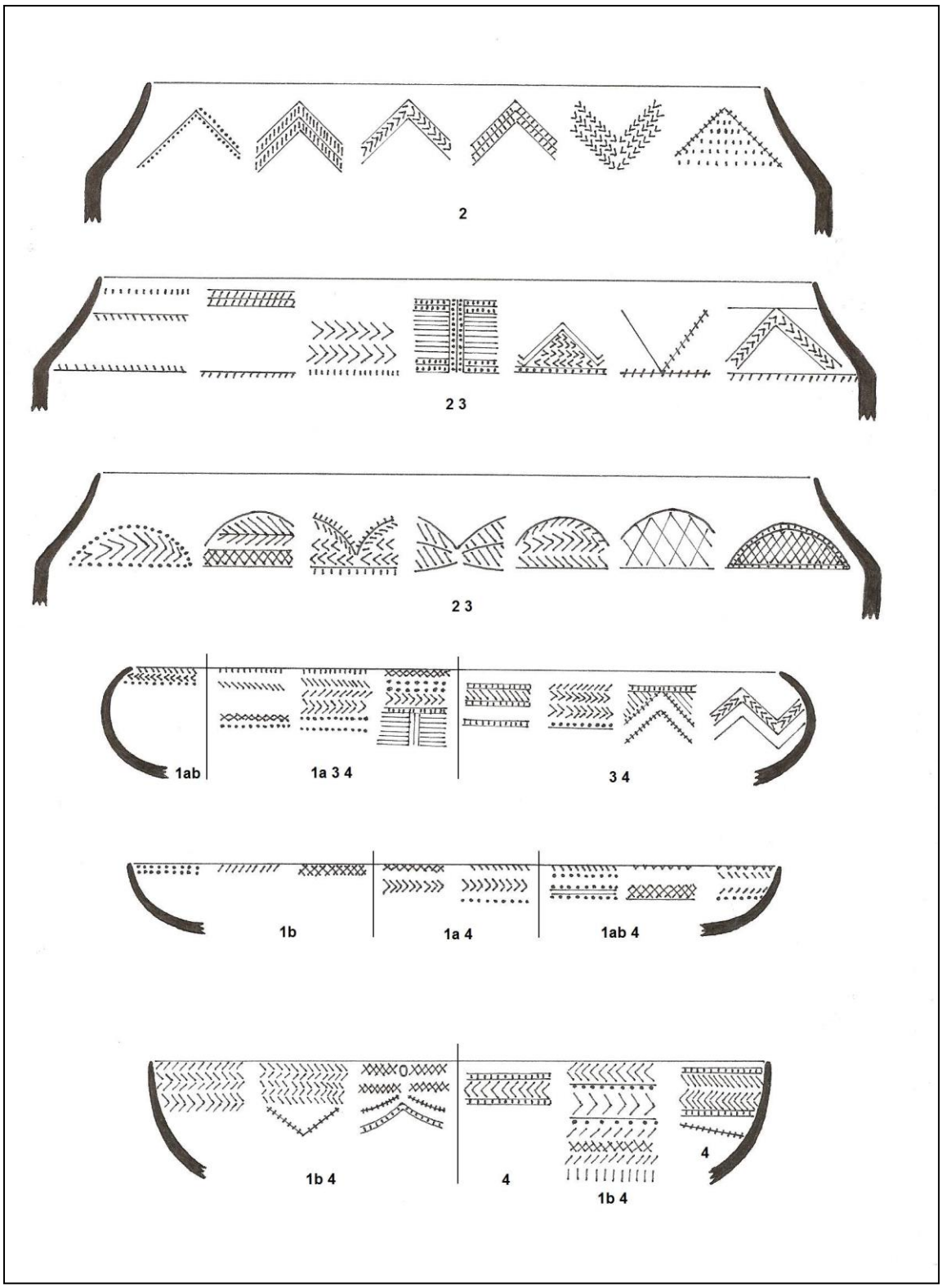

Figure 2.9: *Eiland* ceramic types.

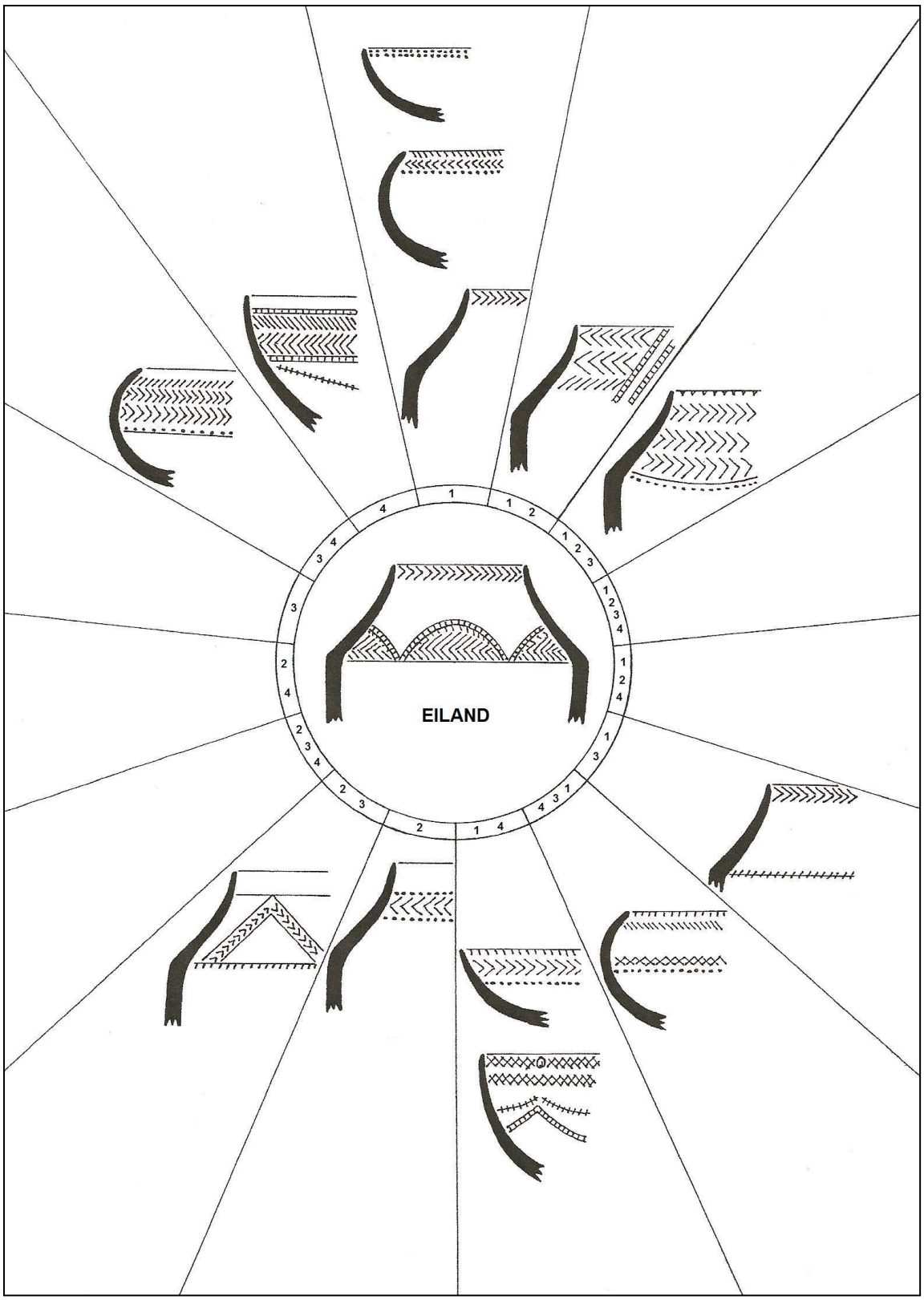

Figure 2.10: The *Eiland* design structure.

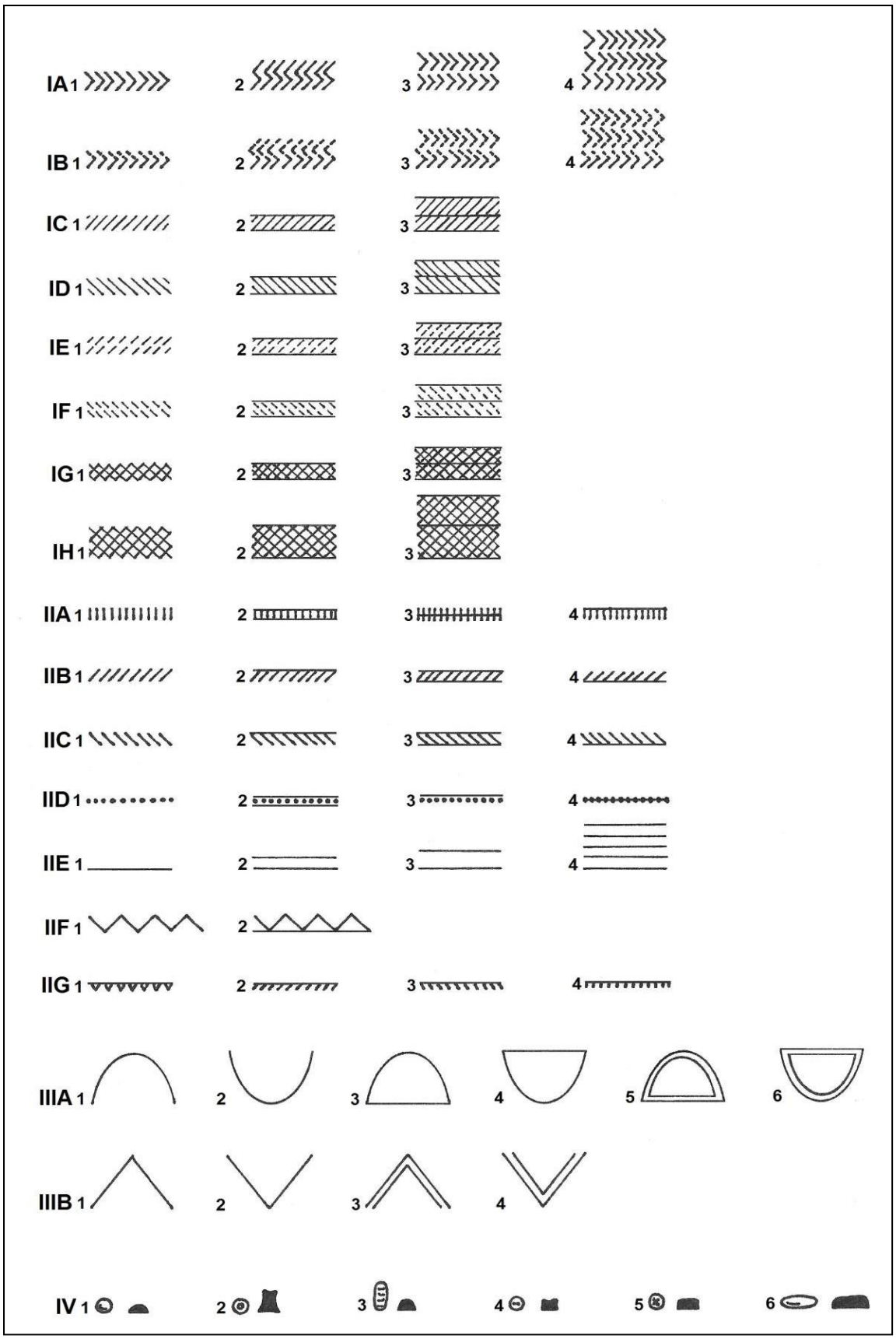

Figure 2.11: Key to the *Moritsane* motifs.

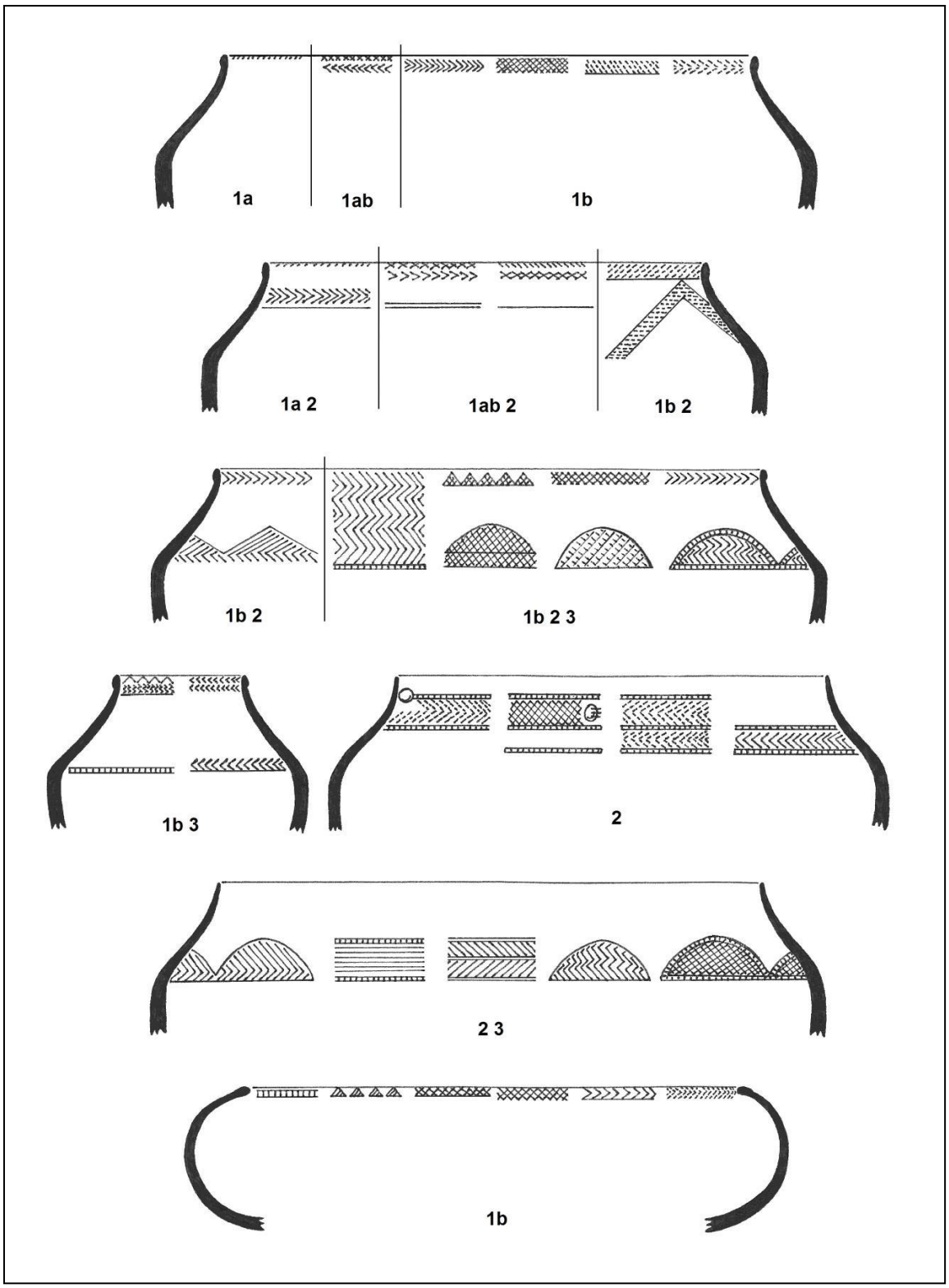

Figure 2.12: *Moritsane* ceramic types.

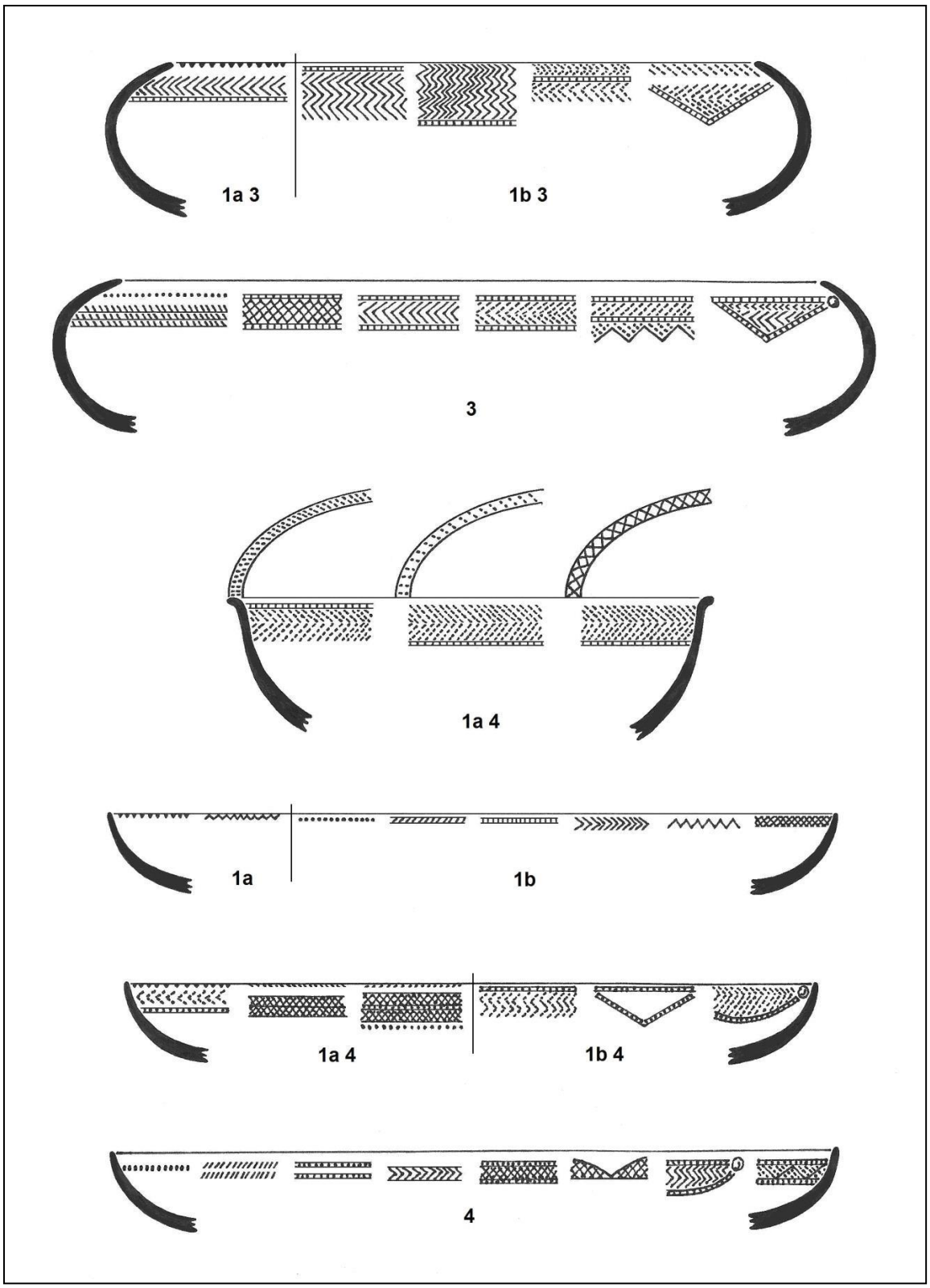

Figure 2.13: *Moritsane* ceramic types.

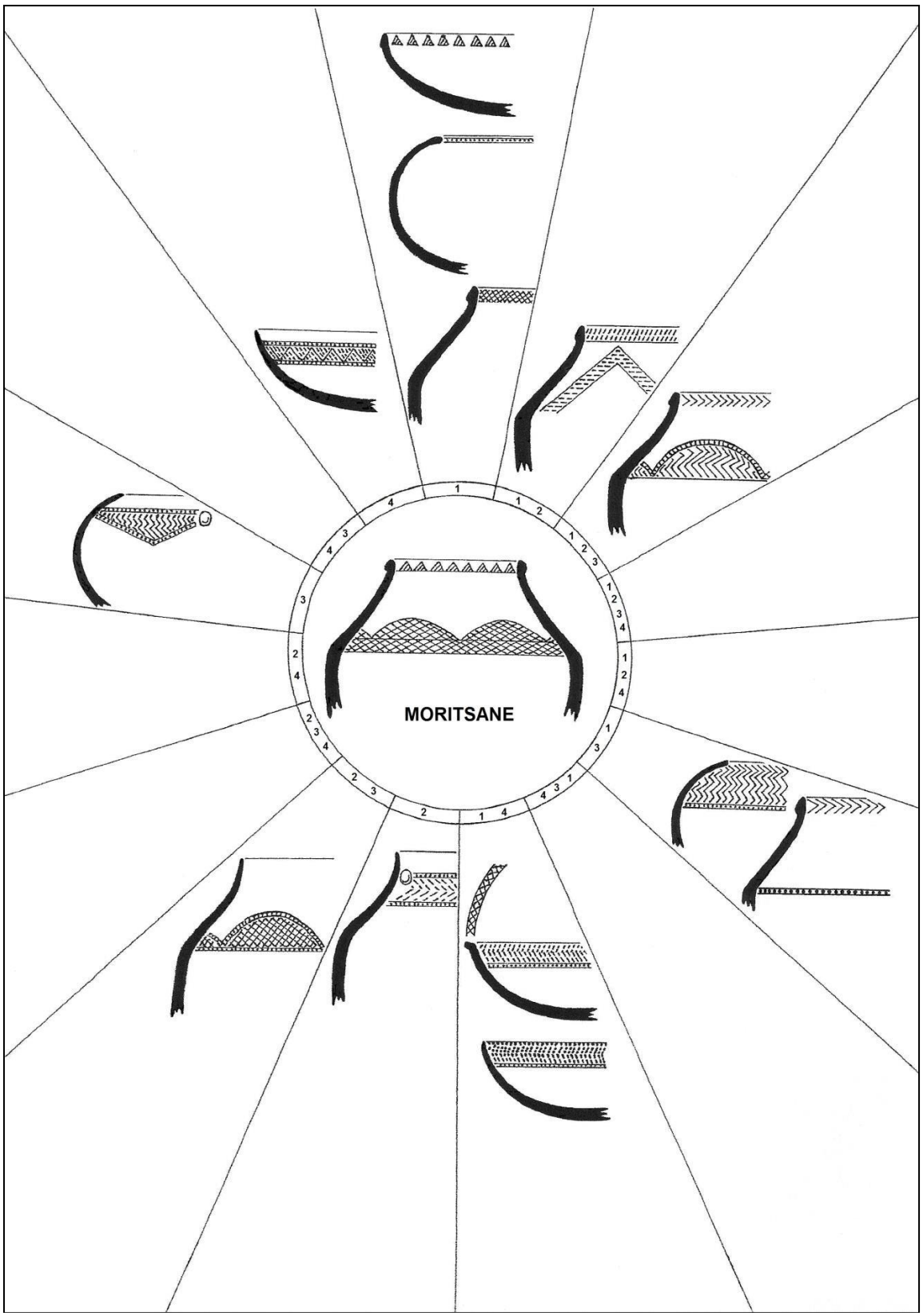

Figure 2.14: The *Moritsane* design structure.

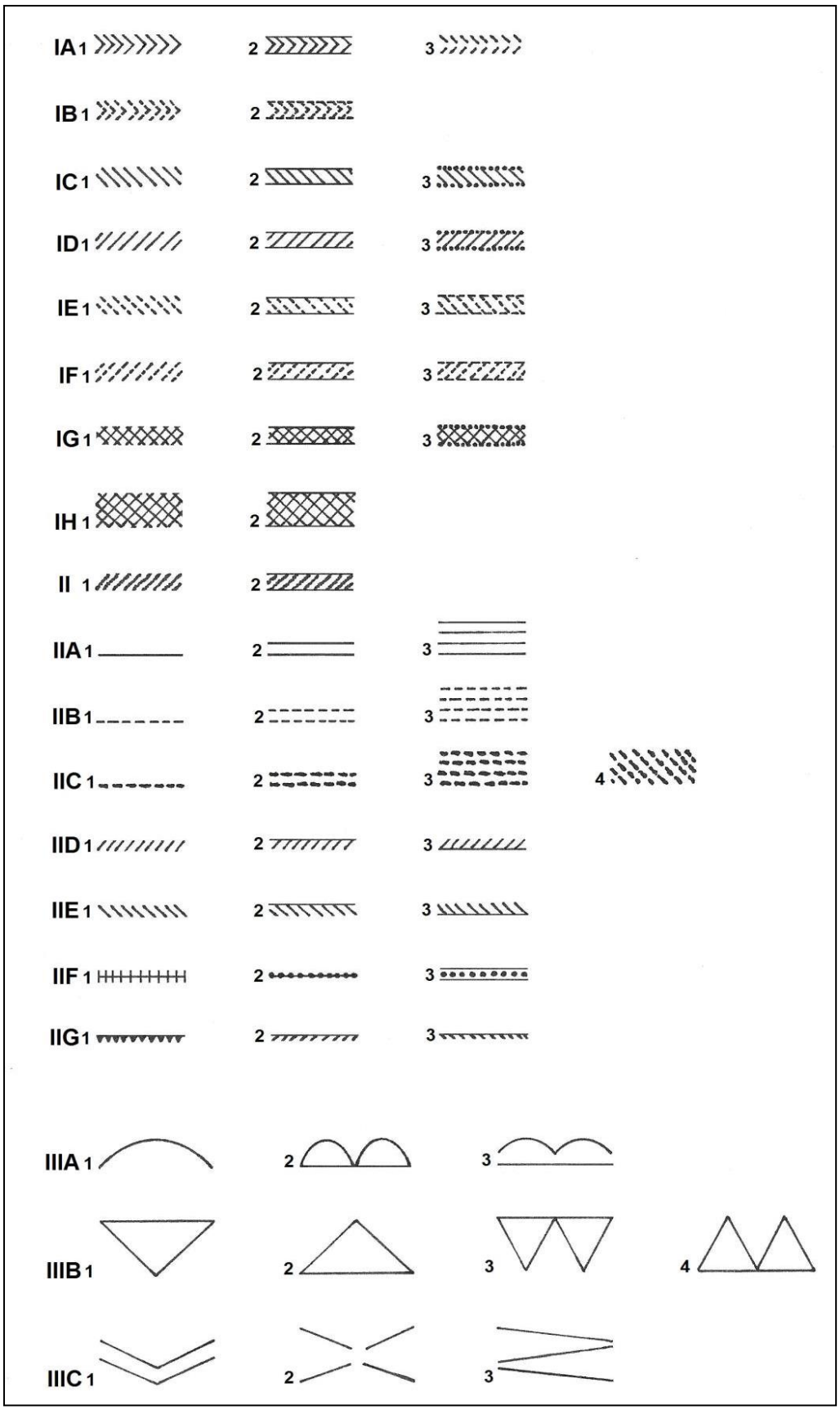

Figure 2.15: Key to the Early *Moloko* motifs.

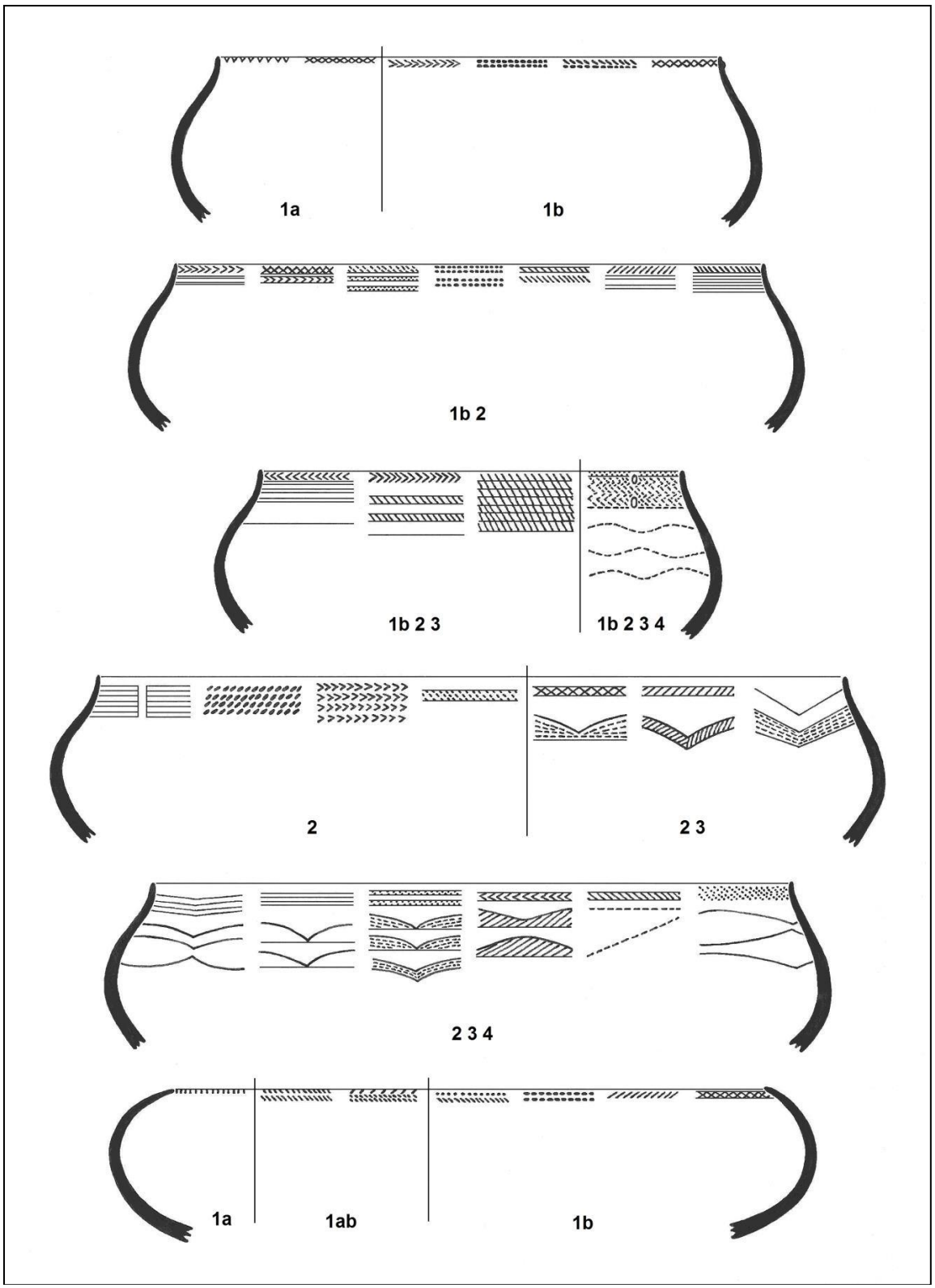

Figure 2.16: Early *Moloko* ceramic types.

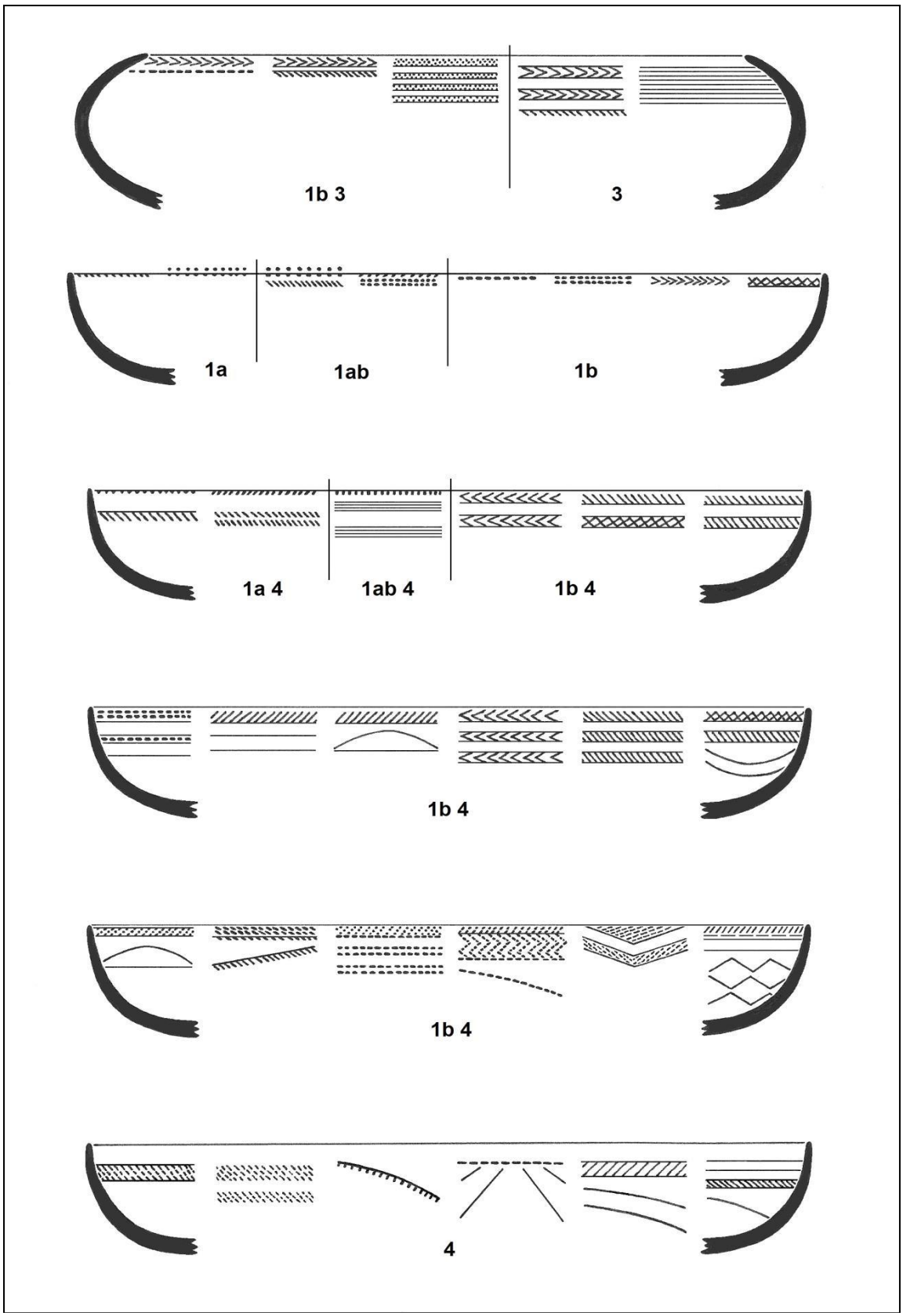

Figure 2.17: Early *Moloko* ceramic types.

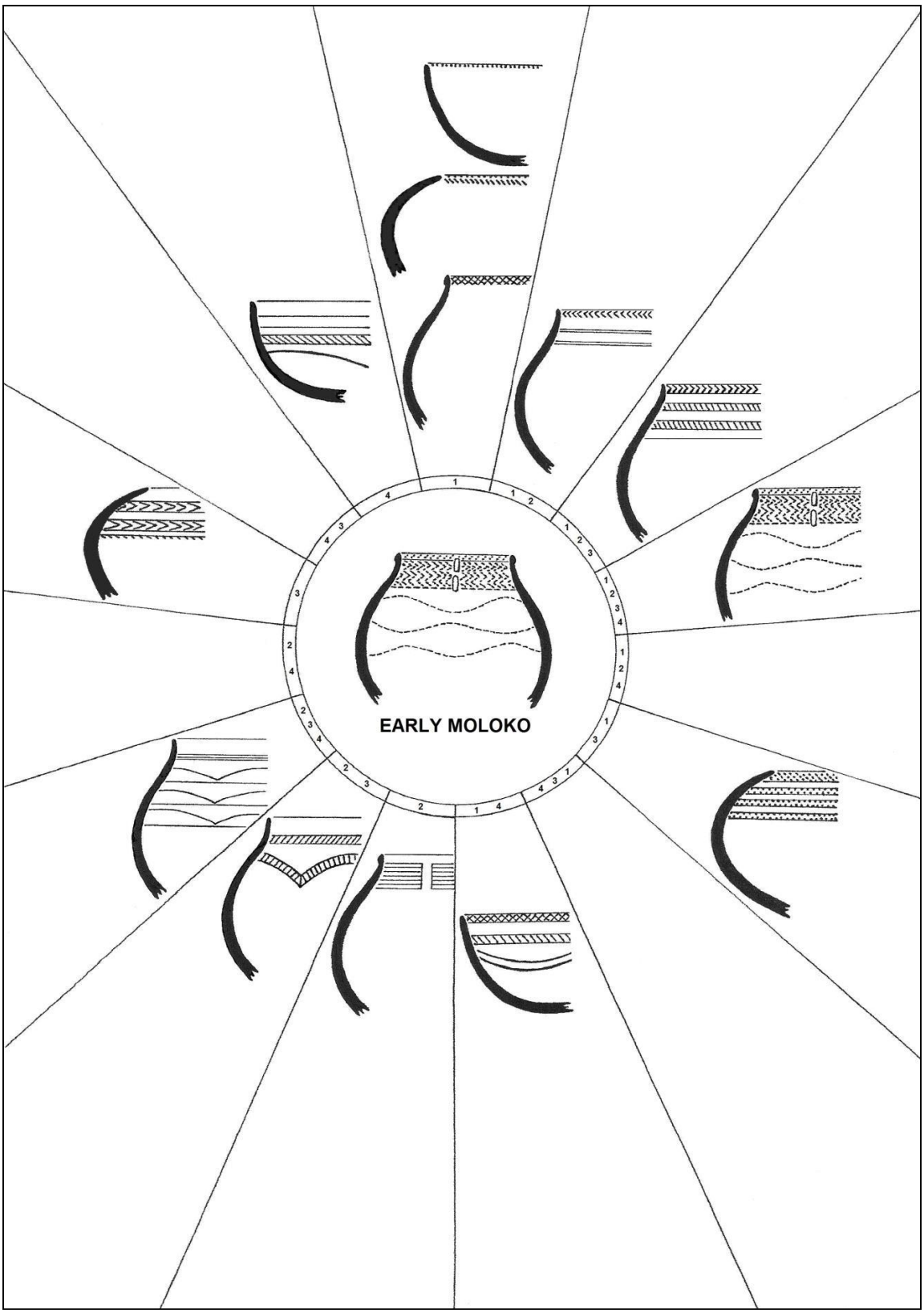

Figure 2.18: The Early *Moloko* design structure.

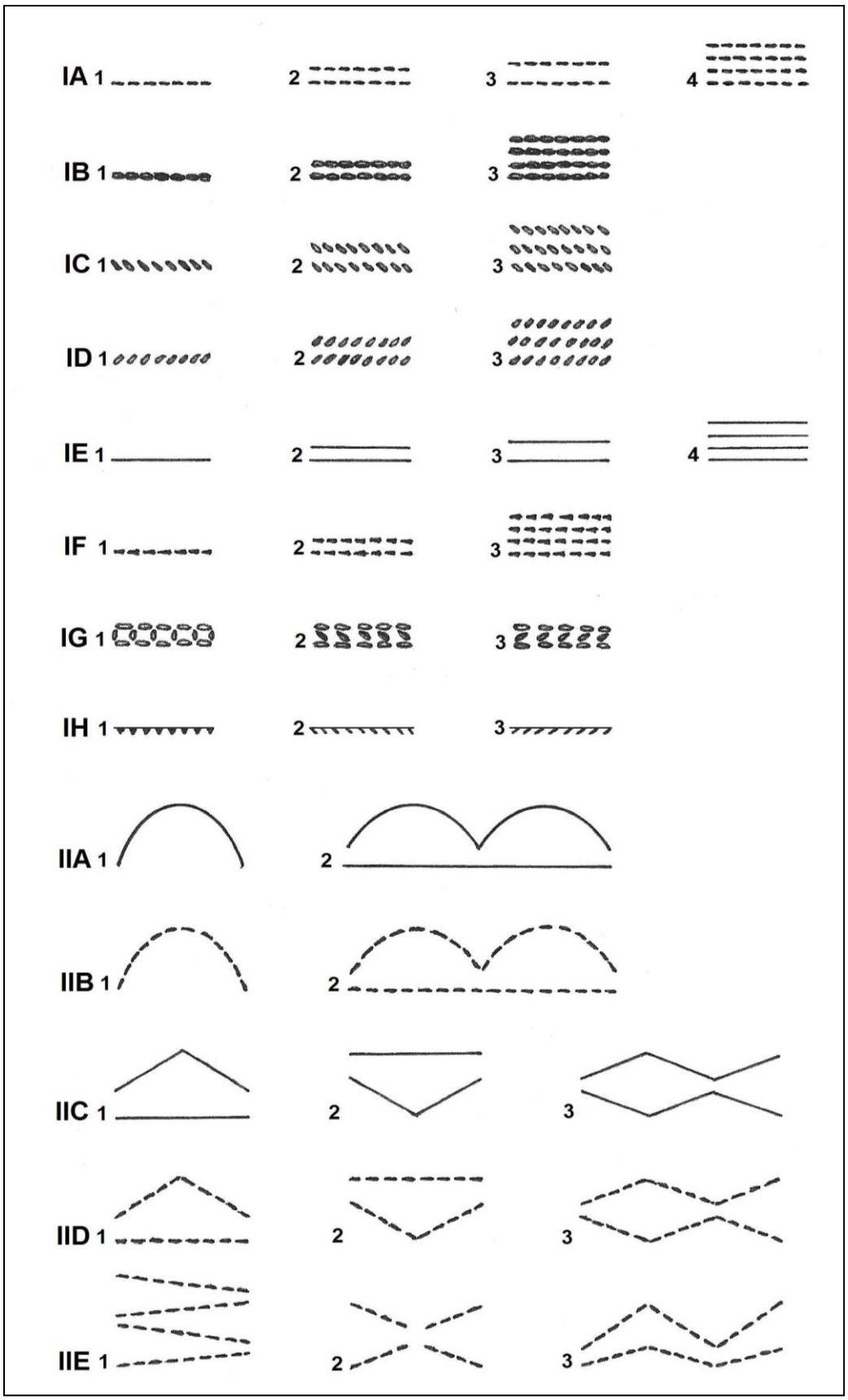

Figure 2.19: Key to the *Letsibogo* motifs.

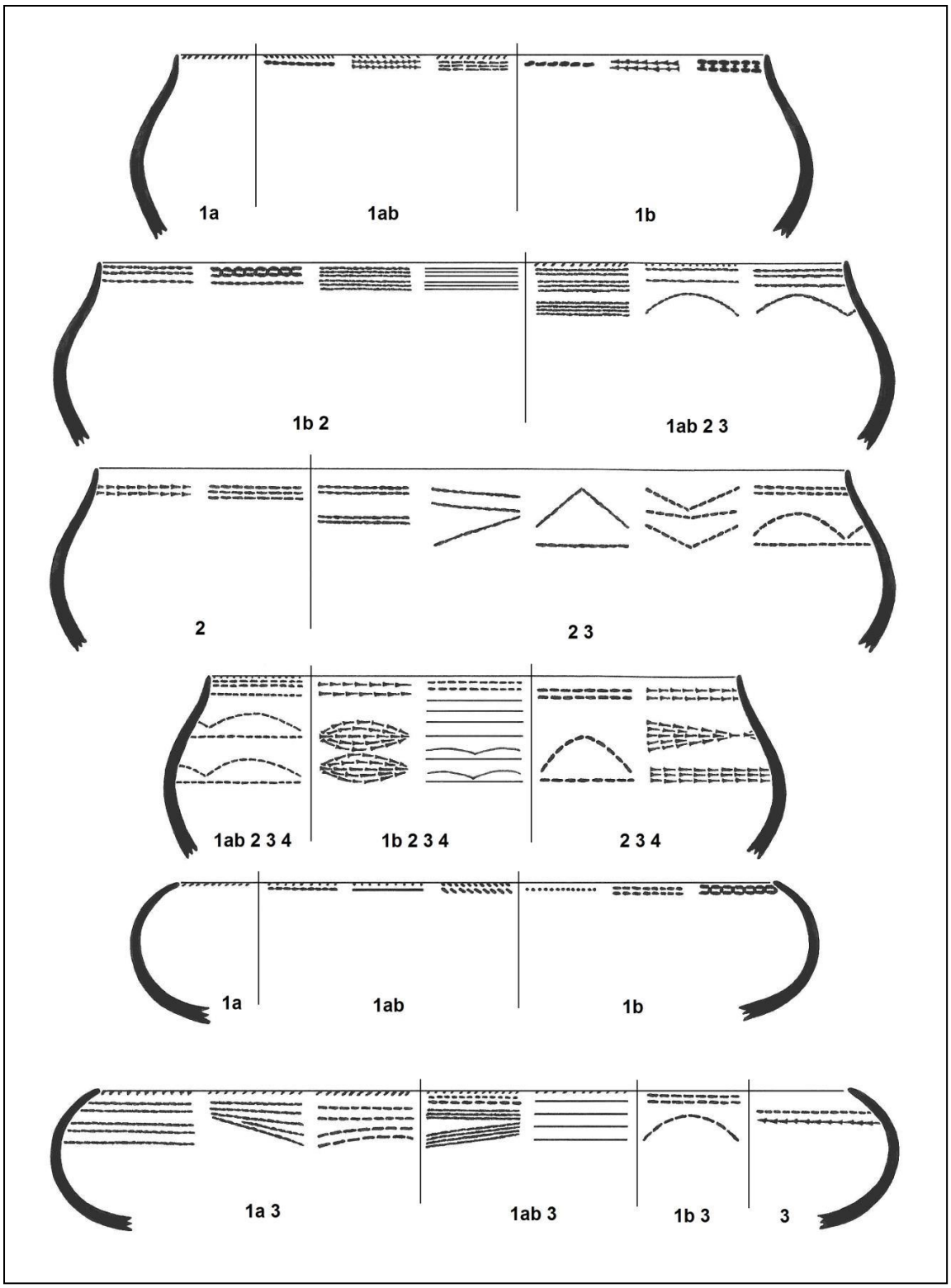

Figure 2.20: *Letsibogo* ceramic types.

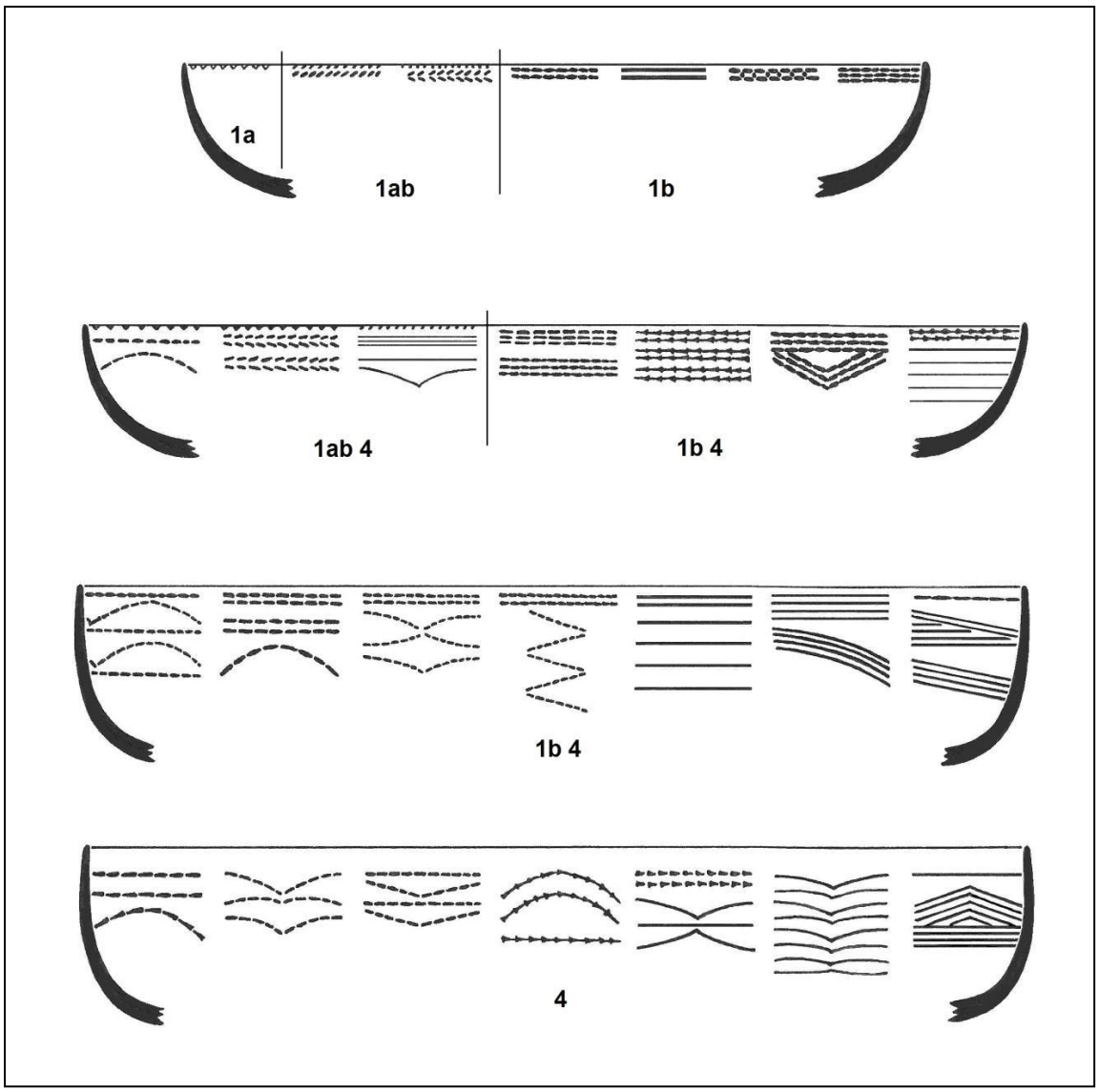

Figure 2.21: *Letsibogo* ceramic types.

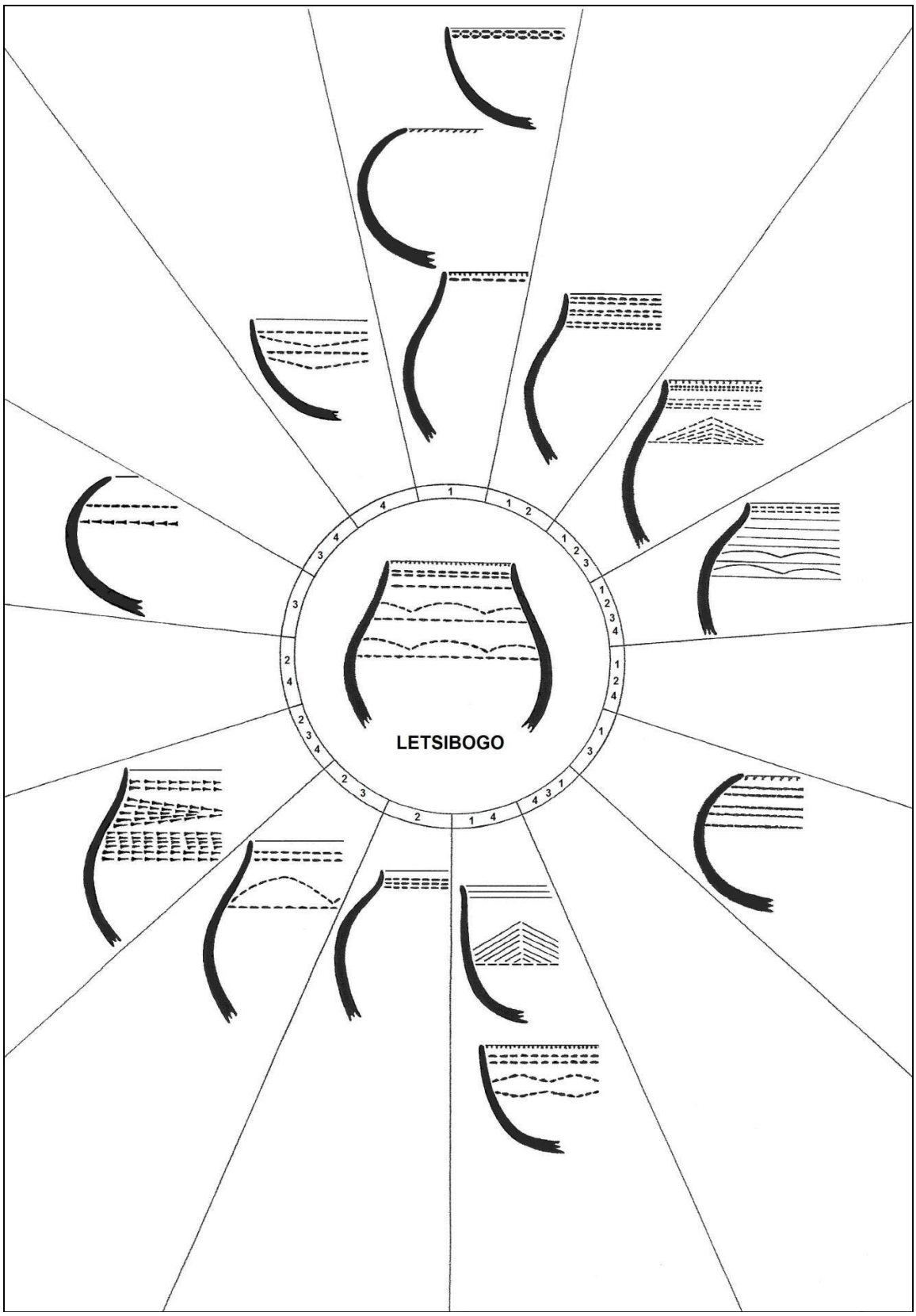

Figure 2.22: The *Letsibogo* design structure.

CHAPTER 3

RESEARCH ENVIRONMENT AND SITE SURVEY

3.1 Introduction

In this chapter I introduce the research area, historically and geographically, describing its geology and soils, its climate, flora and fauna and how these could have impacted on Iron Age settlements. The results of a comprehensive site survey of the research area are also presented in this chapter.

The research area, comprising the farm Basinghall, is situated in the southern Tuli Block, which forms part of the Central District of Botswana. The Tuli Block is a relatively thin strip of land, about 10-20 km wide and 350 km long, extending from the Shashe-Limpopo River confluence in the north-east down to the Notwane-Limpopo River confluence at Buffelsdrift in the south-west.

The name of the region derives from the Tuli Circle on the northern border of the Tuli Block. In 1891 a severe epidemic of lung disease was prevalent among Ngwato cattle in central Botswana. The British South African Company (BSAC) was apprehensive that their cattle herds at Fort Tuli on the Rhodesian (now Zimbabwe) side of the Shashe River would become infected. Khama III consequently assigned some Ngwato tribal land, encompassing a semi-circle with a radius of 16 km on the Botswana side, to serve as a buffer zone to prevent the disease from spreading (Roodt 1998a:31-32). The narrow strip of land bordering the Limpopo River and the Tuli Circle, which was subsequently granted to the BSAC in 1895 for the purpose of constructing a railway line, was named the Tuli Block.

Basinghall Farm was proclaimed by the High Commissioner in 1905 as farm No. 13 as a portion of the Tuli Block and purchased by a company called the Bechuanaland Trading Association. The first homestead at Basinghall was built near the Zoetfontein geological fault by the then farm manager E. Flattery. As the water table is only 10-20 m deep, several wells were dug and equipped with rotary pumps. Cattle, sheep, goats and donkeys were traded from the locals. Flattery had a trading store, creamery and a limestone-slaking furnace for producing slaked lime. In the 1910s part of the floodplain was cleared and crops were irrigated by flood irrigation. My family obtained the farm in 1947. My late father, Wilhelm Biemond, who had arrived from Holland in 1948 as manager on the farm, bought it in 1965 from his uncle Dim Kieviet. He cleared the entire floodplain and cultivated crops such as cotton and onions and also planted flower bulbs under flood irrigation. Today Basinghall is used as a cattle and game ranch.

Two tribal villages, Dovedale and Kudumatse, are situated along the main road to the west and to the north respectively of Basinghall Farm. Basinghall falls under the tribal jurisdiction of the Dovedale tribal village. Kgosi Ditodi Namane is the tribal chief and rules from the *Kgotla* (court), which is located in the centre of the village. The Dovedale residents are mostly Ngwato while others belong to the Kwena, Tswapong and other minor ethnic groups.

3.2 The Limpopo River

The Limpopo River originates at the junction of the Crocodile River (Odi) and the Marico River (Madikwe) at a place called Olifantsdrift. The Limpopo forms the south-eastern border between South Africa. At the Shashe confluence the Limpopo continues in an eastern direction through Mozambique and enters the Indian Ocean at Xai-Xai. Where the Shashe, as one of the major tributary rivers, enters the Limpopo, it is about 100 m wide, broadening to 150 m at Xai-Xai with a floodplain of around 20 km wide. At Basinghall the Limpopo is about 30 m wide and the associated floodplain is less than one kilometre in extent.

The Crocodile River, which has its headwaters in Gauteng, flows into the Hartbeespoort Dam. Water from the Magaliesberg up to Rustenburg in the North West Province flows into the Vaalkop Dam, and after joining the Crocodile, continues past Thabazimbi into the Limpopo. The Marico River has its catchment area in the western Bankenveld up to the Botswana border and meets the Crocodile River at Olifantsdrift (Figure 3.1).

The Notwane-Limpopo River confluence at Buffelsdrift, which is 50 km downstream from Olifantsdrift, has its catchment area around Gaborone in Botswana. The Motlhabatsi River, with a catchment area in the Kransberge near Thabazimbi, joins the Limpopo River on the South African side at Buffelsdrift. At a distance of 30 km from Buffelsdrift the Bonwapitsi River, with its headwaters in the Shoshong area, joins the Limpopo River on Riversley Farm, which is adjacent to Basinghall. A tributary to the Bonwapitsi River, the Serorome, joins the Bonwapitsi 30 km inland. The Mahalatswe River, originating

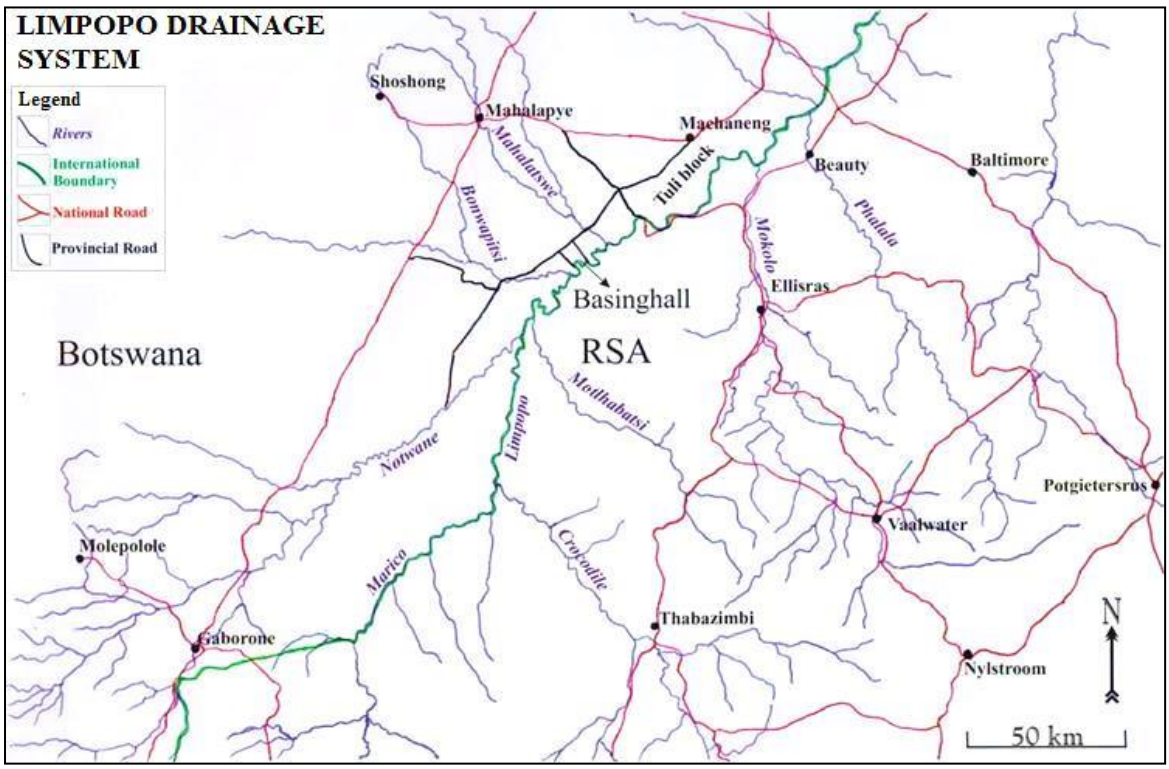

Figure 3.1: The Limpopo River drainage system.

around the Mahalapye area and in the Mogware Hills, joins the Limpopo River 10 km downstream from Basinghall.

After heavy rains (more than 200 mm over a few days), as for example during February 2000, a large volume of water is produced in the region around Basinghall by the convergence of the above river systems. Aided by the meandering of the Limpopo in this region, large floodplains form with fertile alluvium soils. The meandering course also produces inland pans that fill during floods. The extent of such a cycle of run-off and river discharge could be observed in 2000 when the floodwaters covered all the black cotton soils (Figure 3.3.F), adding a layer of 2-3 mm of silt-load onto the floodplain. The rich soils deposited by the meandering of the Limpopo (Figure 3.1) offer prime land for cultivation, accounting for the high concentration of sites around the floodplains. Rathateng, the origin site of the Kwena according to oral traditions, is also situated close to the confluence of the Marico and Crocodile Rivers (Pistorius 1995:49-64).

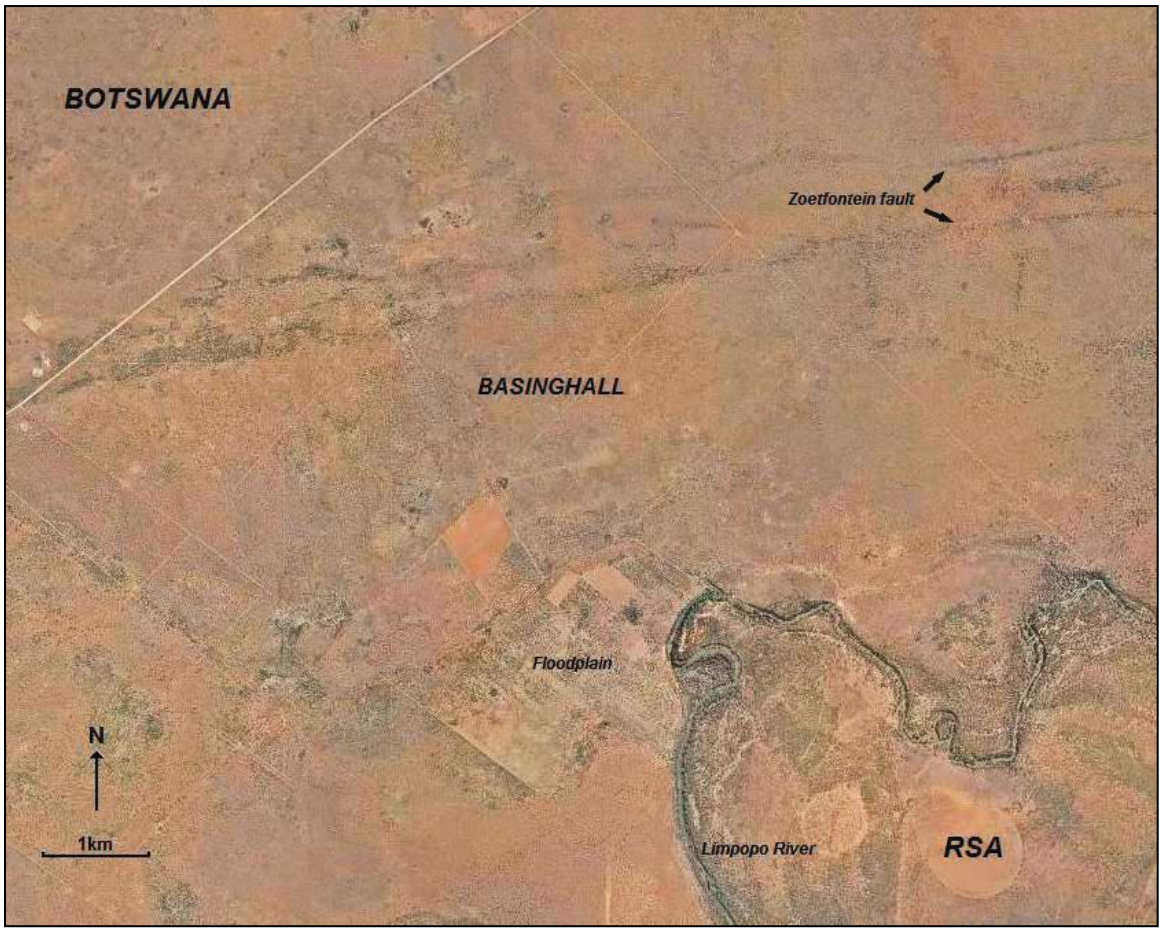

Figure 3.2: Aerial photograph of Basinghall Farm.

In a climatic reconstruction of southern Africa during the last 2000 years Tyson and Lindesay (1992:275) distinguish a Little Ice Age AD (1300 - AD 1850) preceded by a warm and wet phase (AD 900 - AD 1300). Huffman (1996:59) refined this reconstruction of an approximate climatic chronology through the application of archaeological data. He identifies a cool and dry phase (AD 1290 - AD 1425), a warm and wet phase (AD 1425 -

AD 1675), a cool and dry phase (AD 1675 - AD 1780) and a warm and wet phase (AD 1780 - AD 1810). During the warm and wet phases the Limpopo River would have flooded regularly making regional settlement likely. During cool and dry periods with low precipitation the Limpopo would have represented a major source of readily accessible water, presumably contributing to even more intensified settlement around the floodplain by concentrating people on the landscape around this resource for survival.

3.3 Geology and soils

The rock types of the research area embrace three major geological units: the Archaean Beit Bridge Basement Complexes, the Proterozoic Waterberg Group sediments and the Phanerozoic Karoo Sequences (Brandl 1996:1). The oldest rocks are the Archaean gneisses, granites, metaquartzites and magnetites of the Basement Complexes. These Basement Complexes consist of a number of stabile shields known as cratons (e.g. the Kaapvaal Craton) surrounded by less stabile mobile belts. The Tuli Block is situated on the oldest of these, namely the Limpopo Mobile Belt. The Limpopo Belt forms a linear zone composed of metamorphic rocks that were produced from 3100 - 2700 million years ago. Major deformations of the mobile belts are associated with igneous activities and a large degree of metamorphosis (McCarthy & Rubidge 2005:109-112). The metamorphosed rocks created under these conditions, and today exposed on the surface along the Limpopo River (McCarthy & Rubidge 2005:111), are excellent knapping material to produce lithic tools.

By 2000 million years ago the collision of the Congo Craton with the Kaapvaal-Zimbabwe Craton caused the development of rifts and shear zones. The Palala shear zone marks the southern boundary of the Limpopo Belt (McCarthy & Rubidge 2005:142-143). The shear zone is situated between the Zoetfontein Fault in the north and the Melinda Fault in the south (Brandl 1996:43). The east-west oriented Zoetfontein Fault cuts through the upper half of Basinghall Farm (see Figure 3.2). On the map it is outlined by dark lines formed by large trees such as leadwood (*Combretum imberbe*) and knob thorn (*Acacia nigrescens*), growing on the edges of the fault, which also serve as an indication of the shallow water table at a depth of about 15 m. Sweet underground water is obtained on and to the north of the fault.

The basement material is overlain by younger rhyolite magma flows and igneous rocks of the Bushveld Complex, which, in turn, was succeeded by the formation of the Waterberg and Soutpansberg Groups. These represent the last major events of sedimentary accumulations on the Kaapvaal Craton and were deposited by an extensive river system (McCarthy & Rubidge 2005:142-145). The deposits are stained red by iron oxide, thus providing the earliest evidence for the presence of free oxygen in the earth's atmosphere between 2000 - 1800 million years ago (McCarthy & Rubidge 2005:122-123, 141-145). The mostly sedimentary deposits, with some conglomerates, are represented in the research area by sandstone, siltstone, shale and minor grit consisting of grains of quartz, red feldspar, jasper, chert, mica and iron oxide.

The third succession was deposited about 300 million years ago as the Karoo Sequence. A large depression formed north of the southern margin of the Gondwana Supercontinent in which sedimentary rocks of the Karoo Sequence began to accumulate. As the South

Pole moved away from the southern African region the glaciers melted, depositing the lower layers of a sequence called the Wellington Formation (McCarthy & Rubidge 2005:192-211). It is composed mostly of dark grey mudstone and sandstone with imbedded dropstones resulting from glacier movements (Brandl 1996:28). As the ice disappeared large rivers formed, discharging sediment into the Karoo Sea and depositing the Ecca Group of rocks. Extensive swamps developed on the deltas at river mouths, giving rise to coal deposits. At Basinghall the coal deposits developed from 15 m - 150 m deep in the Swartrand and Grootegeluk Formations south of the Zoetfontein Fault (Lurie 1977:131). The Karoo Sea gradually filled with sediment, and the deltas gave way to extensive floodplains that deposited the upper thinner layers of the Karoo sequence consisting of variously coloured shale, limestone, siltstone and sandstone (Brandl 1996:27-37). Some of the sandstone outcrops exposed in the research area by fault uplift activity show water flow ripple marks. The sandstone outcrops form natural barriers in the Limpopo River. The outcrops also represented ideal surfaces for San engravings as found at Riversley (Van der Ryst et al. 2004:1-11). They also provided raw material to Iron Age people for fashioning lower grinding stones and grain bin bases.

At around 190 million years ago the last succession, represented by the Clarens Formation of the Karoo Sequence, developed. Sandstone sediments were deposited under dry conditions by palaeo-winds blowing from a westerly direction, creating a vast desert over southern Africa (McCarthy & Rubidge 2005:208-211, 245-250). Immense quantities of basaltic lava flows, referred to as the Drakensberg lavas, covered large areas of southern Africa 182 million years ago, initiating the break-up of Gondwana. It was during this period that the ancestral Limpopo River developed as part of an inland river system (McCarthy & Rubidge 2005:247).

By 90 million years ago Africa was a continent with an elevated interior (McCarthy & Rubidge 2005:244-248). Uplift by crust movements formed interior basins. The Kalahari-Zimbabwe Axis developed in the headwaters of the ancestral Limpopo as the first in a series of swells (McCarthy & Rubidge 2005:247). This affected the loss of most of the water of the Limpopo and inland lakes developed that gave rise to depressions (McCarthy & Rubidge 2005:266). The southern depression, the Kalahari Basin, had no river outlets and was filled over the next 60 million years by erosional debris from high areas and windblown sand to form the low-relief African planation surface.

Tertiary deposits, composed mainly of gravel and sand calcified to various degrees, resulted in the formation of the conglomerates and calcarenites exposed close to the Limpopo River at Basinghall (Brandl 1996:37). Red consolidated silty sand overlies the gravels that are covered by a thick blanket of surface red soils (Figure 3.3.B). These Tertiary deposits are Post African I surface sediments consisting of erosional debris produced by crustal uplifting at 18 million years ago in mostly the east of southern Africa. Further uplifting that occurred mainly in the east at around 5 million years ago, trapped moisture and caused more arid conditions in the interior, resulting in the formation of the Kalahari Desert (Brandl 1996:38). These desert sands, varying in depth from 5 - 200 m, form the Post African II surface deposits, which are represented by east-west oriented sand dunes in the research area (Figure 3.3.C).

Quaternary deposits are generally found in close proximity to present rivers, including the Limpopo River (Brandl 1996:37). The terrace gravels of up to one metre thick that occur up to 20 m above the present level of the Limpopo River probably originated from tertiary deposits and include banded ironstone, grey quartzite, chert and fault breccia material. These mostly metamorphic pebbles were used by Stone Age people to manufacture stone tools. Calcrete deposits, containing Stone Age tools, occur as horizons on the banks of the Limpopo River. Crack fissures apparent in the limestone outcrops (Figure 3.3.A) at Basinghall indicate arid conditions as shallow lake deposits dried up during the late Middle Pleistocene (Brandl 1996:39). Some fossilised animal teeth and bones, ostrich eggshell fragments and Middle Stone Age (MSA) stone tools have been identified in these limestone bedrocks. Another Quaternary deposit, ferricrete, occurs as blackish-brown nodules around pans. Ferricrete is also frequently uncovered as sterile material in lower levels of some of the excavated trenches. Deposits of alluvial silts, clays and coarse sands developed into floodplains along the Limpopo River. These clay and loam soils of only a few metres in thickness represent the most recent deposits at Basinghall Farm (Figure 3.3.D, E, & F).

On the soils map of Botswana (De Wit & Nachtergaele 1990), the main classes of soils that occur in the research area are:

Luvic Arenosols: Deep to very deep, well drained, yellowish brown to red, fine and fine-medium sands to loamy fine sands.

Calcic Luvisols: Moderately deep to very deep, imperfectly to moderately well drained, dark greyish brown to red, sandy clay loams to clays.

Ferric Luvisols: Moderately deep to deep, well drained reddish brown to strong brown, sandy loams to sandy clay loams.

A more detailed study of the soils at Basinghall is presented in Figure 3.3. The Basinghall soils can be divided into the following categories:

A - Exposed limestone ridges covered by a thin layer of Leptosols (mostly grey loamy soil derived from limestone). A fine red sand of Aeolian origin covers some sections of these limestone ridges. The lower-lying depressions on these ridges form perennial pans lined with dark clay soils.

B - Moderately deep Arenosols, consisting mainly of fine to medium sand or sandy loam overlying the limestone and sandstone outcrops, comprise most of the soils in the research area. They are well drained and range in colour from yellowish brown to dark red. Most of the archaeological sites are located on these hard red soils close to the more wooded sandy ridges and perennial pans.

C - White to yellow Aeolian Kalahari sands overlying the red soils. These soils are the most densely wooded, supplying Iron Age people with firewood and also charcoal for iron smelting.

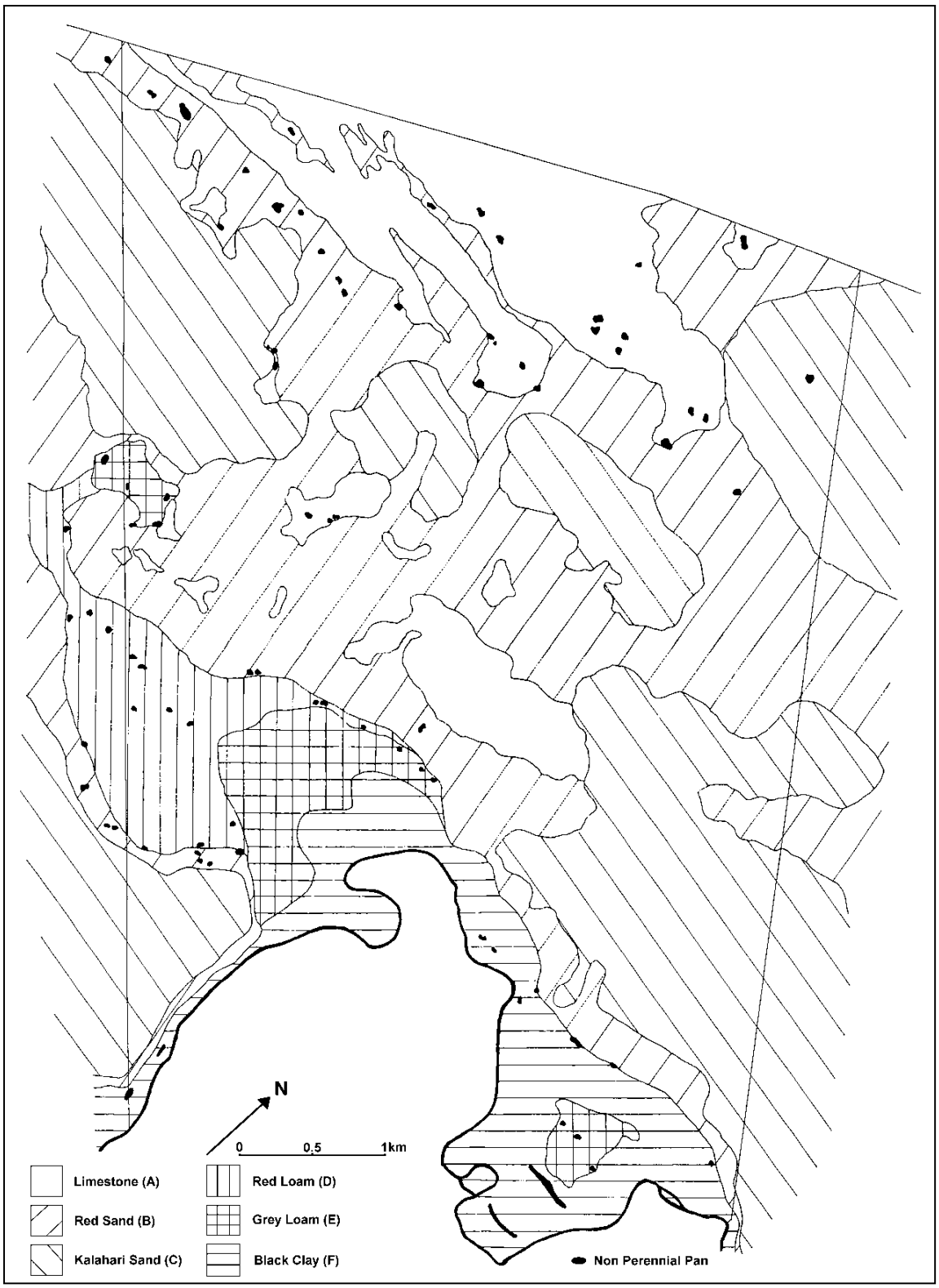

Figure 3.3: Geology and soils map of Basinghall Farm (after De Wit & Nachtergaele 1990).

D - Red loam soils around the edges of the floodplains. They are particularly fertile and were used for agriculture during the prehistoric and historical periods. Many perennial pans are located on these soils and served as water sources for the

occupants of the nearby Iron Age settlements. These pans are lined with poorly drained dark clays, which increase their water storage capacity.

E - Grey loam alluvial soils bordering the black clays that are also good for crop cultivation. MSA tools are abundant in these soils.

F - Poorly drained black alluvial clays situated close to the Limpopo River. Most of these soils were submerged during the February 2000 flood. No sites have been located on these soils as they become unfit for habitation after heavy rains and were probably also not favoured for settlement in the past.

3.4 The climate, flora and fauna

The research area is situated in the Savannah Biome, commonly referred to as the Bushveld, which is marked by a grassy ground layer and an upper layer of woody plants. If this upper layer is found near the ground the vegetation may be denoted as Shrubveld, where it is dense as Woodland and the intermediate stages as Bushveld. The key feature of the Savannah Biome is that the climate cycle comprises a hot, wet season of four to six months and a warm, dry season for the rest of the year (Scholes 1997:258).

The summer rainfall constitutes 80-90% of the yearly precipitation and occurs in the form of thunderstorms. Winters are dry and cloudless with occasional frost. The average rainfall for the region is between 400 mm and 450 mm per year (Ramothwa & Minja 2001:38). The rainy season is between September and April but generally only starts in November and ends in March. The early rains in October and November fall in short heavy showers averaging 10 mm or more, while the rainfall in the latter part of the rainy season is less violent and more regular. Unevenness in seasonal precipitation, although with a good overall rainfall for a year, can result in crop failure. Though there is a 60% probability that rainfall will be average in any one year, the coefficient of variation is between 30-55% (Ramothwa & Minja 2001:39). Thus both prolonged and short-term droughts are regular occurrences.

The wetter months have higher temperatures while the drier months are cooler. From October to March temperatures can soar up to 40°C, with the average above 30°C during midday, while the night temperatures average around 20°C. Daytime temperatures during winter are around 27°C, decreasing to about 6°C at night. The average temperature is 21°C with ranges of 10-20°C between day and night (Ramothwa & Minja 2001:42). Occasional frost occurs in low-lying areas close to the river in the winter months of June and July. The altitude ranges between 825 m above sea level for the lowest point and 835 m above sea level for the highest point in the research area. The Limpopo River, which flows from a south-westerly direction into a north-easterly direction, has a drop of about 2 m in the research area.

The vegetation at Basinghall is composed of a mix of Savannah biomes as a result of the diversity in soil types. Intermediate zones from broadleaf savannahs in the sandy parts to fine-leaf savannahs in the clay soils are described based on the different soil types provided in Figure 3.3. The different types are discussed according to Low and Rebello's (1998) vegetation classification method.

The main vegetation type in the research area is classified as Sweet Bushveld (Low & Rebelo 1998:25), which occurs in the dry and hot Limpopo River Valley and the associated valleys of tributaries that range from 800-950 m above sea level in altitude. An overall mostly short and shrubby vegetation structure occurs on the red soils (Figure 3.3.B) and the limestones (Figure 3.3.A), and partly on the sandy soils (Figure 3.3.C). Low rainfall and grazing are the key environmental parameters that determine the structure and distribution of Sweet Bushveld vegetation types.

The sandy areas (Low & Rebelo 1998:25) are dominated by trees such as silver cluster leaf (*Terminalia sericea*), yellow pomegranate (*Rhigozum obovatum*), wild raisin (*Grewia flava*) and umbrella thorn (*Acacia tortilis*). Dominant grasses are broom grass (*Eragrostis pallens*), Kalahari sand quick grass (*Schmidtia pappophoroides*), hairy love grass (*Eragrotis trichophora*), *Aristida stipitata* and other *Aristida* species.

On the shallower and drier red soils (Figure 3.3.B) and limestone soils (Figure 3.3.A) (Low & Rebelo 1998:25), common corkwood (*Commiphora pyracanthoides*), wild raisin (*Grewia flava*), shepherd's tree (*Boscia albitrunca*) and red bush willow (*Combretum apiculatum*) are more prominent, and dense, nearly impenetrable thickets of blue thorn (*Acacia orubescens*), black thorn (*Acacia mellifera*) and sickle bush (*Dichrostachys cinerea)* are often come across. Grasses, including guinea grass (*Panicum maximum*), blue buffalo grass (*Cenchrus ciliaris*), sour grass (*Enneapogon cenchroides)* and Bushveld signal grass (*Urochloa mosambicensis*), may be dominant.

Mixed Bushveld vegetation occupies the Kalahari sandy soils (Figure 3.3.C) (Low & Rebelo 1998:26). It varies from a dense, short bushveld to a rather open tree savannah. The structure of this vegetation type is determined mostly by fire and grazing. Common trees in this type include silver cluster leaf (*Terminalia sericea*), marula (*Sclerocarya birrea*), weeping wattle (*Peltophorum africanum*) and various *Grewia* species. The grazing is sweet and dominated by grasses such as broom grass (*Eragrostis pallens*), finger grass (*Digitaria eriantha*), Kalahari sand quick grass (*Schmidtia pappophoroides*), silky Bushman grass (*Stipagrostis uniplumis*) and various *Aristida* and *Eragrostis* species.

On the loam and clay soils (Figure 3.3.D, E & F) the Clay Thorn Bushveld vegetation type occurs (Low & Rebelo 1998:23). The vegetation is dominated by various *Acacia* species: umbrella thorn (*Acacia tortilis*), sweet thorn (*Acacia karroo*), other *Acacias* such as *A. gerrardii*, *A. nebrownii* and *A. millefera*. Other woody species include buffalo thorn (*Ziziphus mucronata*), leadwood (*Combretum imberbe*) and various *Grewia* species. The principal grass species form a dense stand of turf grass (*Ischaemum afrum*), deck grass (*Sehima galpinii*), canary millet (*Setaria incrassate*) and white buffalo grass (*Panicum coloratum*). Overgrazing and deterioration of the grass sward manifest in a severe increase of cover and woody species, as a result of which soils closer to the riverbanks are susceptible to erosion.

On the riverbanks in the regular flood zone the vegetation consists of large riparian species such as the Ana tree (*Faidherbia albida*) and the fever-berry (*Croton megalobotrys*), and also huge specimens of leadwood (*Combretum imberbe*) and buffalo thorn (*Ziziphus mucronata*) intermixed with various *Acacia* species. The reed beds, green

grasses and weeds in these clay soils, with a high water retention capacity, serve as grazing to animals in the drier months of the year.

Vegetation types and plant distribution patterns at Basinghall has influenced the scale of land-use, settlement patterns and subsistence practices of Iron Age people in many ways. On some Kalahari sand soils (Figure 3.3.C), with a Mixed Bushveld vegetation type, the silver cluster leaf (*Terminalia sericea*) woodland is associated with poison leaf (*Dichapetalum cymosum*), which is a plant poisonous to animals. If an ungulate eats but a few leaves, the heart and nervous system are affected by a poisonous substance, monofluoroacetate, generally ensuing in the death of the animal (Vahrmeijer 1981:94). The plant is drought resistant and produces the first edible green leaves in September–October but with disastrous results when grazed by cattle. Another constraint to stock-owners is the presence of the heartwater rickettsial organism, *Ehrlichia ruminantium* (formerly *Cowdria ruminantium*), which is associated with Mixed and Sweet Bushveld vegetation. The African Bont tick (*Amblyomma hebraeum*) that transmits the disease prefers these environments, causing heartwater which may lead to large-scale losses in susceptible animals (Mönnig & Veldman 1986:113-115). Indigenous cattle, sheep and goat breeds are more resistant to heartwater suggesting that Iron Age people most probably selected for these disease-resistant animals.

At the height of each Iron Age settlement phase the landscape would have been more open as trees and shrubs would have been increasingly used as building material for houses, kraals and scalloped enclosures, and as firewood for household and metalworking purposes. In 1820, a traveller such as the Rev. John Campbell described a more open landscape around Tswana towns such as Kaditshwene, capital of the Hurutshe near present-day Zeerust, North West Province (Boeyens 1998:63). At Basinghall remnants of large leadwood trees, which could be 500 years and older, are often found close to archaeological sites. The ubiquitous presence of these trees near sites probably reflects prehistoric practices. Trees producing edible fruit such as the shepherd's tree (*Boscia albitrunca)*, marula (*Sclerocarya birrea*) and sourplum (*Ximenia caffra*) are also common at archaeological sites (Roodt 1998b:29, 67, 77 & 151). Many other species bearing edible fruits and medicinal plants associated with Kalahari Sands and Sweet Bushveld are common in the research area and would have supplemented the diet and subsistence of prehistoric people.

The taxonomic range of the fauna in the research area is much depleted and obviously differs from Iron Age times. The larger species such as elephant, rhinoceros, buffalo and lion were exterminated more than a century ago but have been reintroduced on private game farms and nature reserves in the region. In AD 1896 rinderpest was introduced to Botswana from Zimbabwe, killing most cattle along the main road from Francistown to Lobatse. The Ngwato lost about 90% of their cattle, amounting to 70 000 head or more. An estimated 95% of game died in the process (Ramsay et al. 1996:202). Game species occurring naturally today at Basinghall are kudu, waterbuck, blue wildebeest, zebra, hartebeest, impala, bushbuck, duiker, steenbok and warthog with leopard, cheetah and the smaller cat species as carnivores.

In his travel journal the renowned hunter Gordon Cumming (1850), who hunted in the region in 1835, recorded the following species: elephant, black and white rhinoceros,

giraffe, buffalo, zebra, eland, hartebeest, blue wildebeest, impala and ostrich. Livingstone (1857) described the communal hunting of herds of many game species that included eland, zebra, blue wildebeest, hartebeest and springbok by means of game traps (see Figure 1.3). At localities where large herds often grazed or came to drink water, deep pits (about 12 m wide and 4 m deep) were dug and covered with branches and sand. Two parallel fences of branches were built in the shape of a funnel of about one kilometre long and wide at the mouth. By using grass fires a large group of people drove the herds into the funnel and the pit where they were stabbed with spears. At Basinghall a possible seven hunting pits were recorded (Figure 3.5).

3.5 The site survey

Basinghall Farm 31 LQ, with a surface area of 4000 hectares, is situated in the Tuli Block bordering on the Republic of South Africa. The farm boundaries are indicated on the 2327 A3 and 2327 C1 topographic maps (scale 1:50 000 of 1986, Department of Lands and Surveys of Botswana) (Figure 3.4). The south-eastern boundary (11 km) is the Limpopo River with the international border between Botswana and South Africa in the middle of the riverbed, which is also the farm boundary. The south-western boundary (8 km) borders Riversley Farm and the north-eastern boundary (8 km) borders on Holmlea Farm. The north-western boundary (6 km) borders Ngwato tribal land from which it is separated by a main road called the Backline.

Strategy and method

The strategy followed during the archaeological survey was to identify and focus on Iron Age sites on Basinghall Farm. The survey also included a 500 m-wide zone on the neighbouring farms of Riversley and Holmlea bordering Basinghall Farm. The survey was done on foot with the assistance of farm workers. The sites were mapped (Figure 3.5 & 3.6) by using a Garmin hand-held Global Positioning System (GPS) with coordinates given for each site surveyed. Every site was briefly described and, on the basis of a surface collection of decorated pottery, placed in a chronological framework (Table 3.1). Aerial photographs of 1963 and 1989 were also obtained from the Department of Lands and Surveys, but were not very useful as most of the sites were only detected through thorough and wide-ranging walking.

Open spaces with vegetation indicators of prehistoric activities, e.g. the white shepherd's tree or *motopi* (*Boscia albitrunca*), smelly shepherd's tree or *mopipi* (*Boscia foetida*) and brittle thorn or *molalatau* (*Phaeoptilum spinosum*), were intensively investigated. The brittle thorn bush co-occurs with blue buffalo grass (*Cenchrus ciliaris*) on middens and cattle kraals so that their presence is indicative of past land-use activities. Burrowing animals, such as springhare and aardvark, utilise middens and expose cultural material on the surface, thus assisting in site detection. Soil discolouration, e.g. grey soil in middens and kraals, as well as cultural material, e.g. pottery, fauna, slag and hut rubble, were used in the identification of sites. The grain bin sites were more easily located as the stone platforms, grinding stones and other imported stones are conspicuous since they are unlike local rock types.

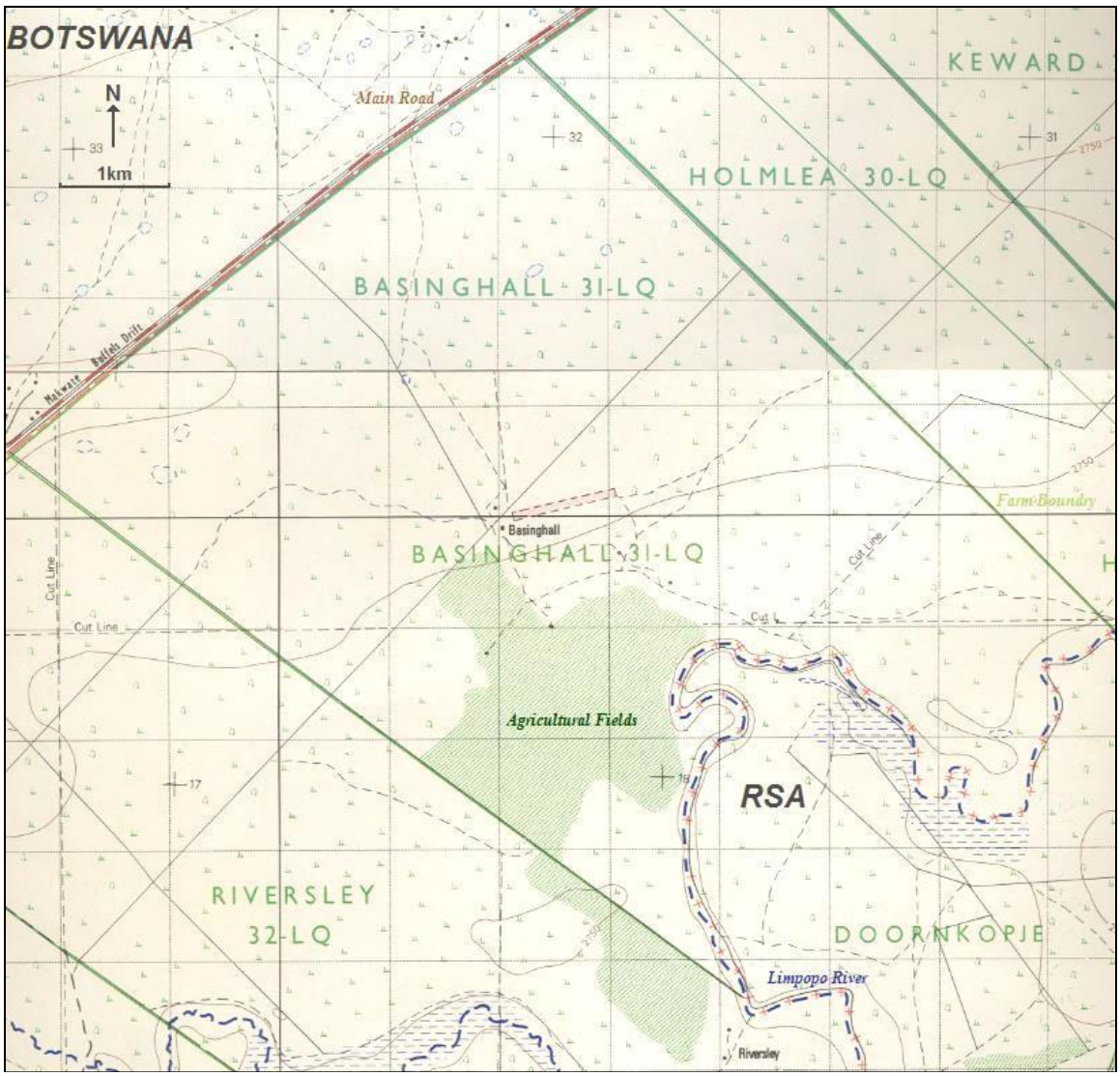

Figure 3.4: Topographic map of Basinghall Farm (scale 1:50 000 of 1986, Department of Lands and Surveys of Botswana).

The sites were numbered according to the system used in the catalogue of the National Museum in Gaborone. The numbering sequence of sites on each map sheet begins with the first site located within the boundaries of a particular map area, e.g. site one on map 2327 A3 is designated as 37-A3-1. The Botswana latitudes and longitudes fall within the twenties, therefore the numerical two's were not included in the site numbering system.

Site classification and distribution

The sites were classified on the basis of our present knowledge of the Iron Age chronology (Table 3.1). Decorated ceramics recovered during the survey were classified according to currently established decoration styles as outlined in Chapter 2. For the Middle Iron Age (MIA) those sites dominated by the *Toutswe* ceramic style were classed as *Toutswe* facies and the sites dominated by the *Moritsane* ceramic style as *Moritsane* facies. Sites with ceramics that fit Middle *Moloko* period were classified as *Letsibogo*

facies. No specific facies has as yet been assigned to sites and ceramics associated with the Early *Moloko* phase. For each facies a prominent and characteristic site was selected and excavated. These sites will be described and discussed in separate chapters. The sites that were mapped and excavated are marked in Table 3.1.

Criteria used for the grain bin sites were platform size, the clustering of grain bin platforms and the presence or absence of lower grinding stones. All grain bin sites were mapped to determine the extent of each site and the clustering of grain bins within a site. Three groups were accordingly identified: firstly smaller sites of less than one hectare with no observable lower grinding stones; secondly larger sites, extending more than one hectare, with numerous grain bin platforms and lower grinding stones and, thirdly, grain bin sites of about one hectare in extent associated with glass and material of the historical contact period.

For each category a diagnostic grain bin site was selected and mapped by GPS after which a surface collection of decorated ceramics and other cultural material was undertaken. The selected sites will be described accordingly in Chapter 8.

The survey around the floodplain located 81 sites in total. These comprise two Later Stone Age (LSA) rock engraving sites and a smelly shepherd's tree (*Boscia foetida*) engraved by 19th-century European hunters. The Early Iron Age (EIA) is represented by one *Diamant* facies settlement and the Middle Iron Age by ten *Toutswe* and three *Moritsane* facies sites. The Late Iron Age (LIA) is represented by two Early *Moloko*, 16 Middle *Moloko* (*Letsibogo* facies) and 43 Late *Moloko* sites. The Late *Moloko* sites constitute 25 small grain bin sites, nine large grain bin sites, three historic grain bin sites, seven probable game traps and an iron-working site. The survey further included the documentation of a historical telegraph station (± 1889), a historical farm homestead (± 1900) and a creamery (± 1920). Scatters of Middle Stone Age tools and flakes were identified over the entire floodplain and the adjacent red soils but are not recorded in Table 3.1.

In this study I focus on those Iron Age sites that were settled up to 1000 years ago and which are represented by a total of 75 of the above recorded sites. The survey established an evident spatial pattern in the distribution of sites. MIA sites are mostly spaced along the edges of the floodplain with a few sites located adjacent to the larger non perennial pans. *Toutswe* and *Moritsane* facies sites occur within the same general areas but were occupied at different times. The Early *Moloko* localities are situated on the red loam soils of the floodplains, while the Middle *Moloko* (*Letsibogo* facies) sites are mostly spaced around the floodplains and close to the larger non perennial pans. The grain bin sites are scattered randomly over the entire research area with some sites closer to the non-perennial pans. A more detailed discussion on site distribution and site sequence follows in the next chapters.

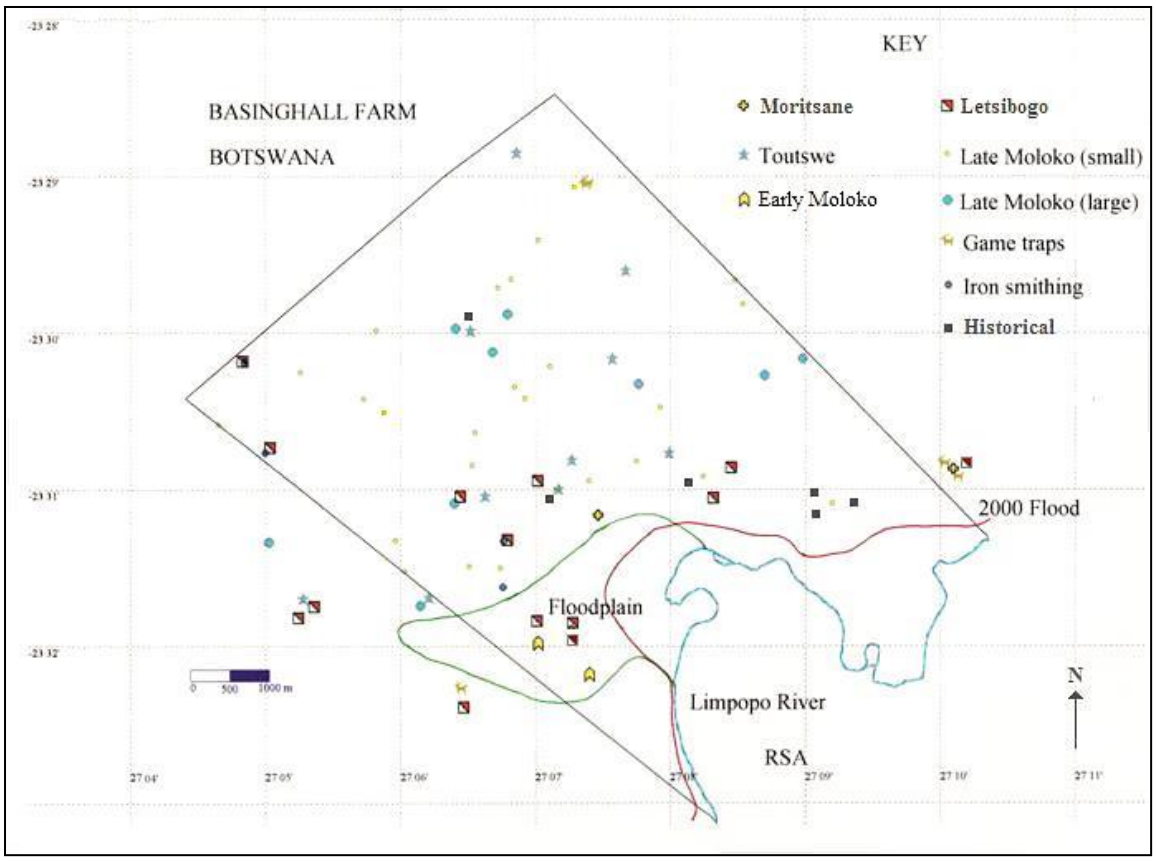

Figure 3.5: Iron Age and Historical sites at Basinghall Farm.

3.6 Conclusion

The large volume of water produced in the upper Limpopo River by the confluence of four tributaries within a 40 km zone, swollen by the meandering of the river along this stretch, forms floodplains during heavy rains. The availability of water from the river and pans, together with the fertile soils of the floodplains, constituted an ideal environment for agropastoralist settlement around these floodplains. The Sweet Bushveld vegetation associated with the perennial pans and abundant wildlife favoured cattle farming and hunting. The wooded Kalahari sand ridges supplied enough building material and firewood to Iron Age settlers to utilise the environment at Basinghall throughout the second millennium AD. The survey around the floodplain uncovered 75 Iron Age sites. The survey data, supplemented by the results of selective excavations of each facies, will be used to establish an Iron Age sequence at Basinghall as discussed in the following chapters. In Chapter 4 the first major group of people to settle at Basinghall, the *Toutswe* people will be investigated.

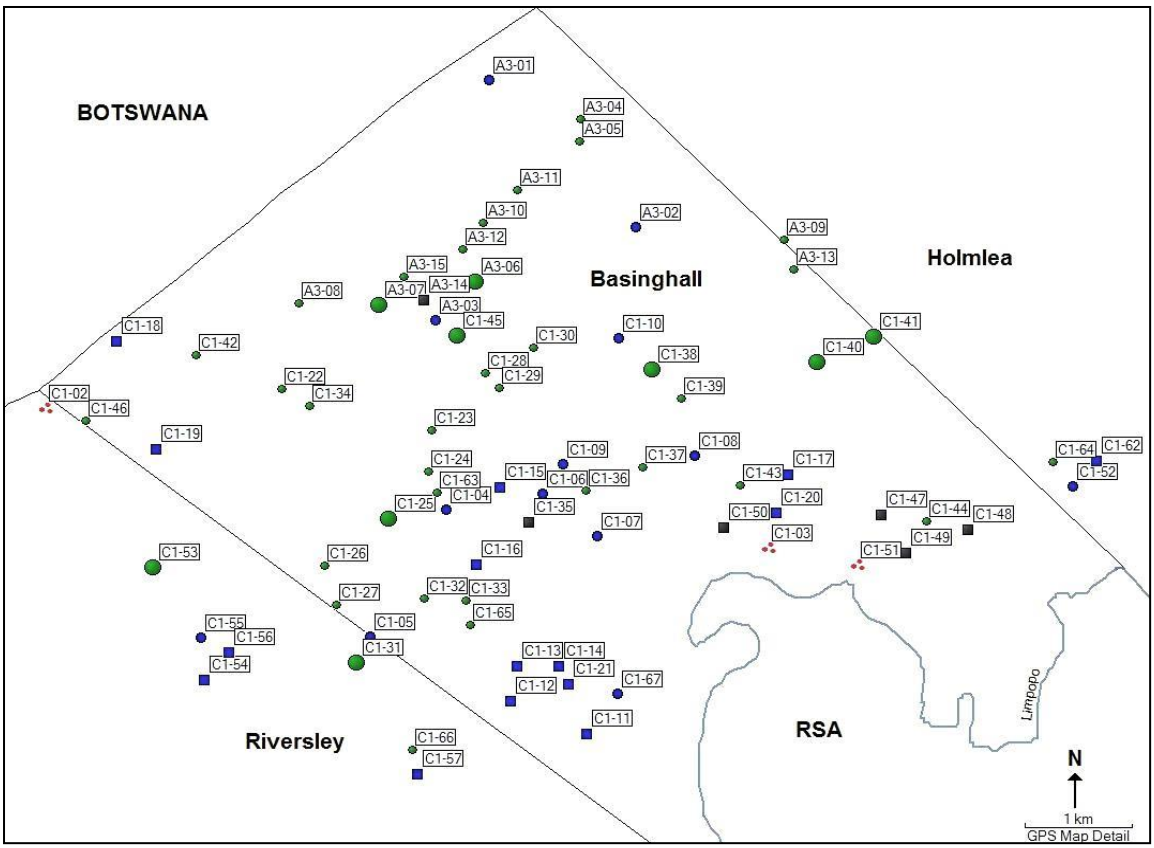

Figure 3.6: The archaeological sites mapped during the survey of Basinghall Farm.

Table 3.1: Archaeological sites identified during the survey.

Site 37-	Latitude S	Longitude E	Farm	Facies	Description	Soils
A3-01	23°28'51.3"	27°06'52.5"	Basinghall	*Toutswe*	Midden (excavated)	Limestone
A3-02	23°29'36.4"	27°07'41.0"	Basinghall	*Toutswe*	Midden	Sand
A3-03	23°29'59.4"	27°06'32.0"	Basinghall	*Toutswe*	Midden	Limestone
A3-04	23°29'03.3"	27°07'23.0"	Basinghall	Late *Moloko*	Midden, kraal	Sand
A3-05	23°29'02.5"	27°07'24.1"	Basinghall	Late *Moloko*	Game trap	Sand
A3-06	23°29'53.1"	27°06'48.3"	Basinghall	Late *Moloko*	Large grain bin	Sand
A3-07	23°29'58.6"	27°06'25.2"	Basinghall	Late *Moloko*	Large grain bin	Sand
A3-08	23°29'59.5"	27°05'50.1"	Basinghall	Late *Moloko*	Small grain bin	Limestone
A3-09	23°29'40.2"	27°08'29.8"	Basinghall	Late *Moloko*	Small grain bin	Sand
A3-10	23°29'39.9"	27°06'49.8"	Basinghall	Late *Moloko*	Small grain bin (mapped)	Limestone
A3-11	23°29'24.9"	27°07'02.1"	Basinghall	Late *Moloko*	Small grain bin	Limestone
A3-12	23°29'43.2"	27°06'44.1"	Basinghall	Late *Moloko*	Small grain bin	Limestone
A3-13	23°29'49.3"	27°08'33.2"	Basinghall	Late *Moloko*	Small grain bin	Sand
A3-14	23°29'58.7"	27°06'31.1"	Basinghall		Historical homestead	Limestone
A3-15	23°29'54.4"	27°06'26.5"	Basinghall		Game trap	Limestone
C1-02	23°30'31.3"	27°04'26.5"	Riversley		LSA rock engravings	Sandstone
C1-03	23°31'13.8"	27°08'24.5"	Basinghall		LSA rock engravings	Sandstone
C1-04	23°31'02.6"	27°06'38.4"	Basinghall	*Toutswe*	Midden (excavated)	Limestone
C1-05	23°31'41.5"	27°06'13.5"	Riversley	*Toutswe*	Midden	Limestone
C1-06	23°30'59.9"	27°07'11.2"	Basinghall	*Toutswe*	Midden	Limestone
C1-07	23°31'10.1"	27°07'28.5"	Basinghall	*Moritsane*	Midden (excavated)	Hard red

Site 37-	Latitude S	Longitude E	Farm	Facies	Description	Soils
C1-08	23º30'46.2"	27º08'00.3"	Basinghall	*Toutswe*	Midden (excavated)	Limestone
C1-09	23º30'48.8"	27º07'17.0"	Basinghall	*Toutswe*	Midden	Limestone
C1-10	23º30'10.2"	27º07'35.2"	Basinghall	*Toutswe*	Midden	Hard red
C1-11	23º32'11.1"	27º07'24.8"	Basinghall	Early *Moloko*	Kraal (excavated)	Red loam
C1-12	23º31'59.2"	27º07'01.9"	Basinghall	Early *Moloko*	Kraal	Red loam
C1-13	23º31'50.3"	27º07'01.6"	Basinghall	*Letsibogo*	Kraal	Red loam
C1-14	23º31'51.1'	27º07'17.6"	Basinghall	*Letsibogo*	Kraal, midden	Red loam
C1-15	23º30'56.7"	27º07'02.0"	Basinghall	*Letsibogo*	Kraal (surface collection)	Hard red
C1-16	23º31'19.3"	27º06'48.4"	Basinghall	*Letsibogo*	Kraal, smelting	Hard red
C1-17	23º30'51.7"	27º08'27.8"	Basinghall	*Letsibogo*	Kraal, midden	Sand
C1-18	23º30'11.1"	27º04'50.8"	Basinghall	*Letsibogo*	Kraal, midden, smelting	Hard red
C1-19	23º30'44.2"	27º05'02.9"	Basinghall	*Letsibogo*	Kraal, smelting (excavated)	Sand
C1-20	23º31'03.3"	27º08'20.0"	Basinghall	*Letsibogo*	Kraal, midden	Hard red
C1-21	23º31'55.0"	27º07'16.7"	Basinghall	*Letsibogo*	Kraal, midden	Red loam
C1-22	23º30'25.7"	27º05'44.6"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-23	23º30'38.5"	27º06'33.9"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-24	23º30'51.0"	27º06'32.7"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-25	23º31'05.4"	27º06'24.7"	Basinghall	Late *Moloko*	Large grain bin (excavated)	Hard red
C1-26	23º31'19.8"	27º05'58.6"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-27	23º31'31.6"	27º06'02.6"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-28	23º30'21.0"	27º06'51.5"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-29	23º30'25.4"	27º06'56.2"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-30	23º30'13.1"	27º07'07.3"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-31	23º31'44.6"	27º06'09.4"	Riversley	Late *Moloko*	Large grain bin	Hard red
C1-32	23º31'29.8"	27º06'31.4"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-33	23º31'30.3"	27º06'45.3"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-34	23º30'30.9"	27º05'53.7"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-35	23º31'03.7"	27º07'06.8"	Basinghall	Late *Moloko*	Historical grain bin (mapped)	Hard red
C1-36	23º30'56.9"	27º07'24.7"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-37	23º30'49.4"	27º07'45.7"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-38	23º30'19.9"	27º07'46.6"	Basinghall	Late *Moloko*	Large grain bin	Hard red
C1-39	23º30'28.8"	27º07'56.2"	Basinghall	Late *Moloko*	Small grain bin	Hard red
C1-40	23º30'16.4"	27º08'42.5"	Basinghall	Late *Moloko*	Large grain bin	Sand
C1-41	23º30'10.0"	27º08'59.5"	Basinghall	Late *Moloko*	Large grain bin	Sand
C1-42	23º30'15.5"	27º05'16.3"	Basinghall	Late *Moloko*	Small grain bin	Limestone
C1-43	23º30'55.3"	27º08'15.6"	Basinghall	Late *Moloko*	Small grain bin	Sand
C1-44	23º31'05.5"	27º09'12.8"	Basinghall	Late *Moloko*	Small grain bin	Sand
C1-45	23º30'07.6"	27º06'41.7"	Basinghall	Late *Moloko*	Large grain bin	Sand
C1-46	23º30'35.5"	27º04'39.9"	Basinghall	Late *Moloko*	Small grain bin	Sand
C1-47	23º31'06.5"	27º09'04.6"	Basinghall	Late *Moloko*	Historical grain bin	Sand
C1-48	23º31'06.5"	27º09'27.7"	Basinghall	Late *Moloko*	Historical grain bin	Sand
C1-49	23º31'14.6"	27º09'06.5"	Basinghall		Historical creamery	Hard red
C1-50	23º31'08.0"	27º08'09.8"	Basinghall		1890 Telegraph station	Hard red
C1-51	23º31'19.1"	27º08'54.0"	Basinghall		Historical engravings on tree	Red loam
C1-52	23º30'52.1"	27º10'06.1"	Holmlea	*Moritsane*	Midden (surface collection)	Sand
C1-53	23º31'20.4"	27º05'02.2"	Riversley	Late *Moloko*	Large grain bin	Hard red
C1-54	23º31'49.2"	27º05'15.5"	Riversley	*Letsibogo*	Kraal, midden	Hard red
C1-55	23º31'41.9"	27º05'17.7"	Riversley	*Toutswe*	Midden	Limestone
C1-56	23º31'44.9"	27º05'22.4"	Riversley	*Letsibogo*	Kraal, midden	Hard red

Site 37-	Latitude S	Longitude E	Farm	Facies	Description	Soils
C1-57	23º32'23.4"	27º06'28.9"	Riversley	*Letsibogo*	Kraal, midden, smelting	Sand
C1-58	23º33'51.2"	27º08'05.5"	Riversley	*Letsibogo*	Kraal, midden	Sand
C1-59	23º33'47.0"	27º08'09.2"	Riversley	*Letsibogo*	Kraal, midden	Sand
C1-60	23º33'44.9"	27º08'12.1"	Riversley	*Letsibogo*	Kraal, midden	Sand
C1-61	23º33'37.7"	27º08'18.8"	Riversley	*Moritsane*	Midden (surface collection)	Sand
C1-62	23º30'52.1"	27º10'06.1"	Holmlea	*Letsibogo*	Kraal, midden	Sand
C1-63	23º30'57.5"	27º06'35.5"	Basinghall	Late *Moloko*	Game trap	Hard red
C1-64	23º30'49.9"	27º10'02.5"	Holmlea	Late *Moloko*	Game trap	Sand
C1-65	23º31'37.7"	27º06'46.5"	Riversley	Late *Moloko*	Iron smelting	Hard red
C1-66	23º32'16.1"	27º06'27.6"	Basinghall	Late *Moloko*	Game trap	Sand
C1-67	23º31'58.7"	27º07'34.7"	Basinghall	*Diamant*	EIA settlement	Red loam

CHAPTER 4

THE *TOUTSWE* FACIES

4.1 Introduction

The *Toutswe* chiefdom's archaeological appellation derives from Toutswemogala, a prominent flat-topped hill situated near Palapye in Central Botswana. This locality was the base of a major chiefdom that rose to power at around AD 1000. By AD 1200 the cattle-rich chiefdom controlled numerous regional centres, after which it gradually declined until Toutswemogala was abandoned by AD 1300 (Huffman 2007:151). Denbow (1983, 1986) proposed three levels of Toutswe settlement based on the size of middens, the extent of the area covered with houses and grain bins, as well as the length of occupation. Primary sites, such as Toutswemogala and Bosutswe, cover more than four hectares each and were occupied for almost three centuries. Secondary hilltop sites such as Taukome, 35 km west of Toutswemogala, and Lose, located north of Mahalapye, are about two to four hectares in extent and were occupied for periods of up to 200 years (Denbow 1984:26-34). Third tier settlements include open sites such as Kgaswe, which was mitigated for the colliery project at Palapye. These smaller sites are two hectares or less in extent and were occupied for periods of not more than fifty years (Denbow 1999).

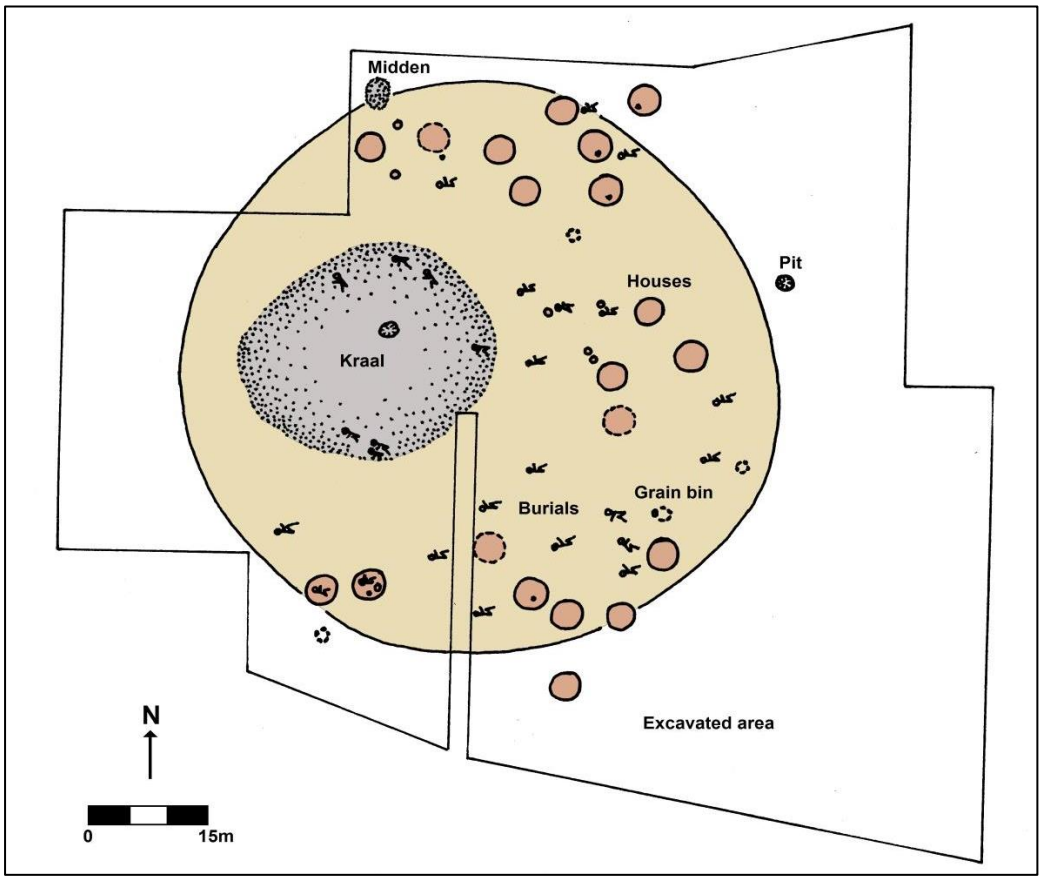

Figure 4.1: The 11th-century *Toutswe* settlement at Kgaswe (Denbow 1999:112).

Excavations at Kgaswe (Figure 4.1) by Denbow (1999:112) uncovered a commoner settlement based on the Central Cattle Pattern layout. A central kraal contained a single pit and seven burials, mostly of males, on the edge of the kraal. In the outer zone the remains of 19 houses with four grain bins were distributed in an arc around the kraal. The burials of several females and children, and one of a single male, were found among the houses.

Toutswe sites at Basinghall are classified as third-level settlements representing commoner cattle-post sites. Their layout resembles the settlement pattern of Kgaswe (Figures 4.1 and 4.4). The main aim of the investigations at the Basinghall *Toutswe* sites was to acquire dates for their occupation and to collect a representative ceramic sample rather than to uncover the settlement layout. The easily recognisable middens were investigated with a view to selecting the most promising areas for excavations. None of the sites had surface hut rubble concentrations or grain bin platforms.

Three of the most prominent *Toutswe* sites, Site 37-C1-8 (*Letamong*), Site 37-C1-4 (*Onjombo*) and Site 37-A3-1 (*Lekotsane*) were selected for excavation.

4.2 Excavations at Site 37-C1-8

Site name: *Letamong* (at the dam) **S23°30'46.2" E27°08'00.3"**

Site description

Limestone ridges that rise a few metres above the surrounding plain are occasionally exposed on the perimeter of the floodplain. Most of the *Toutswe* sites are located on these high rises from which the surrounding landscape can be viewed. The *Letamong* site is situated on such a rise with the midden positioned at the highest point of the rise forming a mound of one metre above ground level. The site has an elevation of 829 m above sea level (contour lines are indicated in Figure 4.4). The nearest permanent water source is the Limpopo River, which is 1.2 km away. The closest seasonal water source is a non-perennial pan ± 500 m from the site.

The site extends over an area of approximately 100 m x 100 m with a dense grass cover of creeping urochloa (*Urochloa mosambicensis*) and a few shepherd's trees (*Boscia albitrunca*). An open clearing of hard red soils adjacent to the midden is surrounded by *Acacia* and *Grewia* species (Figures 4.2 and 4.3). The ashy grey-coloured midden is approximately 50 m in diameter (Figure 4.4) with a ± 50 cm deep dense deposit. Subsurface cultural material in the midden has been exposed through bioturbation. No cattle kraal deposit, house remains, grain bin remains or lower grinding stones were identified on the surface. The aim of the investigation at the site was to acquire a date for the occupation and to collect a representative ceramic sample rather than to uncover the settlement layout.

Figure 4.2: General view of the site.

Figure 4.3: The midden deposit.

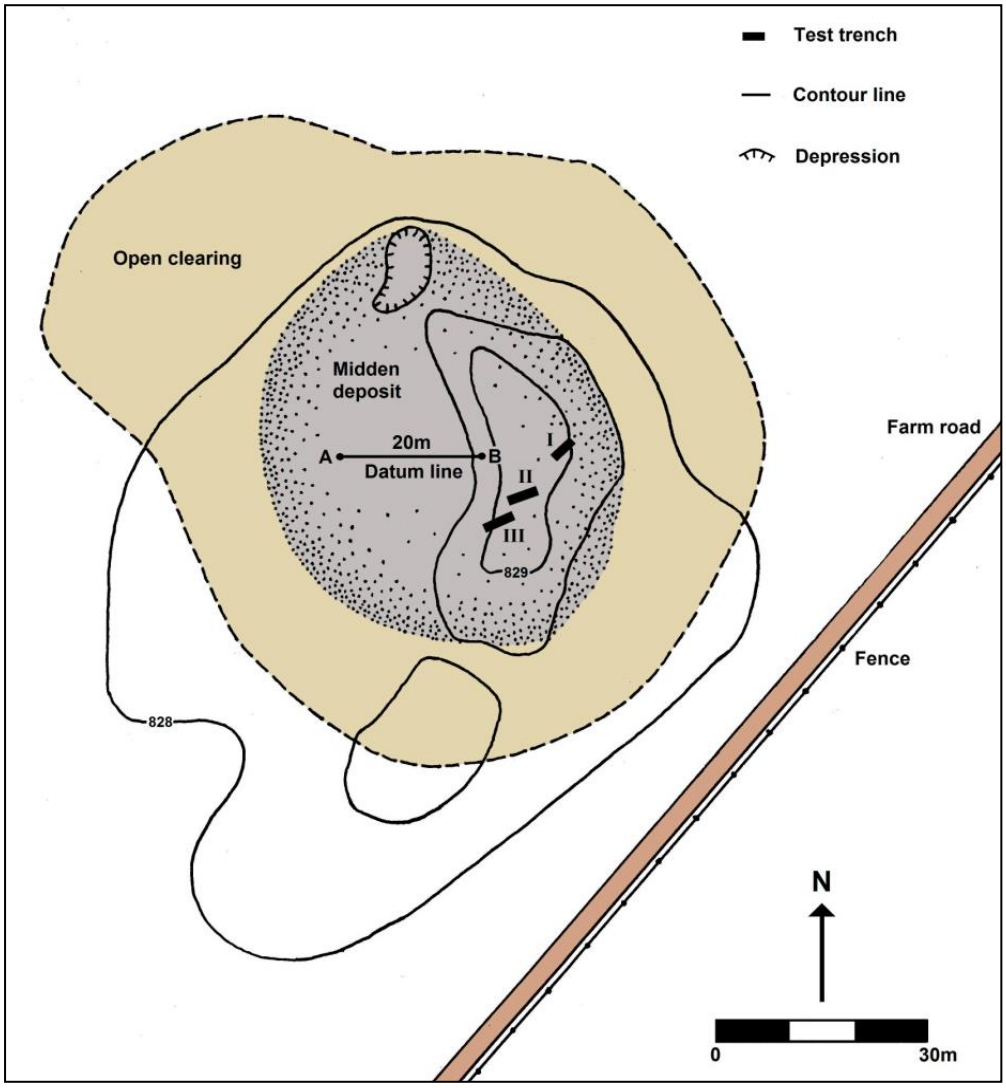

Figure 4.4: Settlement layout of Site 37-C1-8.

Figure 4.5: Test trench I.

Figure 4.6: Test trench II.

Figure 4.7: Test trench III.

Excavation methodology

Test excavations were placed at the highest point on the eastern side of the midden. Three test trenches encompassing a total area of 11 m² were excavated south and east of the datum line (Figure 4.4). Test trench I was placed east of the datum line as a 3 m x 1 m block divided into 1 m x 1 m squares assigned A, B and C (Figure 4.5). Trench II and Trench III were south-east of the datum line. Each constituted a 4 m x 1 m block divided into 1 m x 1 m squares assigned A, B, C and D (Figures 4.6 and 4.7). The test excavations were carried out in September 2003 by UNISA students and their families. The trenches were excavated using 10 cm spits until the limestone bedrock was reached. The excavated deposit was passed through a 1.5 mm sieve and all cultural materials were extracted, sorted and analysed.

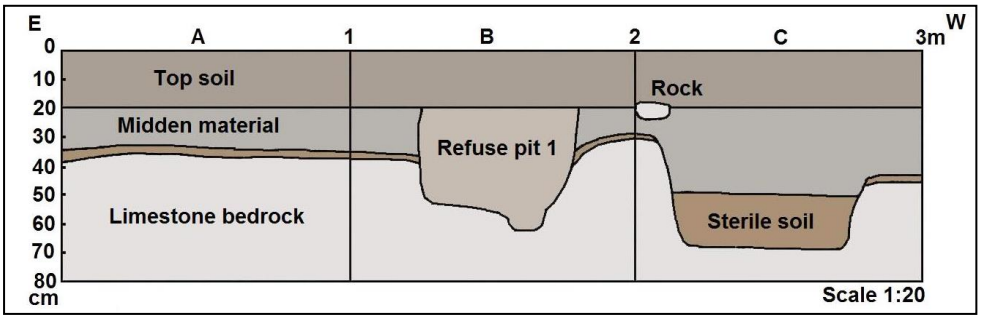

Figure 4.8: View of southern profile of test trench I.

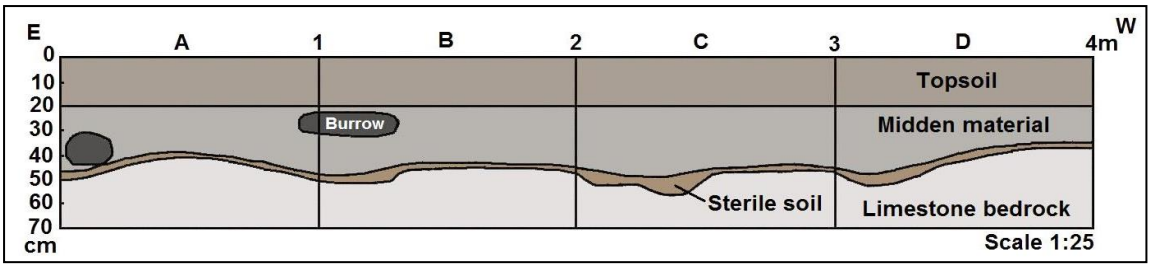

Figure 4.9: View of southern profile of test trench II.

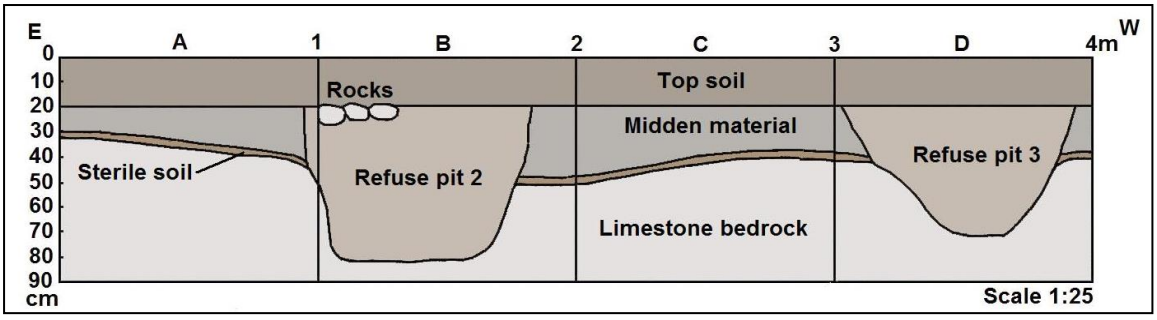

Figure 4.10: View of southern profile of test trench III.

Stratigraphy

The stratigraphic detail of the midden is presented in profile drawings (Figures 4.8-4.10). The stratigraphic sequence was relatively homogeneous across the midden and the three trenches are accordingly discussed as one unit. Four horizontal subdivisions could be identified. The first layer of 12-15 cm formed a hard crust with a brownish-grey colour. The upper layer was underlain by a softer lighter-coloured midden deposit. Below the midden a thin dark brown layer covered the limestone bedrock. Middle Stone Age (MSA) tools and flakes were present in the brown layer. Several refuse pits exposed in trenches I and III exhibited a lighter ashy grey colour and contained a higher percentage of animal bones and potsherds. Disturbances across the profile resulted from grass root intrusions and several animal burrows with darker deposits on account of a higher organic content and decaying nesting material.

Features

A total of three refuse pits were uncovered during the excavations. Trench I had one pit with two in trench III. The pits are indicated in the profile drawings (Figures 4.8 and 4.10).

Refuse pit 1

A disposal pit with a diameter of 60 cm was exposed in trench I, square B, at a depth of 20 cm below the surface. The cavity extended 20 cm into the limestone bedrock (Figure 4.11). The feature contained a mixture of bone and potsherds.

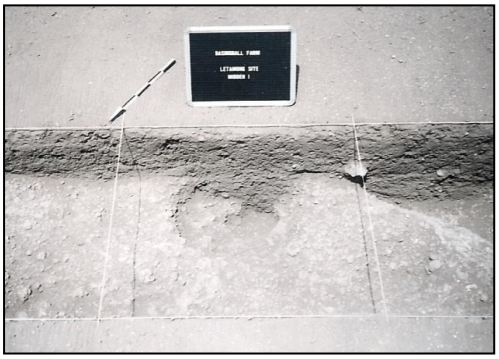

Figure 4.11: Excavated refuse pit 1.

Refuse pit 2

Three stones covered a disposal pit of 110 cm in diameter and 60 cm deep in trench III, square B, at a depth of 20 cm below the surface (Figure 4.12). It had been dug 40 cm into the limestone bedrock. The pit was filled with animal bones (including rhinoceros foot bones) and potsherds.

Figure 4.12: Refuse pit 2.

Figure 4.13: Refuse pit 3.

Refuse pit 3

A pit with a diameter of 90 cm and 50 cm deep was uncovered in trench III, square D, at a depth of 20 cm below the surface (Figure 4.13). In this instance no stones covered the pit that had been dug 30 cm into the limestone bedrock. The feature contained animal bones, potsherds and 280 g of compacted dung.

Dating

Charcoal fragments were retrieved from the undisturbed pits in test trench III. A sample of 67 g charcoal was submitted to the CSIR Quaternary Dating Research Unit, Pretoria. It provided a radiocarbon date of 870 ± 45 years BP (Pta-9167), which calibrated to AD 1217 with a 1-sigma range of AD 1179 to AD 1259 (Southern hemisphere INTCAL 1998 adapted).

Cultural material finds

The cultural finds from the surface collection and the test trenches yielded a representative sample (see Table 4.1). Of the 14 593 ceramics 7538 (52%) were smaller than one centimetre. The remainder of the collection constituted 6793 (46%) undecorated

and 262 (2%) decorated sherds. The decorated potsherds are representative of the *Toutswe*, *Eiland* and *Moritsane* facies. The faunal sample, comprising identifiable bones, bone fragments and bone flakes, amounts to 50 786 elements. The analysis of the faunal component lies beyond the scope of this study. The recovered beads consist of 104 glass beads, 1111 finished ostrich eggshell (OES) beads and nine metal beads. Other metal objects include an iron (Fe) needle, an awl and a spear tip and shaft.

Table 4.1: Cultural material finds from Site 37-C1-8.

Trench	Pottery				Bone		Beads			Other finds
	Undec	Dec	Rims	<1cm	UNID	ID	Glass	OES	Metal	
I	1867	47	100	2148	11 390	45	33	256	2 Fe	Spear tip & shaft
II	2343	54	81	2831	16 045	21	22	340	3 Cu; 1 Fe	Needle
III	2466	73	110	2559	23 163	122	49	352	2 Cu; 1 Fe	Awl
Surface	117	88	126	-	-	-	-	163	-	Slag & iron ore
Total n	**6793**	**262**	**417**	**7538**	**50 598**	**188**	**104**	**1111**	**5 Cu;4 Fe**	

Undec - Undecorated sherds Dec - Decorated sherds Fe – Iron Cu - Copper
OES - Finished ostrich eggshell UNID - Unidentifiable bones ID - Identifiable bones

Figure 4.14: Highly burnished (1), burnished (2) and unburnished (3) vessels.

Ceramics

The three trenches yielded a total of 14 390 potsherds. Sherds smaller than 1 cm in diameter (n = 7538, 52%) were not included in the analysis. The remaining 6852 (48%) sherds were analysed according to the method of stylistic ceramic analysis outlined in Chapter 2. A summary of the analysis is presented in Table 4.2. The sherds recovered from the three pits below a depth of 40 cm are presented as unit 40 – 60 cm. Two vessel shapes, namely jars (n = 687, 10%) and bowls (n = 117, 1.7%), were identified. Body sections (n = 6048, 88.3%) dominate the ceramic sample from this site. The assemblage contains rim sherds (n = 283, 4.1%), decorated sherds (n = 171, 2.5%) and undecorated sherds (n = 6681, 97.5%). A total of 716 (10.4%) highly burnished sherds, 5151 (75.2%) burnished sherds and 985 (14.4%) unburnished sherds were recovered (Figure 4.14). The ceramics are well made with a high incidence of burnishing (85%), well fired and finely decorated. The colour of the ceramics ranges from yellow-brown, red-brown, brown, and grey to black. Sherd thickness is between 5 to 15 mm.

Table 4.2: Analysis of the excavated ceramic sherds from Site 37-C1-8.

Layer (cm)	Vessel	Rim	Decorated	Undecorated	HB	B	UB	Total	< 1cm
0 - 10	Jars	39	33	88	22	95	4	121	
	Bowls	7	1	10	1	10		11	
	Indeterminate			1111	73	864	174	1111	1693
10 - 20	Jars	76	38	177	56	153	6	215	
	Bowls	18	7	24	6	22	3	31	
	Indeterminate			2148	176	1593	379	2148	2456
20 - 30	Jars	39	25	115	40	98	2	140	
	Bowls	5	4	27	10	21		31	
	Indeterminate			1432	135	1080	217	1432	1582
30 - 40	Jars	56	38	114	49	97	6	152	
	Bowls	22	2	31	11	22		33	
	Indeterminate			1065	84	826	155	1065	1349
Pits 40 - 60	Jars	21	20	39	17	41	1	59	
	Bowls		3	8	5	6		11	
	Indeterminate			292	31	223	38	292	458
Total n		**283**	**171**	**6681**	**716**	**5151**	**985**	**6852**	**7538**
Total %		**4.1**	**2.5**	**97.5**	**10.4**	**75.2**	**14.4**	**48**	**52**

HB – Highly burnished B – Burnished UB – Unburnished

Table 4.3: Analysis of the identifiable vessel types from Site 37-C1-8.

Vessel type	Undecorated		Decorated						Total n	Total %
			Toutswe		*Eiland*		*Moritsane*			
	Ex	Sc	Ex	Sc	Ex	Sc	Ex	Sc		
Jars	221	72	6	1					**300**	**29.5**
Constricted jars	6	9	2			1		3	**21**	**2**
Jar body sherds	303		144	51	3	8	2	9	**520**	**51.2**
Beakers		1	1						**2**	**0.2**
Beaker body sherds			6	3					**9**	**0.9**
Bowls	47	35	5		1	2		2	**92**	**9.1**
Bowl body sherds	60						4	8	**72**	**7.1**
Total n	**637**	**117**	**164**	**55**	**4**	**10**	**6**	**22**	**1016**	
Total %	**62.7**	**11.5**	**16.2**	**5.3**	**0.4**	**1.1**	**0.6**	**2.2**		**100**

Ex – Excavated Sc – Surface collection

The collection yielded 1016 identifiable vessels. Of these 811 (80%) were excavated and 205 (20%) surface-collected. The surface collection comprises decorated and rim sherds only. The vessel types (Table 4.3) include jars (n = 300, 29.5%) and jar body sherds (sherds with no rims) (n = 520, 51.2%); constricted jars (n = 21, 2%); beakers (n = 2, 0.2%) and beaker body sherds (n = 9, 0.9%); bowls (n = 92, 9.1%) and bowl body sherds (n = 72, 7.1%). Samples of the vessel profiles are depicted in Figure 4.83. These include jars (No. 1-14); constricted jars (No. 15-20); beakers (No. 21-24) and bowls (No. 25-42). The 262 decorated vessels were stylistically analysed according to the *Toutswe*, *Eiland* and *Moritsane* facies types outlined in Chapter 2. The decorated vessel classes are illustrated in Figures 4.84-4.89 and the classification of the decoration motifs is presented in Table 4.4-4.6.

Figure 4.15: Decorated *Toutswe* facies jars (top and middle row); beakers and bowls (bottom row).

Toutswe facies

A total of 266 motifs were employed on the 219 decorated vessels by utilising 37 *Toutswe* facies motif classes as outlined in Chapter 2, Figure 2.4. Comb-stamped band designs of Class I F1 (11.7%); Class I E1 (10.5%) and Class I F9 (9.8%) were the motifs most frequently used. The most common decoration techniques were comb-stamping (44.4%); oblique incision (17.3%) and crosshatching (12.8%) (Figure 4.15). The assemblage yielded eight of the possible 11 *Toutswe* facies classes outlined in Chapter 2, Figure 2.5. The site is accordingly interpreted as a *Toutswe* facies settlement.

The *Toutswe* facies vessel classes include:

Jars (n = 202)
Class 1: Figure 4.84 (No. 8-11); Figure 4.85 (No. 2, 4-10 & 12); Figure 4.86 (No. 1, 3, 4 & 7)
Class 2: Figure 4.84 (No. 1-7); Figure 4.85 (No. 3 & 11); Figure 4.86 (No. 2, 5, 6, 8-15)
Class 5: Figure 4.85 (No. 1); Figure 4.87 (No. 1-5)
Constricted jar (n = 2)
Class 6: Figure 4.87 (No. 10)
Beakers (n = 10)
Class 7: Figure 4.87 (No. 6-9 & 11); Figure 4.88 (No. 1-8)
Bowls (n = 5)
Class 8: Figure 4.88 (No. 11-17)
Class 9: Figure 4.88 (No. 10)

Table 4.4: Analysis of the *Toutswe* motif classes in the collection.

Class	1	2	3/5	5	6	7	8	9	Total	Total
Profile	Jar	Jar	Jar	Jar	CJar	Beaker	Bowl	Bowl	n	%
Layout	2	2	234	34	3	4	1a	1a		
I A1	2	3	2						**7**	**2.6**
I A3		1							**1**	**0.4**
I A4		11				2			**13**	**4.9**
I A8		1							**1**	**0.4**
I B1	2	9	2						**13**	**4.9**
I B4		10	1						**11**	**4.1**
I D1	1	11							**12**	**4.5**
I D2		13				2			**15**	**5.6**
I D3		5							**5**	**1.8**
I E1	5	15	6	1		1			**28**	**10.5**
I E9		11							**11**	**4.1**
I F1	7	17	6			1			**31**	**11.7**
I F3		1							**1**	**0.4**
I F5		2							**2**	**0.8**
I F6	1	3							**4**	**1.5**
I F9	2	21	2	1					**26**	**9.8**
I G1		1	1						**2**	**0.8**
I G2		2				1			**3**	**1.1**
I H1		1							**1**	**0.4**
I H3		2			1				**3**	**1.1**
I H4					1	1			**2**	**0.8**
I I1		2	1			1		1	**5**	**1.8**
I I3		1				2			**3**	**1.1**
II A1		5	4			2			**11**	**4.1**
II A3		4							**4**	**1.5**
II A6		1	16	1		4			**22**	**8.3**
II B1		3	1		1				**5**	**1.8**
II B2		3							**3**	**1.1**
III B2		1	1						**2**	**0.8**
III B4		1	2			5			**8**	**3.0**
IV A2			1						**1**	**0.4**
IV B1				1					**1**	**0.4**
IV B2				1					**1**	**0.4**
V 1							3		**3**	**1.1**
V 2							2		**2**	**0.8**
V 3							2		**2**	**0.8**
V 4							1		**1**	**0.4**
Total n	**20**	**161**	**46**	**5**	**3**	**22**	**8**	**1**	**266**	
Total %	**7.6**	**60.5**	**17.3**	**1.8**	**1.1**	**8.3**	**3.0**	**0.4**		**100**

CJar – Constricted Jar

Eiland facies

Eiland facies ceramics are represented by 15 (5.7%) of the decorated sherds in the collection, comprising 11 jars and three bowls. A total of 25 *Eiland* motifs (Table 4.5) were employed on the vessels by utilising ten *Eiland* facies motif classes as described in Chapter 2, Figure 2.7. The most frequent decoration motifs were herringbone (40%), crosshatching (12%) with infilled arcades (20%) made by incision (Figure 4.16).

The *Eiland* vessel classes include:

Jars (n = 11)
Class 8: Figure 4.89 (No. 1 & 2)
Class 9: Figure 4.89 (No. 3 & 4)
Constricted jar (n = 1)
Class 10: Figure 4.88 (No. 9)
Bowls (n = 3)
Class 13: Figure 4.89 (No 20 & 21)

Table 4.5: Analysis of the *Eiland* motif classes in the collection.

Class	Profile	Layout	I A1	I A2	I A4	I D1	II A2	II E1	III A3	III A4	IV 1	IV 3	Total n	Total%
8	Jar	2	2		21		2	1					8	32
9	Jar	2, 3	4	1		2	1		4	1			13	52
10	Cons. Jar	1a, b				1		1					2	8
13	Bowl	1b									1	1	2	8
Total n			**6**	**3**	**1**	**3**	**3**	**2**	**4**	**1**	**1**	**1**	**25**	
Total %			**24**	**12**	**4**	**12**	**12**	**8**	**16**	**4**	**4**	**4**		**100**

Figure 4.16: Decorated *Eiland* facies vessels (top row); *Moritsane* facies vessels (bottom row).

Moritsane facies

Moritsane facies ceramics are represented by 28 (10.7%) decorated vessels, comprising 11 jars, three constricted jars and 14 bowls. A total of 60 motifs were employed on the vessels by utilising 19 *Moritsane* facies motif classes as outlined in Chapter 2, Figure 2.10. The most common decoration motifs were the 'stepladder' design II A2 (31.6%), herringbone I A1 (18.2%) and oblique lines I D1 (10%) made by incision (Figure 4.16).

The *Moritsane* vessel classes include:

Jars (n = 11)
Class 4: Figure 4.89 (No. 9)
Class 10: Figure 4.89 (No. 5-8)
Constricted jars (n = 3)
Class 11: Figure 4.86 (No. 16)
Class 14: Figure 4.89 (No. 10)
Bowls (n = 14)
Class 16: Figure 4.89 (No. 22)
Class 19: Figure 4.89 (No. 13)
Class 21: Figure 4.89 (No. 11, 12, 14-19)

Twenty-one bowls were coloured with red ochre on the inside including one constricted jar. Nine bowls were coloured with red ochre on the outside.

Table 4.6: Analysis of the *Moritsane* motif classes in the collection.

Class	**4**	**6**	**9**	**10**	**16**	**21**	**Total**	**Total**
Profile	**Jar**	**Jar**	**Jar**	**Jar**	**Bowl**	**Bowl**	**n**	**%**
Layout	**1a,2**	**1b,2**	**2**	**2,3**	**1ab**	**4**		
I A1			6			5	**11**	**18.2**
I A2			1	1		1	**3**	**5.0**
I A4			2				**2**	**3.3**
I C1		1					**1**	**1.7**
I D1					1	5	**6**	**10.0**
I G1						1	**1**	**1.7**
I H1						1	**1**	**1.7**
I H2	1						**1**	**1.7**
II A2	1					18	**19**	**31.6**
II A3						1	**1**	**1.7**
II B2						2	**2**	**3.3**
II C2						1	**1**	**1.7**
II E1						1	**1**	**1.7**
II E4				1		3	**4**	**6.6**
II F1		1					**1**	**1.7**
II G1	1				1		**2**	**3.3**
III A2						1	**1**	**1.7**
III A3				1			**1**	**1.7**
III A6						1	**1**	**1.7**
Total n	**3**	**2**	**9**	**3**	**2**	**41**	**60**	
Total %	**5.0**	**3.3**	**15.0**	**5.0**	**3.3**	**68.4**		**100**
Inside Red		1				21	**22**	
Outside Red						9	**9**	

Beads

A total of 1245 beads were recovered. These were fashioned from OES (n = 1111); freshwater mussel (n = 21); copper (n = 4) and iron (n = 5). There was also a sizeable assemblage of glass trade beads (n = 104). The glass beads fall into three types: K2 Indo-Pacific (n = 32); East Coast Indo-Pacific (n = 68) and Mapungubwe (n = 4) series trade beads (Figures 4.17-4.20). Details on the type, shape, diaphaneity and diameter of the beads are given in Table 4.7.

Table 4.7: Glass beads excavated at Site 37-C1-8.

Series	Colour	Diaphaneity	Shape	Length ratio	Size (mm) <2.5	Size (mm) 2.55-3.5	Size (mm) 3.55-4.5	Total n
K2 Indo-Pacific	Blue	Transparent	Tube	Short	7			7
K2 Indo-Pacific	Blue	Transparent	Tube	Standard	14			14
K2 Indo-Pacific	Blue	Transparent	Tube	Long	3			3
K2 Indo-Pacific	Blue-green	Transparent	Tube	Short	2			2
K2 Indo-Pacific	Blue-green	Transparent	Tube	Standard	4			4
K2 Indo-Pacific	Blue	Translucent	Cylinder	Short		1	1	2
Subtotal					**30**	**1**	**1**	**32**
EC Indo-Pacific	Red-brown	Opaque	Tube	Short	2	4		6
EC Indo-Pacific	Red-brown	Opaque	Tube	Standard	2			2
EC Indo-Pacific	Red-brown	Opaque	Tube	Long	2			2
EC Indo-Pacific	Red-brown	Opaque	Cylinder	Short	4	6		10
EC Indo-Pacific	Red-brown	Opaque	Cylinder	Standard	1	3		4
EC Indo-Pacific	Red-brown	Opaque	Cylinder	Long		1		1
EC Indo-Pacific	Red-brown	Opaque	Oblate	Short	2	1	1	4
Subtotal					**13**	**15**	**1**	**29**
EC Indo-Pacific	Black	Opaque	Tube	Short	3	3		6
EC Indo-Pacific	Black	Opaque	Tube	Standard	1	2		3
EC Indo-Pacific	Black	Opaque	Tube	Long		1		1
EC Indo-Pacific	Black	Opaque	Cylinder	Short	5	18	1	24
EC Indo-Pacific	Black	Opaque	Cylinder	Standard		4		4
EC Indo-Pacific	Black	Opaque	Cylinder	Long		1		1
Subtotal					**9**	**29**	**1**	**39**
Mapungubwe	Blue	Translucent	Oblate	Short	1		1	2
Mapungubwe	Dark blue	Translucent	Oblate	Short		1		1
Mapungubwe	Green-blue	Translucent	Oblate	Short			1	1
Subtotal					**1**	**1**	**2**	**4**
Total n					**53**	**46**	**5**	**104**

Figure 4.17: Blue and blue-green K2 Indo-Pacific series beads.

Figure 4.18: Red-brown East Coast Indo-Pacific series beads.

Figure 4.19: Black East Coast Indo-Pacific series beads.

Figure 4.20: Mapungubwe series (1-4); K2 series (5 & 6) beads.

The 1111 finished OES beads recovered from the excavations at Site 37-C1-8 consist of 353 complete beads and 758 broken beads. Bead sizes range from 3-12 mm in diameter with 79% beads between 4-8 mm in diameter (Figure 4.21). Bead details and sizes for complete beads are presented in Table 4.8.

Figure 4.21: OES beads.

Table 4.8: Finished OES beads recovered from the excavations.

Size mm	3-3.9	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12 +	Total n	Total %
Complete	21	60	84	88	29	14	10	3	4	1	**314**	**28**
Complete black	6	12	4	10	2	2	2	1			**39**	**4**
Broken	34	120	132	162	119	64	24	14	6	2	**677**	**61**
Broken black	5	13	15	21	20	4	2	1			**81**	**7**
Total n	**66**	**205**	**235**	**281**	**170**	**84**	**38**	**19**	**10**	**3**	**1111**	
Total %	**6**	**18**	**21**	**25**	**15**	**8**	**3**	**2**	**1**	**1**		**100**

The 1303 unfinished OES bead fragments that have been recovered (Figures 4.22 and Table 4.9) can be grouped into four production stages: Stage 1 is represented by prepared irregular discs/blanks; stage 2 as the drilling of the central perforation; during stage 3 the edges of perforated blanks were chipped to create a roughly circular form and chips of 2-4 mm in diameter were discarded; followed by rounding the edges in a grooved stone in stage 4 to produce a final product of finished beads (Figure 4.21).

The excavation focused on the midden area, which probably accounts for the presence of mostly bead blanks, incomplete beads and fragments. Many of the discarded fragments are irregular or broke during the manufacturing process. The unfinished beads are between 4-12 mm in diameter. Blackened finished beads comprise 11% of the collection and incomplete blackened fragments only 5.6%. The dark colour was produced under anaerobic conditions in a fire before the OES fragments were fashioned into beads (Kandel 2005:9; Kandel & Conard 2005:1716). The fact that beads from all stages of production were recovered demonstrates that people at the settlement produced their own OES beads (Figure 4.22).

Table 4.9: Unfinished OES bead fragments recovered from the excavations.

Size mm	3-3.9	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12 +	Total n	Total %
Stage 4 complete			3	12	7	6	2	2	1	1	**34**	**2.6**
St. 4 complete black			2		1		1				**4**	**0.3**

St. 4 broken		6	25	16	30	27	44	49	22	10	**229**	**17.6**
St. 4 broken black		1	2	4	5	3	7	5	1	1	**29**	**2.2**
Stage 3			1	6	10	11	18	12	12	9	**79**	**6.1**
Stage 3 black				2	3	1	1	1	1		**9**	**0.7**
Stage 2		17	28	38	31	32	18	11	10	7	**192**	**14.7**
Stage 2 black		2	3	2	2	1	1	2	2	3	**18**	**1.4**
Stage 1				22	35	27	17	10	13	7	**131**	**10.0**
Stage 1 black				4	6	1	1	1			**13**	**1.0**
Chips	565										**565**	**43.4**
Total n	**565**	**26**	**64**	**106**	**130**	**109**	**110**	**93**	**62**	**38**	**1303**	
Total %	**43.4**	**2.0**	**4.9**	**8.1**	**10.0**	**8.4**	**8.4**	**7.1**	**4.8**	**2.9**		**100**

Figure 4.22: The production stages of OES beads: stage 4 (top row), waste chips (second row), stage 3 (third row), stage 2 (fourth row) and stage 1 (fifth row). Note the blackened beads in each stage.

In addition, 21 freshwater mussel (*Unionidae*) beads, the diameters of which range from 3-7 mm, were recovered (Figure 4.23). Fragments of unworked freshwater mussel in a size range of between 5 to 50 mm were also present.

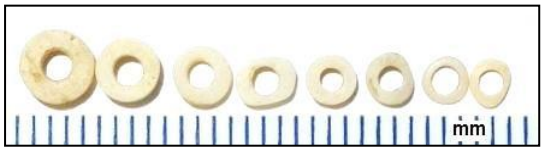

Figure 4.23: Freshwater mussel beads.

Metal artefacts

The metal sample contains various corroded iron and copper artefacts (Table 4.10). The worked iron objects (Figure 4.24 and 4.25) include beads, sections of solid and coiled bangles, a needle, an awl, spear/arrow tips and shafts. The copper (Cu) objects consist of beads and fragments of solid and coiled bangles (Figure 4.26). A total of 187 slag nodules from the trenches and a slag chunk and iron ore collected on the surface (Figure 4.30) reflect metal-working activities at the settlement.

Table 4.10: Various metal artefacts excavated.

Trench	Beads	Bangles	Other
I	2 Fe	13 Cu coiled; 2 Fe solid	Spear/arrow tip & shaft
II	1 Fe; 3 Cu	4 Cu coiled; 1 Fe solid	Needle
III	2 Fe; 1 Cu	4 Cu coiled; 2 Fe coiled	Awl
Total n	**5 Fe; 4 Cu**	**21 Cu; 5 Fe**	

Figure 4.24: Iron artefacts including an awl (1), spear/arrow tips and shafts (2-4) and a needle (5).

Figure 4.25: Iron beads (1, 2) and bangles (3, 4).

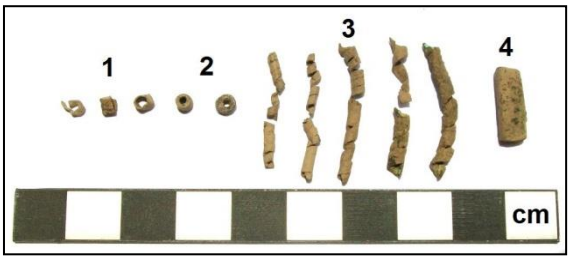

Figure 4.26: Copper beads (1, 2) and bangles (3, 4).

Other clay artefacts

Eight tools made from fragments of discarded vessels form part of the ceramic collection. Each has an abraded area in the form of a flattened arc produced by scraping or moulding tasks (Figure 4.27). A fragment of a spindle whorl was found in trench III (Figure 4.32). A total of 137 fragments of burned hut rubble with pole impressions were also recovered (Figure 4.28). The pole impressions on the hut rubble suggest cone-on-cylinder type houses. The walls would have been constructed from wooden stakes infilled and plastered with clay (Figure 4.32).

Figure 4.27: Abraded potsherds.

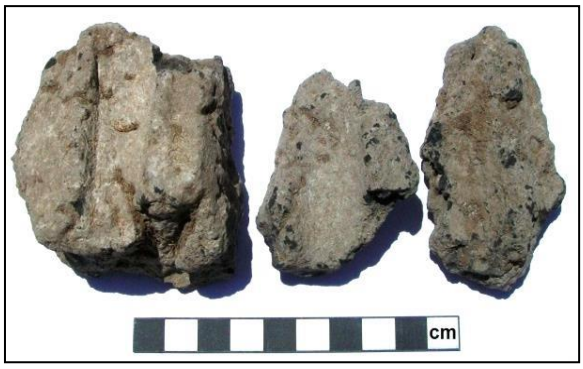

Figure 4.28: Hut rubble fragments.

Three clay figurine fragments (Figures 4.29 and 4.32) were also found. Two body fragments were decorated with rows of stabs and the third is part of the horn of a cattle figurine.

Figure 4.29: Clay figurine fragments.

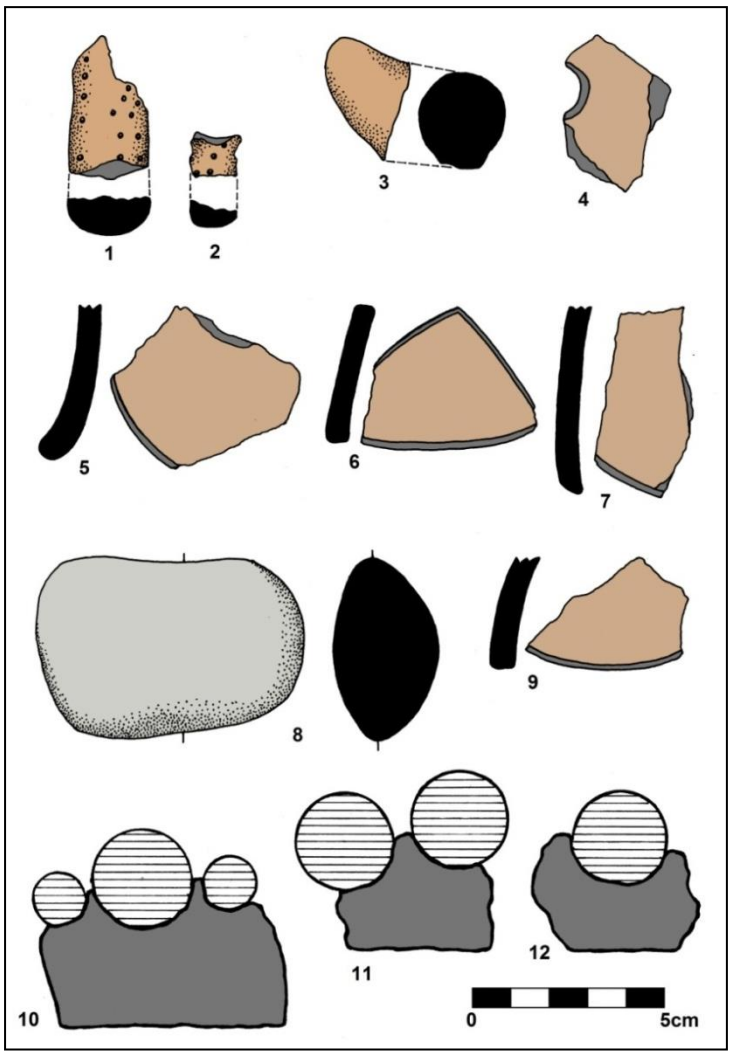

Figure 4.30: Clay figurine fragments (1-3); spindle whorl fragment (4); abraded potsherds (5-7 & 9); polished stone (8); hut rubble fragments indicating the size of wooden stakes used for constructing walls (10-12).

Worked stone

A fragment of an upper grinding stone, probably used for grinding sorghum or millet, was recovered. In addition, a smooth polished stone was also found (Figure 4.31).

Figure 4.31: Slag chunk, nodules and iron ore.

Figure 4.32: Polished and upper grinding stones.

4.3 Excavations at Site 37-C1-4

Site name: *Onjombo* (watering well in Herero) **S23°31'02.6" E27º06 38.4"**

Site description

The *Onjombo* site is situated on the highest point at Basinghall. It is located on the eastern part of a limestone ridge in an open clearing that incorporates a few shepherd's (*Boscia albitrunca*) and smelly shepherd's (*Boscia foetida*) trees (Figures 4.33 and 4.34). The site has an elevation of 839 m above sea level (see contour lines indicated in Figure 4.35). The closest water source is a non-perennial pan situated ± 200 m to the east of the site while the Limpopo River is ± 3 km away.

The site covers an area of 90 m x 60 m. The ash-grey midden of approximately 40 m in diameter (Figure 4.35) contains a dense deposit of ± 25 cm in depth. An exploration pit dating from around AD 1900 had been placed in the midden where the grey soils probably attracted the attention of prospectors searching for minerals. The dimensions of this feature are 2 m x 1.8 m with a depth of 5 m. The excavated bedrock material was discarded around the edge. To the west of the midden is a natural hollow where animal burrowing exposed subsurface cultural material through bioturbation. No cattle kraal deposit, house remains, grain bin remains or lower grinding stones were identified on the surface. The aim of the investigation at the site was to acquire a date for the occupation and to collect a representative ceramic sample rather than to uncover the settlement layout.

Figure 4.33: General view of the site.

Figure 4.34: The midden deposit.

Excavation methodology

The central part of the midden is partly covered by discarded material from the prospecting pit. An intact portion of the midden deposit was selected for excavation. A 10 m^2 test trench (M) was excavated as a 5 m x 2 m block divided into 1 m x 1 m squares assigned A1, A2, B1, B2, C1, C2, D1, D2, E1 and E2. The trench was excavated using 10 cm spits until bedrock was reached at a depth of ± 25 cm (Figures 4.36 and 4.37).

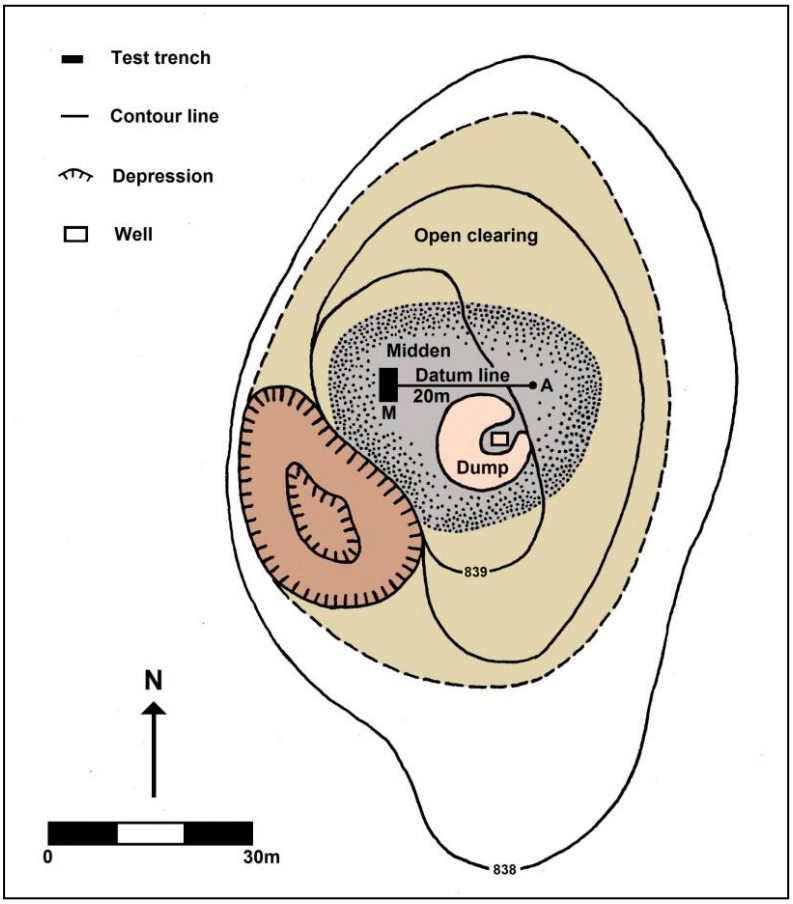

Figure 4.35: Settlement layout of Site 37-C1-4.

Figure 4.36: Southern view of the test trench M.

Figure 4.37: Eastern profile of the test trench.

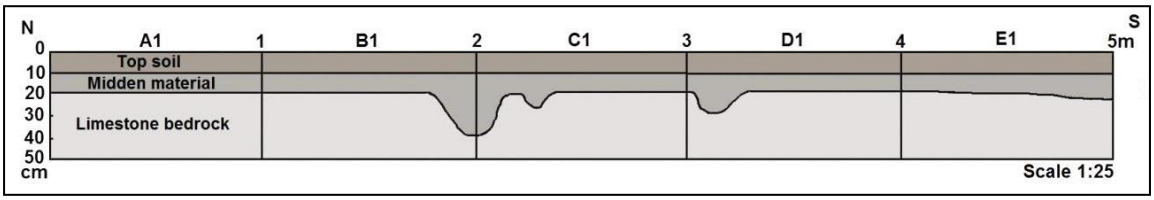

Figure 4.38: The eastern profile of the test trench.

Stratigraphy

The stratigraphy in the midden is presented in a profile drawing (see Figure 4.38). Three horizontal subdivisions were identified. The uppermost layer of 10 cm formed a hard crust with a brownish-grey colour. The next layer consisted of softer lighter-coloured midden deposit that contained numerous ceramic sherds and animal bones. The trench was excavated to a depth of ± 25 cm up to bedrock. Disturbances across the profile resulted from grass root intrusions and also several animal burrows with darker deposits of organic humus.

Dating

Charcoal fragments were retrieved from the undisturbed midden layer at a depth of 15-25 cm. A sample of 146 g charcoal was submitted to the CSIR Quaternary Dating Research Unit, Pretoria. It provided a radiocarbon date of 760 ± 50 years BP (Pta-9169), which calibrated to AD 1283 with a 1-sigma range of AD 1266 to AD 1296 (Southern hemisphere INTCAL 1998 adapted).

Cultural material finds

The surface collection and the test trenches yielded a representative sample of cultural material (see Table 4.11). Of the 5692 ceramic sherds 1862 (33%) were smaller than one centimetre. The remainder constituted 3678 (65%) undecorated and 152 (2%) decorated sherds. The decorated potsherds are representative of both the *Toutswe* and *Moritsane* facies. The faunal sample consists of a total of 19 893 bone fragments, bone flakes and identifiable bones. The bead sample comprises 77 glass, 557 finished OES, seven

freshwater mussel shell and eight metal beads. Metal objects include copper bangles, wire pieces and an earring, and also an iron spear tip and bangle fragments.

Table 4.11: Cultural material finds from Site 37-C1-4.

Trench	Pottery				Bone		Beads				Other finds
	Undec	Dec	Rims	<1cm	UNID	ID	Glass	OES	Shell	Metal	
M	3587	100	251	1862	19 809	84	77	513	7	4 Cu; 4 Fe	Earring; spear tip; bangles
Surface	91	52	95	-	-	-	-	44		-	
Total n	**3678**	**152**	**346**	**1862**	**19 809**	**84**	**77**	**557**	**7**	**4 Cu; 4 Fe**	

Undec - Undecorated sherds Dec - Decorated sherds Fe – Iron Cu - Copper
OES - Ostrich eggshell UNID - Unidentifiable bones ID - Identifiable bones

Ceramics

The excavated trench yielded a total of 5549 potsherds. Fragments smaller than 1 cm in diameter (n = 1862, 34%) were not included in the analysis. The remaining 3687 (66%) sherds were analysed according to the method of stylistic analysis discussed in Chapter 2. A summary of the analysis is presented in Table 4.12. Two vessel shapes, jar sherds (n = 545, 15%) and bowl sherds (n = 171, 5%), were identified. The bulk of the ceramic sample consists of indeterminate body sherds (n = 2971, 80%). The assemblage comprises rim sherds (n = 251, 6.8%), decorated sherds (n = 100, 2.7%) and undecorated sherds (n = 3587, 97.3%). A total of 352 (9.5%) highly burnished sherds, 1784 (48.4%) burnished sherds and 1551 (42.1%) unburnished sherds were recovered. The ceramics are well made, often burnished (58%), well fired and finely decorated. The colour of the ceramics ranges from yellow-brown, red-brown, brown, grey to black. Sherd thickness is between 5 and 20 mm.

Table 4.12: Analysis of the excavated ceramic sherds from Site 37-C1-4.

Layer (cm)	Vessel	Rim	Decorated	Undecorated	HB	B	UB	Total	< 1cm
0 - 10	Jars	27	13	86	18	61	20	99	
	Bowls	16	3	29	7	19	6	32	
	Indeterminate			613	53	237	323	613	543
10 - 20	Jars	97	43	266	60	190	59	309	
	Bowls	44	16	72	20	57	11	88	
	Indeterminate			1587	100	720	767	1587	877
20+	Jars	38	23	114	23	87	27	137	
	Bowls	29	2	49	15	27	9	51	
	Indeterminate			771	56	386	329	771	442
Total n		**251**	**100**	**3587**	**352**	**1784**	**1551**	**3687**	**1862**
Total %		**6.8**	**2.7**	**97.3**	**9.5**	**48.4**	**42.1**		

HB – Highly burnished B – Burnished UB – Unburnished

The collection yielded 861 identifiable vessels. Of these 718 (83%) were excavated and 143 (17%) collected from the surface. The surface collection comprises decorated and rim sherds only. The vessel types (Table 4.13) include jars (n = 217, 25.2%) and jar body sherds (sherds with no rims) (n = 415, 48.2%); constricted jars (n = 25, 2.9%); beakers (n = 2, 0.2%); beaker body sherds (n = 2, 0.2%); bowls (n = 111, 12.9%) and bowl body sherds (n = 89, 10.4%). Samples of the vessel profiles are depicted in Figure 4.90. These include jars (No. 1-19); constricted jars (No. 20-24); beakers (No. 25-27) and bowls (No.

28-45). The 125 decorated vessels were stylistically analysed according to the *Toutswe* and *Moritsane* facies types outlined in Chapter 2. A single first-millennium *Bambata* facies sherd was also recovered (see Figure 4.93, No. 16). The decorated vessel classes are illustrated in Figures 4.91-4.93 and the classification of decoration motifs is presented in Tables 4.14 and 4.15.

Table 4.13: Analysis of the identifiable vessel types from Site 37-C1-4.

Vessel type	Undecorated		Decorated					Total n	Total %
			Toutswe		*Moritsane*		*Bambata*		
	Ex	Sc	Ex	Sc	Ex	Sc	Ex		
Jars	150	58	2	1	5	1		**217**	**25.2**
Constricted jars	12	10				2	1	**25**	**2.9**
Jar body sherds	315		57	34	3	6		**415**	**48.2**
Beakers		1	1					**2**	**0.2**
Beaker body sherds	1	1						**2**	**0.2**
Bowls	89	21				1		**111**	**12.9**
Bowl body sherds	78				4	7		**89**	**10.4**
Total n	**645**	**91**	**60**	**35**	**12**	**17**	**1**	**861**	
Total %	**74.9**	**10.6**	**7.0**	**4.0**	**1.4**	**2.0**	**0.1**		**100**

Ex – Excavated Sc – Surface collection

Toutswe facies

The *Toutswe* facies is represented by 95 (76%) decorated vessels (see Figure 4.39 for examples). A total of 78 motifs were employed on the 95 decorated vessels by utilising

Table 4.14: Analysis of the *Toutswe* motif classes in the collection.

Class	1	2	3/5	7	Total	Total
Profile	Jar	Jar	Jar	Beaker	n	%
Layout	2	2	234	4		
I A1		1	1		**2**	**2.6**
I A4		13			**13**	**16.7**
I B1		4	2		**6**	**7.7**
I B4	1	4			**5**	**6.4**
I D1		2	1		**3**	**3.8**
I D2	1	3			**4**	**5.1**
I D3		5			**5**	**6.4**
I E1		2			**2**	**2.6**
I F1		1			**1**	**1.3**
I F9		6			**6**	**7.7**
I H3		1			**1**	**1.3**
I I1		2			**2**	**2.6**
II A3	1	6			**7**	**7.7**
II A6		2	6	1	**9**	**11.5**
II B1		1			**1**	**1.3**
II B2		2			**2**	**2.6**
IV A1			1		**1**	**1.3**
IV A2			1		**1**	**1.3**
IV B1		1	3	1	**5**	**6.4**
IV B2			2		**2**	**2.6**
Total n	**3**	**56**	**17**	**2**	**78**	
Total%	**3.8**	**71.8**	**21.8**	**2.6**		**100**

Figure 4.39: Decorated *Toutswe* facies vessels.

20 *Toutswe* facies motif classes as outlined in Chapter 2, Figure 2.4. Comb-stamped band designs of Class II A3 (18.8%); Class I F1 (11.7%) and Class I F9 (9.8%) were the motifs most frequently used. The most common decoration techniques were oblique incision (33.3%) and comb-stamping (18%). The assemblage yielded five of the possible 11 *Toutswe* facies classes outlined in Chapter 2, Figure 2.5.

The *Toutswe* facies vessel classes include:

Jars (n = 94)
Class 1: Figure 4.91 (No. 5, 12 & 13); Figure 4.92 (No. 4)
Class 2: Figure 4.91 (No. 1-4, 6-11, 14 & 15); Figure 4.92 (No. 1-3 & 5)
Class 5: Figure 4.92 (No. 6-10 & 12)
Beaker (n = 1)
Class 7: Figure 4.92 (No. 11)

Moritsane facies

Moritsane facies ceramics are represented by 29 (23.2%) decorated vessels in the collection, comprising 13 jars, four constricted jars and 12 bowls. A total of 36 motifs were employed on the vessels by utilising 13 *Moritsane* facies motif classes as outlined in Chapter 2, Figure 2.10. The most common motifs were the 'stepladder' design II A2 (22.2%) and herringbone I A1 (19.5 %) made by incision.

The *Moritsane* vessel classes include:

Jars (n = 13)
Class 1: Figure 4.93 (No. 12)
Class 3: Figure 4.93 (No. 1)
Class 10: Figure 4.93 (No. 2-4)
Constricted jars (n = 4)
Class 12: Figure 4.93 (No. 8)
Class 13: Figure 4.93 (No. 5)
Class 15: Figure 4.93 (No. 6 & 7)
Bowls (n = 12)
Class 17: Figure 4.93 (No. 13)
Class 21: Figure 4.93 (No. 9-11, 14 & 15)

Fourteen bowls were coloured with red ochre on the inside and two bowls were coloured with red ochre on the outside.

Table 4.15: Analysis of the *Moritsane* motif classes in the collection.

Class	1	3	10	12	13	15	17	21	Total n	Total %
Profile	Jar	Jar	Jar	C Jar	C Jar	C Jar	Bowl	Bowl		
Layout	1a	1b	2,3	1b	1a,3	3	1b	4		
I A1			1		1	1		4	**7**	**19.5**
I A3								1	**1**	**2.8**
I D1		1		1				1	**3**	**8.3**
I G1			1					2	**3**	**8.3**

I G2						1			**1**	**2.8**
II A2				1				7	**8**	**22.2**
II B2			1					1	**2**	**5.5**
II C2								1	**1**	**2.8**
II E1		1	1		1			2	**5**	**13.9**
II E4								1	**1**	**2.8**
II G1	1				1				**2**	**5.5**
III A5								1	**1**	**2.8**
IV 6							1		**1**	**2.8**
Total n	**1**	**2**	**4**	**2**	**3**	**2**	**1**	**21**	**36**	
Total %	**2.8**	**5.5**	**11.2**	**5.5**	**8.3**	**5.5**	**2.8**	**58.4**		**100**
Inside Red								14	**14**	
Outside Red								2	**2**	

Beads

Site 37-C1-4 yielded a total of 645 beads. These were fashioned from OES (n = 557); freshwater mussel (n = 7); copper (n = 4) and iron (n = 4). Glass trade beads (n = 77) were also retrieved. The glass beads include K2 Indo-Pacific (29), East Coast Indo-Pacific (43), Mapungubwe (2) and Khami Indo-Pacific (3) series trade beads (Figures 4-40-4.43). Information on the type, shape, diaphaneity and diameter of the beads is given in Table 4.16.

Table 4.16: Glass beads excavated at Site 37-C1-4.

Series	Colour	Diaphaneity	Shape	Length ratio	Size (mm) <2.5	Size (mm) 2.55-3.5	Size (mm) 3.55-4.5	Total n
K2 Indo-Pacific	Blue	Transparent	Tube	Short	2	1		3
K2 Indo-Pacific	Blue	Transparent	Tube	Standard	7			7
K2 Indo-Pacific	Blue-green	Transparent	Tube	Short	8	1		9
K2 Indo-Pacific	Blue-green	Transparent	Tube	Standard	7			7
K2 Indo-Pacific	Green	Transparent	Tube	Short	2			2
K2 Indo-Pacific	Green	Transparent	Tube	Standard	1			1
Subtotal					**27**	**2**		**29**
EC Indo-Pacific	Red-brown	Opaque	Tube	Short	7			7
EC Indo-Pacific	Red-brown	Opaque	Tube	Standard	5			5
EC Indo-Pacific	Red-brown	Opaque	Cylinder	Short	2	7	2	11
EC Indo-Pacific	Red-brown	Opaque	Cylinder	Standard	1	4		5
Subtotal					**15**	**11**	**2**	**28**
EC Indo-Pacific	Black	Opaque	Tube	Short	3	3		6
EC Indo-Pacific	Black	Opaque	Cylinder	Short	1	5		6
EC Indo-Pacific	Black	Opaque	Cylinder	Standard		3		3
Subtotal					**4**	**11**		**15**
Mapungubwe	Blue	Translucent	Oblate	Short		1		1
Mapungubwe	Dark blue	Translucent	Oblate	Short		1		1
Khami Indo-Pacific	Blue-green	Translucent	Cylinder	Short		1		1
Khami Indo-Pacific	Dark blue	Translucent	Cylinder	Short			2	2
Total n					**46**	**27**	**4**	**77**

Figure 4.40: Blue, blue-green and green K2 Indo-Pacific series beads.

Figure 4.41: Red-brown East Coast Indo-Pacific series beads.

Figure 4.42: Black East Coast Indo-Pacific series beads.

Figure 4.43: Mapungubwe oblate series (1 & 2); Khami Indo-Pacific series beads (3-5).

The 557 finished OES beads consist of 162 complete beads and 395 broken beads. Bead sizes range from 3-12 mm in diameter with 81% beads between 4-8 mm in diameter (Figure 4.44). Bead details and sizes for complete beads are presented in Table 4.17.

Table 4.17: Finished OES beads.

Size mm	3-3.9	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12 +	Total n	Total %
Complete	2	19	38	20	28	18	5	6	3	4	**143**	**25.7**
Complete black		2	4	3	3	4	2	1			**19**	**3.4**
Broken		15	145	68	42	15	9	16	7		**317**	**56.9**
Broken black		3	23	21	19	3	5	2	2		**78**	**14.0**
Total n	**2**	**39**	**210**	**112**	**92**	**40**	**21**	**25**	**12**	**4**	**557**	
Total %	**0.3**	**7.0**	**37.7**	**20.1**	**16.5**	**7.2**	**3.8**	**4.5**	**2.2**	**0.7**		**100**

Figure 4.44: OES beads.

The 1670 unfinished OES bead fragments (Figure 4.45 and Table 4.18) can be grouped into four production stages as previously discussed. The OES bead sample contains 114 (6.8%) stage 1 blanks that were chipped to create a roughly circular form before the central perforation was drilled (Figure 4.45 fourth row). The unfinished beads are

between 5-12 mm in diameter. Blackened finished beads comprise 17.4% of the collection and incomplete blackened fragments only 3.8%. The presence of beads from all stages of production suggests bead production at the settlement.

Table 4.18: Unfinished OES bead fragments recovered from the excavations.

Size mm	< 4	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12 +	Total n	Total %
Stage 4 complete		6	14	10	10	3	3	3		**49**	**2.9**
St. 4 complete black		1	2	2						**5**	**0.3**
St. 4 broken		9	6	8	14	3	3	1		**44**	**2.6**
St. 4 broken black		3	1	2	2	1				**9**	**0.5**
Stage 3		19	22	14	3	1				**59**	**3.5**
Stage 3 black		4	1	2						**7**	**0.4**
Stage 2			3	4	2	1				**10**	**0.6**
Stage 1 blank		20	25	27	15	6	1			**94**	**5.6**
Stage 1 blank black		3	7	8	2					**20**	**1.2**
Stage 1		72	68	31	16	10	11	8	15	**231**	**13.8**
Stage 1 black		6	5	3	4	1	1	3	1	**24**	**1.4**
Chips	1118									**1118**	**66.9**
Total n	**1118**	**143**	**154**	**111**	**68**	**26**	**19**	**15**	**16**	**1670**	
Total %	**66.9**	**8.6**	**9.2**	**6.6**	**4.1**	**1.6**	**1.1**	**0.9**	**1.0**		**100**

Figure 4.45: The production stages of OES beads: stage 4 (top row), stage 3 (second row), waste chips (third row), stage 1 chipped blanks (fourth row) and stage 1 (fifth row). Note the blackened beads in each stage.

The bead sample also includes seven freshwater mussel (*Unionidae*) beads of 4-7 mm in diameter.

Metal artefacts

The worked iron objects (Figure 4.47 & 4.48) include beads, coiled bangles, a spear tip and unidentified fragments. The copper artefacts consist of beads, coiled bangles, wire and an earring (Figure 4.46). A 5 g slag nodule was recovered from block A1 which may suggest metal-working activities at the settlement.

Figure 4.46: Copper beads (1), wire (2), earring (3) and bangles (4).

Figure 4.47: Iron beads and bangles.

Figure 4.48: Iron spear tip.

Other artefacts

The ceramic collection includes six tools used in scraping or moulding tasks or in the preparation of animal hides (Figure 4.49). A broken whey stopper (Figure 4.49) was found in block C2. Such a circular ceramic disk is commonly placed at the bottom of a perforated pot that contains sour milk to filter whey. A total of 13.6 kg fragments of hut rubble with pole impressions that again suggest cone-on-cylinder houses were also recovered (Figure 4.50).

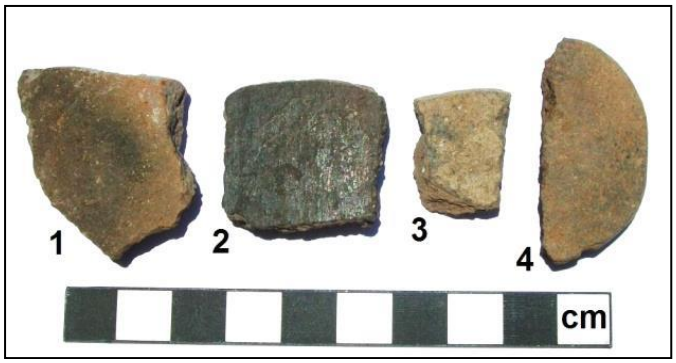

Figure 4.49: Abraded potsherds (1-3) and whey stopper (4).

Figure 4.50: Hut rubble fragments.

Two fire-damaged ivory fragments (Figure 4.51) were also recovered. These fragments were most likely parts of ivory armbands. A cache of ivory armbands was found buried in a midden from an archaeological site at Mosu on the edge of the Makgadikgadi Pans. These ivory ornaments were probably traded to Mapungubwe and further afield to Arab traders on the East Coast (Reid & Segobye 2000:64).

Figure 4.51: Burnt ivory fragments.

Worked stone

The excavations also yielded three upper grinding stone fragments, probably used for grinding sorghum or millet (Figure 4.52).

Figure 4.52: Upper grinding stone fragments.

4.4 Excavations at Site 37-A3-1

Site name: *Lekotsane* (little house) **S23º28'51.3" E27º06'52.5"**

Site description

The site is situated on a limestone outcrop to the east of a non-perennial pan. It is located in an open clearing marked by a few shepherd's trees (*Boscia albitrunca*) (Figures 4.53-54). The midden is positioned on the highest point of the outcrop. The closest water source is a non-perennial pan situated ± 100 m to the west of the site with the permanent water source of the Limpopo River ± 6 km away.

The open clearing covers an area of 120 m x 120 m. A grey-coloured midden approximately 40 m in diameter and, to the east of the midden, a cattle kraal deposit of 25 m in diameter were recorded in the open clearing (Figure 4.55). The midden is greatly disturbed by burrowing animals that exposed the underlying cultural material. The material contained *Toutswe*, *Eiland*, *Moritsane* and *Letsibogo* facies ceramics. No cultural material was documented in the kraal area, which probably relates to the *Letsibogo* component of the site. No house remains, grain bin remains or lower grinding stones were identified on the surface.

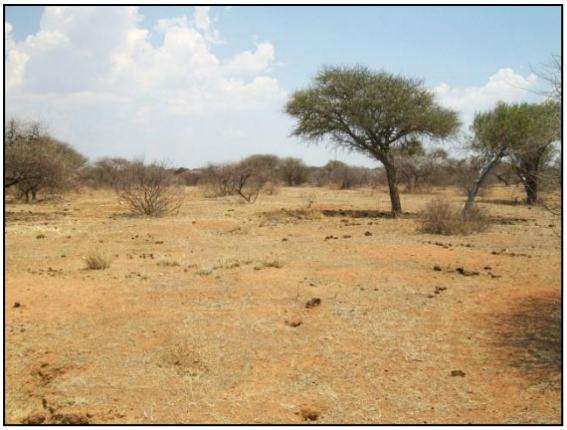

Figure 4.53: General view of the site.

Figure 4.54: The midden deposit.

Excavation methodology

The easily recognisable midden was investigated with a view to sample *Toutswe* ceramics. A total area of 12 m² encompassing six test trenches was excavated in the midden (Figure 4.55). Test trenches A, B, C and D were excavated north of the datum line while trench E was excavated west and trench F south of the datum line. Each covered a 2 m x 1 m block divided into 1 m x 1 m squares, assigned for example A1 and A2 (Figures 4.56-4.62). The excavations were carried out in September 2004 with the assistance of UNISA students and their families. The trenches were excavated using 10 cm spits until the limestone bedrock was reached.

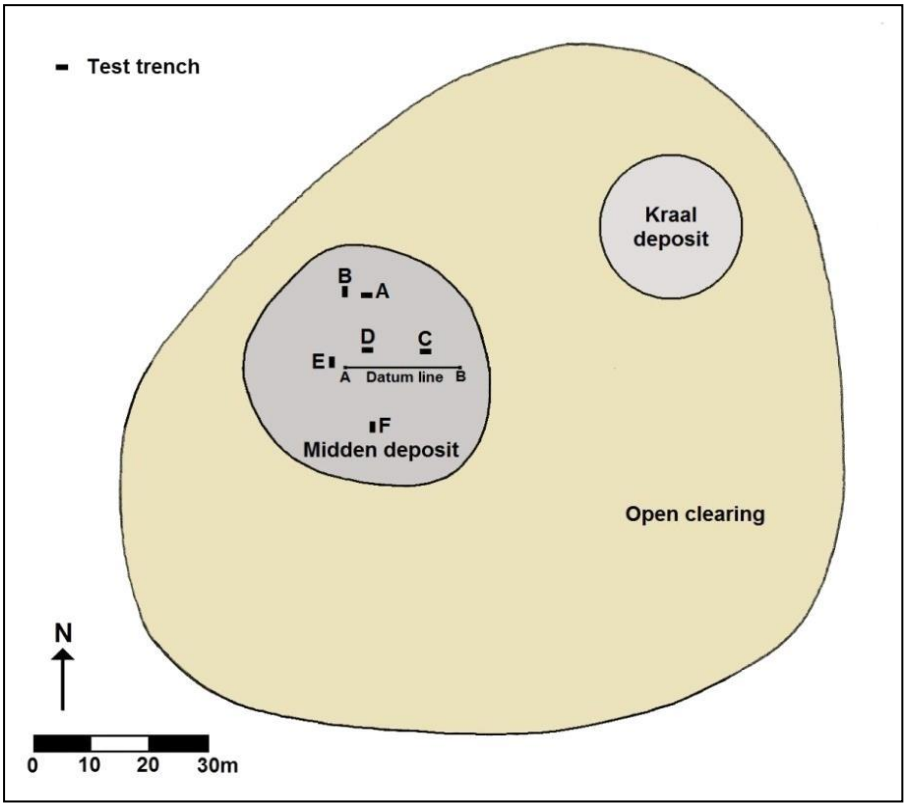

Figure 4.55: Settlement layout of Site 37-A3-1.

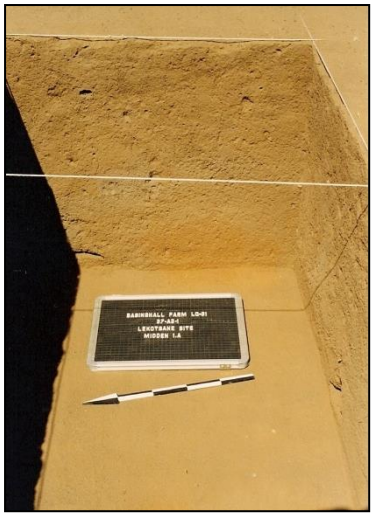

Figure 4.56: Test trench A.

Figure 4.57: Test trench B.

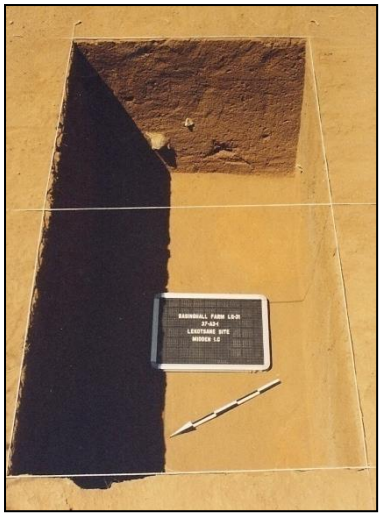

Figure 4.58: Test trench C.

Figure 4.59: Southern profile of trench C.

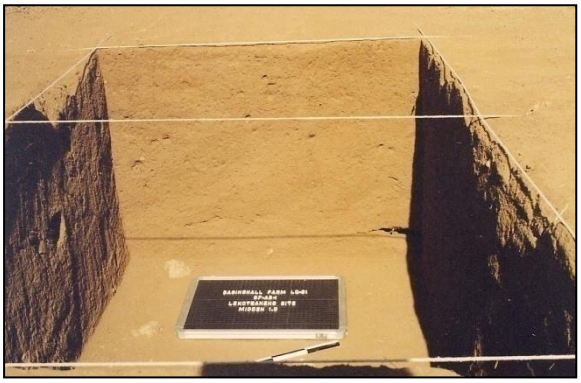

Figure 4.60: Test trench D.

Figure 4.61: Test trench E.

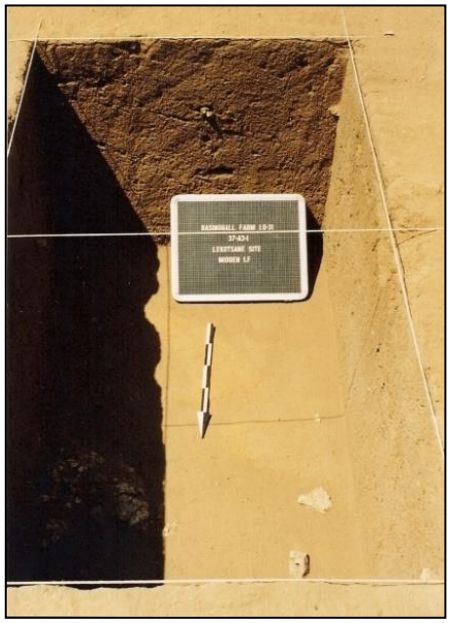

Figure 4.62: Test trench F.

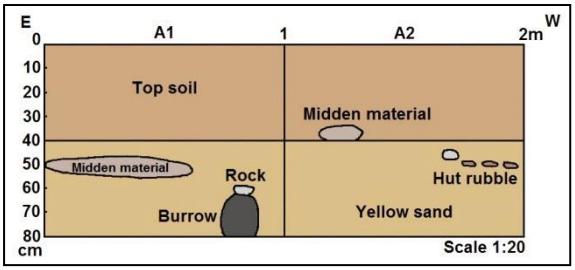

Figure 4.63: Southern profile of trench A.

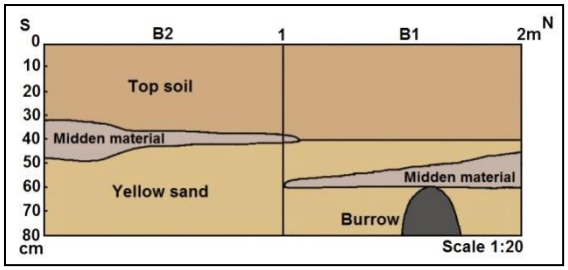

Figure 4.64: Western profile of trench B.

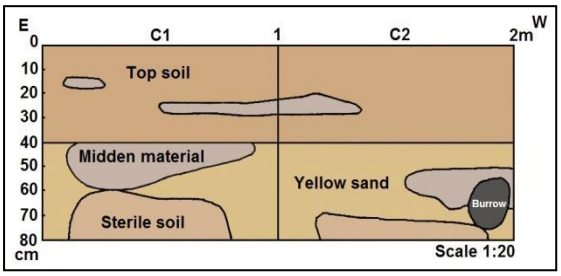

Figure 4.65: Southern profile of trench C.

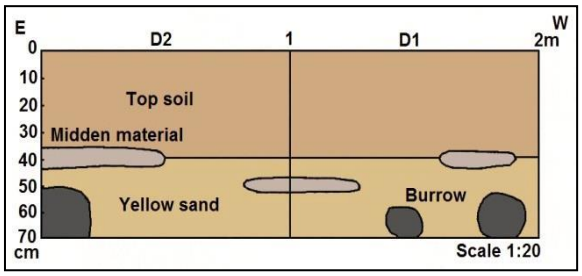

Figure 4.66: Southern profile of trench D.

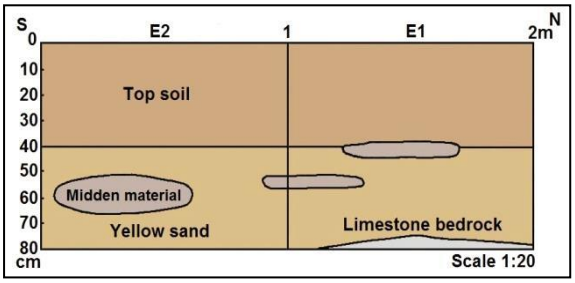

Figure 4.67: Western profile of trench E.

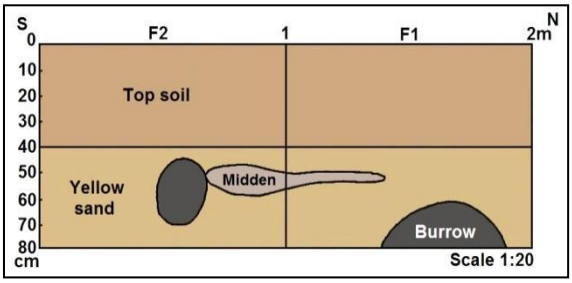

Figure 4.68: Western profile of trench F.

Stratigraphy

The stratigraphy of the midden is presented in profile drawings (Figures 4.63-4.68). The stratigraphic sequence was relatively uniform and all six trenches are accordingly discussed as one unit. Two horizontal subdivisions of 40 cm each were identified. A brownish-red upper crust was underlain by softer and lighter-coloured sand. The ash-grey midden deposits were encountered at ± 40 cm. There were clearly more animal bones and ceramics in the midden layers. The trenches were excavated up to bedrock, which was reached at a depth of 80 cm. Disturbances across the profile resulted from grass root infiltrations and several rodent burrows of darker deposits with a higher organic content.

Dating

Charcoal fragments were retrieved from the undisturbed midden layer at a depth of 40-60 cm in test trench C. These undisturbed lower levels were dominated by *Toutswe* ceramics. A sample of 123 g charcoal was submitted to the CSIR Quaternary Dating Research Unit, Pretoria. It provided a radiocarbon date of 1010 ± 40 years BP (Pta-9392),

which calibrated to AD 1030 with a 1-sigma range of AD 1015 to AD 1047 and AD 1097 to AD 1136 (Southern hemisphere INTCAL 1998 adapted).

Cultural material finds

Cultural finds from the surface collection and test trenches yielded a representative sample (Table 4.19). Of the 7765 ceramic sherds 1902 (25%) fragments were smaller than one centimetre. The rest of the collection constituted 5670 (72.5%) undecorated and 193 (2.5%) decorated sherds. The decorated potsherds represent the *Toutswe, Eiland, Moritsane* and *Letsibogo* facies. The majority of the *Moritsane* and *Letsibogo* facies ceramics were identified in the upper levels (0-30 cm) whereas most of the *Toutswe* and *Eiland* facies ceramics occurred in the lower levels (30-80 cm) of the trenches. The faunal sample consists of a total of 18 846 bone fragments, bone flakes and identifiable bones. The bead sample consists of 53 glass beads, 584 finished OES beads and six metal beads. Metal objects include copper and iron bangles, spear/arrow shafts and an iron hook.

Table 4.19: Cultural material finds from Site 37-A3-1.

Trench	Pottery				Bone		Beads			Other finds
	Undec	Dec	Rims	<1cm	UNID	ID	Glass	OES	Metal	
A	1083	17	80	372	2911	11	11	90	1 Fe	4 Fe bangles
B	1176	27	115	563	4685	18	9	139	1 Fe	Spear shaft, 2 Cu bangles
C	772	6	50	133	1854	7	11	56	1 Cu	6 Fe bangles, Fe hook
D	861	22	56	222	2786	11	8	85		Spear shaft, figurine
E	652	24	35	217	2135	8	5	63	1 Fe	2 Cu bangles
F	1013	13	77	395	4403	17	9	118	1 Cu; 1 Fe	4 Cu + 3 Fe bangles
Surface	113	84	125	-	-	-	-	33	-	
Total n	**5670**	**193**	**538**	**1902**	**18774**	**72**	**53**	**584**	**2 Cu;4 Fe**	

Undec - Undecorated sherds Dec - Decorated sherds Fe - Iron Cu - Copper
OES - Finished ostrich eggshell UNID - Unidentifiable bones ID - Identifiable bones

Ceramics

Excavations of the six trenches generated a total of 7568 ceramic sherds. Sherds smaller than one centimetre in diameter (n = 1902, 25.1%) were not included in the analysis. The remaining sherds (n = 5666, 74.9%) were analysed according to the stylistic ceramic analysis described in Chapter 2. A summary of the analyses is presented in Table 4.20. Again two vessel shapes, namely jars (sherds n = 686, 12.1%) and bowls (sherds n = 178, 3.1%), were present. The bulk of the sample consists of indeterminate body sherds (n = 4802, 84.8%). The assemblage contains rim sherds (n = 413, 7.3%), decorated sherds (n = 109, 1.9%) and undecorated sherds (n = 5557, 98.1%). A total of 762 (13.4%) highly burnished sherds, 3365 (59.4%) burnished sherds and 1539 (27.2%) unburnished sherds were recovered. Some 294 (5.2%) sherds formed part of cooking vessels that were soot-blackened by fire on the outside or retained charred food remains on the inside.

Table 4.20: Analysis of the excavated ceramic sherds from Site 37-A3-1.

Layer (cm)	Vessel	Rim	Decorated	Undecorated	Blackened	HB	B	UB	Total	<1cm
0 - 10	Jars	37	12	92		13	80	11	104	
	Bowls	24	10	24		7	24	3	34	
	Indeterminate			759	46	90	455	214	759	284

10 - 20	Jars	46	5	90		12	77	6	95	
	Bowls	19	9	19	1	7	20	1	28	
	Indeterminate			682	31	77	390	215	682	299
20 - 30	Jars	39	10	83		17	69	7	93	
	Bowls	16	10	12		5	15	2	22	
	Indeterminate			698	42	86	400	212	698	274
30 - 40	Jars	41	9	71		20	55	5	80	
	Bowls	15	6	17		9	12	2	23	
	Indeterminate			573	26	63	341	169	573	219
40 - 50	Jars	42	4	85		28	58	3	89	
	Bowls	10	6	11		6	9	2	17	
	Indeterminate			616	40	85	333	198	616	253
50 - 60	Jars	30	9	112		16	101	4	121	
	Bowls	18	4	24		8	19	1	28	
	Indeterminate			591	60	84	301	206	591	189
60 - 70	Jars	27	3	50		11	39	3	53	
	Bowls	6	1	7		4	3	1	8	
	Indeterminate			386	25	42	229	115	386	153
70 - 80	Jars	28	6	45		8	42	1	51	
	Bowls	15	5	13		3	14	1	18	
	Indeterminate			497	23	61	279	157	497	231
Total n		**413**	**109**	**5557**	**294**	**762**	**3365**	**1539**	**5666**	**1902**
Total %		**7.3**	**1.9**	**98.1**	**5.2**	**13.4**	**59.4**	**27.2**	**74.9**	**25.1**

HB – Highly burnished B – Burnished UB – Unburnished

Table 4.21: Analysis of the identifiable vessel types from Site 37-A3-1.

Vessel type	Undecorated		Decorated								Total n	Total %
			Toutswe		*Eiland*		*Moritsane*		*Letsibogo*			
	Ex	Sc	Ex	Sc	Ex	Sc	Ex	Sc	Ex	Sc		
Jars	239	62		4				1	5		311	29.5
Constricted jars	33	20					3				56	5.3
Jar body sherds	328		40	28	1	3	5	5	32	12	454	43.0
Beakers	3										3	0.3
Beaker body sherds	2	2									4	0.4
Bowls	79	29				2	2	3	9	5	129	12.2
Bowl body sherds	65				1	2	1	4	21	4	98	9.3
Total n	**749**	**113**	**40**	**32**	**2**	**7**	**11**	**13**	**67**	**21**	**1055**	
Total %	**71.0**	**10.7**	**3.8**	**3.0**	**0.2**	**0.7**	**1.1**	**1.2**	**6.3**	**2.0**		**100**

The collection yielded 1055 reconstructable vessels. Of these 869 (82.4%) were excavated and 186 (17.6%) collected on the surface. The surface collection comprised decorated and rim sherds only. Vessel types (Table 4.21) include jars (n = 311, 29.5%) and jar body sherds (sherds with no rims) (n = 454, 43%), constricted jars (n = 56, 5.3%), beakers (n = 3, 0.3%) and beaker body sherds (n = 4, 0.4%), bowls (n = 129, 12.2%) and bowl body sherds (n = 98, 9.3%). Samples of the vessel profiles are illustrated in Figure 4.94. These include jars (No. 1-21); constricted jars (No. 22-31); beakers (No. 32-35) and bowls (No. 36-54). The 193 decorated vessels were stylistically analysed according to the *Toutswe*, *Eiland*, *Moritsane* and *Letsibogo* facies types described in Chapter 2. The decorated vessel classes are illustrated in Figures 4.95-4.100 and the classification of the decoration motifs is presented in Tables 4.22-4.24.

Toutswe facies

The *Toutswe* facies is represented by 72 (37%) of the decorated vessels in the assemblage (see Figure 4.69 for examples). The majority of the *Toutswe* ceramics were identified in the lower levels (30-80 cm) of the trenches. A total of 69 motifs were employed on the 72 decorated vessels by utilising 21 *Toutswe* facies motif classes as outlined in Chapter 2, Figure 2.4. Comb-stamped band designs of Class II A3 (18.8%), Class I F1 (11.7%) and Class I F9 (9.8%) were the motifs most frequently used. The most frequent decoration techniques were comb-stamping (43.5%) and oblique incision (18.8%). The assemblage yielded three of the possible 11 *Toutswe* facies classes outlined in Chapter 2, Figure 2.5.

The *Toutswe* facies vessel classes include:

Jars (n = 72)
Class 1: Figure 4.95 (No. 9, 11-14); Figure 4.96 (No. 1-9, 11 & 14); Figure 4.97 (No. 6, 7 & 17)
Class 2: Figure 4.95 (No. 1-8 & 10); Figure 4.96 (No. 10, 12, 13 & 15); Figure 4.97 (No. 1-5, 8-16)
Class 3 or 5: Figure 4.96 (No. 16 & 17)

Table 4.22: Analysis of the *Toutswe* motif classes in the collection.

Class	1	2	3/5	Total	Total
Profile	Jar	Jar	Jar	n	%
Layout	2	2	234		
I A1	1	2	1	**4**	**5.8**
I A4		1		**1**	**1.5**
I B1	1			**1**	**1.5**
I B2		3		**3**	**4.3**
I B4		4		**4**	**5.8**
I C1		1		**1**	**1.5**
I C3	1			**1**	**1.5**
I D3		1		**1**	**1.5**
I E1		5		**5**	**7.2**
I E9		6		**6**	**8.7**
I F1	4	4	1	**9**	**13.0**
I F9	3	5		**8**	**11.5**
I H3		1		**1**	**1.5**
I I1		1		**1**	**1.5**
I I3		3		**3**	**4.3**
II A1		2		**2**	**2.8**
II A3	8	5		**13**	**18.8**
II A6			2	**2**	**2.8**
II B2		1		**1**	**1.5**
IV A1			1	**1**	**1.5**
IV B2			1	**1**	**1.5**
Total n	**45**	**18**	**6**	**69**	
Total%	**65.2**	**26.1**	**8.7**		**100**

Figure 4.69: Decorated *Toutswe* facies jars (top and middle row); transitional phase (*Thatswane*) jars (bottom row).

Eiland facies

Nine (5%) of the decorated sherds in the collection from Site 37-A3-1 (*Lekotsane*), comprising four jars and five bowls, belong to the *Eiland* facies ceramics. A total of 12 *Eiland* motifs (Table 4.23) were employed on the vessels by utilising eight *Eiland* facies motif classes as outlined in Chapter 2, Figure 2.7. Two vessels were decorated by incised arcades (III A3), filled in with herringbone (I A2) and crosshatching (I D4) motifs respectively.

The *Eiland* facies vessel classes include:

Jars: (n = 4)
Class 2: Figure 4.98 (No. 11)
Class 9: Figure 4.98 (No. 8, 9 & 10)
Bowls: (n = 5)
Class 13: Figure 4.98 (No. 12, 13 & 14)
Class 14: Figure 4.98 (No. 1 & 2)

Table 4.23: Analysis of the *Eiland* motif classes in the collection.

Class	Profile	Layout	IA1	ID4	IIA3	IIF1	IIF2	IIIA3	IV1	IV2	Total n
2	Jar	1b							1		1
9	Jar	23	2	1	1			2			6
13	Bowl	1b								3	3
14	Bowl	1a				1	1				2
Total n			**2**	**1**	**1**	**1**	**1**	**2**	**1**	**3**	**12**

Moritsane facies

Twenty-four (12%) of the decorated vessels in the collection represent *Moritsane* facies ceramics, comprising ten jars, two constricted jars and 12 bowls (see Figure 4.70 for a selection of decorated sherds). The majority of the *Moritsane* ceramics were identified in the upper levels (0-30 cm) of the trenches. A total of 55 motifs were employed on the vessels by utilising 23 *Moritsane* facies motif classes as outlined in Chapter 2, Figure 2.10. The two most common motifs, both made by incision, are the 'stepladder' design II A2 and oblique incision I D1.

The *Moritsane* vessel classes include:

Jars (n = 10)
Class 2: Figure 4.98 (No. 5)
Class 6: Figure 4.98 (No. 4)
Class 9: Figure 4. 99 (No. 11-13)
Class 10: Figure 4.98 (No. 6 & 7)
Constricted jars (n = 2)
Class 11: Figure 4.98 (No. 3)
Bowls (n = 12)
Class 17: Figure 4.99 (No. 2 & 5)
Class 20: Figure 4.99 (No. 1, 3 & 4)

Class 21: Figure 4.99 (No. 6-10 & 14)

Nine bowls were coloured with red ochre on the inside and seven bowls with red ochre on the outside.

Figure 4.70: Decorated *Moritsane* facies vessels.

Figure 4.71: Decorated *Letsibogo* facies vessels.

Table 4.24: Analysis of the *Moritsane* motif classes in the collection.

Class	**2**	**6**	**9**	**10**	**11**	**17**	**20**	**21**	**Total n**	**Total %**
Profile	**Jar**	**Jar**	**Jar**	**Jar**	**C Jar**	**Bowl**	**Bowl**	**Bowl**		
Layout	**1ab**	**1b,2**	**2**	**2,3**	**1a**	**1b**	**1b,4**	**4**		
I A1			4						**4**	**7.3**
I A3		1							**1**	**1.8**
I C1			1						**1**	**1.8**
I D1	1		2			1	1	3	**8**	**14.6**
I F1							1		**1**	**1.8**
I G1				2					**2**	**3.6**
I H1			1				1	1	**3**	**5.5**
II A2			1			1	3	3	**8**	**14.6**
II A3						1			**1**	**1.8**
II B3								1	**1**	**1.8**
II C3								1	**1**	**1.8**
II D3	1		1	3				1	**6**	**10.9**
II D4				1					**1**	**1.8**
II E2			1			1			**2**	**3.6**
II E4								1	**1**	**1.8**
II G1	1				1				**2**	**3.6**
II G2					1				**1**	**1.8**
III A5			1					1	**2**	**3.6**
III A6							1		**1**	**1.8**
III B4							3	2	**5**	**9.1**
IV 1							1		**1**	**1.8**
IV 3							1		**1**	**1.8**
IV 5						1			**1**	**1.8**
Total n	**3**	**1**	**12**	**6**	**2**	**5**	**12**	**14**	**55**	
Total %	**5.5**	**1.8**	**21.8**	**10.9**	**3.6**	**9.1**	**21.8**	**25.5**		**100**
Inside Red						2	1	6	**9**	
Outside Red							2	5	**7**	

Letsibogo facies

The *Letsibogo* facies is represented by 88 (46%) decorated vessels in the collection (see Figure 4.71 for a selection of decorated sherds). The majority of the *Letsibogo* ceramics were identified in the upper levels (0-30 cm) of the trenches. A total of 60 motifs were employed utilising 18 *Letsibogo* facies motif classes as outlined in Chapter 2, Figure 2.19. The punctate double line design (class I A2) and incised single line design (class I E1) were most frequently used. The assemblage yielded eight of the possible 26 *Letsibogo* facies classes outlined in Figures 2.20 and 2.21. *Letsibogo* ceramics are usually highly decorated and thus slightly over-emphasise the proportion of decorated vessels at Site 37-A3-1.

The *Letsibogo* facies vessel classes include:

Jars (n = 49)
Class 3 (type 1b): Figure 4.100 (No. 2, 3 & 6)
Class 4 (type 1b, 2): Figure 4.100 (No. 1)
Class 9 (type 2 3): Figure 4.100 (No. 4)
Class 11 (type 3): Figure 4.100 (No. 21)
Constricted jar (n = 1)
Class 14 (type 1ab): Figure 4.100 (No. 5)
Bowls (n = 38)
Class 22 (type 1b): Figure 4.100 (No. 17, 19 & 20)
Class 25 (type 1b 4): Figure 4.100 (No. 7, 13 & 18)
Class 26 (type 4): Figure 4.100 (No. 8-12 & 14-16)

The *Letsibogo* collection from this site includes 17 vessels coloured with red ochre on the outside, 35 vessels coloured with graphite on the outer surface and 25 vessels coloured with graphite on the interior.

Table 4.25: Analysis of the *Letsibogo* motif classes in the collection.

Class	3	4	9	11	14	22	25	26	Total	Total
Profile	Jar	Jar	Jar	Jar	CJar	Bowl	Bowl	Bowl	n	%
Layout	1b	1b,2	2,3	3	1ab	1b	1b,4	4		
I A1							1	3	**4**	**6.6**
I A2			1	1		1	1	5	**9**	**15.0**
I A3			1	1					**2**	**3.3**
I C2	2							4	**6**	**10.0**
I C3	1					1	2	4	**8**	**13.3**
I D1								1	**1**	**1.7**
I D2					1				**1**	**1.7**
I D3							1		**1**	**1.7**
I E1			2	3				4	**9**	**15.0**
I E2		1	1					3	**5**	**8.3**
I E3			1	3				1	**5**	**8.3**
I E4		1						1	**2**	**3.3**
IF2						1			**1**	**1.7**

I H1					1				**1**	**1.7**
II A2			1						**1**	**1.7**
II B1							1	1	**2**	**3.3**
II C1				1					**1**	**1.7**
II D1								1	**1**	**1.7**
Total n	**3**	**2**	**7**	**9**	**2**	**3**	**6**	**28**	**60**	
Total%	**5.0**	**3.3**	**11.7**	**15.0**	**3.3**	**5.0**	**10.0**	**46.7**		**100**
Out R			3	3			1	10	**17**	
Out G	1	1	4	3		1	3	22	**35**	
In G		1				2	3	19	**25**	

CJar – Constricted Jar Out R – Red outside
Out G – Graphite outside In G – Graphite inside

Beads

A total of 645 identifiable beads were recovered. These were fashioned from OES (n = 584); clay (n = 1); bone (n = 1); copper (n = 2) and iron (n = 4). There were also a number of glass trade beads (n = 53). The glass beads comprise K2 Indo-Pacific (33); East Coast Indo-Pacific (17); Khami Indo-Pacific (1) and European (2) series trade beads (Figures 4.72-4.75). The bead information clearly points towards a multi-component site, an aspect which will be discussed in Chapter 9. Data on the type, shape, diaphaneity and diameter of the beads are provided in Table 4.26.

Table 4.26: Glass beads excavated at Site 37-A3-1.

Series	Colour	Diaphaneity	Shape	Length ratio	Size (mm) <2.5	Size (mm) 2.55-3.5	Size (mm) 3.55-4.5	Total n
K2 Indo-Pacific	Blue	Transparent	Tube	Short	5			5
K2 Indo-Pacific	Blue	Transparent	Tube	Standard	11			11
K2 Indo-Pacific	Blue-green	Transparent	Tube	Short	4	2		6
K2 Indo-Pacific	Blue-green	Transparent	Tube	Standard	6			6
K2 Indo-Pacific	Green	Transparent	Tube	Short	3	1		4
K2 Indo-Pacific	Green	Transparent	Tube	Standard	1			1
Subtotal					**30**	**3**		**33**
EC Indo-Pacific	Red-brown	Opaque	Tube	Short		6	1	7
EC Indo-Pacific	Red-brown	Opaque	Cylinder	Short		2		2
EC Indo-Pacific	Red-brown	Opaque	Cylinder	Standard	3			3
Subtotal					**3**	**8**	**1**	**12**
EC Indo-Pacific	Black	Opaque	Cylinder	Short		4		4
EC Indo-Pacific	Black	Opaque	Cylinder	Long		1		1
Subtotal						**5**		**5**
Khami Indo-Pacific	Green	Translucent	Cylinder	Short		1		1
European	Blue	Transparent	Tube	Standard			1 (7 mm Ø)	1
European	Pink	Opaque	Oblate	Short		1		1
Total n					**33**	**18**	**2**	**53**

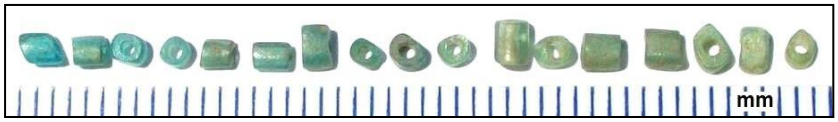

Figure 4.72: Blue, blue-green and green K2 Indo-Pacific series beads.

Figure 4.73: Red-brown East Coast Indo-Pacific series beads.

Figure 4.74: Black East Coast Indo-Pacific series beads.

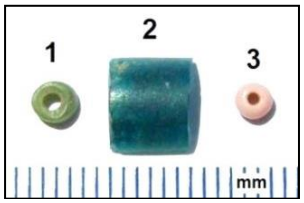

Figure 4.75: Khami Indo-Pacific series (1) European beads (2 & 3).

The 584 finished OES beads recovered from the excavations consist of 115 complete beads and 469 broken beads. Bead sizes range from 3-12 mm in diameter with 78% beads between 4-8 mm in diameter (Figure 4.76). Bead details and sizes for complete beads are presented in Table 4.27.

Table 4.27: Finished OES beads.

Size mm	3-3.9	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12 +	Total n	Total %
Complete	5	9	17	31	21	6	5	4	1	2	**101**	**17.3**
Complete black	1	2	3	4	2	1	1				**14**	**2.4**
Broken	10	83	95	86	59	43	26	18	1	2	**423**	**72.4**
Broken black		13	16	9	5	3					**46**	**7.9**
Total n	**16**	**107**	**131**	**130**	**87**	**53**	**32**	**22**	**2**	**4**	**584**	
Total %	**2.7**	**18.3**	**22.4**	**22.3**	**14.9**	**9.1**	**5.5**	**3.8**	**0.3**	**0.7**		**100**

Figure 4.76: OES beads.

The 209 unfinished OES bead fragments that have been recovered (Figure 4.77 and Table 4.28) can be grouped into four production stages as previously described. The unfinished beads are between 4-12 mm in diameter. Blackened finished beads comprise 10% of the collection and incomplete blackened fragments only 5.8%. Beads from all stages of production demonstrate that people at the settlement produced their own OES beads.

Table 4.28: Unfinished OES bead fragments recovered from the excavations.

Size mm	3-3.9	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12 +	Total n	Total %
Stage 4 complete		1	2	7	2	5	2	1	1		**21**	**10.0**
St. 4 complete black					1	1					**2**	**1.0**
St. 4 broken			10	10	3	1	1	2	2		**29**	**13.9**
St. 4 broken black					1						**1**	**0.5**
Stage 3			4	5	5	1	3				**18**	**8.6**
Stage 3 black						1					**1**	**0.5**
Stage 2			3	6	3	4	3	2	2	3	**26**	**12.4**
Stage 2 black			1	2		2					**5**	**2.4**
Stage 2 blanks			2	3		2	1				**8**	**3.8**
Stage 1			4	4	4	1	1	3	2	4	**23**	**11.0**
Stage 1 black				1	1	1					**3**	**1.4**
Chips	72										**72**	**34.5**
Total n	**72**	**1**	**26**	**38**	**20**	**19**	**11**	**8**	**7**	**7**	**209**	
Total %	**34.5**	**0.5**	**12.4**	**18.2**	**9.6**	**9.1**	**5.3**	**3.8**	**3.3**	**3.3**		**100**

Figure 4.77: The production stages of OES beads: stage 4 (top row), stage 3 (second row), waste chips (third row), stage 2 (fourth row) and stage 1 (fifth row). Note the blackened beads in each stage.

In addition, the excavations yielded one clay bead (15.5 mm long and 10 mm in diameter) (Figure 4.82) and one bone bead (a disc of 11.5 mm in diameter).

Metal artefacts

Various corroded iron and copper artefacts were recovered. The iron objects (Figures 4.78 and 4.79) include four beads, 13 coiled bangle fragments, two spear/arrow shafts, one hook and three unidentified fragments. The copper objects consist of two beads and eight coiled bangle fragments (Figure 4.78). The presence of two slag nodules in the excavations suggests local metal-working activities.

Figure 4.78: Iron beads (1) and coiled bangles (2); copper bangle coils (3) and beads (4).

Figure 4.79: Iron spear/arrow shafts (1 & 3) and a hook (2).

Other clay artefacts

Sixteen abraded potsherds made from fragments of discarded vessels form part of the ceramic collection. Each has an abraded area in the form of a flattened arc produced by scraping or moulding tasks (Figure 4.80). A total of 11.3 kg fragments of hut rubble with pole impressions suggest cone-on-cylinder type houses (Figure 4.81).

Figure 4.80: Abraded potsherds.

Figure 4.81: Hut rubble fragments.

Other noteworthy finds are a clay bead, clay figurine fragment and a clay spoon fragment (Figure 4.82). The figurine body fragment displays rows of stabs and a breast.

Figure 4.82 Clay bead, figurine and spoon fragments.

4.5 Conclusion

The three excavated *Toutswe* facies sites are classified as third-level settlements that represent commoner cattle posts. The settlement pattern consisted of a central midden surrounded by household structures. The aim of the investigations was to date the sites and to collect a representative ceramic sample rather than to uncover settlement layout. Although no houses or granaries were recorded, the excavations in middens recovered a representative sample of cultural material. The suite of radiocarbon dates confirmed that *Toutswe* people settled at Basinghall over a period of three centuries.

Site 37-C1-8 (*Letamong*), the most prominent *Toutswe* site at Basinghall, has a midden of 50 cm in depth. The relative quantities of cultural material from this site indicate a period of occupation of more than 50 years. The ceramic assemblage, which yielded eight of the possible 11 *Toutswe* facies ceramic classes, displays characteristics typical of a 12th-century *Toutswe* facies. An intrusive ceramic component of 16% *Eiland* and *Moritsane* facies was also established. The 104 glass beads comprise K2 Indo-Pacific (n = 32), East Coast Indo-Pacific (n = 68) and Mapungubwe (n = 4) series trade beads.

The late 13th-century date obtained for Site 37-C1-4 (*Onjombo*) suggests that this locality was inhabited during the final period of the *Toutswe* chiefdom. The ceramic assemblage yielded five of the possible 11 *Toutswe* facies classes. The *Toutswe* facies represents 76% of the ceramic sample and the intrusive *Moritsane* facies the remainder. The 77 glass beads comprise K2 Indo-Pacific (n = 29), East Coast Indo-Pacific (n = 43), Mapungubwe (n = 2) and Khami Indo-Pacific (n = 3) series trade beads.

The diversity of ceramics from the third locality, Site 37-A3-1 (*Lekotsane*), suggests a multi-component settlement. The early *Toutswe* and *Eiland* facies ceramics date to the 11th century while the *Moritsane* facies ceramics are from a later period. A more recent 19th-century *Letsibogo* facies ceramic component was also recorded. *Letsibogo* ceramics are generally highly decorated and thus over-emphasise the relative proportion of decorated vessels in the sample for the particular site. The 53 glass beads comprise K2 Indo-Pacific (n = 33), East Coast Indo-Pacific (n = 17), Khami Indo-Pacific (n = 1) and European (n = 2) series trade beads. The Khami and European series beads can be linked to an occupation during the *Letsibogo* facies period.

An intrusion of *Moritsane* facies ceramics is recognised from the analyses of excavated material from the *Toutswe* facies sites. In the next chapter I investigate settlements of the *Moritsane* people.

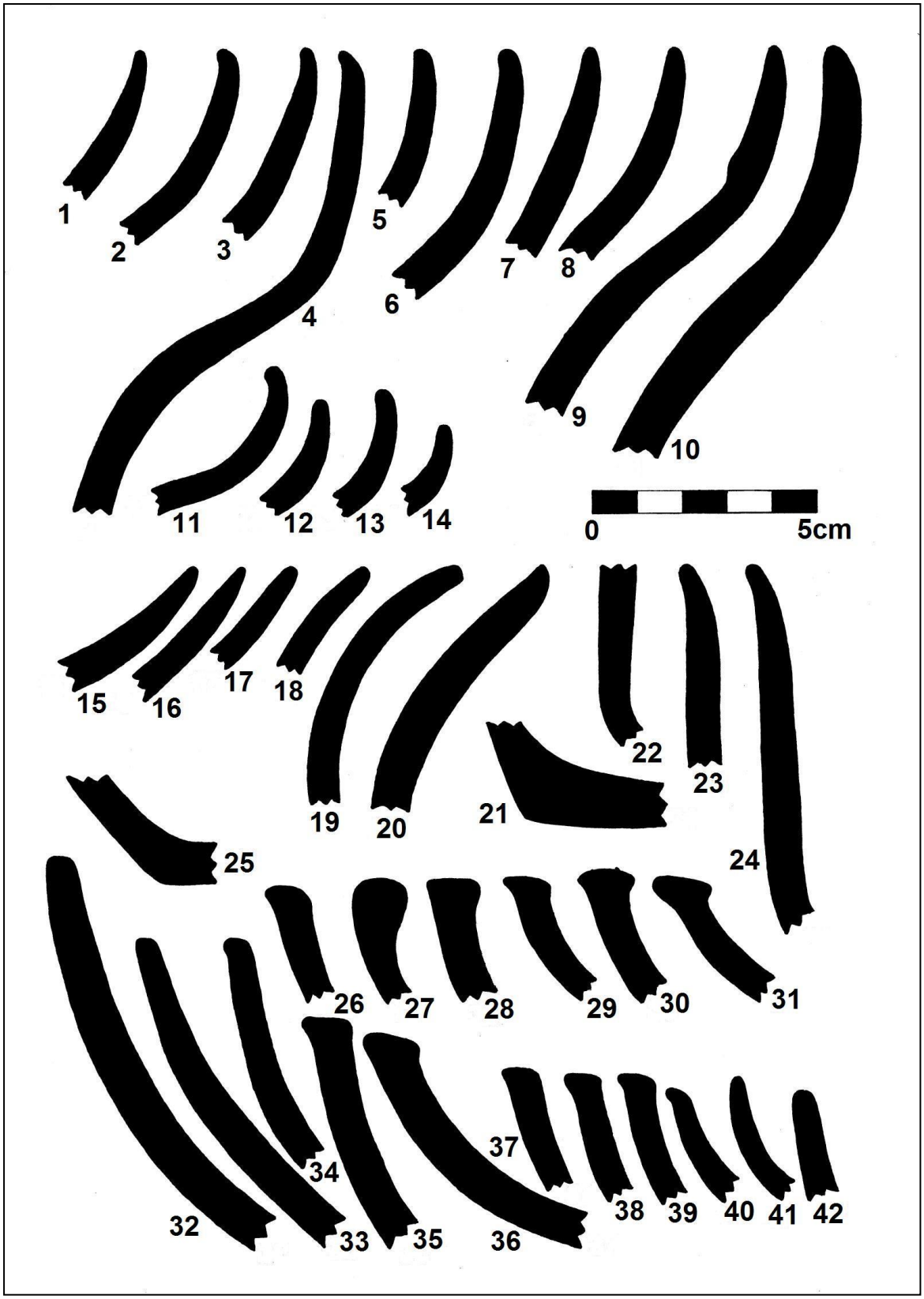

Figure 4.83: Vessel profiles from Site 37-C1-8: jars (No. 1-14); constricted jars (No. 15-20); beakers (No. 21-24) and bowls (No. 25-42).

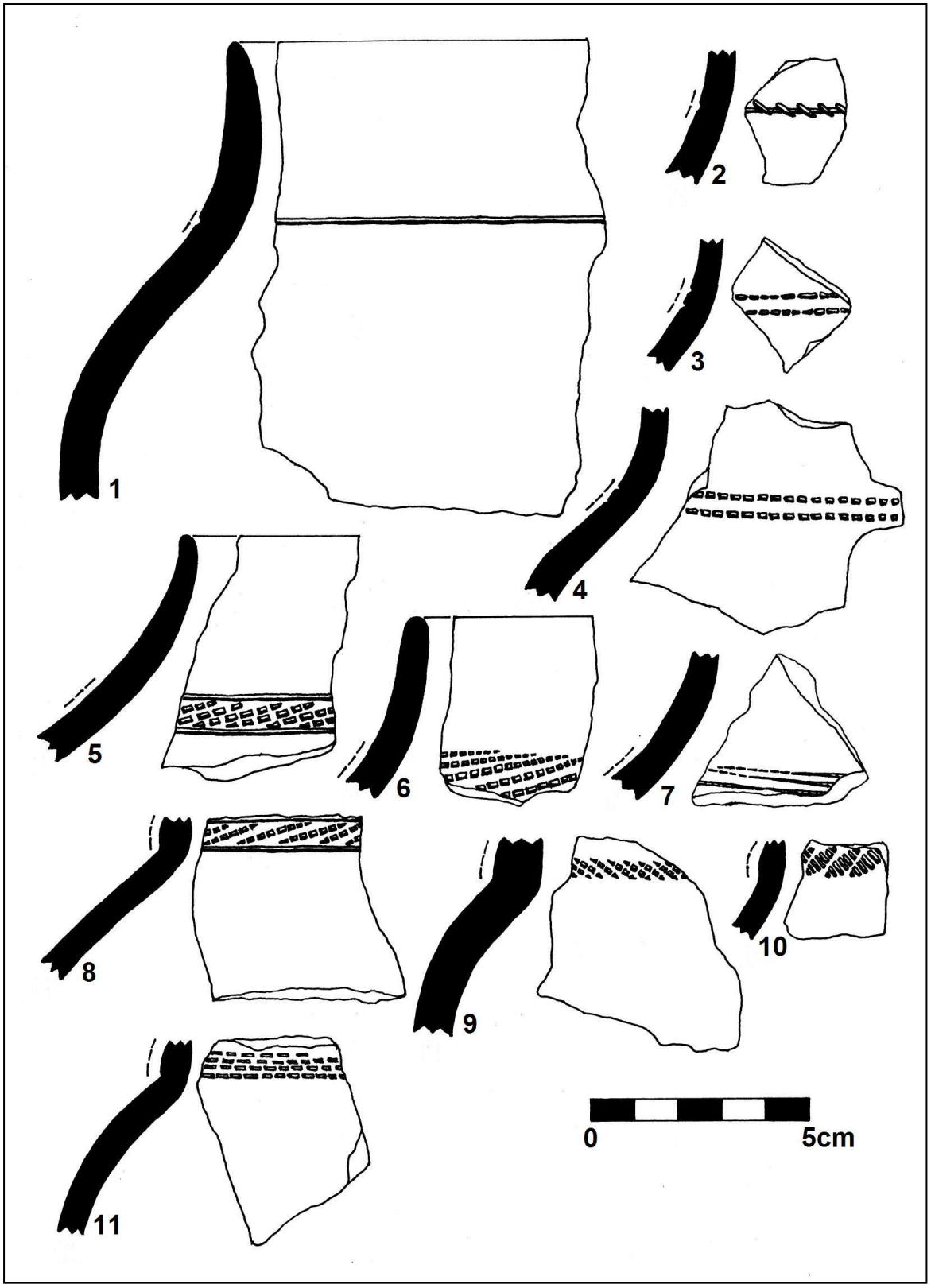

Figure 4.84: *Toutswe* facies jar types from Site 37-C1-8: Class 1 (No.8-11) and Class 2 (No. 1-7).

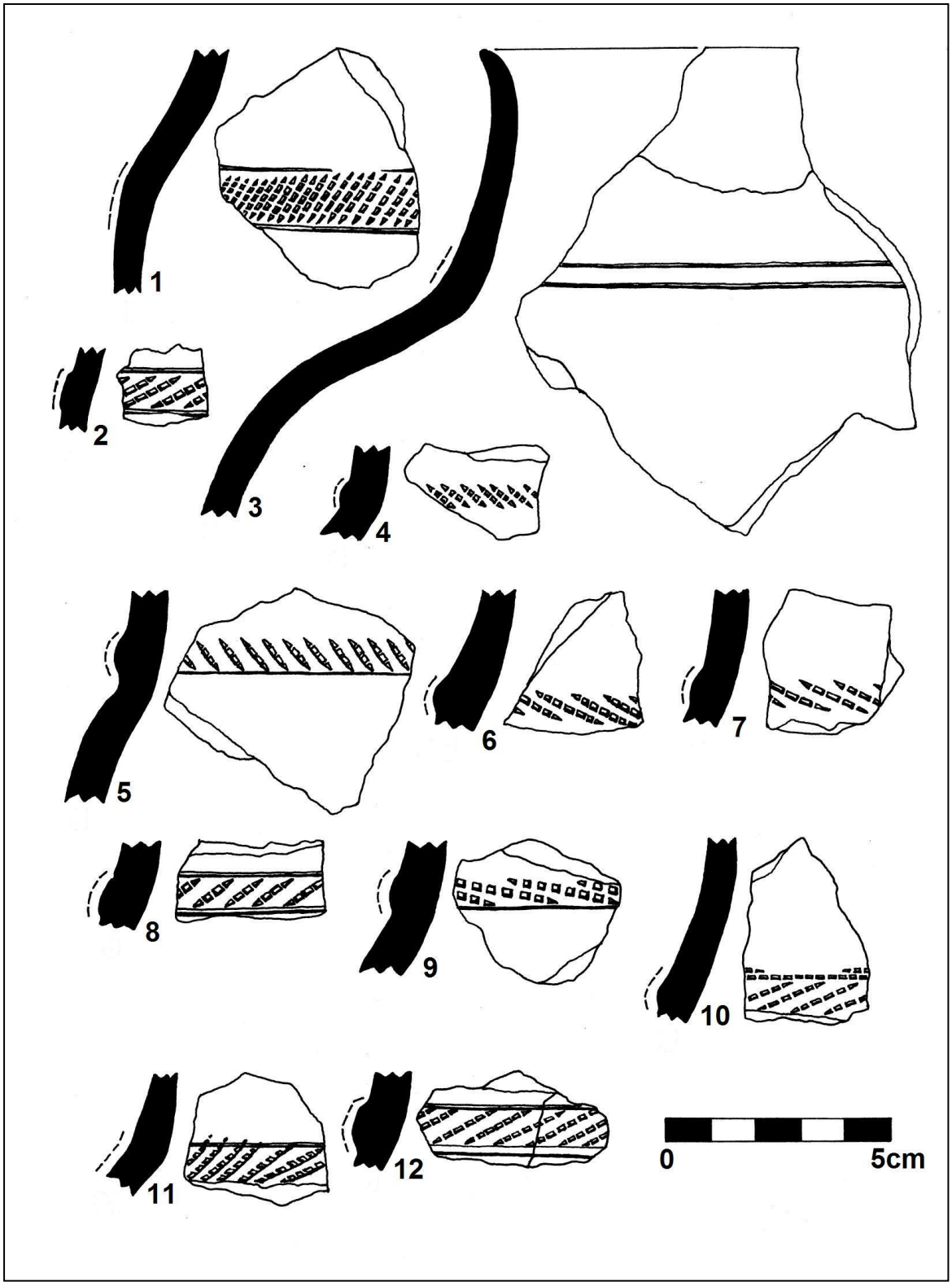

Figure 4.85: *Toutswe* facies jar types from Site 37-C1-8: Class 1 (No.2, 4-10 & 12); Class 2 (No. 3 & 11) and Class 5 (No. 1).

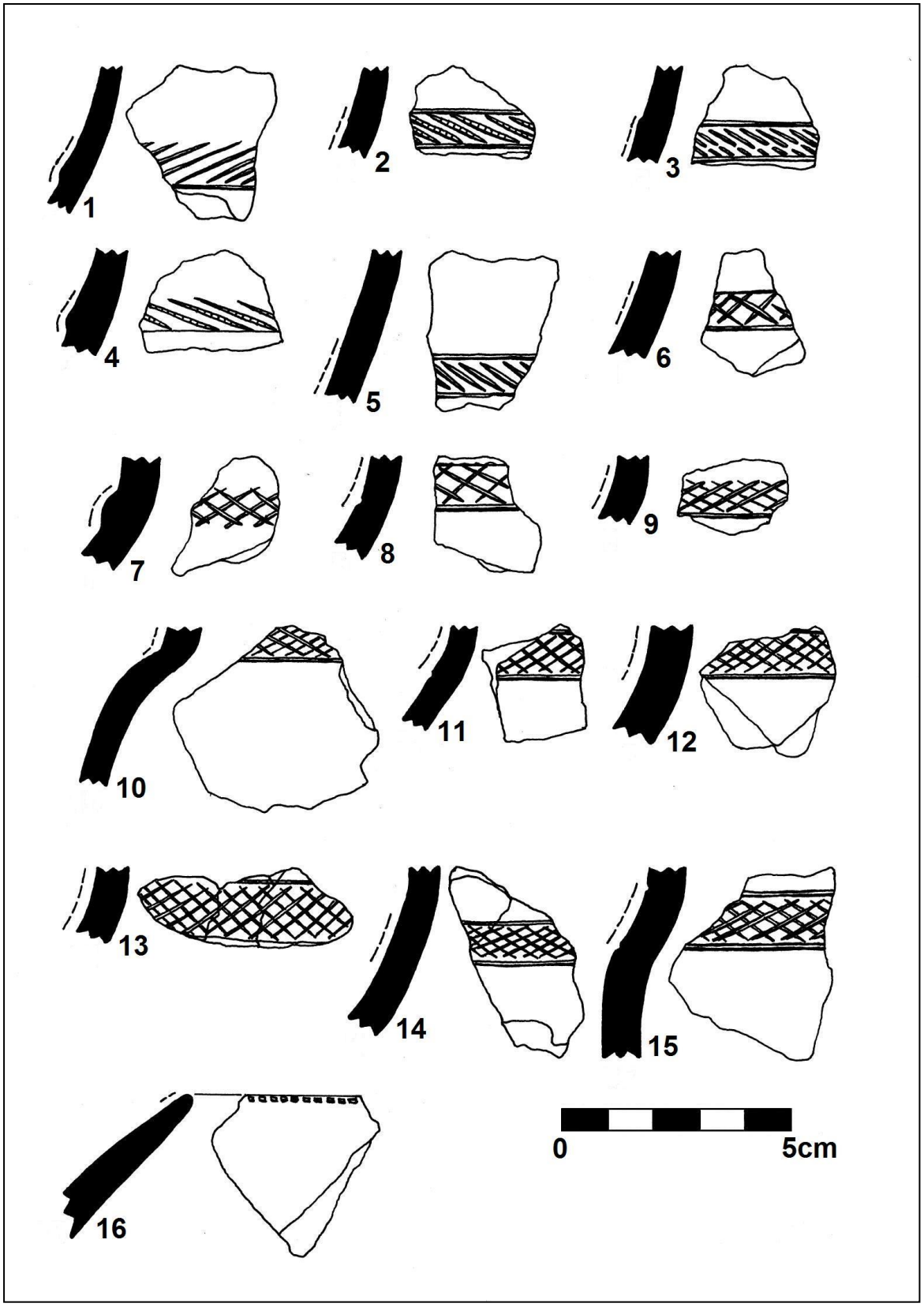

Figure 4.86: *Toutswe* facies jar types from Site 37-C1-8: Class 1 (No.1, 3, 4 & 7) and Class 2 (No. 2, 5, 6, 8-15). *Moritsane* facies constricted jar Class 11 (No. 16).

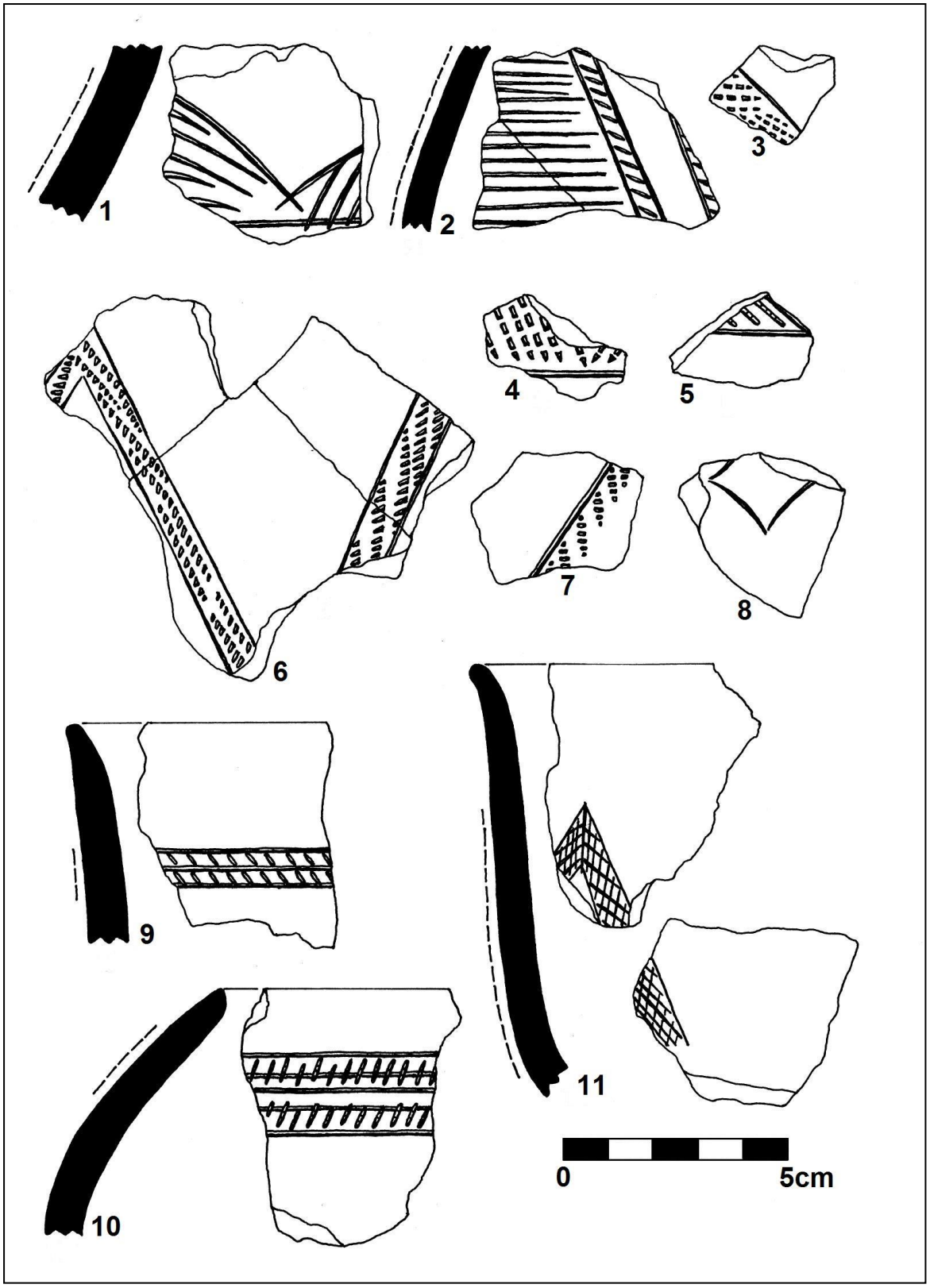

Figure 4.87: *Toutswe* facies vessel types from Site 37-C1-8: jar Class 5 (No.1-5); constricted jar Class 6 (No. 10) and beaker Class 7 (No. 6-9 & 11).

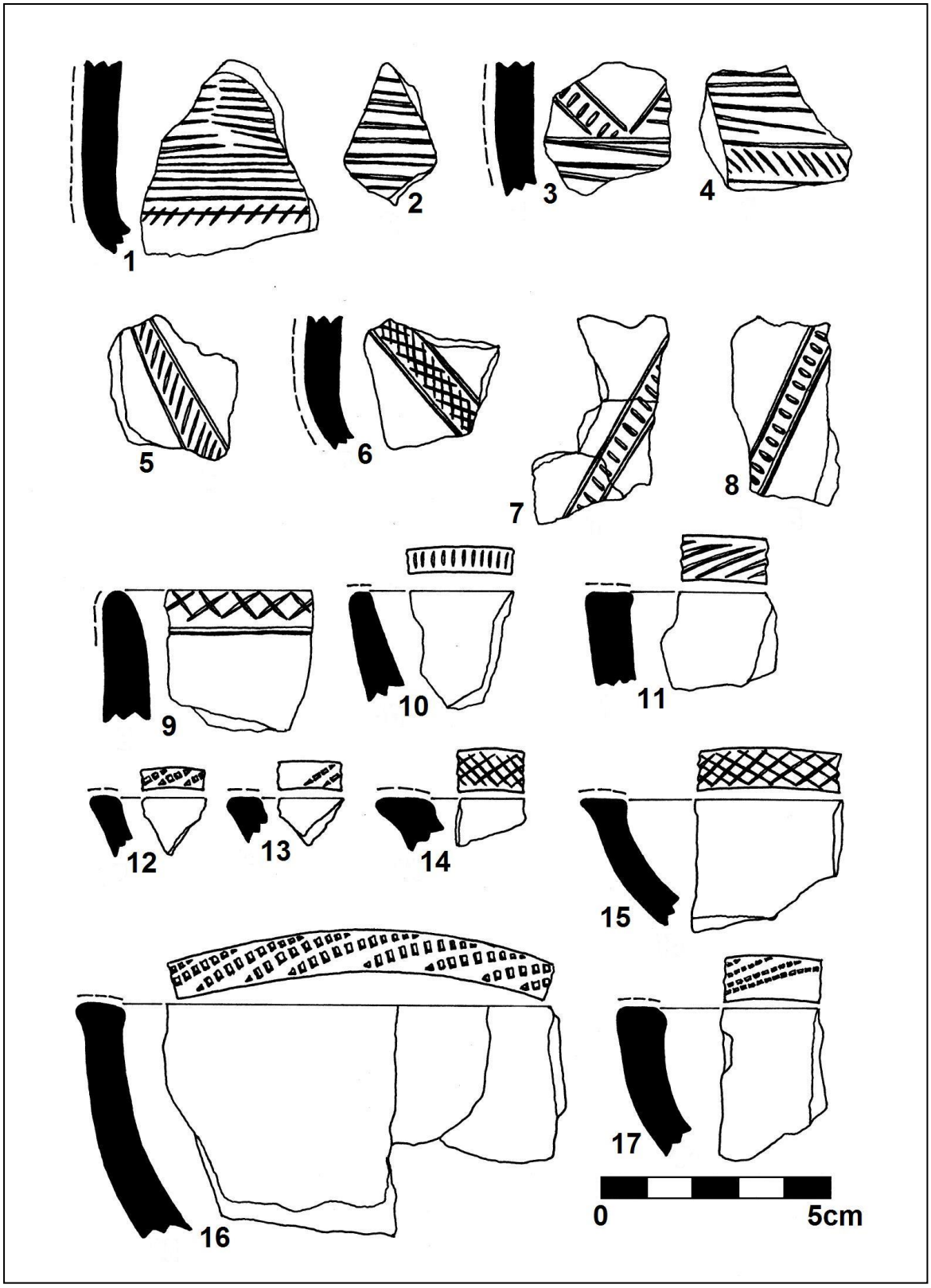

Figure 4.88: *Toutswe* facies vessel types from Site 37-C1-8: beakers Class 7 (No.1-8); bowls Class 8 (No. 11-17) and Class 9 (No. 10). *Eiland* facies constricted jar Class 10 (No. 9).

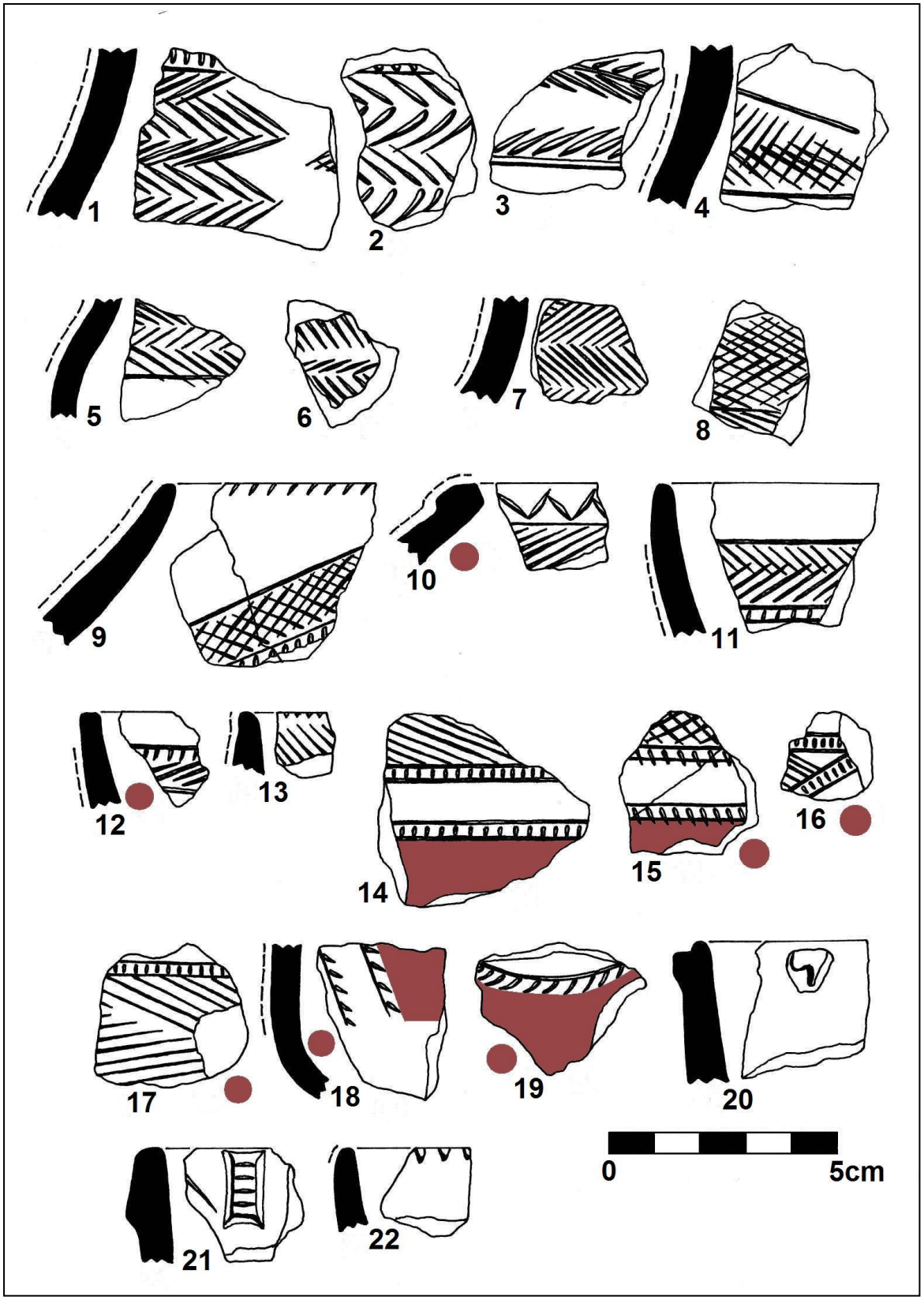

Figure 4.89: *Eiland* facies jar types from Site 37-C1-8: Class 8 (No. 1 & 2); Class 9 (No.3 & 4) and Class 13 (No. 20 & 21). *Moritsane* facies jar types Class 4 (No. 9); Class 10 (No. 5-8); constricted jar Class 14 (No. 10) and bowls Class 16 (No. 22); Class 19 (No. 13); Class 21 (No 11, 12, 14-19).

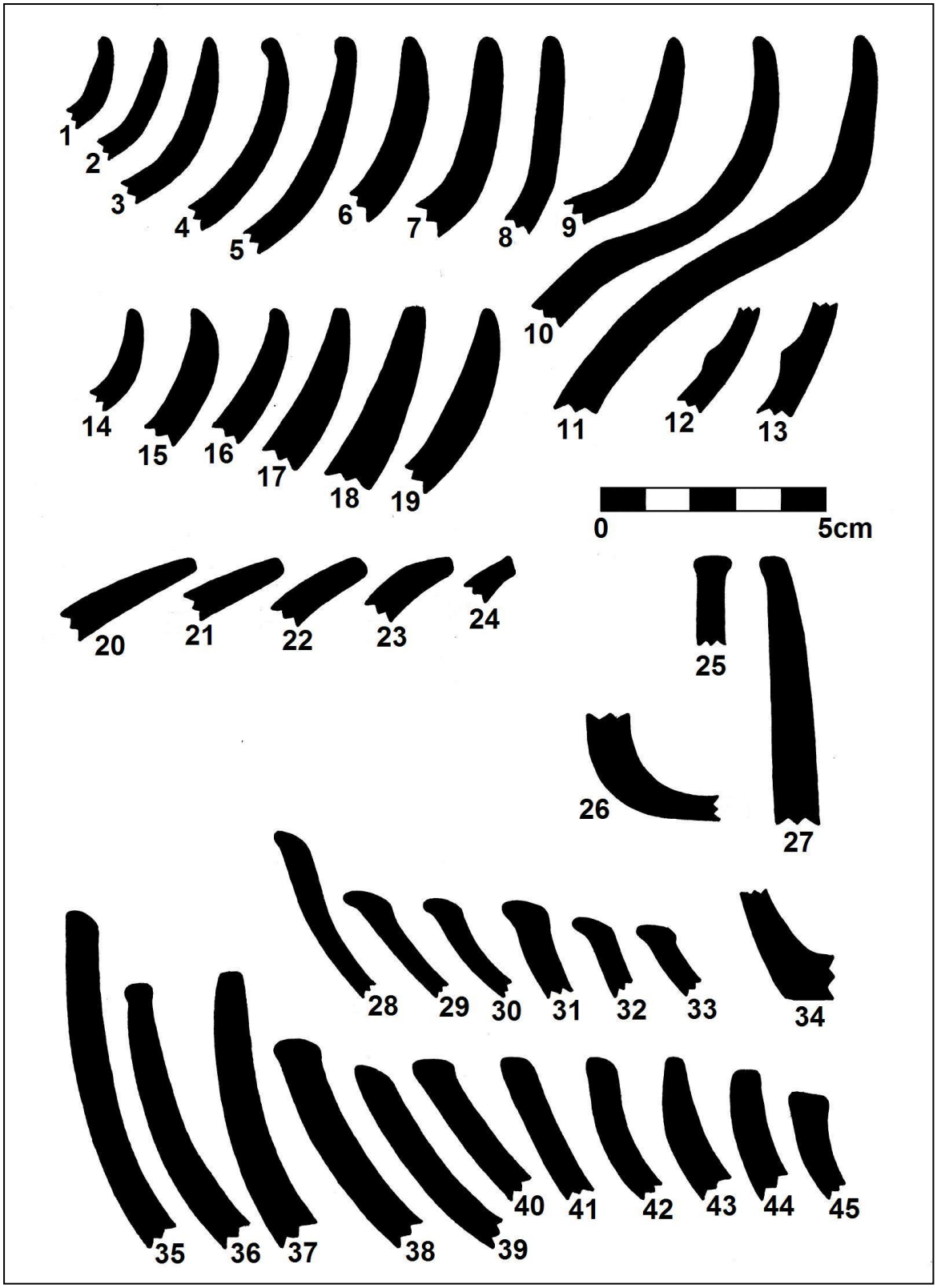

Figure 4.90: Vessel profiles from Site 37-C1-4: jars (No. 1-19); constricted jars (No. 20-24); beakers (No. 25-27) and bowls (No. 28-45).

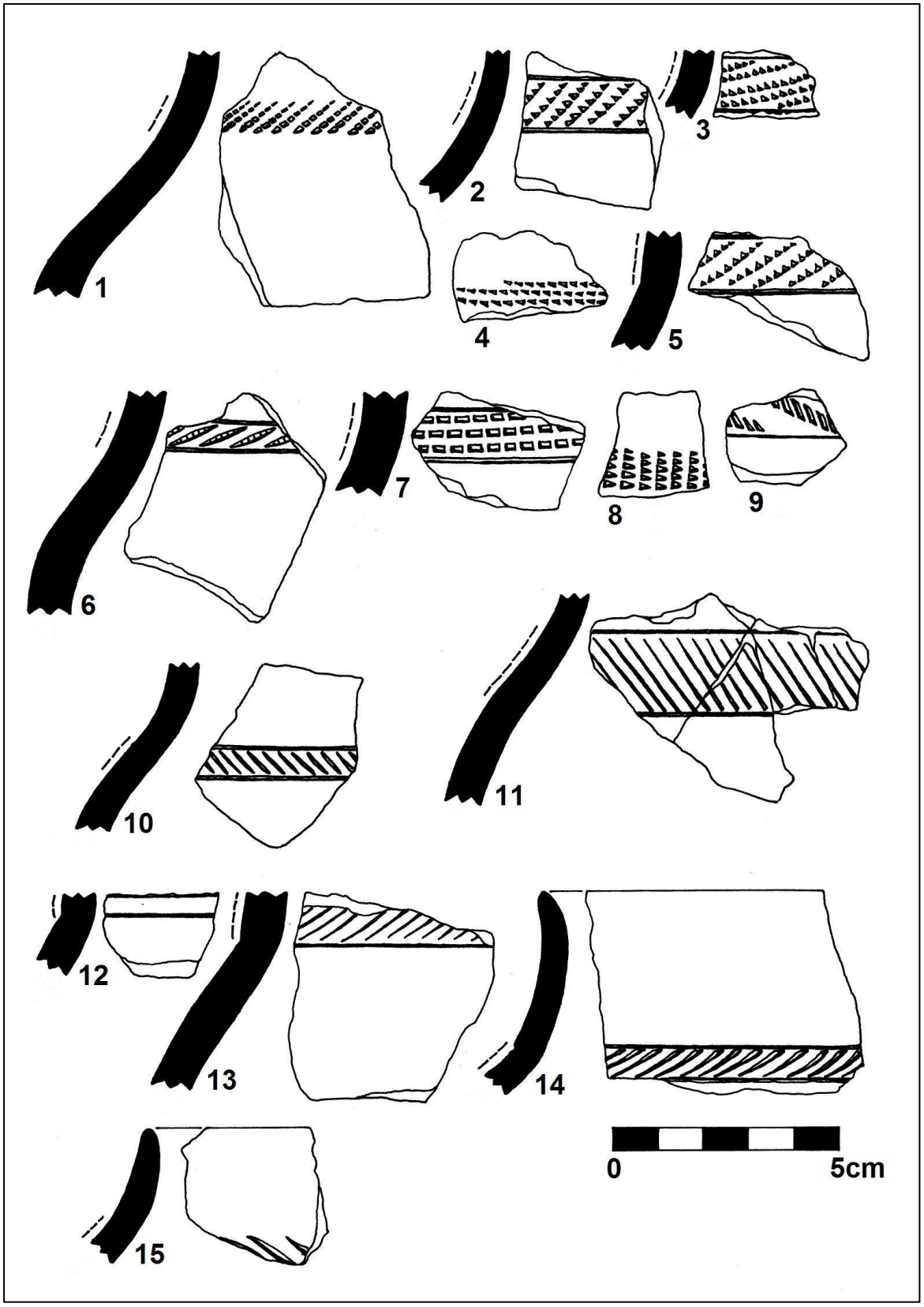

Figure 4.91: *Toutswe* facies jar types from Site 37-C1-4: Class 1 (No.5, 12 & 13) and Class 2 (No. 1-4, 6-11, 14 & 15).

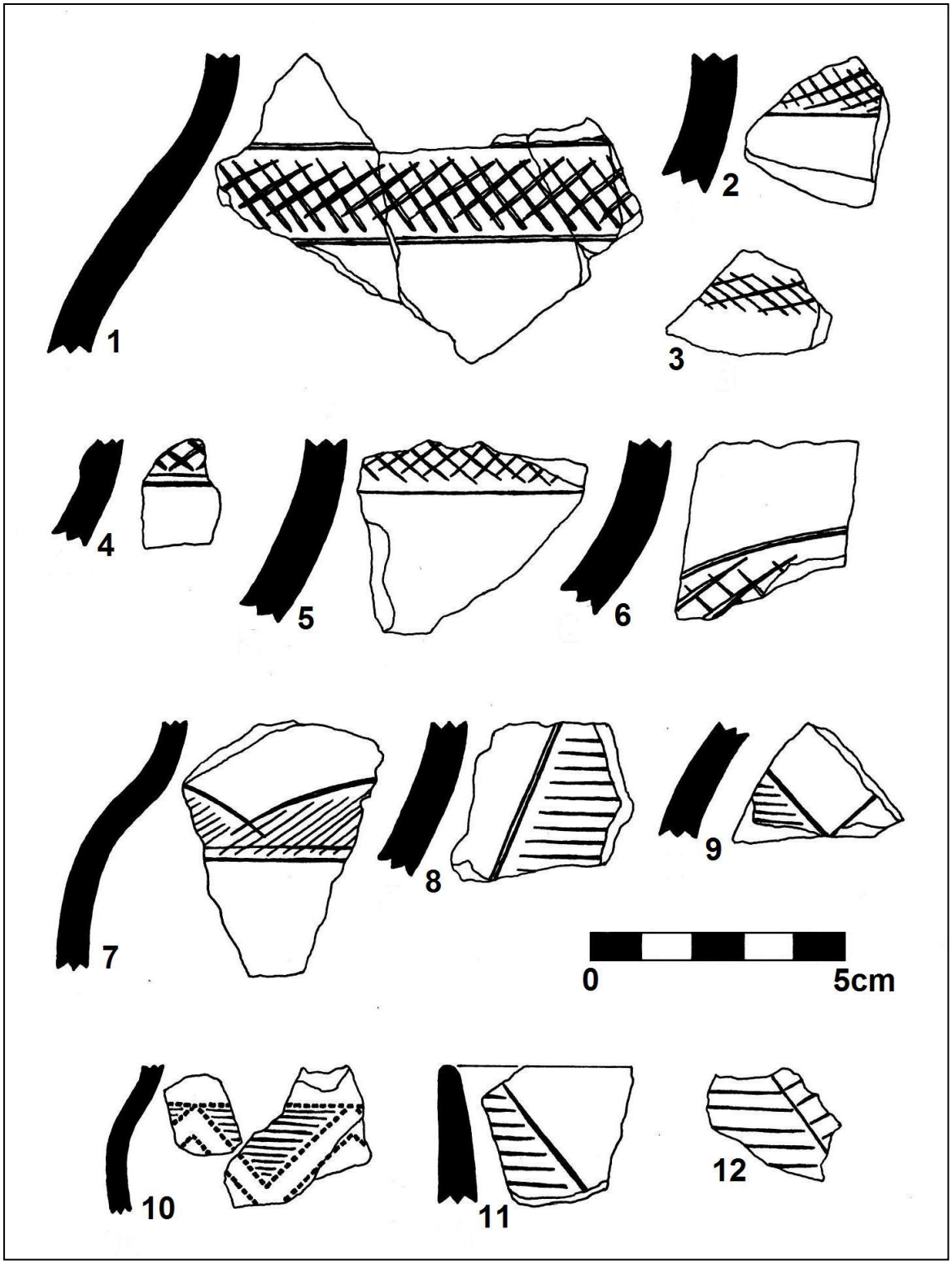

Figure 4.92: *Toutswe* facies jar types from Site 37-C1-4: Class 1 (No. 4); Class 2 (No. 1. 2, 3 & 5); Class 5 (No. 6-10 & 12) and beaker Class 7 (No. 11).

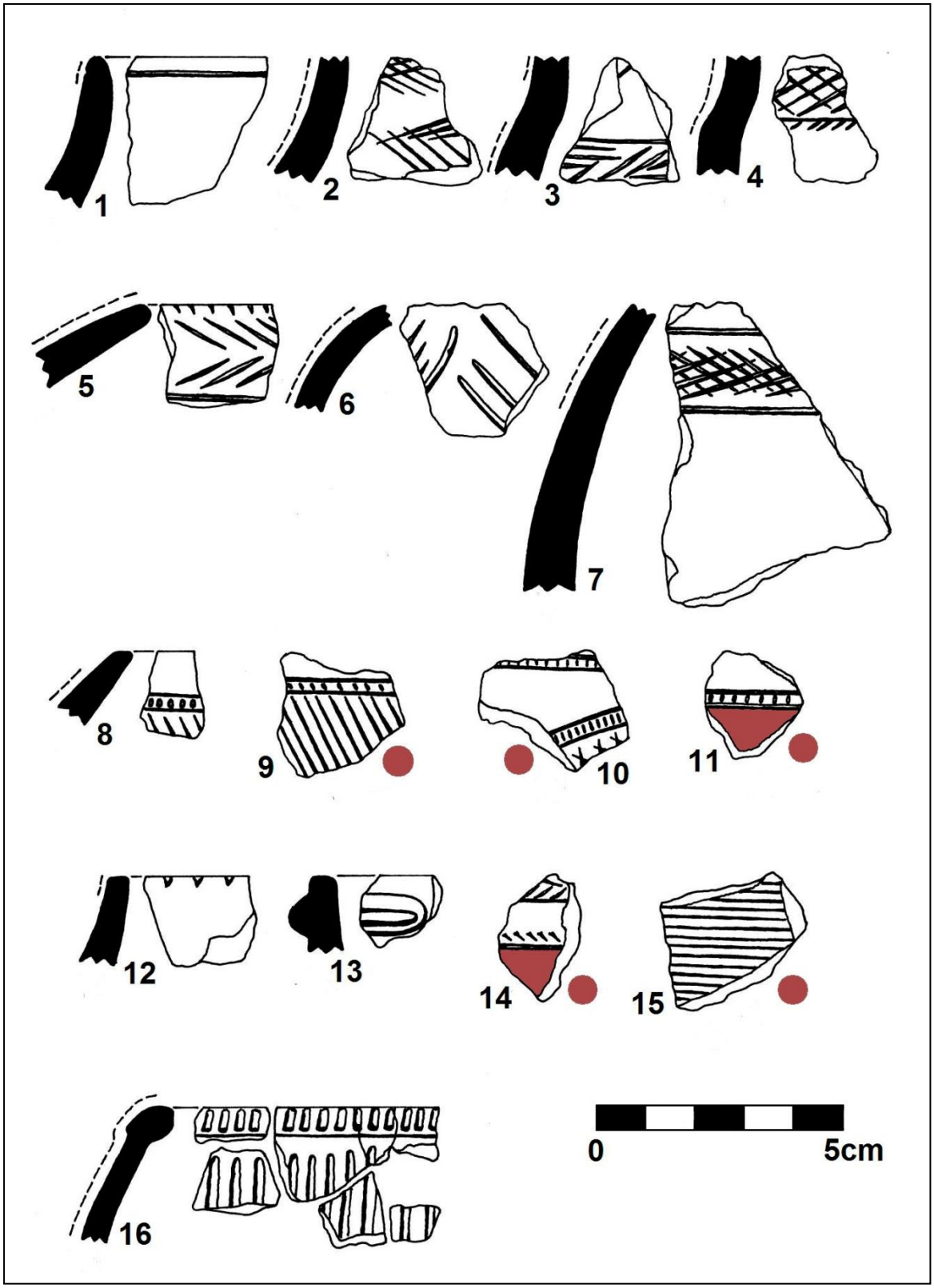

Figure 4.93: *Moritsane* facies jar types from Site 37-C1-4: Class 1 (No. 12); Class 3 (No. 1); Class 10 (No. 2-4); constricted jar Class 12 (No. 8); Class 13 (No. 5); Class 15 (No. 6 & 7) and bowls Class 17 (No. 13); Class 21 (No 9-11, 14 & 15). *Bambata* facies constricted jar type 1b3 (No. 16).

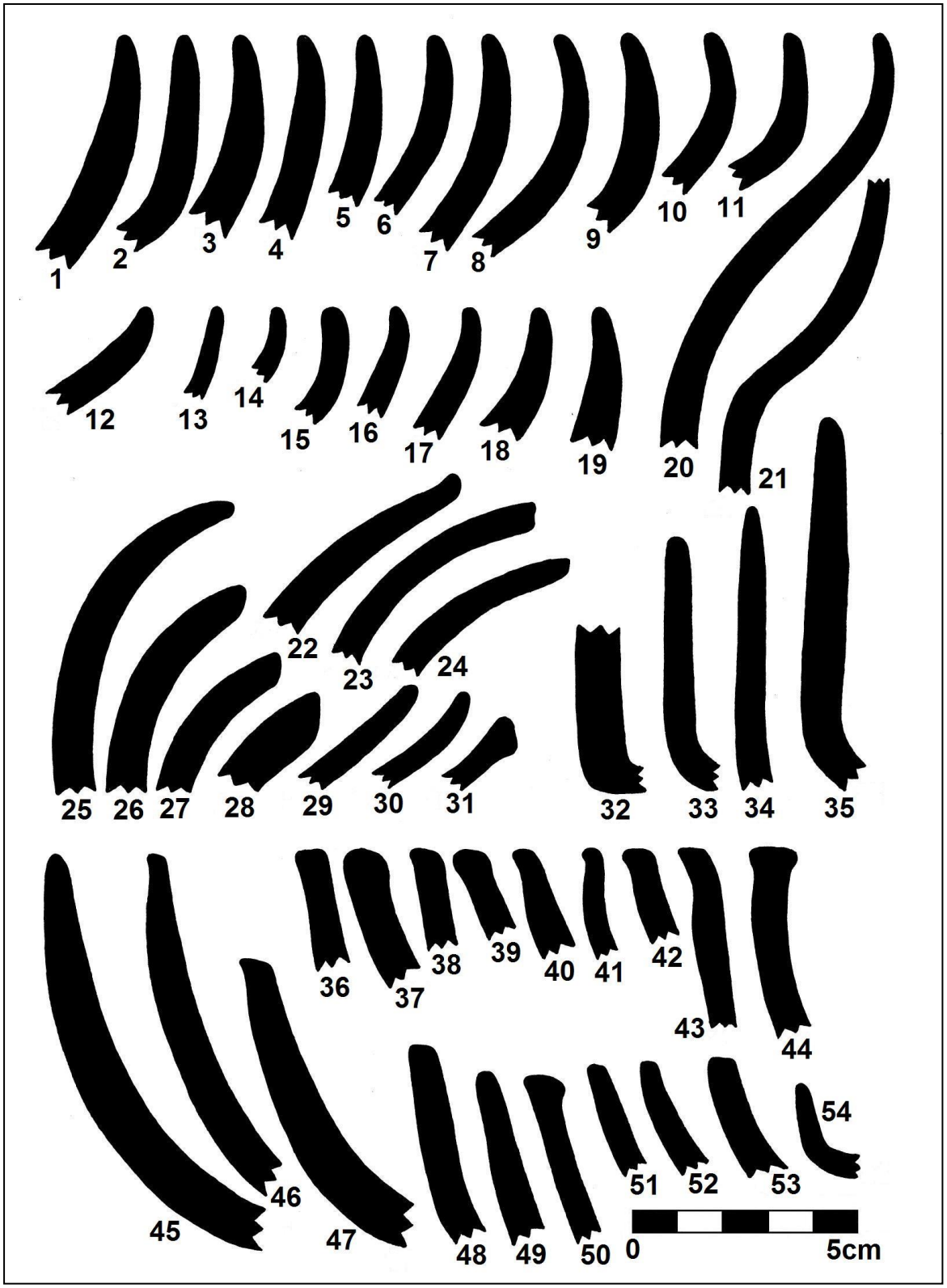

Figure 4.94: Vessel profiles from Site 37-A3-1: jars (No. 1-21); constricted jars (No. 22-31); beakers (No. 32-35) and bowls (No. 36-54).

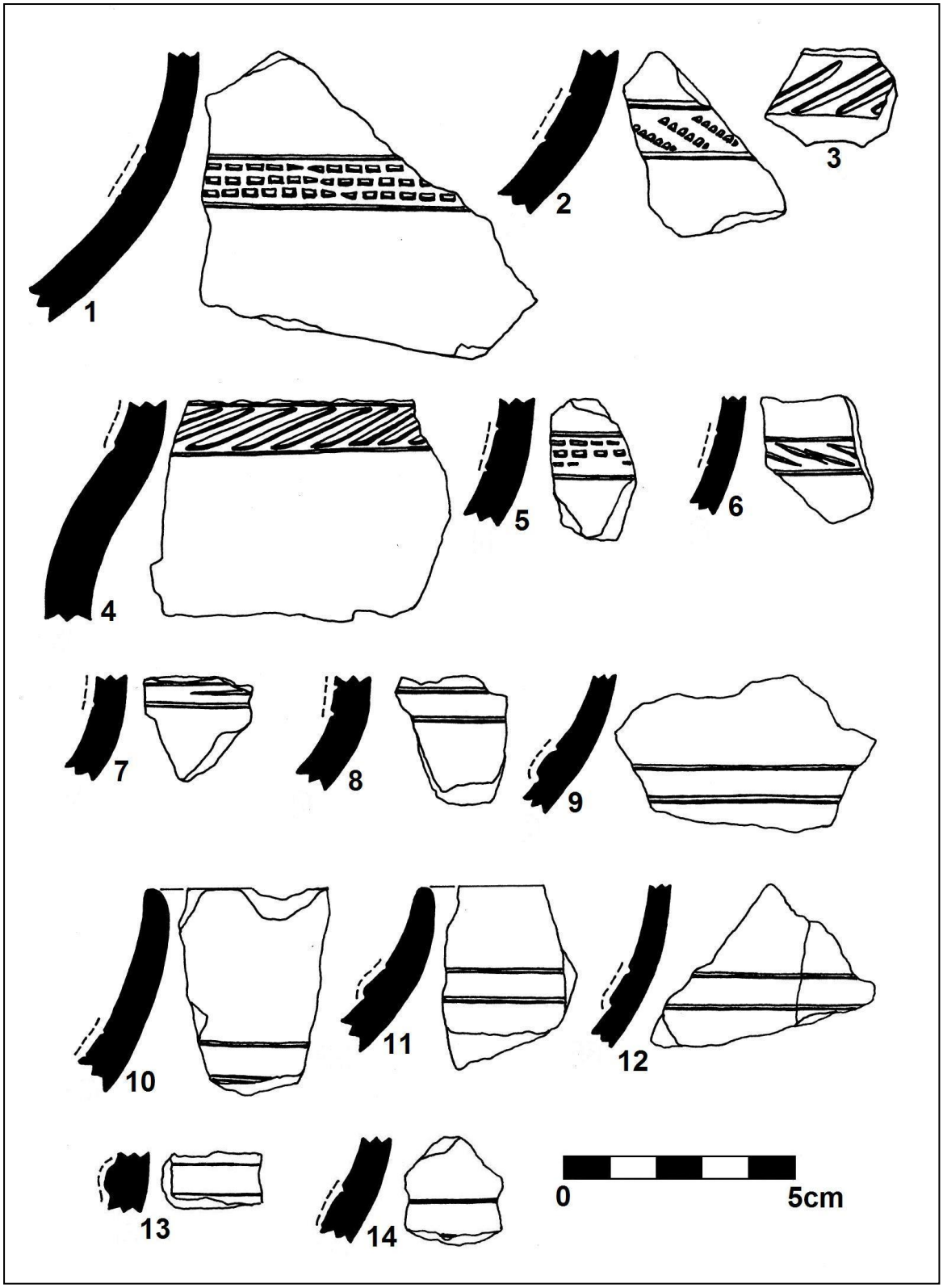

Figure 4.95: *Toutswe* facies jar types from Site 37-A3-1: Class 1 (No.9, 11-14) and Class 2 (No. 1-8 & 10).

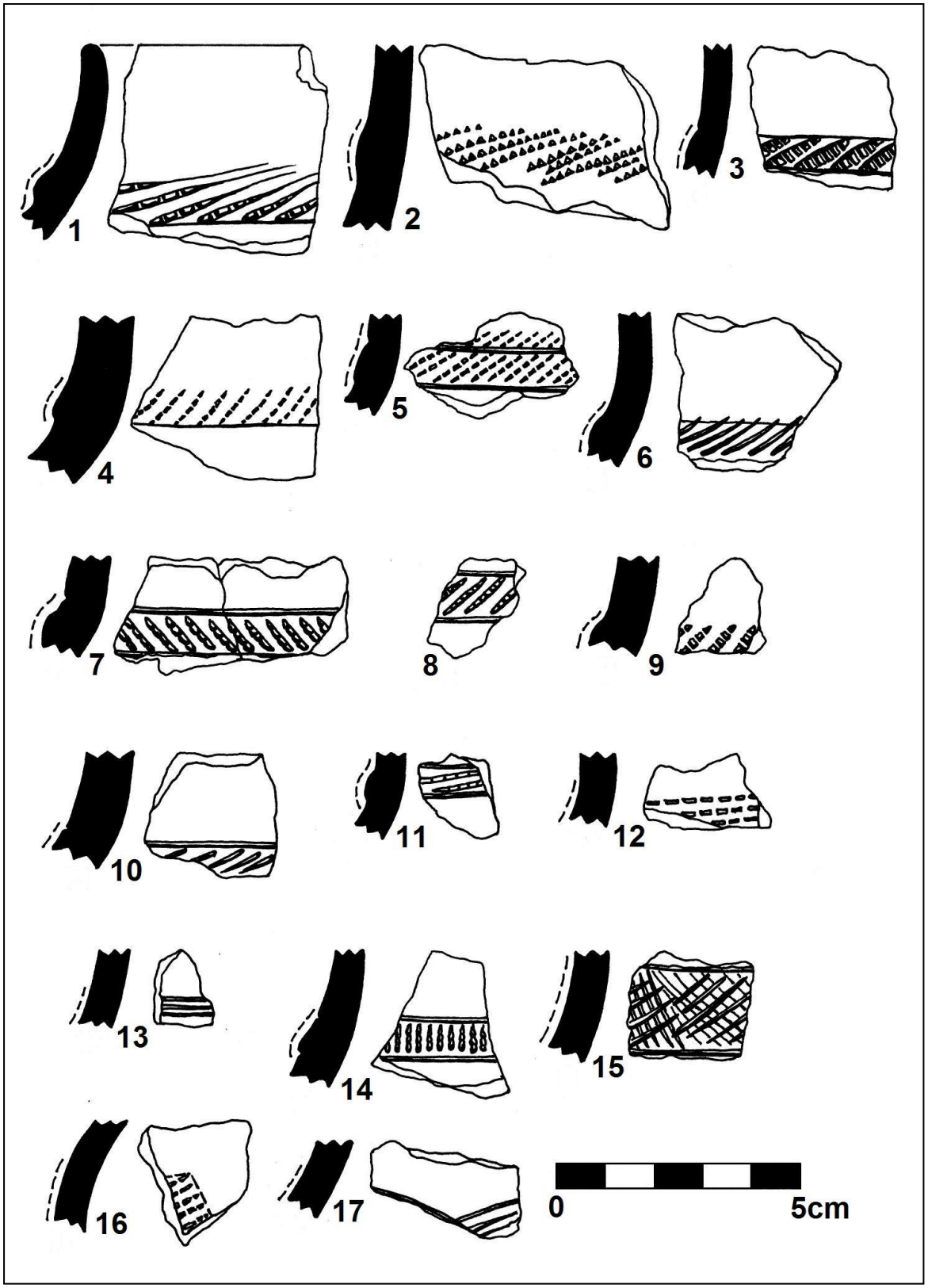

Figure 4.96: *Toutswe* facies jar types from Site 37-A3-1: Class 1 (No.1-9, 11 & 14); Class 2 (No. 10, 12, 13 & 15) and Class 5 (No. 16 & 17).

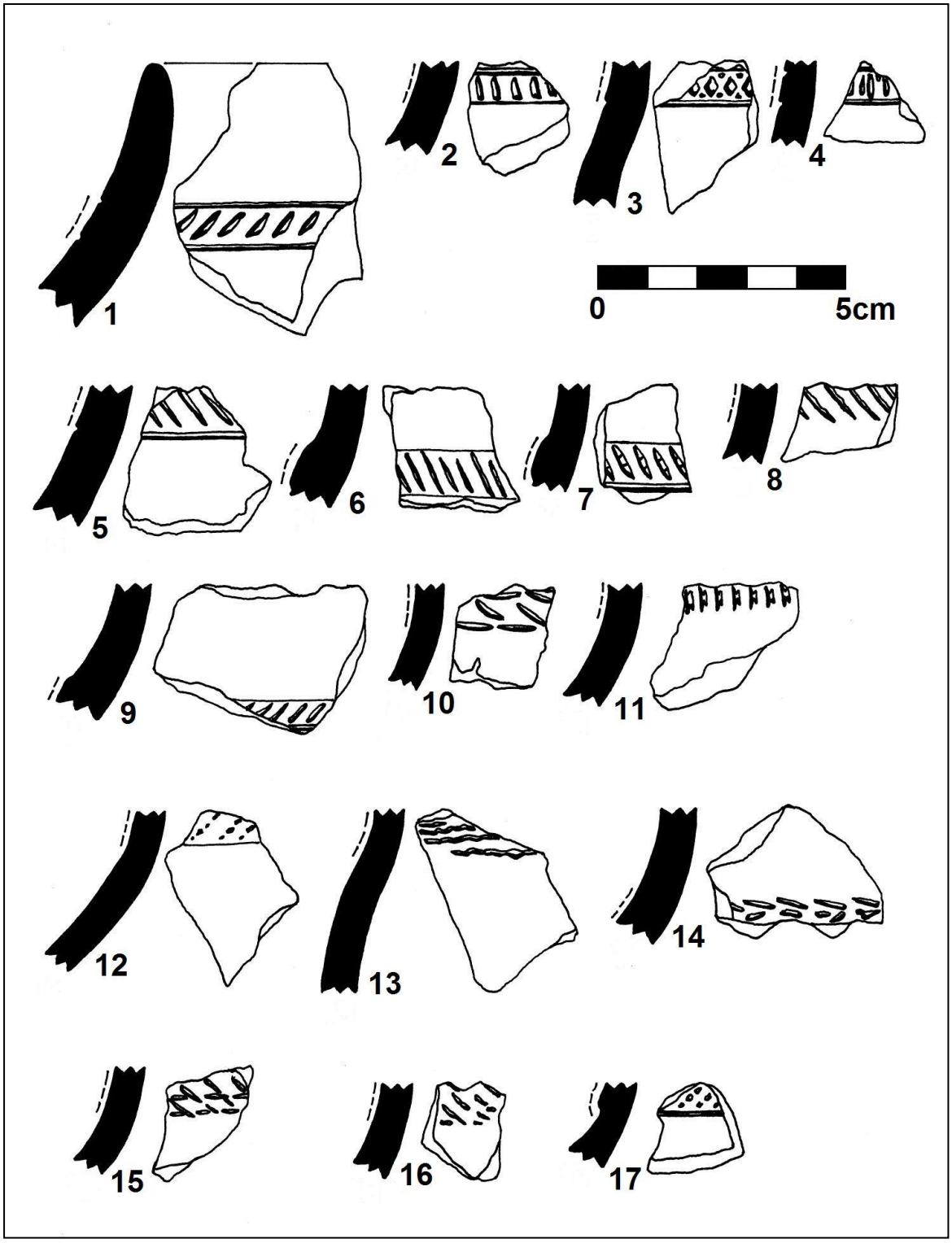

Figure 4.97: *Toutswe* facies jar types from Site 37-A3-1: Class 1 (No.6, 7, 9, & 17) and Class 2 (No. 1-5, 8, 10-16).

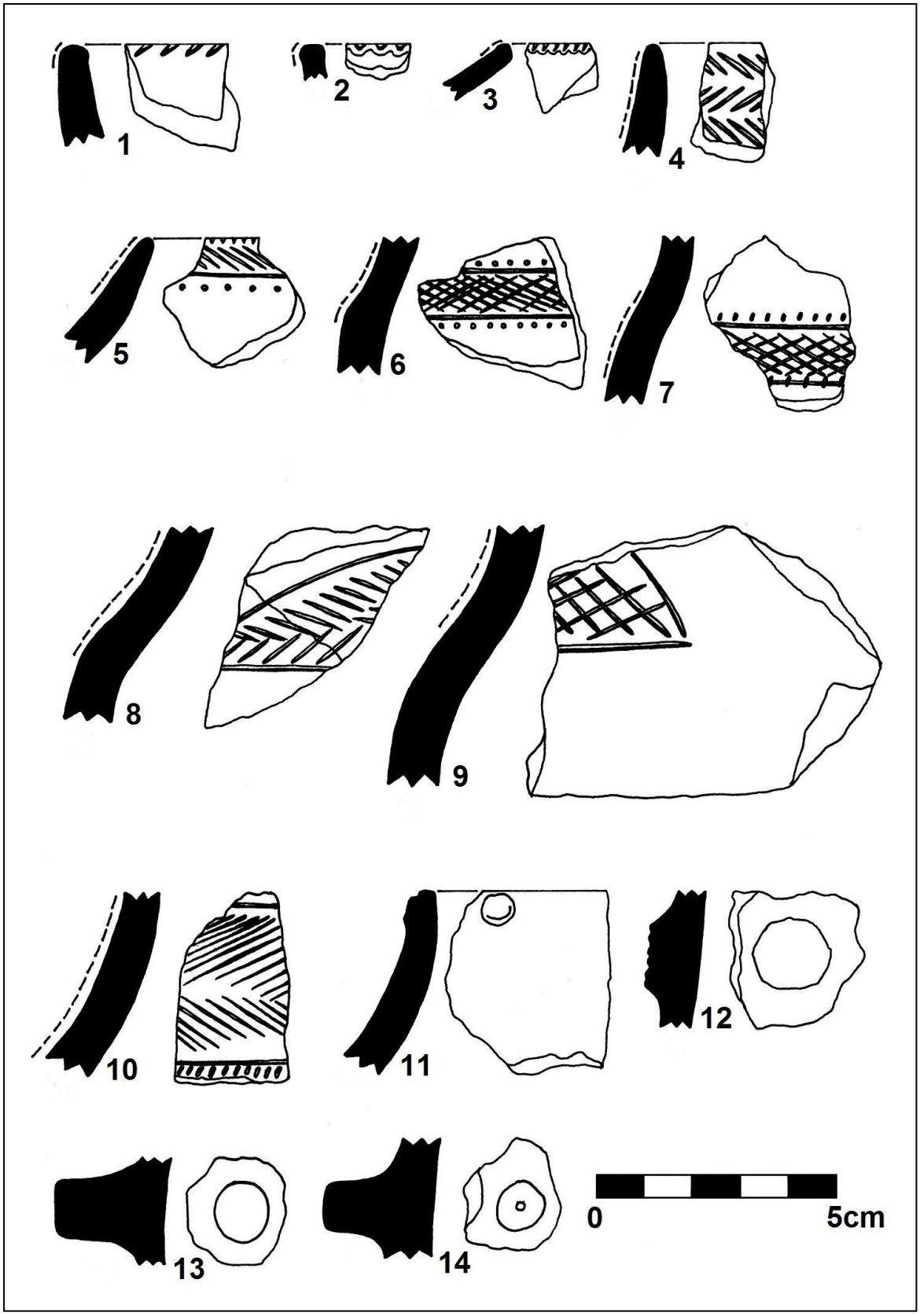

Figure 4.98: *Eiland* facies vessel types from Site 37-A3-1: Class 2 (No. 11); Class 9 (No.8, 9 & 10); Class 13 (No. 12, 13 & 14) and Class 14 (No. 1 & 2). *Moritsane* facies vessel types Class 2 (No. 5); Class 6 (No. 4); Class 10 (No. 6 & 7) and constricted jar Class 11 (No. 3).

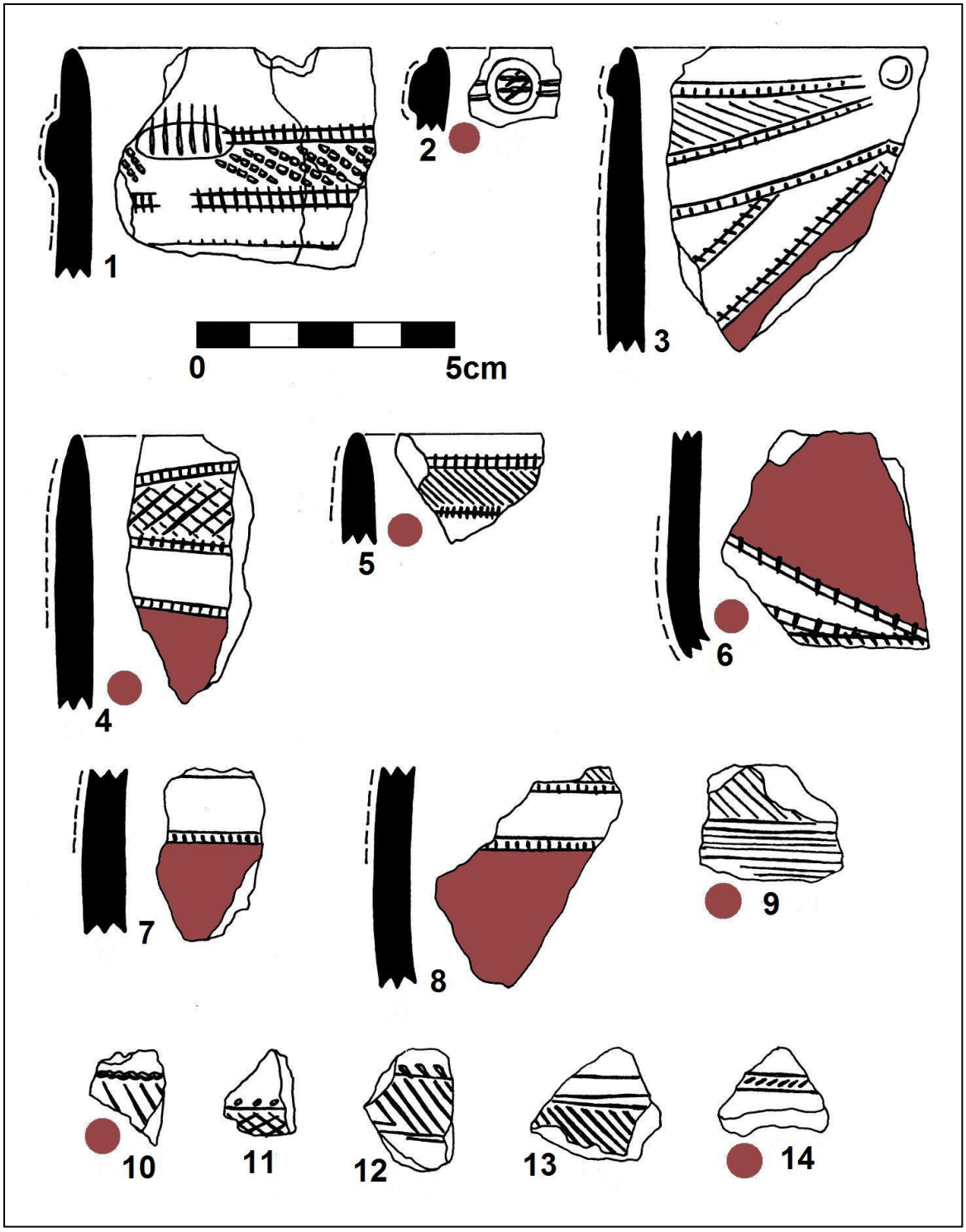

Figure 4.99: *Moritsane* facies vessel types from Site 37-A3-1: Class 9 (No. 11-13); Class 17 (No. 2 & 5); Class 20 (No.1, 3 & 4) and Class 21 (No. 6-10 & 14).

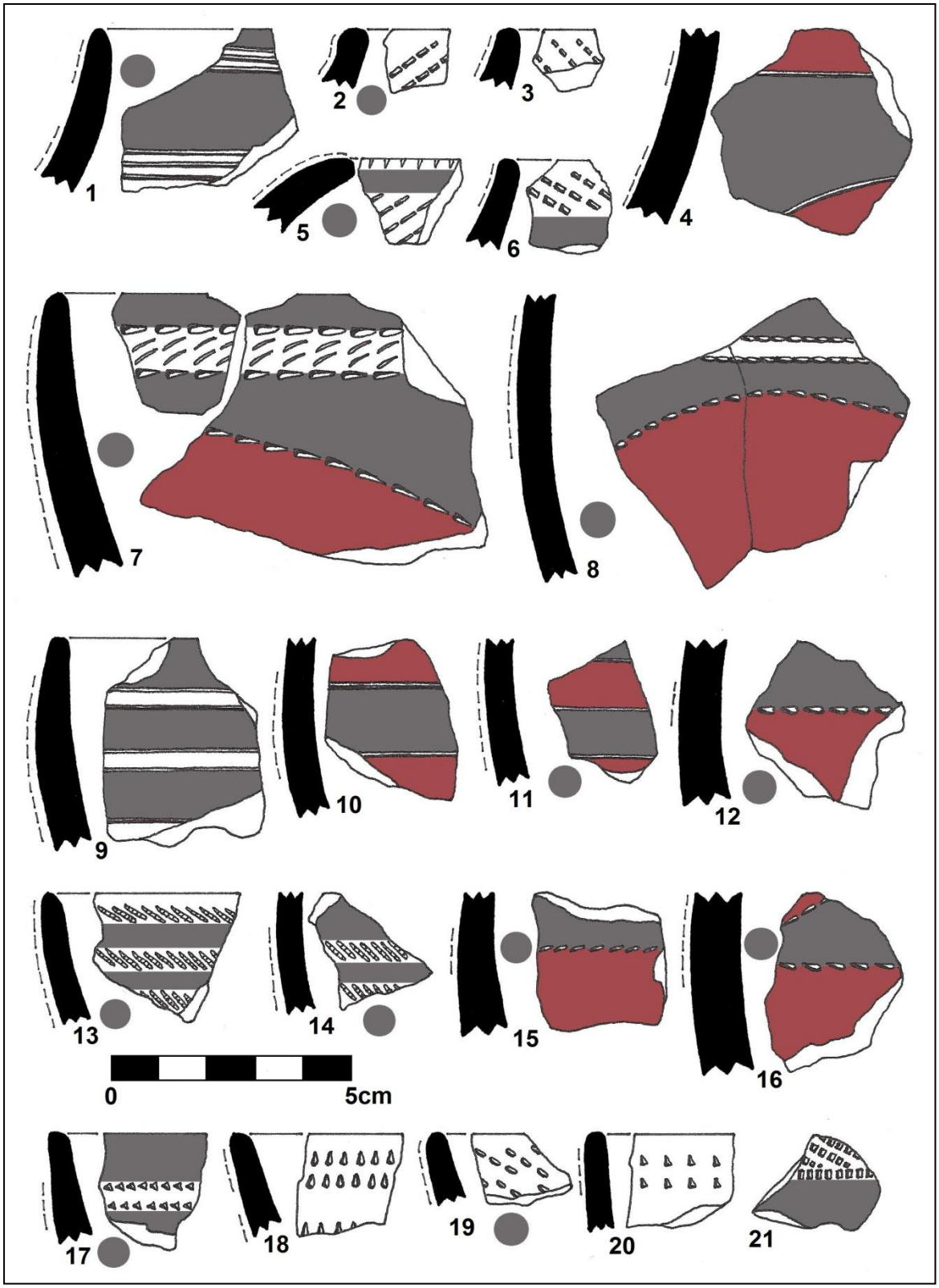

Figure 4.100: *Letsibogo* facies vessel types from Site 37-A3-1: Class 3 (No. 2, 3 & 6); Class 4 (No.1); Class 9 (No. 4); Class 11 (No. 21); constricted jar Class 14 (No. 5) and bowls Class 22 (No. 17, 19 & 20); Class 25 (No. 7, 13 & 18) and Class 26 (No 8-12, 14-16).

CHAPTER 5

THE *MORITSANE* FACIES

5.1 Introduction

It is generally held that the *Eiland* ceramic sequence originated in the Early Iron Age. The *Eiland* sequence can be divided into the following phases/facies: *Happy Rest* (AD 500 – AD 750), *Diamant* (AD 750 – AD 1000), *Eiland* (AD 1000 – AD 1300) and *Broadhurst* (AD 1300 – AD 1430) (Huffman 2007:226). Based on the assessment of ceramic assemblages from known and recently excavated sites in south-eastern Botswana (Denbow 1981:66-74), as well as associated radiocarbon dates, I propose a new sequence to account for stylistic change in the *Eiland* sequence in the second millennium AD. It is suggested that in south-eastern Botswana the 13th-century *Eiland* facies generated a *Moritsane* facies (AD 1200 – AD 1400), followed by a redefined *Broadhurst* facies (AD 1400 – AD 1450), which ended in the 15th century with the arrival of *Moloko* people (Sotho-Tswana speakers) on the landscape.

The settlement organisation of the *Eiland* facies displays elements of the central cattle pattern (Huffman 1986a:284). The settlements were small and dispersed over the landscape with no obvious centralised socio-political structure as in the case of the *Toutswe* chiefdom (Huffman 1986a:284). At Moritsane Hill near Gaborone a 13th-century settlement is situated on the flat top of the steep-sided hill (Campbell & Main 2003:118). It consists of a midden of about 50 m in diameter with the remains of a few huts and granaries on the northern and eastern side of the summit. The excavations exposed a burial, carved bone points, glass beads, iron fragments and a cowrie seashell (Denbow 1986:7). At Silver Leaves near Tzaneen, Limpopo Province, refuse pits ± 90 cm deep filled with pottery, iron objects and charcoal were identified at an *Eiland* site (Klapwijk & Evers 1987:40). An *Eiland* settlement on top of a rainmaking hill on Kirstenbos, a farm near Marken, Limpopo Province, investigated by UNISA, has huts on terraces with no obvious cattle kraals (Van der Ryst 1996:56 & 57). A substantial collection of *Eiland* ceramics and some *K2* period glass beads were recovered from the hill.

The *Eiland/Moritsane* facies sites at Basinghall were primarily investigated to obtain a representative ceramic collection and material for radiocarbon dating. These sites are all situated in close proximity to the Limpopo River on higher-lying red sandy soils. The middens are easily identifiable from disturbances caused by burrowing mammals that deposit midden material on the current land surface. Site modification by burrowing agents is not always destructive (Fowler *et al.* 2004). Burrowing activities bring objects to the surface and have proven to be invaluable in identifying buried sites in the study area. Site 37-C1-7 (*Setlhong*) at Basinghall was selected for excavation with the results discussed below. Two other sites, 37-C1-52 and 37-C1-61, on the neighbouring farms Holmlea and Riversley, were also investigated. The analyses of the surface collections from each of these localities are included in the following discussion of *Moritsane* facies ceramics.

5.2 Excavation at Site 37-C1-7, Basinghall

Site name: *Setlhong* (hedgehog) **S23°31'10.1" E27°07'28.5"**

Site description

The site on the edge of the floodplain in red loam soils is ideally placed in respect of agricultural soils and water sources. The closest seasonal water is a non-perennial pan at a distance of around 200 m. The permanent water source of the Limpopo River is about 1.2 km from the site. It is overgrown with brittle thorn (*Phaeoptilum spinosum*) shrubs and there are also a few large umbrella thorn trees (*Acacia tortilis*) (Figures 5.1 and 5.2).

The site measures ± 130 m across (see Figure 5.3) with a centralised midden area of ± 30 m in diameter. A scanty kraal deposit of 17 m in diameter and about 60 cm deep was identified to the north within the central midden area. The site in general has a low archaeological visibility with very few surface artefacts. The midden area has been extensively disturbed by burrowing animals exposing ashy soils that contain cultural material (see Figures 5.1 and 5.2). Burrows adjacent to the midden have unearthed pottery concentrations that probably mark houses which define the extent of the site. No hut remains, grain bin remains or lower grinding stones were identified on the surface. The aim of the investigation at the site was to acquire a date for the occupation and to collect a representative ceramic sample rather than to uncover the settlement layout.

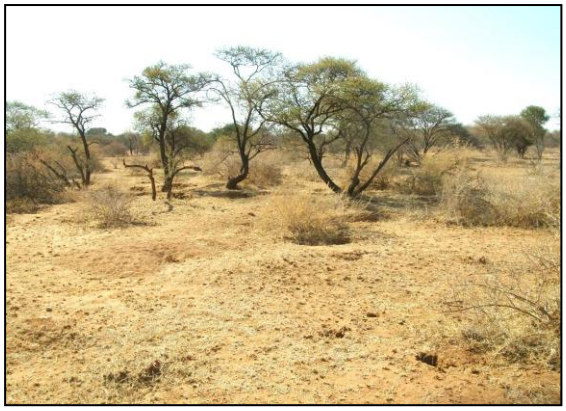

Figure 5.1: General view of the site.

Figure 5.2: Disturbed midden deposit.

Excavation methodology

The animal burrows that exposed midden material were investigated to determine the effect of the disturbances on the site's integrity. An intact portion of the deposit was selected for excavation. A test trench was excavated 6 m to the west of the datum line (see Figure 5.3). The trench totalling 4 m² was excavated as a 3 m x 1 m block divided into 1 m x 1 m squares assigned B1, B2, B3 with an extended 1 m x 1 m block designated A2 (Figures 5.4 and 5.5). The trench was excavated using 10 cm spits until sterile soil was reached at a depth of 50 cm. The excavated deposit was passed through a 1.5 mm sieve and all cultural materials were extracted, sorted and analysed.

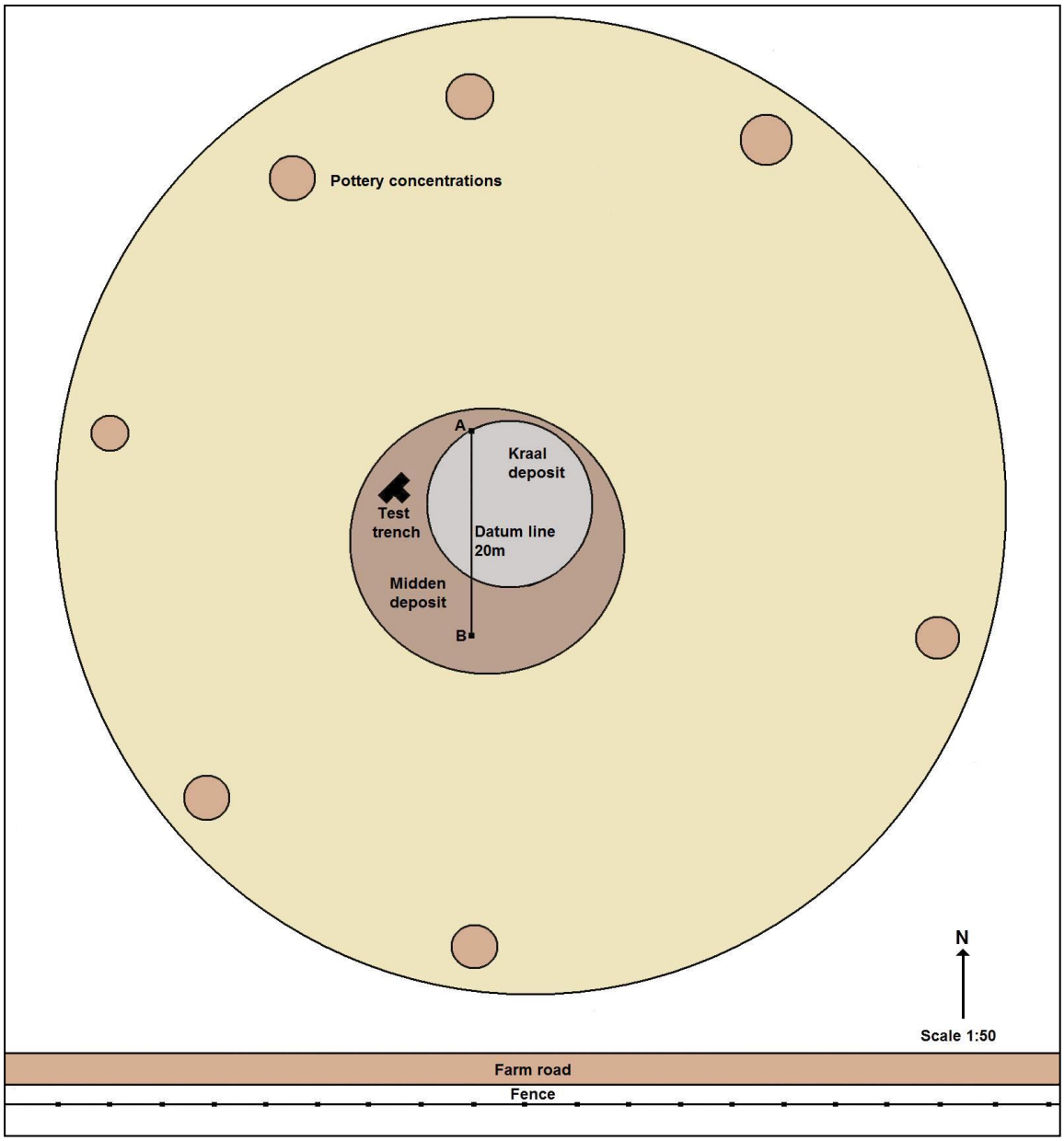

Figure 5.3: Settlement layout of Site 37-C1-7.

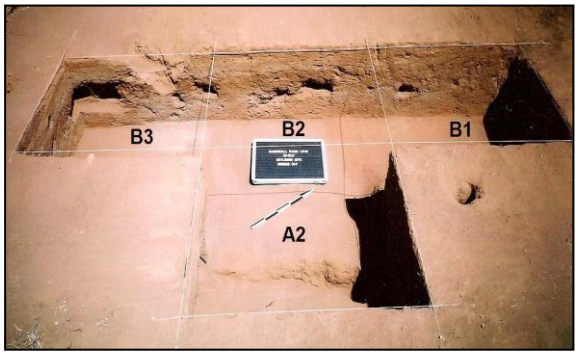

Figure 5.4: Western view of the test trench.

Figure 5.5: Southern view of the test trench.

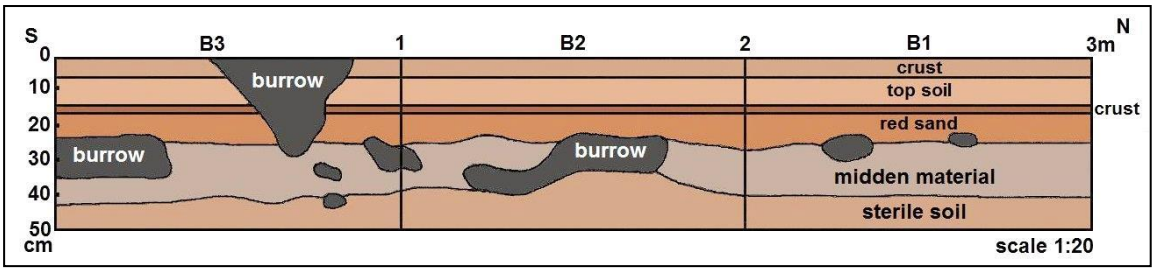

Figure 5.6: The western profile of the test trench.

Stratigraphy

The stratigraphy of the midden is presented in a profile drawing (see Figure 5.6). Six horizontal subdivisions were identified. The first layer of 5 cm formed a hard crust of crumbly material and cultural debris brought to the surface through animal burrowing activities. Under the hard crust was a ± 10 cm layer of softer subsoil produced by material unearthed from burrows and redeposited on top of the original surface. The original surface, found at a depth of 15 to 18 cm, comprised a hard crust of around 3 cm. A softer red sand layer followed up to a depth of around 25 cm. Under the red sand was ashy grey midden material in an intact layer of approximately 15 cm that contained numerous ceramic sherds and animal bones. This was underlain by a hard red sterile soil layer. The trench was excavated to a depth of 50 cm.

The midden deposit exhibited a homogenous stratigraphy, which suggests a single-component settlement. This is substantiated by the upper layers of the profile that contain midden material similar to that of the intact midden layer but with a more crumbly texture deriving from biotic activities. Around the visible disturbances in the profile from shrub and grass root infiltration and several rodent burrows there was evidently some mixing of archaeological layers through redistribution of the archaeological deposit.

Dating

Charcoal fragments were retrieved from the undisturbed midden layer at a depth of 30-40 cm. A sample of 82 g charcoal was submitted to the CSIR Quaternary Dating Research Unit, Pretoria. It provided a radiocarbon date of 670 ± 50 years BP (Pta-9442), which calibrated to AD 1308 or AD 1367 or AD 1379 with a 1-sigma range of AD 1293 to AD 1400 (Southern hemisphere INTCAL 1998 adapted).

Cultural material finds

Finds from the surface collection and the test trench excavation yielded a representative sample of cultural material (see Table 5.1). Of the 2919 ceramics 1949 (67%) sherds were undecorated and 135 (5%) decorated. The bulk of the decorated potsherds are representative of the *Moritsane* facies. The faunal sample consists of a total of 25 051 identifiable bones, bone fragments and bone flakes. An analysis of the animal bones lies beyond the scope of this study. The recovered beads consist of ten glass beads, 79 finished ostrich eggshell (OES) beads and 2650 unfinished OES beads. Metal objects together with a piece of smelting slag and a grinding stone fragment were also recovered. The few stone

tools identified in the excavations include three Middle Stone Age (MSA) stone tools and six Later Stone Age (LSA) microliths.

Table 5.1: Cultural material finds from Site 37-C1-7.

Trench	Pottery				Bone		Beads			Other finds
	Undec	Dec	Rims	<1cm	UNID	ID	Glass	OES F	OES UnF	
A2	389	15	30	199	5164	33	2	12	492	2 Ochre fragments
B1	432	23	38	64	5449	24	2	16	629	Copper + iron wire
B2	587	31	61	261	8310	56	3	16	829	Iron bangle + nail
B3	518	25	48	311	5975	40	3	15	635	Iron fragment
Surface	23	41	40	-	-	-	-	20	65	
Total n	**1949**	**135**	**217**	**835**	**24898**	**153**	**10**	**79**	**2650**	

Undec - Undecorated sherds Dec - Decorated sherds UNID - Unidentifiable bones
ID - Identifiable bones OES F - Finished OES UnF - Unfinished

Ceramics

The excavated trench yielded a total of 2855 potsherds. Sherds smaller than one centimetre in diameter (n = 835, 29%) were not included in the analysis. The remaining 2020 (71%) sherds were analysed according to the procedure for the stylistic ceramic analysis outlined in Chapter 2. A summary of the analyses is presented in Table 5.2. The assemblage comprises 177 (9%) rim sherds, 94 (5%) decorated sherds and 1926 (95%) undecorated sherds. The two main vessel shapes identified are jars (n = 186, 9%) and bowls (n = 97, 5%) with 1737 (86%) indeterminate sherds. A total of 105 (5%) highly burnished sherds, 1573 (78%) burnished sherds and 342 (17%) unburnished sherds were recovered. The ceramics in the collection are well made, burnished (83%) well fired and finely decorated (Figure 5.7). The colour of the vessels ranges from yellow-brown and red-brown to brown. The vessels have an average thickness of between 5 and 15 mm.

Table 5.2: Analysis of the excavated ceramic sherds from Site 37-C1-7.

Layer (cm)	Vessel	Rim	Decorated	Undecorated	HB	B	UB	Total	< 1cm
0 - 10	Jars	19	4	19		23		23	
	Bowls	7	6	17	6	13	4	23	
	Indeterminate		5	188	5	142	46	193	94
10 - 20	Jars	11	7	19	6	19	1	26	
	Bowls	8	5	7	2	10		12	
	Indeterminate		5	273	5	227	46	278	126
20 - 30	Jars	42	12	57	4	63	2	69	
	Bowls	32	7	33	6	33	1	40	
	Indeterminate		15	774	26	617	146	789	375
30 - 40	Jars	35	10	47	8	46	3	57	
	Bowls	14	6	14	4	14	2	20	
	Indeterminate		7	364	28	284	59	371	172
40 - 50	Jars	8		11		11		11	
	Bowls	1	2		1	1		2	
	Indeterminate		3	103	4	70	32	106	68
Total n		**177**	**94**	**1926**	**105**	**1573**	**342**	**2020**	**835**
Total %		**9**	**5**	**95**	**5**	**78**	**17**	**100**	**29**

HB – Highly burnished B – Burnished UB – Unburnished

Figure 5.7: Highly burnished (1), burnished (2) and unburnished (3) sherds.

Table 5.3: Analysis of the identifiable vessel types from Site 37-C1-7.

Vessel type	Undecorated		Decorated			Total n	Total %
			Moritsane		*Toutswe*		
	Ex	Sc	Ex	Sc	Sc		
Jars	68	18	11	9		**106**	**32.7**
Constricted jars	28	2	2	3		**35**	**10.8**
Jar body sherds	51		17	10	2	**80**	**24.7**
Beaker body sherds	1					**1**	**0.3**
Bowls	33	3	8	9		**53**	**16.4**
Bowl body sherds	23		18	8		**49**	**15.1**
Total n	**204**	**23**	**56**	**39**	**2**	**324**	
Total %	**63.0**	**7.1**	**17.3**	**12.0**	**0.6**		**100**

Ex – Excavated Sc – Surface collection

The collection yielded 324 identifiable vessel types. Of these 260 (80.3%) were excavated and 64 (19.7%) surface-collected. The surface collection comprises decorated and rim sherds only. The vessel types (Table 5.3) include jars (n = 106, 32.7%) and jar body sherds (sherds with no rims) (n = 80, 24.7%), constricted jars (n = 35, 10.8%), a beaker body sherd (n = 1, 0.3%), bowls (n = 53, 16.4%) and bowl body sherds (n = 49, 15.1%) (see Figure 5.8 for examples). Samples of the vessel profiles identified in the collection are depicted in Figure 5.21. These include jars (No. 1-18, 29 & 30), constricted jars (No. 19-24), a beaker (No. 28), probable beakers (No. 25-27), and bowls (No. 31-46). The 97 decorated vessels were analysed with reference to the different ceramic facies identified in the collection and represent mainly *Moritsane* (95, 98%) and only two (2%) *Toutswe* vessels. The decorated vessel classes are illustrated in Figures 5.22-5.24 and the classification of the decoration motifs is presented in Table 5.4. Also refer to Figure 5.9 for examples of decorated vessels.

Moritsane: Basinghall Farm

In total 98% of the decorated vessels in the *Setlhong* assemblage from Basinghall belongs to the *Moritsane* facies. A total of 146 motifs were employed on the 95 decorated vessels by utilising 31 *Moritsane* facies motif classes as outlined in Figure 2.11. The so-called 'stepladder' design of class II A2 (12.4%) is the motif most frequently used, followed by oblique incisions of class I D1 (11.6%) and lastly crosshatching, class I H1 (8.2%). Most decorative motifs were executed by an incision technique with only 2.1% by a comb-stamping technique. The assemblage yielded ten of the possible 21 *Moritsane* facies classes outlined in Figures 2.12 and 2.13, which include:

Jars (n = 47 or 49.4 %)
Class 1 (type 1a): Figure 5.22 (No. 1 & 3)
Class 3 (type 1b): Figure 5.22 (No. 2, 7, 17 & 18)
Class 4 (type 1a 2): Figure 5.22 (No. 5 & 6)
Class 6 (type 1b 2): Figure 5.23 (No. 5)
Class 9 (type 2): Figure 5.22 (No. 8-14 & 16) and Figure 5.23 (No. 1, 2, 3 & 9)
Class 10 (type 2 3): Figure 5.23 (No. 4, 6, 7, 8 & 10)
Constricted jars (n = 5, 5.3 %)
Class 13 (type 1a 3): Figure 5.22 (No. 4)
Bowls (n = 43, 45.3%)
Class 16 (type 1a): Figure 5.24 (No. 1-3)
Class 17 (type 1b): Figure 5.24 (No. 4 & 5)
Class 21 (type 4): Figure 5.24 (No. 6-19)

In the collection are 11 bowls coloured with red ochre on the outside and 27 bowls with red ochre on the inside of the vessels.

Figure 5.8: Jars (row 1); constricted jars (row 2); beakers (row 3); bowls (row 4).

Figure 5.9: Decorated *Moritsane* facies vessels.

Table 5.4: Analysis of the *Moritsane* motif classes in the collection.

Class	1	3	4	6	9	10	13	16	17	21	Total	Total
Profile	Jar	Jar	Jar	Jar	Jar	Jar	C Jar	Bowl	Bowl	Bowl	n	%
Layout	1a	1b	1a2	1b2	2	23	1a3	1a	1b	4		
I A1					5	1				2	**8**	**5.5**
I A3					1						**1**	**0.7**
I A4			1		1						**2**	**1.4**

I C1			1		1		1		1	2	**6**	**4.1**
I D1				2	2	4	1			8	**17**	**11.6**
I D2					1						**1**	**0.7**
I E1						1				1	**2**	**1.4**
I E2					1						**1**	**0.7**
I G1	1	1		1	3				1	1	**8**	**5.5**
I G2					6						**6**	**4.1**
I H1					3	5				4	**12**	**8.2**
I H2					2	1					**3**	**2.0**
II A1						2					**2**	**1.4**
II A2				1	1					16	**18**	**12.4**
II A3					1					2	**3**	**2.0**
II B1		1			1				1		**3**	**2.0**
II B2						1				1	**2**	**1.4**
II B3					2		1				**3**	**2.0**
II C1		1				1					**2**	**1.4**
II C2										2	**2**	**1.4**
II D1										3	**3**	**2.0**
II D4										1	**1**	**0.7**
II E1		1	1	1	5	1			1	1	**11**	**7.5**
II E3										1	**1**	**0.7**
II G1	2		2				2	3			**9**	**6.2**
II G2							1				**1**	**0.7**
III A3						6				2	**8**	**5.5**
IIIA5						4				1	**5**	**3.4**
III B3					1						**1**	**0.7**
IV 1		1		1						1	**3**	**2.0**
IV 5		1									**1**	**0.7**
Total n	**3**	**6**	**5**	**6**	**37**	**27**	**6**	**3**	**4**	**49**	**146**	
Total %	**2.0**	**4.1**	**3.4**	**4.1**	**25.4**	**18.5**	**4.1**	**2.0**	**2.8**	**33.6**		**100**
Inside Red										27	**27**	
Outside Red		9	4	14						11	**11**	

C Jar - Constricted jar

Toutswe: Basinghall Farm

The *Toutswe* facies, which comprises 2% of decorated vessels (Figure 5.22; No. 15) in the collection, is represented by two sherds with an applied band in the lower neck of the vessels. The sherds were surface finds and could be intrusive from nearby Toutswe sites.

Beads

A total of 77 identifiable beads were recovered from Site 37-C1-7. These were fashioned from OES (n = 59, 76.6 %), freshwater mussel (n = 5, 6.5%) and bone (n = 3, 3.9%). No metal beads were found. There were also a number of glass trade beads (n = 10, 13.0%). The glass beads are East Coast Indo-Pacific trade beads and consist of seven red-brown and three black beads (Figure 5.10). Information on the type, shape, diaphaneity and diameter of the beads is provided in Table 5.5.

With an absence of time markers such as the K2 Indo-Pacific blue-green series or Mapungubwe beads it is difficult to place the beads into a timeframe. Towards the end of K2 and the beginning of Mapungubwe at AD 1220 red-brown and black beads dominate

bead collections in the Shashe-Limpopo confluence area (Wood 2005:183). A potential oversupply of Indo-Pacific beads at that time could have spread the beads to societies on the borders of the Mapungubwe State. It is also possible that the elite Mapungubwe series beads were reserved for the higher classes, thus never reaching the *Moritsane* people.

Table 5.5: Glass beads recovered from Site 37-C1-7.

Series	Colour	Diaphaneity	Shape	Length ratio	Size mm <2.5	Size mm 2.55-3.5	Total n
EC Indo-Pacific	Red-brown	Opaque	Cylinder	Short		3	3
EC Indo-Pacific	Red-brown	Opaque	Tube	Short	1		1
EC Indo-Pacific	Red-brown	Opaque	Tube	Standard		1	1
EC Indo-Pacific	Red-brown	Opaque	Tube	Standard	1		1
EC Indo-Pacific	Red-brown	Opaque	Oblate	Short		1	1
EC Indo-Pacific	Black	Opaque	Cylinder	Short		1	1
EC Indo-Pacific	Black	Opaque	Cylinder	Standard		1	1
EC Indo-Pacific	Black	Opaque	Tube	Standard		1	1
Total n					**2**	**8**	**10**

Figure 5.10: Glass beads recovered from Site 37-C1-7.

The 59 finished OES beads recovered from the excavations consist of 44 complete beads and 15 broken beads. Bead sizes range from 3-12 mm in diameter with 85% beads between 4-9 mm in diameter (see Figure 5.11). Bead details and sizes for complete beads are presented in Table 5.6.

Table 5.6: Finished OES beads recovered from the excavations.

Size mm	3-3.9	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	Total n	Total %	Black
Complete	1	11	6	8	7	6	2	2	1	44	**74.6**	**5**
Broken		3	1	2	3	3	2	1		15	**25.4**	**3**
Total n	**1**	**14**	**7**	**10**	**10**	**9**	**4**	**3**	**1**	**59**		**8**
Total %	**1.7**	**23.7**	**11.9**	**16.9**	**16.9**	**15.3**	**6.8**	**5.1**	**1.7**		**100**	**13.6**

Figure 5.11: OES beads.

The 2673 unfinished OES bead fragments that have been recovered (see Figure 5.11-5.12 and Table 5.7) can be grouped into four production stages: Stage 1 is represented by prepared irregular discs/blanks; stage 2 as the drilling of the central perforation; during stage 3 the edges of perforated blanks were chipped to create a roughly circular form with chips of 2-4 mm in diameter discarded; and stage 4 as the rounding of edges in a grooved stone to produce a final product of finished beads.

The excavation focussed on the midden area, which probably accounts for the low frequencies of complete and broken beads (2%) against 92% for bead blanks, incomplete beads and fragments. Many of the discarded fragments are irregular or were broken during the manufacturing process. The unfinished beads are between 4-8 mm in diameter. Blackened finished beads comprise 13.6% of the collection and incomplete blackened fragments only 4%. The dark colour was produced under anaerobic conditions in a fire before the OES fragments were fashioned into beads. At Stone Age sites OES beads were often intentionally burned for aesthetic purposes (Kandel 2005:9; Kandel & Conard 2005:1716). Beads from all stages of production were recovered and demonstrate that people at the settlement produced their own OES beads.

Table 5.7: Unfinished OES bead fragments recovered from the excavations.

Size mm	<3.95	4 - 5.95	6 - 7.95	8 - 9.95	>10	Total n	Total %	Black
Stage 1		77	29	14	14	**134**	**5.0**	4
Stage 2		238	137	48	14	**437**	**16.3**	19
Stage 3		30	44	17	6	**97**	**3.6**	7
Stage 4		187	70	26	6	**289**	**10.9**	20
Chips	1716					**1716**	**64.2**	58
Total n	**1716**	**532**	**280**	**105**	**40**	**2673**		**108**
Total %	**64.2**	**19.9**	**10.5**	**3.9**	**1.5**		**100**	**4.0**

Altogether three bone beads of respectively 8, 9.5 and 9.5 mm in diameter and five freshwater mussel beads of 3.5, 3.5, 4 (n = 2) and 7 mm in diameter were recovered (Figure 5.13). Fragments of unworked freshwater mussel (mass = 17 g; n = 39) in a size range of between 5 to 20 mm were also recovered.

Figure 5.12: The production stages of OES beads: stage 1 (top row), stage 2 (second row), stage 3 (third row), waste chips (fourth row) and stage 4 (fifth row). Note the blackened beads in each stage.

Figure 5.13: Bone and freshwater mussel beads.

Figure 5.14: Metal artefacts and an iron slag nodule.

Metal artefacts

Site 37-C1-7 yielded four corroded iron artefacts and a piece of copper wire. The worked metal objects (Figure 5.14) include a piece of iron wire (2 mm in diameter), an 18 mm long nail, a coiled bangle fragment (3.5 mm in diameter) and a small unidentifiable fragment. Apart from a single slag nodule (8 g), no other evidence reflecting metal-working activities was recovered at the site.

Other clay artefacts

A total of ten tools made from fragments of discarded vessels form part of the ceramic collection. Each has an abraded area in the form of a flattened arc produced by scraping or moulding tasks. The objects could have featured as moulding tools used in the production of ceramic vessels or as pot scrapers or in the preparation of animal hides (Figure 5.15). A few pieces (59 g) of hut rubble with pole impressions were also recovered from the midden area (Figure 5.16). The pole impressions suggest cone-on-cylinder type houses. No hut rubble concentrations were identified during the survey.

Figure 5.15: Abraded potsherds.

Figure 5.16: Burned hut rubble fragments.

Worked stone

A fragment of an upper grinding stone, probably used for grinding sorghum or millet, was found (Figure 5.17). In addition, two chunks of red ochre ore (11 g) were collected.

Figure 5.17: An ochre piece and an upper grinding stone fragment.

5.3 Investigations at Site 37-C1-52 on Holmlea Farm

Site coordinates: S23°30'52.1" E27°10'06.1"

Site description

A natural watering point for animals has formed at the periphery of a bend in the Limpopo River where it passes close to a fossilised sand dune that runs across the boundary between Basinghall and Holmlea Farm. The archaeological site is situated on top of the sand 900 m from the river bend. A few white shepherd's (*Boscia albitrunca*) and umbrella thorn (*Acacia tortilis*) trees occur interspersed with brittle thorn (*Phaeoptilum spinosum*) bush. The site measures about 100 m across with a cattle kraal deposit of approximately 40 m in diameter in the middle. Burrowing animals exposed the underlying vitrified dung deposit. The *Letsibogo* facies pottery found in and around the kraal indicates that it is a Middle *Moloko* feature. Ceramics of the *Eiland/Moritsane* facies were collected from the outer edges of the site (Figures 5.18 and 5.19). The presence of different ceramics in the surface collection suggests a multi-component settlement. No other settlement features were observed during the survey.

Two features that were probably game traps used by *Moloko* settlers were identified in close proximity to the site. In AD 1835 Dr Andrew Smith encountered and described Kwena game traps near the Marico River (Kirby 1940:149, plate 22). Dr Livingstone (1857) also observed the use of traps by people living along the Limpopo River. Livingstone described the game traps as a deep hole about 12 m wide and 4 m deep covered with branches and soil (see Figure 1.3). Two brush fences were built in the shape of a funnel about a kilometre in length and a kilometre wide at the entrance. Hunters drove herds of game into the funnel and animals trapped in the pit were killed with spears.

Cultural material finds

The purpose of the surface collection was mainly to obtain rim sherds and decorated ceramics for the ceramic analysis. Other finds include four abraded potsherds, a broken *Letsibogo* facies spindle whorl (see Figure 5.26 No. 12) and a slag nodule.

Ceramics

The surface collection yielded a total of 144 identifiable vessels. The vessels included 23 (16.0%) jars, 41 (28.5%) jar body sherds, nine (6.2%) constricted jars, one (0.7%) beaker body sherd, 26 (18.0%) bowls and 44 (30.6%) bowl body sherds. The 124 decorated vessels were analysed according to the different facies identified in the collection (Table 5.8). They include 80 (55.6 %) *Moritsane*, 10 (6.9 %) *Eiland*, 8 (5.6 %) *Toutswe* and 26 (18.0%) *Letsibogo* facies vessels. A selection of decorated vessel classes are illustrated in Figures 5.18, 5.19, 5.25 and 5.26.

Figure 5.18: *Eiland/Moritsane* facies vessels.

Figure 5.19: Decorated *Moritsane* facies vessels.

Table 5.8: Analysis of the identifiable vessel types from Site 37-C1-52.

Vessel type	Undecorated	Decorated				Total n	Total %
		Toutswe	Eiland	Moritsane	Letsibogo		
Jars	8	3	4	7	1	**23**	**16.0**
Constricted jars	5			4		**9**	**6.2**
Jar body sherds		4	6	27	4	**41**	**28.5**
Beaker body sherd		1				**1**	**0.7**
Bowls	7			9	10	**26**	**18.0**
Bowl body sherds				33	11	**44**	**30.6**
Total n	**20**	**8**	**10**	**80**	**26**	**144**	
Total %	**13.9**	**5.6**	**6.9**	**55.6**	**18.0**		**100**

Moritsane: Holmlea Farm

Moritsane facies vessels represent 55.6% of all decorated vessels in the Holmlea Farm assemblage. The potters employed 132 motifs (Table 5.9) on the 80 decorated vessels by utilising 17 *Moritsane* motif classes, illustrated in Figure 2.11. The stepladder motif (class II A2) was most commonly used, followed by crosshatching (class I G1) and herringbone motifs (class I A1). The motifs were all executed by using an incision decoration technique. The assemblage yielded ten of the possible 21 *Moritsane* classes outlined in Figure 2.12 and 13, which include:

Jars (n = 34, 42.5%)
Class 2 (type 1ab): Figure 5.25 (No. 1)
Class 3 (type 1b): Figure 5.26 (No. 6)

Class 5 (type 1ab 2): Figure 5.25 (No. 3)
Class 10 (type 2 3): Figure 5.26 (No. 10 & 11)
Constricted jars (n = 4, 5%)
Bowls (n = 42, 52.5%)
Class 20 (type 1b 4): Figure 5.26 (No. 2)
Class 21 (type 4): Figure 5.26 (No. 1, 4 & 5)

Red ochre-coloured vessels consisted of 20 bowls coloured on the outside and 29 bowls coloured on the inside.

Table 5.9: Analysis of the *Moritsane* motif classes in the collection.

Class	1	2	3	5	9	10	13	15		20	21	Total	Total
Profile	Jar	Jar	Jar	Jar	Jar	Jar	C Jar	C Jar	Beaker	Bowl	Bowl	n	%
Layout	1a	1ab	1b	1ab 2	2	2 3	1a 3	3	4	1b 4	4		
I A1		1		1	7	3				1	2	**15**	**11.4**
I A2					2							**2**	**1.5**
I C1						2		1			4	**7**	**5.3**
I D1			1			5	1	1		1	6	**15**	**11.4**
I G1		1	2		2	1				1	9	**16**	**12.1**
II A2				1	2			2		1	28	**34**	**25.7**
II B2											3	**3**	**2.3**
II C1											1	**1**	**0.8**
II E1		1	1		3						3	**8**	**6.0**
II E3		1	2								3	**6**	**4.5**
II E4					1				1			**2**	**1.5**
II G1		2		1			1			1		**5**	**3.8**
II G2	1											**1**	**0.8**
III A3						11						**11**	**8.3**
IIIA5										1	2	**3**	**2.3**
III B1									1		1	**2**	**1.5**
IV 1										1		**1**	**0.8**
Total n	**1**	**6**	**6**	**3**	**17**	**22**	**2**	**4**	**2**	**7**	**62**	**132**	
Total %	**0.8**	**4.5**	**4.5**	**2.3**	**12.9**	**16.7**	**1.5**	**3.0**	**1.5**	**5.3**	**47.0**		**100**
Inside Red										1	28	**29**	
Outside Red										1	19	**20**	

C Jar - Constricted jar

Eiland: Holmlea Farm

Eiland facies vessels represent 6.9% of all decorated vessels in the collection and comprise mainly jars. A total of 23 motifs (Table 5.10) were employed on ten jars thereby utilising ten *Eiland* motif classes from Figure 2.7. The most utilised motifs were herringbone (I A1) and incised arcades (III A3), all executed by an incision decoration technique. The vessel classes of jars include:

Class 2: Figure 5.25 (No. 5)
Class 3: Figure 5.25 (No. 4) and Figure 5.26 (No. 3)
Class 5: Figure 5.25 (No. 2)
Class 9: Figure 5.25 (No. 7)

Table 5.10: Analysis of the *Eiland* motif classes in the collection.

Class	Profile	Layout	IA1	ID1	IIA2	IID1	IIE2	IIF2	IIIA3	IIIB2	IIIC1	IV3	Total n	Total %
2	Jar	1b										1	**1**	**4.3**
3	Jar	1a, b2	1			1		2		1	1		**6**	**26.1**
5	Jar	1a, b23	1					1	1		1	1	**5**	**21.7**
9	Jar	23	4	1	1		1		4				**11**	**47.9**
Total n			**6**	**1**	**1**	**1**	**1**	**3**	**5**	**1**	**2**	**2**	**23**	
Total %			**26.1**	**4.3**	**4.3**	**4.3**	**4.3**	**13.1**	**21.7**	**4.3**	**8.8**	**8.8**		**100**

Toutswe: Holmlea Farm

The *Toutswe* facies, which represents 5.6% of the decorated vessels in the collection, only comprise jars: Figure 5.25 (No. 6) and Figure 5.26 (No. 7 & 11). The decorations consist of crude comb-stamped and incised bands in the neck of vessels. The sherd in Fig 5.26 (No. 8) represents a *Toutswe* beaker.

Letsibogo: Holmlea Farm

The *Letsibogo* facies represents 18% of all decorated vessels in the collection and comprise five jars and 22 bowls (Figure 5.26 No. 13, 14, 16 & 17). The decoration motifs were executed by using a dragged punctate and incised technique. A bowl decorated with Early *Moloko* decoration motifs (Figure 5.26 No. 15) signifies an additional Early *Moloko* component at the site.

5.4 Investigations at Site 37-C1-61 on Riversley Farm

Site coordinates: S23°33'37.7" E27°08'18.8"

Description

The site lies 800 m from the Limpopo River on the edge of a sand dune ridge on Riversley Farm. The sand ridge borders black cotton soils that are regularly flooded. The elevation of five metres above the surrounding clay soils creates a good watering point for domestic stock.

The site, measuring about 300 m across, is located in an open clearing that contains a few umbrella thorn (*Acacia tortilis*) trees and brittle thorn (*Phaeoptilum spinosum*) shrubs. A *Moritsane*/*Toutswe* facies midden of approximately 60 m in diameter partly overlaps a *Letsibogo* facies cattle kraal deposit of 25 m in extent. The midden/kraal area has been extensively disturbed by burrowing animals that exposed quantities of cultural material. The surface collection suggests a probable multi-component site consisting of *Toutswe, Moritsane* and *Letsibogo* facies.

Cultural material finds

No excavations were undertaken. The surface ceramic collection consists mainly of decorated ceramics and rim sherds. Other finds include two abraded potsherds, an upper

grinding stone, a burnishing stone, three OES beads, a corroded iron spear shaft, red ochre ore and also MSA and LSA stone tools.

Ceramics

The surface collection yielded a total of 173 identifiable vessels. The vessel types included 29 (16.7%) jars, 84 (48.6%) jar body sherds, 8 (4.6%) constricted jars, two (1.2%) beakers, one (0.6 %) beaker body sherd, 35 (20.2%) bowls and 14 (8.1%) bowl body sherds. The 128 decorated vessels were analysed according to the different facies identified in the collection (Table 5.11) which include 56 (32.4%) *Moritsane* facies, 49 (28.3%) *Toutswe* facies and 23 (13.3%) *Letsibogo* facies vessels. A representative sample of the decorated vessel classes are illustrated in Figures 5.20, 5.27 and 5.28.

Table 5.11: Analysis of the identifiable vessel types from Site 37-C1-61.

Vessel type	Undecorated	Decorated			Total n	Total %
		Toutswe	Moritsane	Letsibogo		
Jars	16	4	8	1	**29**	**16.7**
Constricted jars	7		1		**8**	**4.6**
Jar body sherds		44	28	12	**84**	**48.6**
Beakers	2				**2**	**1.2**
Beaker body sherds		1			**1**	**0.6**
Bowls	20		11	4	**35**	**20.2**
Bowl body sherds			8	6	**14**	**8.1**
Total n	**45**	**49**	**56**	**23**	**173**	
Total %	**26.0**	**28.3**	**32.4**	**13.3**		**100**

Figure 5.20: Decorated *Moritsane* facies vessels.

Moritsane: Riversley Farm

The *Moritsane* facies represents 32.4% of the decorated vessels in the assemblage (see Figure 5.20 for examples). The potters employed 99 *Moritsane* facies motifs (Table 5.12) on the 56 decorated vessels, utilising 22 of the *Moritsane* motif classes illustrated in Figure 2.11. The stepladder design (class II A2) was the most common motif followed by herringbone (class I A1) and oblique incision (class I D1). The assemblage yielded nine out

of the possible 21 *Moritsane* facies classes outlined in Figures 2.12 and 13, which include:

Jars (n = 36, 64.3 %)
Class 2 (type 1ab): Figure 5.27 (No. 4)
Class 3 (type 1b): Figure 5.27 (No. 3)
Class 6 (type 1b 2): Figure 5.27 (No. 1 & 2)
Class 10 (type 2 3): Figure 5.27 (No. 5)
Constricted jars (n = 1, 1.8 %)
Bowls (n = 19, 33.9%)
Class 17 (type 1b): Figure 5.27 (No. 6 & 8)
Class 21 (type 4): Figure 5.27 (No. 7 & 9-12)

Five bowls were coloured with ochre on the outer surface and 13 bowls on the inner surface.

Table 5.12: Analysis of the *Moritsane* motif classes in the collection.

Class	**2**	**3**	**6**	**9**	**10**	**15**	**17**	**20**	**21**	**Total n**	**Total %**
Profile	**Jar**	**Jar**	**Jar**	**Jar**	**Jar**	**C Jar**	**Bowl**	**Bowl**	**Bowl**		
Layout	**1ab**	**1b**	**1b 2**	**2**	**2 3**	**3**	**1b**	**1b 4**	**4**		
I A1			1	5	1		1		3	**11**	**11.1**
I A2			1	1						**2**	**2.0**
I C1				2	1				1	**4**	**4.1**
I D1	1		1	2	1				4	**9**	**9.1**
I D2				2	2			1		**5**	**5.1**
I G1	1	1		1	1				3	**7**	**7.1**
I G2				3						**3**	**3.0**
II A2				1					13	**14**	**14.1**
II A3				1					2	**3**	**3.0**
II B2						1			1	**2**	**2.0**
II B3							1			**1**	**1.0**
II E1	2			4			1		1	**8**	**8.1**
II E3				4					3	**7**	**7.1**
II E4			1		1			1	2	**5**	**5.1**
II G1	2									**2**	**2.0**
III A1			1		1					**2**	**2.0**
III A3					3					**3**	**3.0**
III A4								1	1	**2**	**2.0**
III A5				1	1					**2**	**2.0**
III B4									2	**2**	**2.0**
IV 1								1	2	**3**	**3.0**
IV 6		1							1	**2**	**2.0**
Total n	**6**	**2**	**5**	**27**	**12**	**1**	**3**	**4**	**39**	**99**	
Total %	**6.1**	**2.0**	**5.1**	**27.3**	**12.1**	**1.0**	**3.0**	**4.0**	**39.4**		**100**
Inside Red						1			13	**14**	
Outside Red						1			5	**6**	

C Jar - Constricted jar

Toutswe

The *Toutswe* facies is represented by 28.3% of the decorated vessels in the Riversley Farm collection. The potters employed 56 motifs (Table 5.13) on the 49 decorated vessels in the

sample, utilising 12 of the *Toutswe* facies motif classes illustrated in Figure 2.4. An oblique comb-stamped band (class I F1) and an oblique incised band (I B4) were mostly used as design motifs. The assemblage yielded five of the possible ten *Toutswe* facies classes outlined in Figure 2.5. These include:

Jars (n = 48, 98 %)
Class 1 (type 2): Figure 5.28 (No. 2-8)
Class 2 (type 2): Figure 5.28 (No. 1)
Class 3 (type 2 3 4): Figure 5.28 (No. 9 & 10)
Beaker (n = 1, 2 %)
Class 7 (type 4): Figure 5.28 (No. 11)

Typical undecorated *Toutswe* facies bowls (Figure 5.28 No 12 & 13) were also identified in the collection.

Table 5.13: Analysis of the *Toutswe* motif classes in the collection.

Class	Profile	Layout	IA1	IA4	IB1	IB4	ID2	IE1	IE9	IF1	IF9	IIA6	IIIB4	IVB1	Total n	Total %
1	Jar	2	2	4	2	7	1	1	1	7	6				**31**	**55.4**
2	Jar	2	4			1		1	3	2					**11**	**19.6**
3	Jar	2 3 4						2		2				4	**8**	**14.3**
5	Jar	3 4								1		1		2	**4**	**7.1**
7	Beaker	4		1									1		**2**	**3.6**
Total n			**6**	**5**	**2**	**8**	**1**	**4**	**4**	**12**	**6**	**1**	**1**	**6**	**56**	
Total%			**10.7**	**8.9**	**3.6**	**14.3**	**1.8**	**7.1**	**7.1**	**21.5**	**10.7**	**1.8**	**1.8**	**10.7**		**100**

Letsibogo: Riversley Farm

The *Letsibogo* facies is represented by 13.3% decorated vessels in the collection, which comprise 13 jars and 10 bowls. Several bowl sherds exhibiting the typical *Letsibogo* punctate decoration technique and colouring are depicted in Figure 5.28 (No. 14-17).

5.5 Conclusion

At Basinghall Site 37-C1-7 (*Setlhong*) the *Moritsane* people probably lived in a small village that consisted of a central midden surrounded by houses and granaries. Although no houses or granaries were recorded, the excavation in the midden recovered a sufficiently representative sample of cultural material to confirm that the midden forms part of a 14th-century *Moritsane* settlement. The relative quantities of cultural material recovered suggest an occupation period of more than 20 years. The shallow depth of the scanty kraal deposit and the location of the settlement next to fertile soils suggest that the village was most probably occupied by a crop-cultivating community.

The more finely decorated ceramics have a close resemblance to those of the *Moritsane* facies type site. Only 2.1% of decoration motifs were executed with a comb-stamping technique in comparison to more than 90% of the ceramics recovered from 15th-century *Broadhurst* sites. The inhabitants of the villages probably traded glass beads, iron and copper artefacts with neighbouring settlements but produced their own OES beads.

The diversity of ceramics from Sites 31-C1-52 (Holmlea Farm) and 37-C1-61 (Riversley Farm), both of which are situated closer to the Limpopo River, suggests a multi-component occupation. Site 37-C1-52 has an earlier *Eiland* facies and a *Moloko* component added to what is probably a main *Moritsane* facies settlement phase. Site 37-C1-61 has, in addition to a *Moritsane* facies, a *Toutswe* facies and later *Letsibogo* facies component. More detailed archaeological investigations are needed to determine the extent to which the diverse ceramic surface collection reflects the settlement history of these sites.

In south-eastern Botswana decorated ceramics from the *Moritsane* and *Broadhurst* facies are occasionally found at Early *Moloko* sites, whereas Early *Moloko* sherds are found on *Moritsane* and *Broadhurst* facies sites. *Moritsane* vessels are finely made with neat decorations while Early *Moloko* ceramics seem to be coarser and with more robust decorations. In Chapter 6 these Early *Moloko* characteristics are further explored with reference to the ceramic collection from Site 37-C1-11.

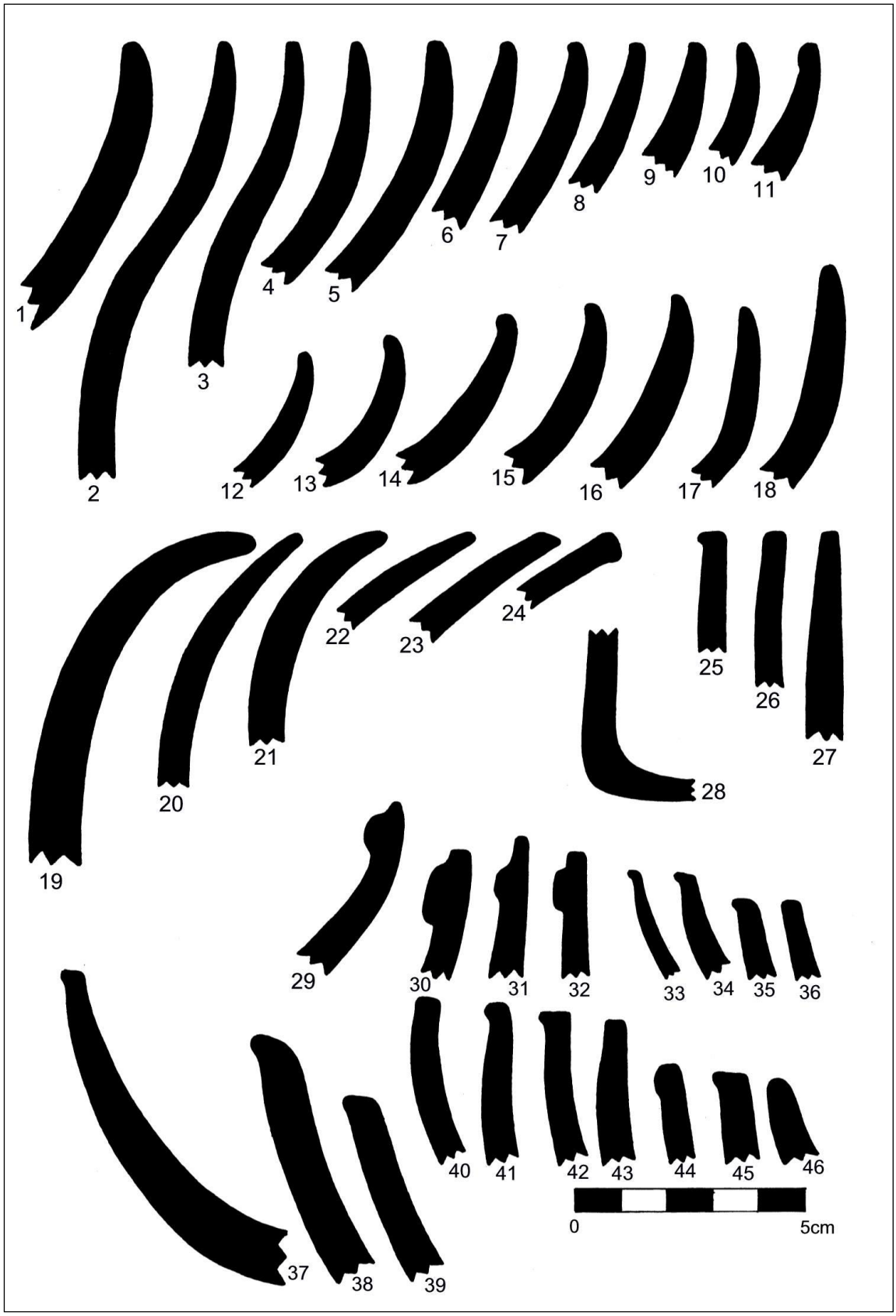

Figure 5.21: Vessel profiles from Site 37-C1-7: jars (No. 1-18, 29 & 30), constricted jars (No. 19-24), beakers (No. 25-28) and bowls (No. 31-46).

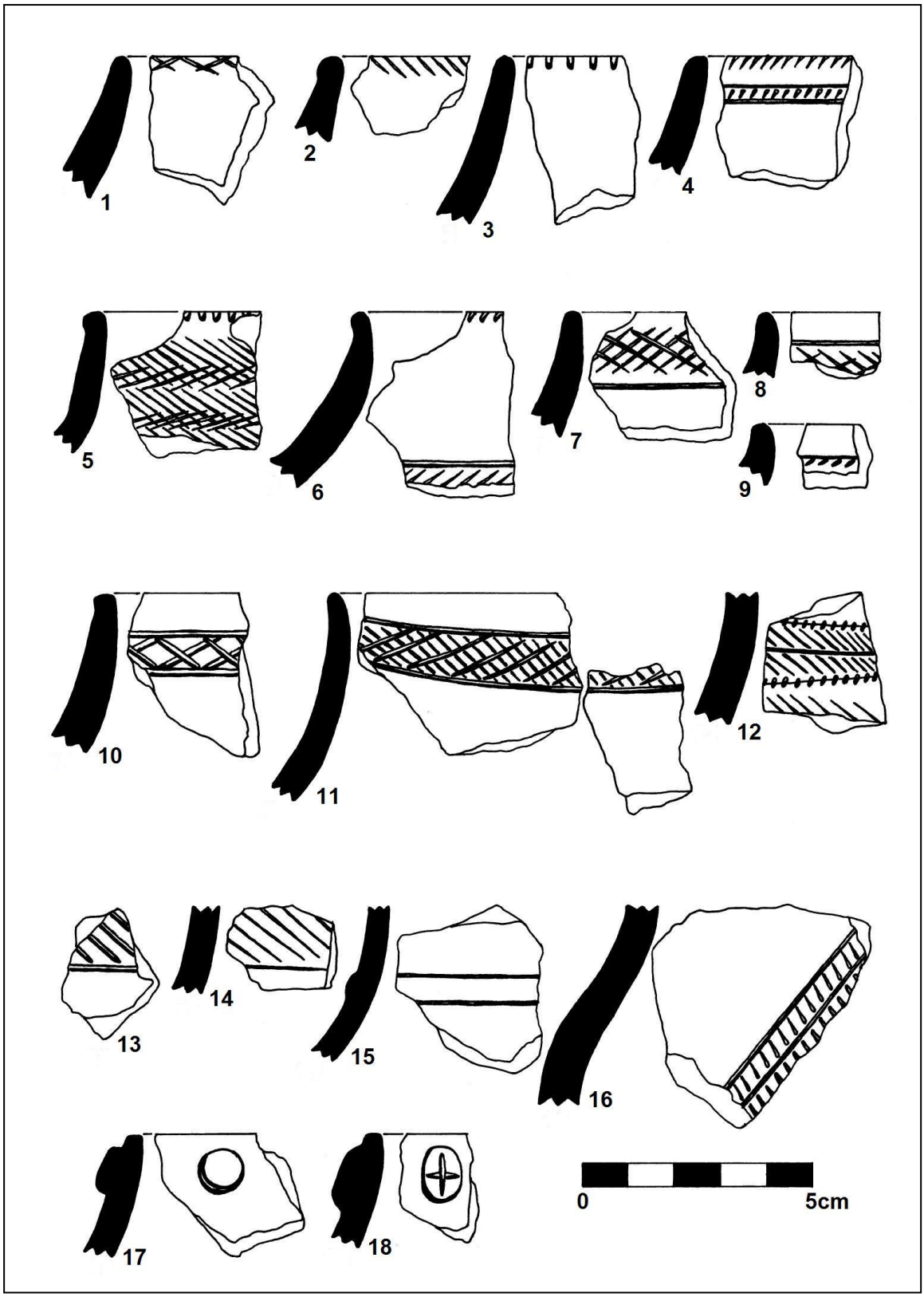

Figure 5.22: *Moritsane* facies jar types from Site 37-C1-7: Class 1 (No.1 & 3), Class 3 (No. 2, 7, 17 & 18), Class 4 (No. 5 & 6), Class 9 (No. 8-14 & 16) and Class 13 (No. 4). A *Toutswe* facies jar (No. 15) identified in the collection.

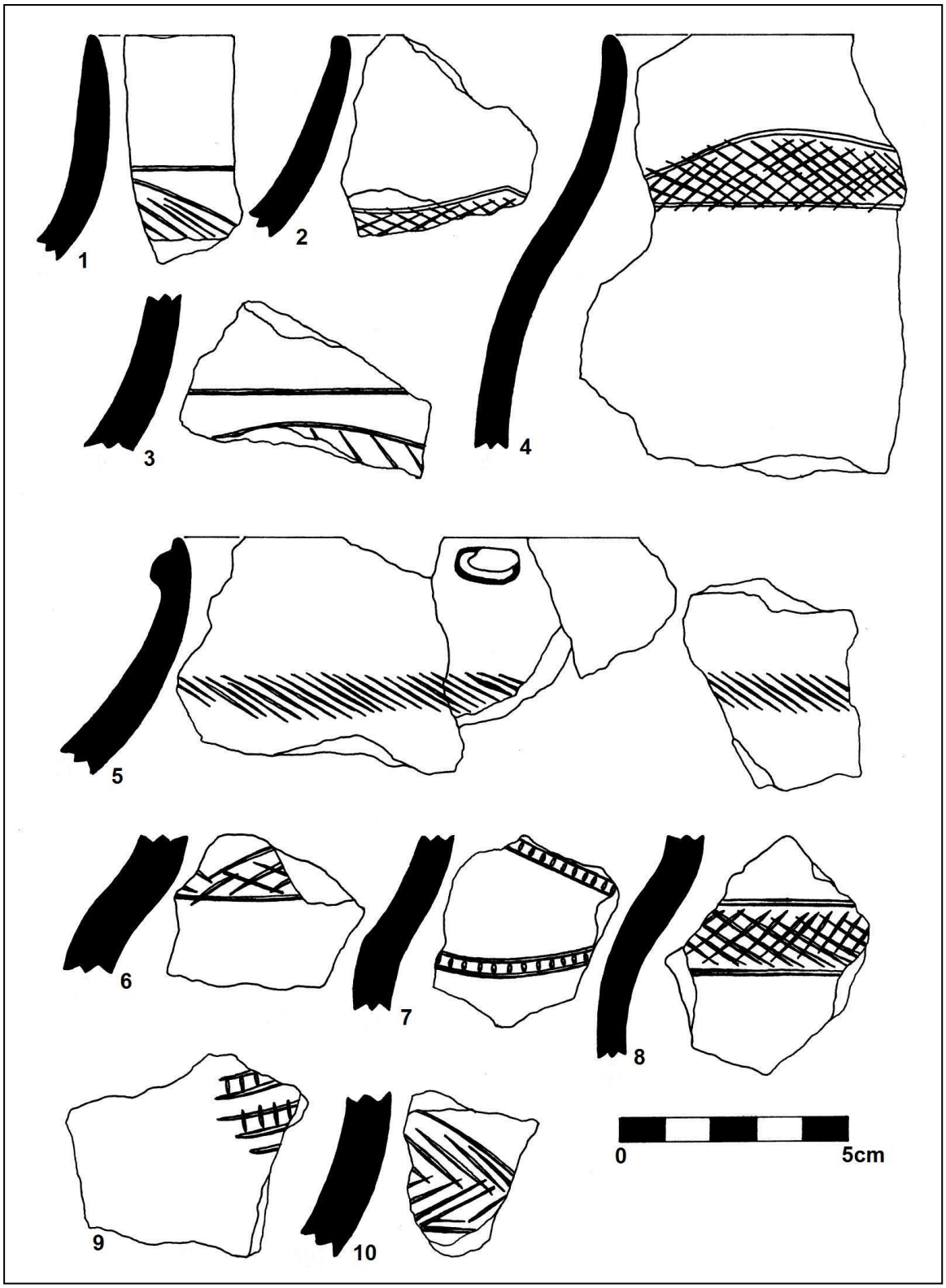

Figure 5.23: *Moritsane* facies jar types from Site 37-C1-7: Class 6 (No. 5), Class 9 (No. 1, 2, 3 & 9) and Class 10 (No. 4, 6, 7, 8 & 10).

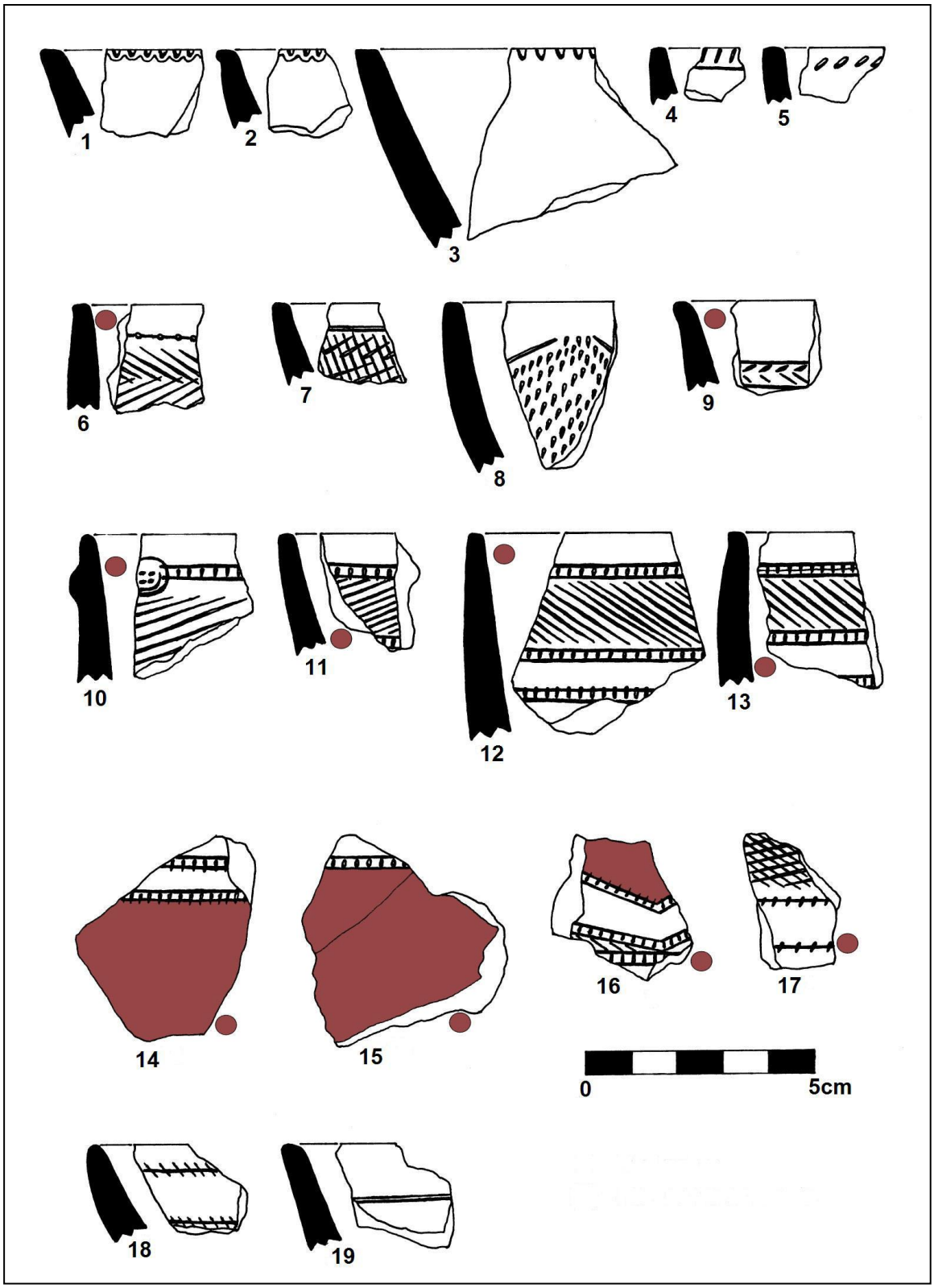

Figure 5.24: *Moritsane* facies bowl types from Site 37-C1-7: Class 16 (No. 1-3), Class 17 (No. 4 & 5), Class 21 (No. 6-19). (Red dot - red ochre colouring on inside).

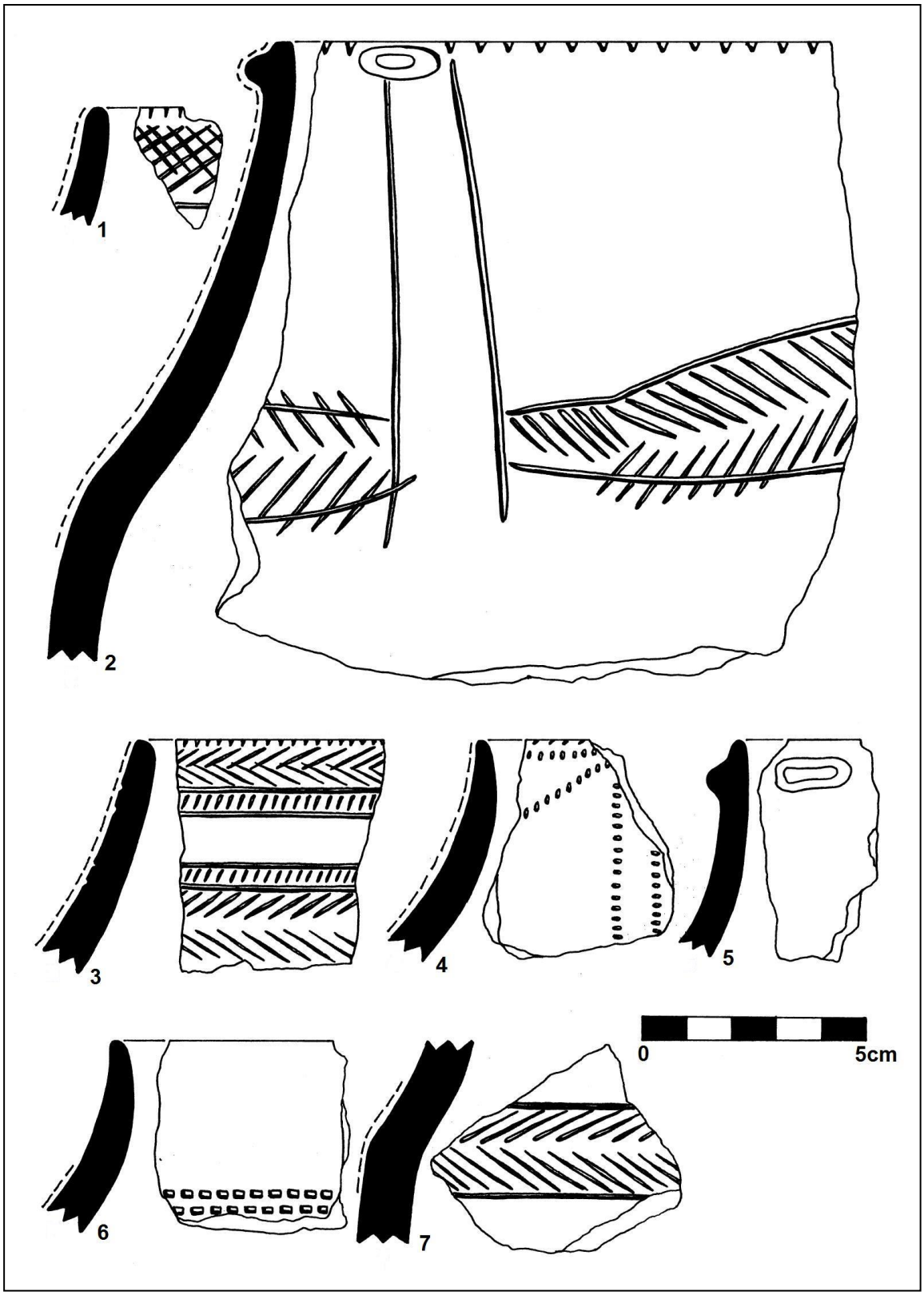

Figure 5.25: *Moritsane* facies jar types from Site 37-C1-52: Class 2 (No. 1), Class 5 (No. 3). *Eiland* facies vessel types: Class 2 (No. 5), Class 3 (No. 4), Class 5 (No. 2) and Class 9 (No. 7). A *Toutswe* facies jar (No. 6) identified in the collection.

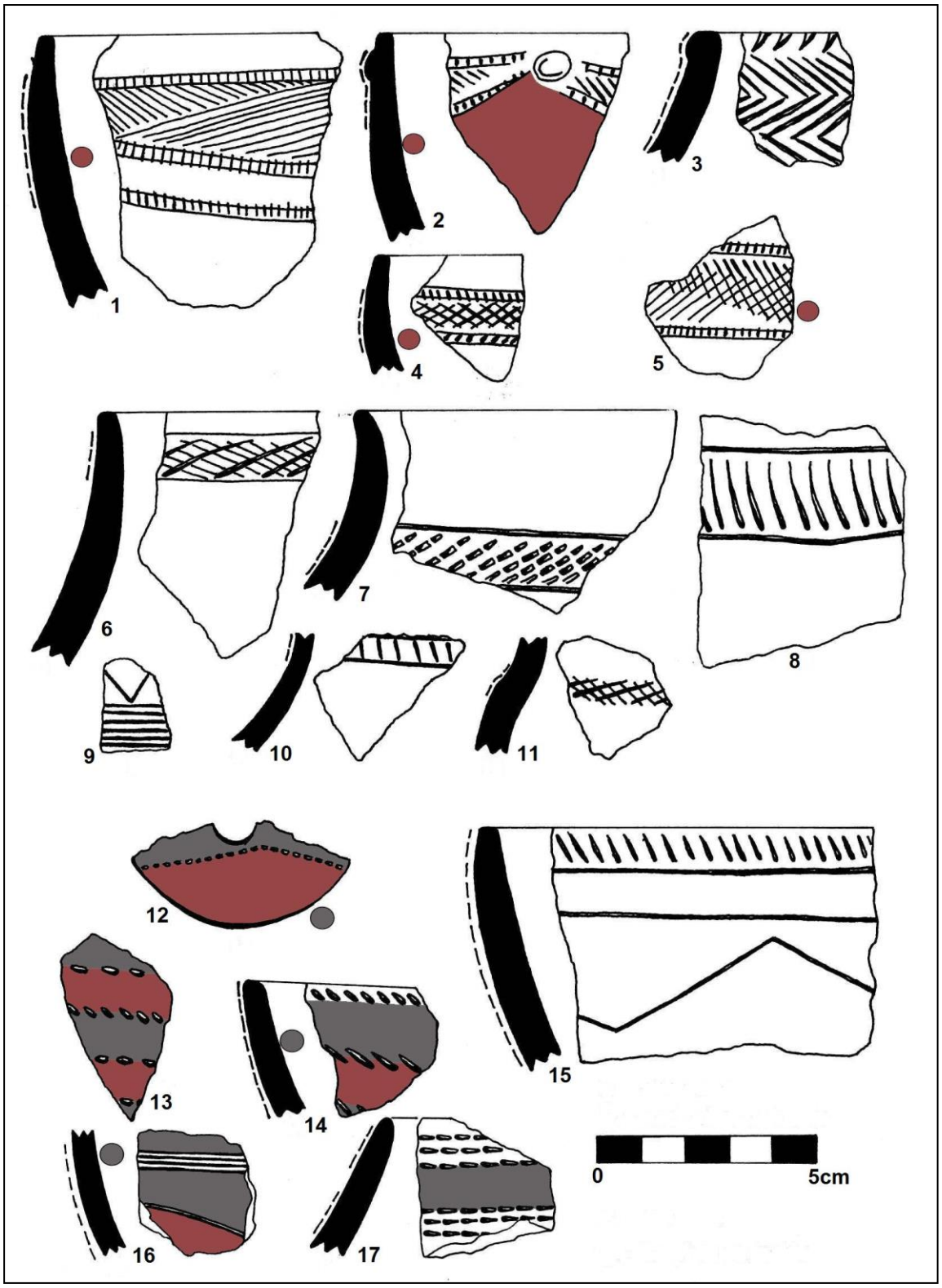

Figure 5.26: *Moritsane* facies vessel types from Site 37-C1-52: Class 3 (No. 6), Class 10 (No. 10 & 11), Class 20 (No. 2), Class 21 (No. 1, 4 & 5). *Eiland* facies vessel type: Class 3: (No. 3). *Toutswe* facies vessel types: Class 3 (No. 7&8) and Class 9 (No. 9). *Letsibogo* facies vessels (No. 13, 14, 16 &17) and Early *Moloko* bowl (No. 15) identified in the collection. A broken *Letsibogo* facies spindle whorl (No. 12). (Red dot - red ochre colouring on inside, grey dot - graphite colouring on inside).

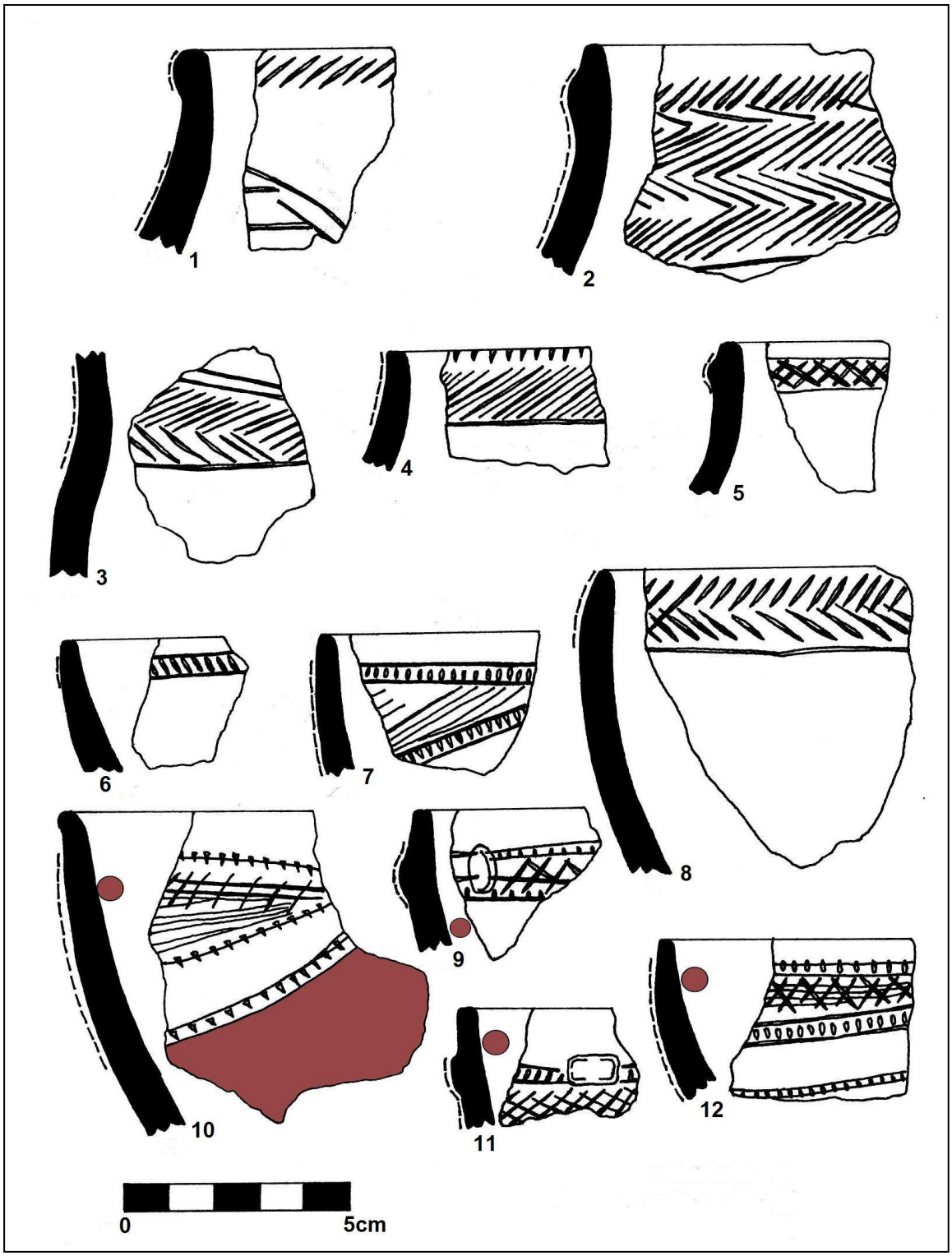

Figure 5.27: *Moritsane* facies vessel types from Site 37-C1-61: Class 2 (No. 4), Class 3 (No. 3), Class 6 (No. 1 & 2), Class 10 (No. 5), Class 17 (No. 6 & 8) and Class 21 (No. 7 & 9-12). (Red dot - red ochre colouring on inside).

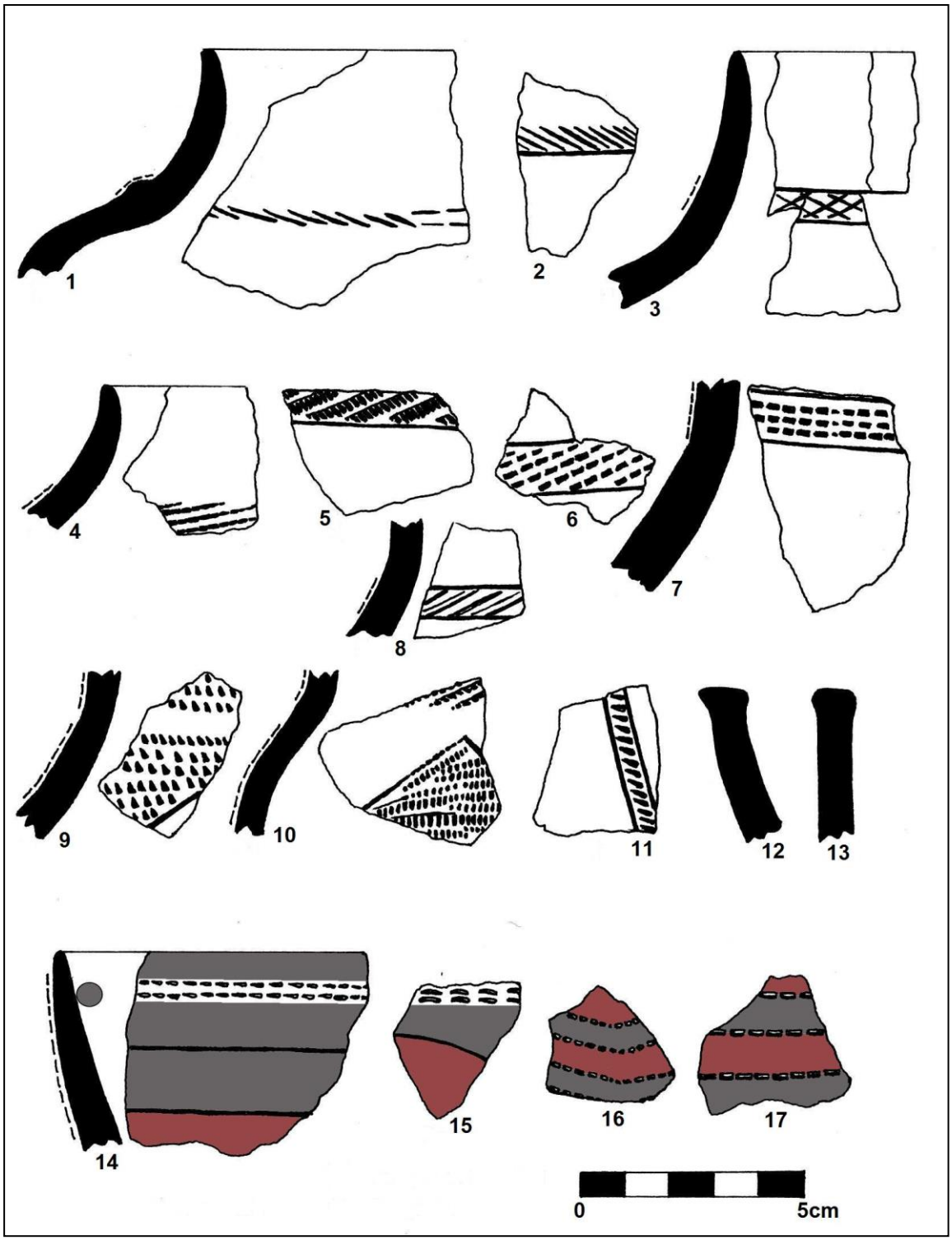

Figure 5.28: *Toutswe* facies vessel types from Site 37-C1-61: Class 1 (No. 2-8), Class 2 (No. 1), Class 3 (No. 9 & 10), Class 7 (No. 11) and bowls (No. 12 & 13). *Letsibogo* facies bowls (No. 14-17) identified in the collection. (Grey dot - graphite colouring on the inside).

CHAPTER 6

THE EARLY *MOLOKO* FACIES

6.1 Introduction

Early Sotho-Tswana settlements were arranged in accordance with the Central Cattle Pattern. A central kraal complex, surrounded by huts and accompanied by an arc of kitchens and grain bins, was enclosed by a stone wall or wooden palisade (Huffman 1986b:302). Settlements were small and dispersed on the landscape, as indicated by a survey of various Early *Moloko* sites in the Marico dating to the 15th century AD. These sites were usually located in an open environment or at the foot of hills not too distant from water sources (Boeyens 1998:106-109; 2003:65-66).

One such investigated settlement, located on Rietfontein 89 JP, although heavily eroded, consisted of 21 hut floor remains clustered in an arc (Boeyens 1998:107). An excavated hut ± 3.5 m in diameter (Figure 6.1) revealed one of the best-preserved Early *Moloko* hut floors yet found. It featured a scalloped raised platform containing pot dimples, pottery and grinding stones. The floor on the lower level revealed a fire bowl with pot-holder stones, a sunken mortar and a flat stone most likely used as a bench (Boeyens 1998:107-108). Radiocarbon dates obtained from charcoal recovered on hut floors indicate a 15th-century occupation. Ceramics uncovered at these sites, including decorated sherds from the above-described hut, exhibit characteristics typical of the Early *Moloko* facies uncovered at Basinghall.

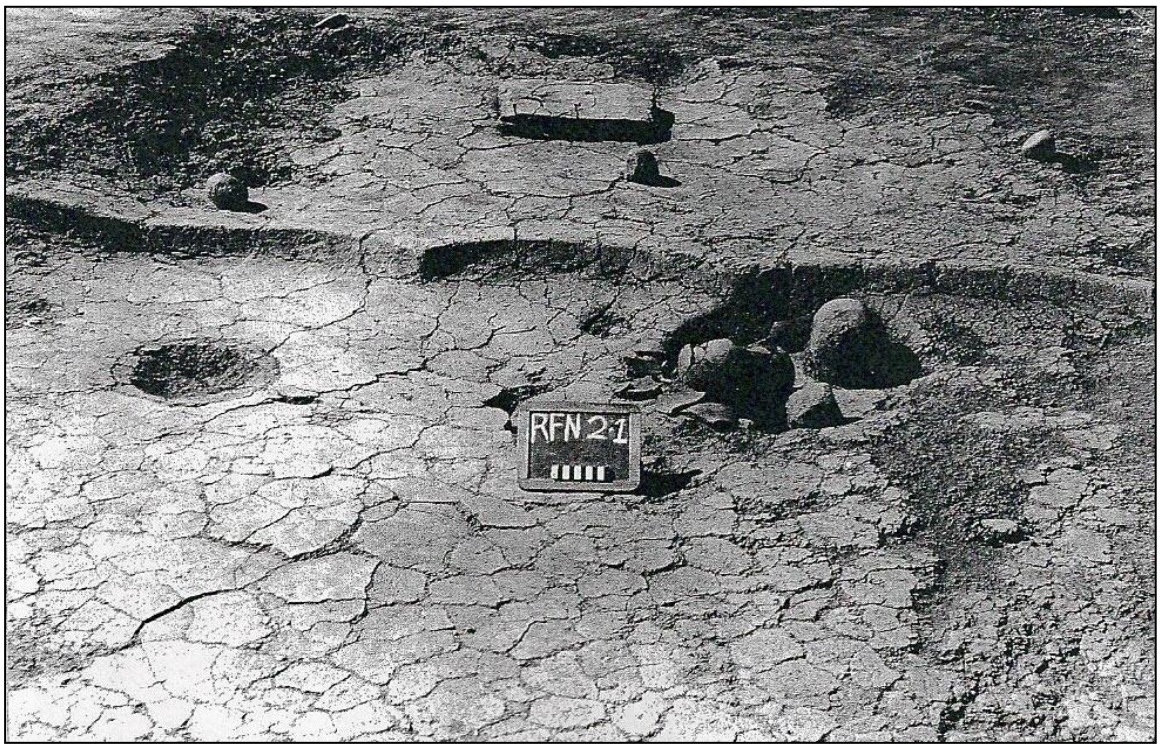

Figure 6.1: An Early *Moloko* hut floor at Rietfontein 89 JP (Boeyens 1998:266).

These small dispersed Early *Moloko* sites have a low archaeological visibility and are often only identified within eroded contexts or when uncovered through agricultural activities. Land-use practices such as ploughing frequently disturb sub-surface archaeological settlements and features. Artefacts that are displaced and redistributed onto a land surface often allow for the identification of such buried sites (Shott 1995: 475-490; Wilkinson et al. 2006:658-670).

At Basinghall two sites were identified in previously cultivated fields. At these localities larger stones were removed and trees were burned down during the field-clearing process in the early 1960s. Subsequent ploughing and cultivation of the fields over a decade disturbed the sub-surface sites and exposed some cattle kraal deposits and hut rubble concentrations. Ploughing and cropping activities also resulted in the fragmentation of ceramics and other cultural materials. Within the agricultural zone Site 37-C1-11 exhibited the most promising features, consisting of exposed cattle kraal deposits surrounded by hut rubble concentrations, and was therefore selected for excavation. Site 37-C1-13 revealed an ephemeral cattle kraal deposit, and only a handful of decorated sherds and some hut rubble fragments were retrieved.

6.2 Excavations at Site 37-C1-11

Site name: *Mmamphuphama* (nightjar) **S23º32'11.1" E27º07'24.8"**

Site description

The site is located on the red loam soil of the floodplain in a previously cultivated field. After the field was left fallow it was invaded by pioneer communities, such as umbrella thorn (*Acacia tortilis*) and black thorn (*Acacia mellifera*). Currently it exhibits a modest grass cover. The closest seasonal water source is a non-perennial pan 100 m to the east. The Limpopo River, one kilometre away from the site, constituted a permanent water source for the occupants.

Previous cultivation activities exposed dung deposits from a cattle kraal and hut rubble concentrations that demarcate the extent of the settlement. No intact hut floor remains could be located amongst the hut rubble concentrations. The site measures ± 100 m across with the cattle kraal ± 40 m in diameter (Figure 6.2). The cattle kraal deposit can be recognised by the white-grey colouration of the compacted dung mixed into the red loam soil. An arc of seven hut rubble concentrations is situated to the western side of the cattle kraal deposit. From the surface collection it became evident that artefactual materials were invariably to be found around and on the hut rubble concentrations and also in the area between the houses and the cattle kraal deposit. No middens were identified.

Both depositional and post-depositional site formation processes have to be taken into account as they guide our understanding of how a particular archaeological record has been formed, preserved or damaged (Shott 1995:475, 1998:299-329). Cultivation techniques, particularly ploughing, have an erosive impact on archaeological sites (Wilkinson et al. 2006:658-670). The excavation of the Early *Moloko* facies site at Basinghall demonstrates the preservation of settlement features and objects underlying such a plough zone. It is, however, important that the impact of soil redistribution on the archaeological features of

such plough-zone sites be taken into account when assessing the archaeological integrity and value of disturbed and transformed sub-surface assemblages, such as at Basinghall (Shott 1995:475; Wilkinson et al. 2006:662).

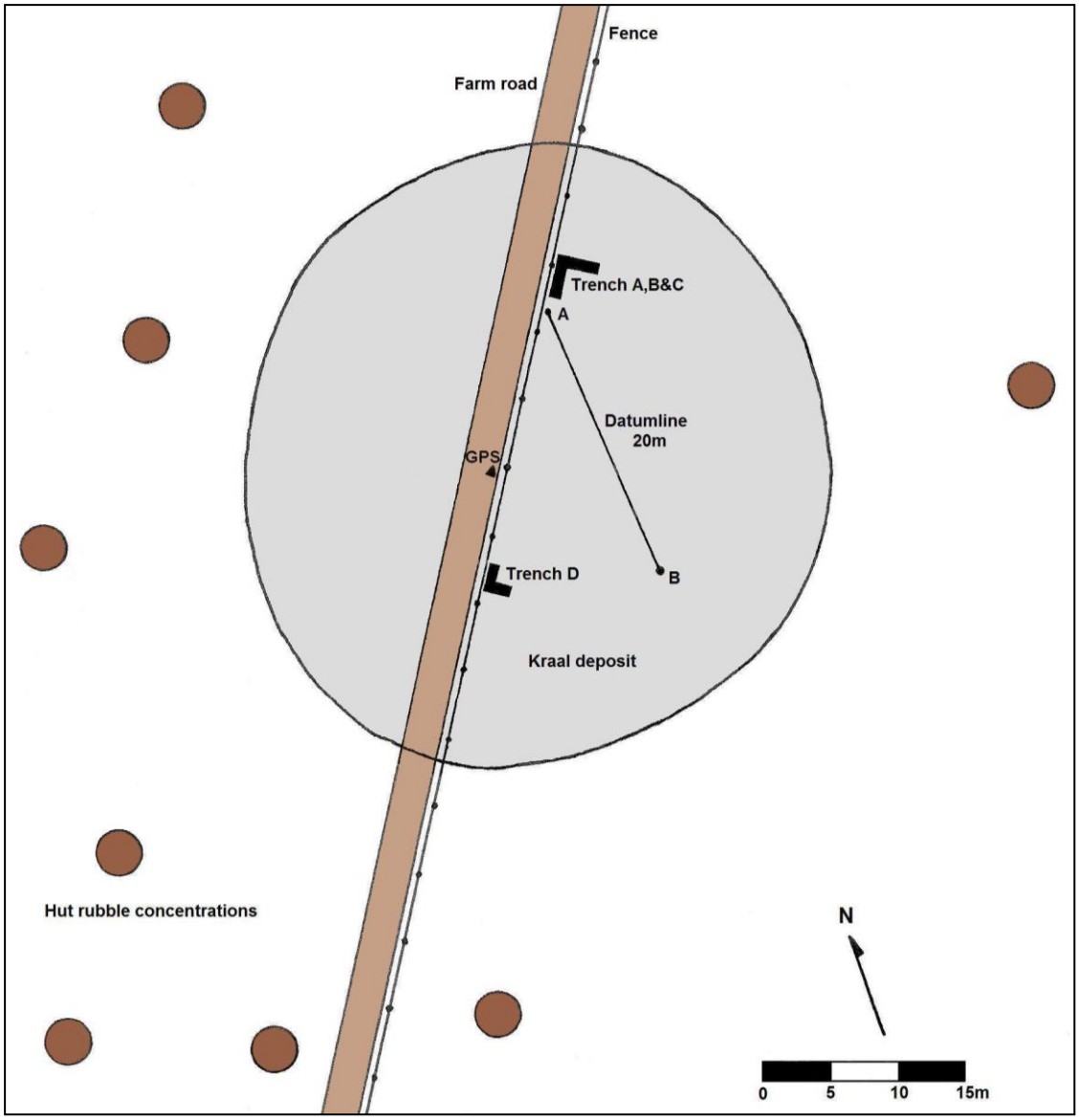

Figure 6.2: The settlement layout of Site 37-C1-11.

Excavation methodology

The site has a low archaeological visibility because it has been minimally affected by bioturbation processes - the only exposure of material resulted from cultivation. Two small rodent burrows in the cattle kraal deposit exposed a few charcoal pieces and some bone fragments. Two test trenches, covering a total area of eight square metres, were positioned north and south of the datum line in the immediate vicinity of the burrows (Figure 6.2). The trenches were excavated by UNISA students and friends in December 2004. The northern trench encompassed an L-shaped 3 m x 3 m x 1 m block divided into 1 m x 1 m squares

assigned A, B, C1, C2 and C3. The southern trench formed an L-shaped 2 m x 2 m x 1 m block divided into 1 m x 1 m squares assigned D1, D2 and D3. The excavations were executed in 10 cm layers until sterile soil was reached at a depth of 40 cm. The excavated deposit was screened using a 1.5 mm sieve and all cultural material was sorted, bagged and analysed.

Stratigraphy

The site stratigraphy revealed a single-component settlement with a rather short occupation period. The top stratum in the trenches displayed white-grey compacted dung mixed with underlying soils from previous cultivation events. In the northern trench (Figures 6.3 & 6.5) the dung layer reached a depth of 30-35 cm followed by a sterile dark red-brown layer that was excavated to a depth of 40 cm.

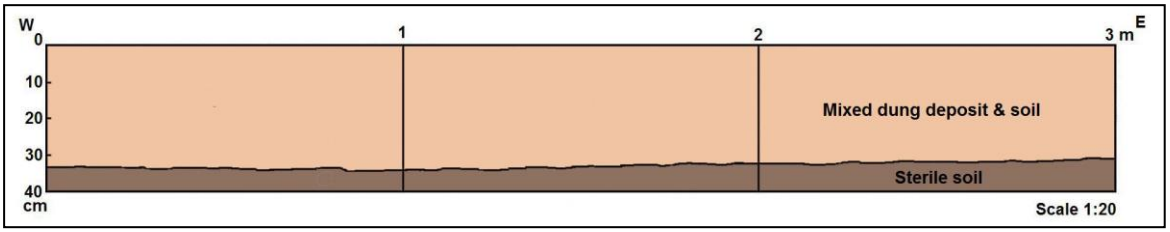

Figure 6.3: The northern profile of the northern trench.

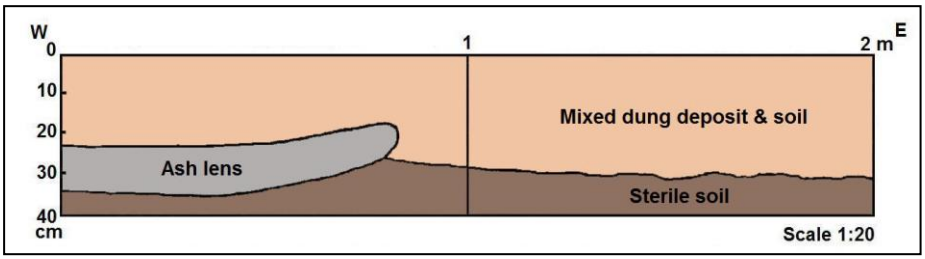

Figure 6.4: The northern profile of the southern trench.

Figure 6.5: The northern trench.

Figure 6.6: The southern trench.

The southern trench (Figures 6.4 & 6.6) exhibited the same profile, namely a compacted dung layer followed by sterile dark red-brown loam soil. In squares D2 and D3, which were excavated up to a depth of 40 cm, a 12 cm white ash and charcoal lens at a depth of 23 cm

was sandwiched between the dung layer and the underlying sterile soils. The cultural material was found to be mixed throughout the dung layer and contained a few MSA tools and flakes. Low levels of post-depositional disturbance were evident in the profiles in the form of grass root intrusions and a few rodent burrows.

Dating

Other than the ash lens, no charcoal was recovered from the test trenches. Close investigation of the ash lens revealed the recent burning of a large tree as some burned-off roots still retained bark with no sign of decay. It is assumed that the ash originated from a tree that was burned when the clearing of the cotton fields took place in the 1960s. On the realisation that the charcoal would be unsuitable for dating, the few highly fragmented human skeletal remains obtained in the dung layer above and in the ash lens were selected for dating purposes. A 150 g sample of fragments and flakes was submitted to the CSIR Quaternary Dating Research Unit. The human remains provided a radiocarbon date of 1000 ± 110 BP (Pta-9476), which calibrated to a 1-sigma date of AD 987 (1033) 1202 (Southern hemisphere INTCAL 1998 adapted).

One of the earliest known radiocarbon dates for an Early *Moloko* site (620 ± 50 BP; Pta-1652) is that of Icon (Limpopo Province) (Hanisch 1979:72). The date obtained from the bone material from Site 37-C1-11 came as somewhat of a surprise, as it predates the Icon date by about 380 years. The accuracy of the date is additionally complicated by the large standard deviation (± 110 years). Though it represents the earliest recorded radiocarbon date for a *Moloko* site and the ceramics unquestionably reflect an early expression of the *Moloko* sequence, the dating result remains unconvincing and needs to be confirmed by additional early dates.

Feature

In blocks D2 and D3 (Figure 6.6), from a depth of 5 cm up to 35 cm, some highly fragmented skeletal remains were uncovered. As a result of earlier agricultural activities the skeletal elements were damaged and dispersed within the compacted dung layer and ash lens. The skeletal fragments consisted of nine teeth (one molar, six premolars and two incisors), six skull fragments, 15 finger and toe bones, some long bones, vertebra and rib fragments and many flakes. According to the dental wear the individual was in its middle thirties (Erica L'Abbé, Department of Anatomy, University of Pretoria, personal communication 2005). As the skeletal remains were recovered in the cattle kraal deposit they most probably originate from a male burial. In accordance with the Central Cattle Pattern prominent males were traditionally buried in the cattle kraal (Huffman 2007:55).

Cultural material finds

In view of the fact that this locality constitutes a single-component site, all the cultural material recovered from the surface collection and the test excavations is described as a single analytic unit (see Table 6.1). Of the 456 ceramics 141 sherds were undecorated and 308 decorated. The faunal sample consists of a total of 2555 bone fragments, bone flakes and identifiable bones. The analysis of the animal bones lies beyond the scope of this study. The recovered beads consist of three ostrich eggshell (OES) beads and one copper bead.

Metal objects, together with figurine fragments and an upper grinding stone fragment, were also recovered. The few stone tools identified in the excavations include MSA artefacts and LSA microliths.

Table 6.1: Cultural material finds from Site 37-C1-11.

Trench	Pottery				Bone		Beads		Other finds
	Undec	Dec	Rims	<1cm	UNID	ID	OES	Copper	
Northern	46	8	6	2	1462	6	1	1	Figurine fragment
Southern	16	-	-	5	1086	1			Upper grinding stone
Surface	79	300	143	-	-	-	2		Figurine fragment, iron bangle
Total-n	**141**	**308**	**149**	**7**	**2548**	**7**	**3**	**1**	

Undec - Undecorated sherds Dec - Decorated sherds UNID - Unidentifiable bones
ID - Identifiable bones OES – Ostrich eggshell

Ceramics

A total of 77 potsherds were recovered in the trenches, seven of which were smaller than 1 cm in diameter and therefore omitted from the analysis. The remaining 70 sherds were analysed according to the typological procedures outlined in Chapter 2. Because so few sherds were recovered the results for each trench are summarised in 10 cm excavated layers in Table 6.2. The excavated vessel shapes encompass three jars, eight bowls and 59 undetermined shapes. The excavated collection yielded six rims, eight decorated and 62 undecorated sherds, 59% of which were burnished and 41% unburnished.

Table 6.2: Analysis of the excavated ceramic sherds from Site 37-C1-11.

Layer (cm)	Vessel	Rim	Dec	Undec	HB	B	UB	Total	< 1cm
0 - 10	Jars		3			3		3	
	Bowls	2	2		2			2	
	Indeterminate			31	4	9	18	31	5
10 - 20	Jars								
	Bowls	3	1	2	1	2		3	
	Indeterminate			17	4	6	7	17	2
20 - 30	Jars								
	Bowls		2		1	1		2	
	Indeterminate			9	2	3	4	9	
30 - 40	Jars								
	Bowls	1		1		1		1	
	Indeterminate			2		2		2	
Total n		**6**	**8**	**62**	**14**	**27**	**29**	**70**	**7**
Total %		**9**	**11**	**89**	**20**	**39**	**41**	**100**	

Dec – Decorated Undec – Undecorated HB – Highly burnished B – Burnished UB – Unburnished

Table 6.3: Analysis of the identifiable vessel types from Site 37-C1-11.

Vessel type	Undecorated		Decorated			Total n	Total %
			Early *Moloko*		*Moritsane*		
	Ex	Sc	Ex	Sc	Sc		
Jars		18		9		**27**	**6.9**
Constricted jars		27		16	2	**45**	**11.6**
Jar body sherds			3	161		**164**	**42.1**
Bowls	3	34	3	37		**77**	**19.7**

Bowl body sherds			2	75		**77**	**19.7**
Total n	**3**	**79**	**8**	**298**	**2**	**390**	
Total %	**0.8**	**20.2**	**2.1**	**76.4**	**0.5**		**100**

Ex – Excavated Sc – Surface collection

The majority of the identified vessels originated from the surface collection, including the decorated and rim sherds. Through cultivation of the fields the ceramics were highly fragmented, which impeded the analysis. Of the 390 identifiable vessels (Table 6.3), only 11 (2.9%) were excavated and 379 (97.1%) were vessel elements obtained through surface collection. The vessels types include 27 (6.9%) jars, 164 (42.1%) jar body sherds (sherds with no rims), 45 (11.6 %) constricted jars, 77 (19.7 %) bowls and 77 (19.7 %) bowl body sherds. The vessel profiles identified in the collection are illustrated in Figure 6.12. These comprise jars (No. 1-18), constricted jars (No. 19-38) and bowls (No. 39-55). The 308 decorated vessels include 306 Early *Moloko* facies vessels (Figure 6.7) and two *Moritsane* facies vessels. The vessel classes are illustrated in Figures 6.13-6.17 and the classification of decoration motifs is presented in Table 6.4.

Early *Moloko* facies

This facies represents 99% of the decorated vessels in the collection of 308 vessels. A total number of 356 decoration motifs were employed on these vessels, consisting of 41 Early *Moloko* motif classes from Figure 2.15. Motif classes II E1 (12.1%) as oblique incision, II C1 (11.5%) as a punctate band and II A1 (9.3%) as an incised band are the motifs most often utilised in the assemblage. The decoration technique was dominated by incision (68.9%) followed by punctates (23.6%), rim notching (3.9%) and comb-stamping (3.6%) (see Figure 6.7 for examples).

Figure 6.7: Early *Moloko* facies: decorated sherds from Site 37-C1-11.

The assemblage yielded 15 Early *Moloko* ceramic classes as outlined in Figures 2.16 and 2.17, which include:

<u>Jars</u> (n = 173, 56.5 %)
Class 3: Figure 6.14 (No. 1)
Class 6: Figure 6.13 (No. 2-5, 7, 10 & 12-14) and Figure 6.14 (No. 5-13 & 15-20)
Class 7: Figure 6.13 (No. 6, 8, 9 & 11), Figure 6.14 (No. 2, 3, 4 & 14) and Figure 6.17 (No.

9, 10, 11 & 14-19)
Constricted jars (n = 16, 5.3 %)
Class 9: Figure 6.15 (No. 4)
Class 10: Figure 6.13 (No. 1) and Figure 6.15 (No. 1, 2 & 3)
Class 11: Figure 6.15 (No. 5, 7 & 8)
Class 13: Figure 6.15 (No. 9, 10, 11, 13 & 14)
Bowls (n = 117, 38.2 %)
Class 14: Figure 6.15 (No. 15-18)
Class 15: Figure 6.15 (No. 19 & 20)
Class 16: Figure 6.15 (No. 21-26) and Figure 6.16 (No. 1, 2, 3 & 5)
Class 17: Figure 6.16 (No. 10)
Class 18: Figure 6.16 (No. 11, 12, 13 & 17) and Figure 6.17 (No. 12)
Class 19: Figure 6.16 (No. 4, 6-9, 14, 15, 16 & 18) and Figure 6.17 (No. 1-8 & 13)

Twenty-seven jars in the collection were coloured with red ochre on the outside and 23 jars similarly with graphite. Some constricted jars have red ochre and graphite on both the outside and inside. Bowls were coloured with red ochre (45) and graphite (20) on the outside and red ochre (52) and graphite (12) on the inside.

Table 6.4: Analysis of the Early *Moloko* decoration motif classes from Basinghall.

Class	3	6	7	5&7	9	10	11	12	13	14	15	16	17	18	19	Total	Total
Profile	J	J	J	J	CJ	CJ	CJ	CJ	CJ	B	B	B	B	B	B	n	%
Layout	1b2	2	23	3	1a	1ab	1b	1b2	2	1a	1ab	1b	1a2	1b2	2		
I A1												2			5	**7**	**2.0**
I A2															3	**3**	**0.8**
I A3		9													3	**12**	**3.4**
I C2		1		1								3			1	**6**	**1.7**
I C3		3														**3**	**0.8**
I D1														1		**1**	**0.3**
I E2		1	1												1	**3**	**0.8**
I F1		3					1									**4**	**1.1**
I F2		2														**2**	**0.6**
I G1	1					1		1				1		1	1	**6**	**1.7**
I G2		3	2	2												**7**	**2.0**
I G3		4													2	**6**	**1.7**
II A1		8		9		1						2			13	**33**	**9.3**
II A2		3		1											5	**9**	**2.5**
II A3		3	1	5											5	**14**	**3.9**
II B1			1	2												**3**	**0.8**
II B2			1													**1**	**0.3**
II C1		4	2	17		1	1	1				1		2	12	**41**	**11.5**
II C2		4		7					1		1	1			6	**20**	**5.6**
II C3		3		3											6	**12**	**3.4**
II C4		1		1												**2**	**0.6**
II C5		3	5												1	**9**	**2.5**
II D1		4		2					2					1	11	**20**	**5.6**
II D2		2													1	**3**	**0.8**
II D3		6		1											1	**8**	**2.3**
II E1	1	13	1	2		1	2		2		1	1			19	**43**	**12.1**
II E2		3		4									1		1	**9**	**2.5**
II E3	1	2	1						1			2		1	8	**16**	**4.5**

II F3														1	8	**9**	**2.5**
II F4		1		1											2	**4**	**1.1**
II G1					2	2				4	1					**9**	**2.5**
II G2										1	1		1			**3**	**0.8**
II G3	1					1										**2**	**0.6**
III A1			1			1								2	2	**6**	**1.7**
IIIA2															1	**1**	**0.3**
III A3			1													**1**	**0.3**
III B1				2												**2**	**0.6**
III B2		1	3													**4**	**1.1**
III B3		1														**1**	**0.3**
III B4															1	**1**	**0.3**
III C2			2												1	**3**	**0.8**
Inside II A1															1	**1**	**0.3**
Inside II C1															6	**6**	**1.7**
Total n	**4**	**88**	**22**	**60**	**2**	**8**	**4**	**2**	**6**	**5**	**4**	**13**	**2**	**9**	**127**	**356**	
Total %	**1.1**	**24.7**	**6.2**	**16.8**	**0.6**	**2.3**	**1.1**	**0.6**	**1.7**	**1.4**	**1.1**	**3.6**	**0.6**	**2.5**	**35.7**		**100**
Inside Grey									1						12	**13**	
Inside Red									1	1	1	2		2	46	**53**	
Outside Red		9	4	14					1	1		1		1	42	**73**	
Outside Grey	1	8	3	11					2					1	19	**45**	

J - Jars CJ - Constricted jars B – Bowls

Moritsane facies

The *Moritsane* facies is represented by two decorated sherds. The thickened-rim constricted jars (Figure 6.15: No. 6) are decorated by a crosshatched motif on the rim with a triangle design below the rim, both typical *Moritsane* characteristics. Another thickened-rim sherd, decorated with an oblique incision design, was collected at the site after completion of the drawings.

Beads

Four beads (Figure 6.8) were recovered. Of these three were ostrich eggshell beads and one copper. The copper bead was made from a 2.5 mm thick copper sheet rolled into a cylinder of eight millimetres in diameter and six millimetres long. Two OES beads were surface finds, one of which is a disc 11 mm in diameter that probably represents an uncompleted bead. The finished bead is eight millimetres in diameter. The third, a broken bead of four millimetres in diameter, was recovered during the excavations. No waste from OES production stages nor any glass beads or beads manufactured from other materials were recovered.

Figure 6.8: Copper and ostrich eggshell beads.

Figure 6.9: Solid iron bangles from Sites: 37-C1-11 (A) and 37-C1-13 (B).

Metal artefacts

A heavy corroded iron bangle (Figure 6.9) measuring 100 mm in diameter and 7 mm thick was recovered during the surface collection. Other than two unidentifiable corroded iron fragments the excavations yielded no metal objects. No artefacts relating to metallurgical activities, such as smelting or smithing, were recovered.

Clay artefacts

A whey stopper (Figure 6.10) of 20 mm in diameter made from a fragment of a decorated body sherd was found during the surface survey. The excavations yielded a cylindrical figurine body fragment of 30 mm in diameter. The surface collection added another body fragment of 20 mm in diameter and an appendage, possibly a limb, of 13 mm in diameter and 27 mm in length. Baked hut rubble sections were recovered during the excavations. Some of the hut rubble remains exhibit pole impressions that suggest cone-on-cylinder type houses at the settlement.

Figure 6.10: The clay figurine fragments and whey stopper.

Worked stone

An upper grinding stone fragment (Figure 6.11) was excavated. This could have been used for grinding sorghum or in the processing of other materials. In addition, six red ochre chips (54 g), most likely pigments used for pottery decoration, were found. Lithics are ubiquitous on the floodplains of the Limpopo and during the excavations seven MSA scrapers and an LSA arrow section were recovered.

Figure 6.11: The upper grinding stone fragment.

6.3 Conclusion

The Early *Moloko* facies site represents the remains of a small settlement that was occupied for a short period. The excavations confirm a settlement layout in accordance with the Central Cattle Pattern. A central cattle kraal area demarcated by compacted dung with relatively low frequencies of cultural material remains was surrounded by an outer arc of hut structures.

The excavated trenches, which were placed in the central cattle kraal, yielded relatively little cultural material in contrast to the excavations in middens of *Toutswe* and *Moritsane* sites, which contained a wealth of cultural material (see Chapters 4 & 5). The ceramic assemblage indicates an Early *Moloko* facies collection with two intrusive *Moritsane* facies sherds. The lack of glass beads at the site is typical of Early *Moloko* sites. The artefact assemblage suggests that the residents had restricted access to metal. Only a few items of personal adornment in the form of copper and OES beads and iron bangles were recovered. The presence of clay figurine fragments could point to rituals or particular belief systems. The early radiocarbon date obtained from the skeletal material remains unconvincing and needs to be corroborated by additional dates. The presence of *Moritsane* facies sherds suggests a 13th- or 14th-century occupation date for the site. In summary, Site 37-C1-11 needs more detailed investigation in order to provide more evidence on Early *Moloko* settlements within this particular time period.

The occupation of Basinghall by Early *Moloko* people (two recorded sites) expanded during the Middle *Moloko* phase to include the *Letsibogo* facies (16 sites recorded). In the next chapter the 17th-century *Letsibogo* settlements are investigated.

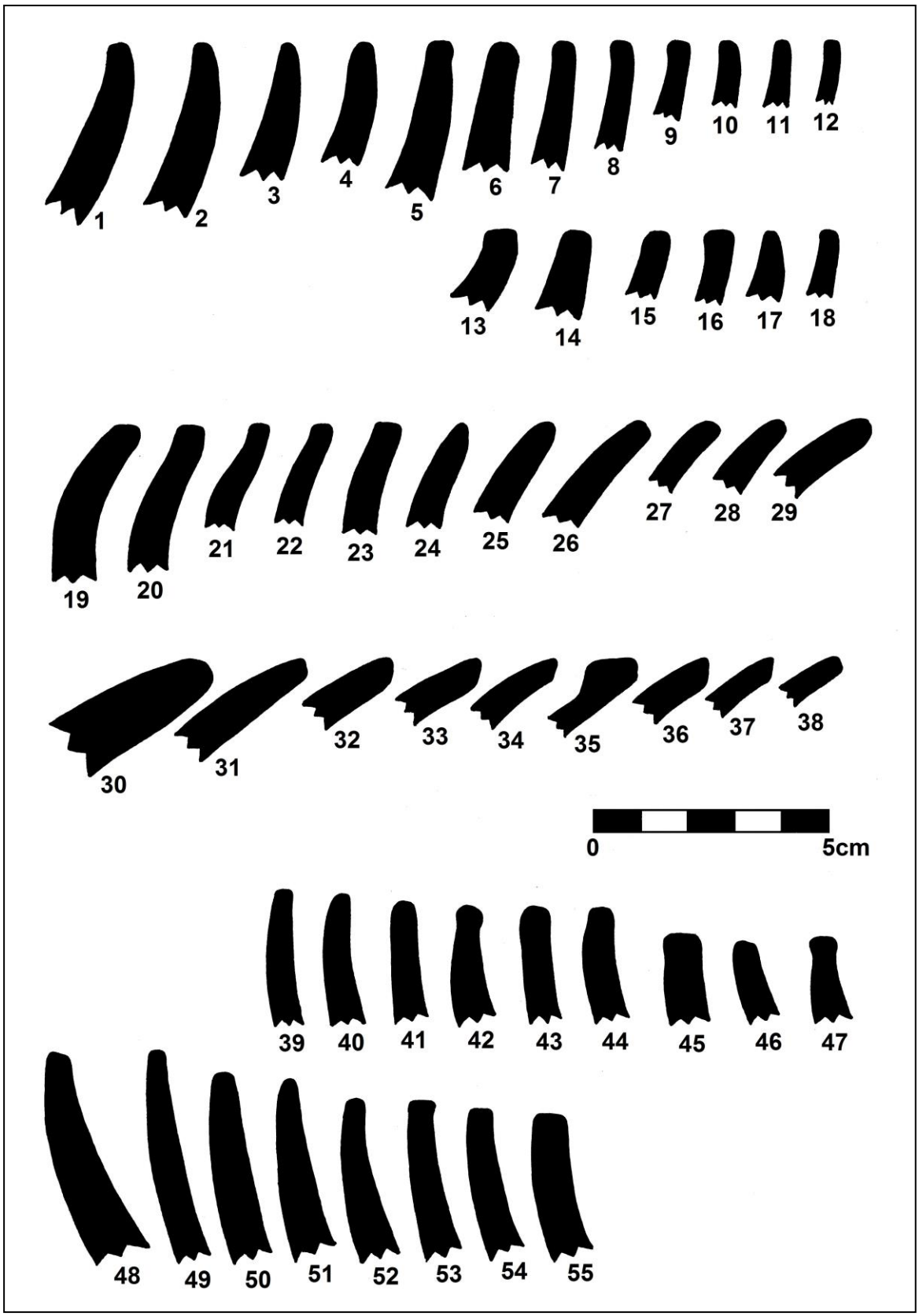

Figure 6.12: Vessel profiles: jars (No. 1-18); constricted jars (No. 19-38) and bowls (No. 39-55).

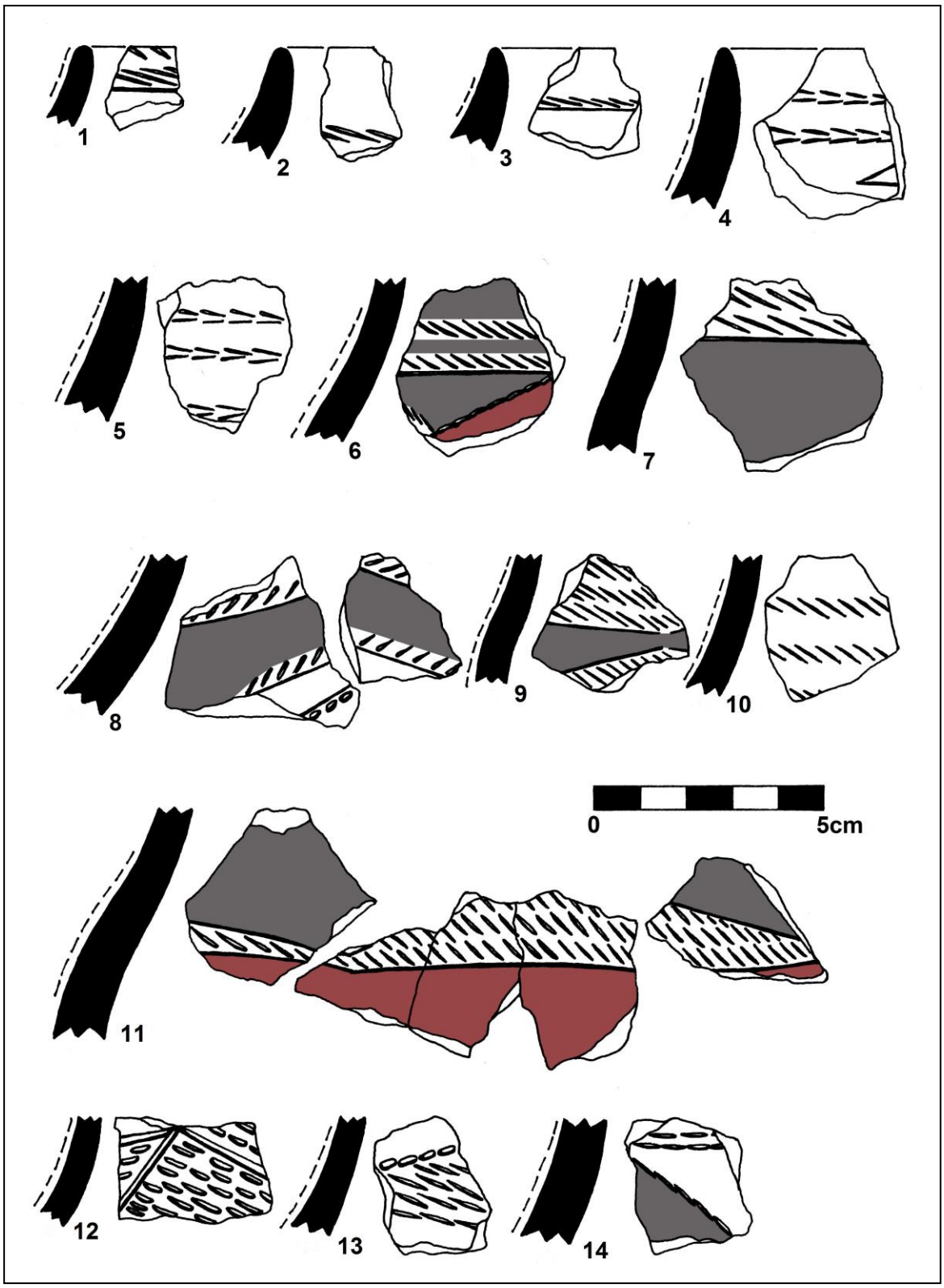

Figure 6.13: Early *Moloko* facies jar and constricted jar types from Site 37-C1-11: Class 6 (No. 2-5, 7, 10 & 12-14), Class 7 (No. 6, 8, 9 & 11) and Class 10 (No. 1).

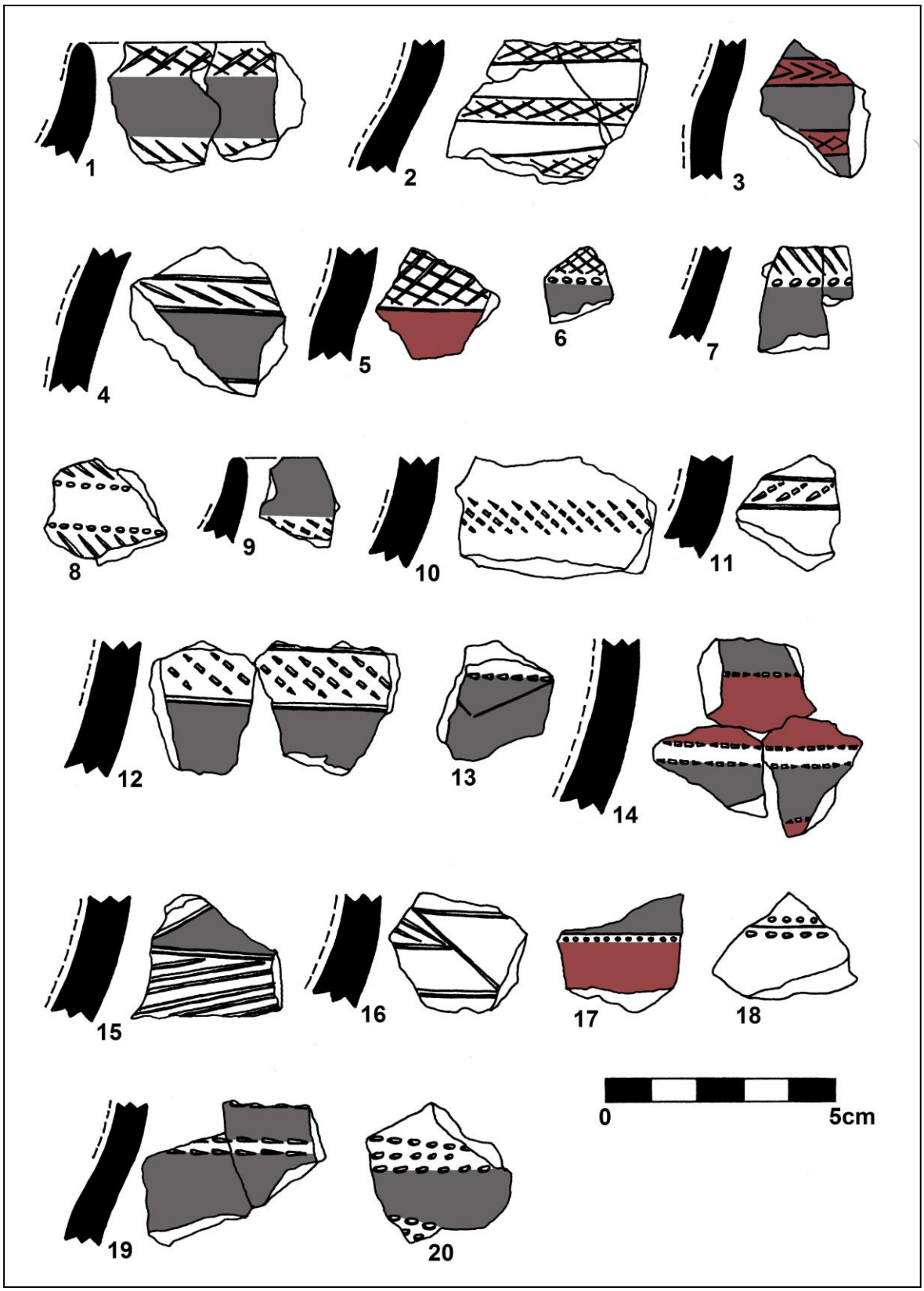

Figure 6.14: Early *Moloko* facies jar types from Site 37-C1-11: Class 3 (No. 1), Class 6 (No. 5-13 & 15-20) and Class 7 (No. 2, 3, 4 & 14).

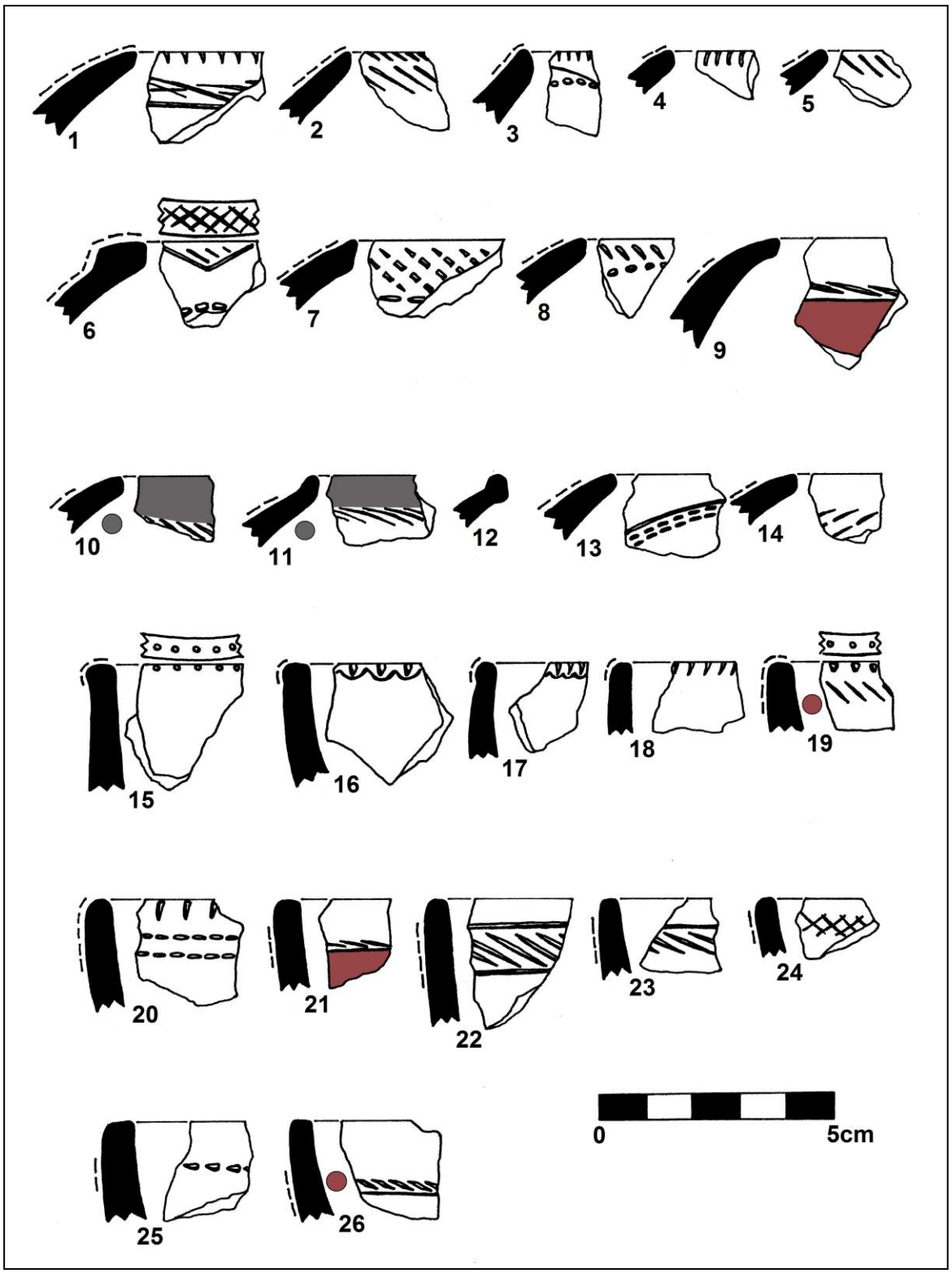

Figure 6.15: Early *Moloko* facies constricted jar and bowl types from Site 37-C1-11: Class 9 (No. 4), Class 10 (No. 1, 2 & 3), Class 11 (No. 5, 7 & 8), Class 13 (No. 9, 10, 11, 13 & 14), Class 14 (No. 15-18), Class 15 (No. 19 & 20) and Class 16 (No. 21-26). *Moritsane* facies vessel type: Class 14 (No. 6). (Grey dot - grey colour inside, red dot - red ochre colour inside).

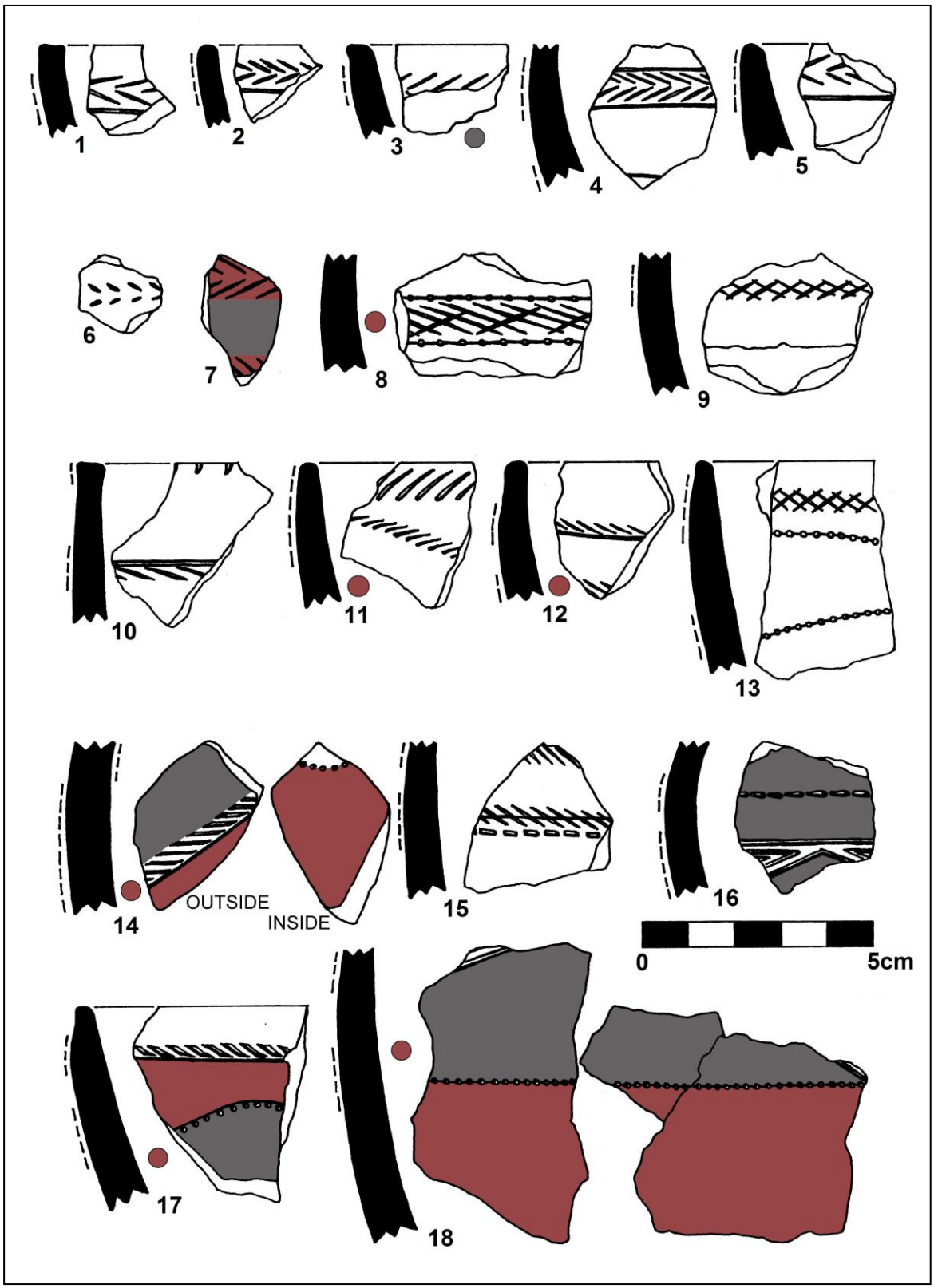

Figure 6.16: Early *Moloko* facies bowl types from Site 37-C1-11: Class 16 (No. 1, 2, 3 & 5), Class 17 (No. 10), Class 18 (No. 11, 12, 13 & 17) and Class 19 (No. 4, 6-9, 14, 15, 16 & 18). (Grey dot - grey colour inside, red dot - red ochre colour inside).

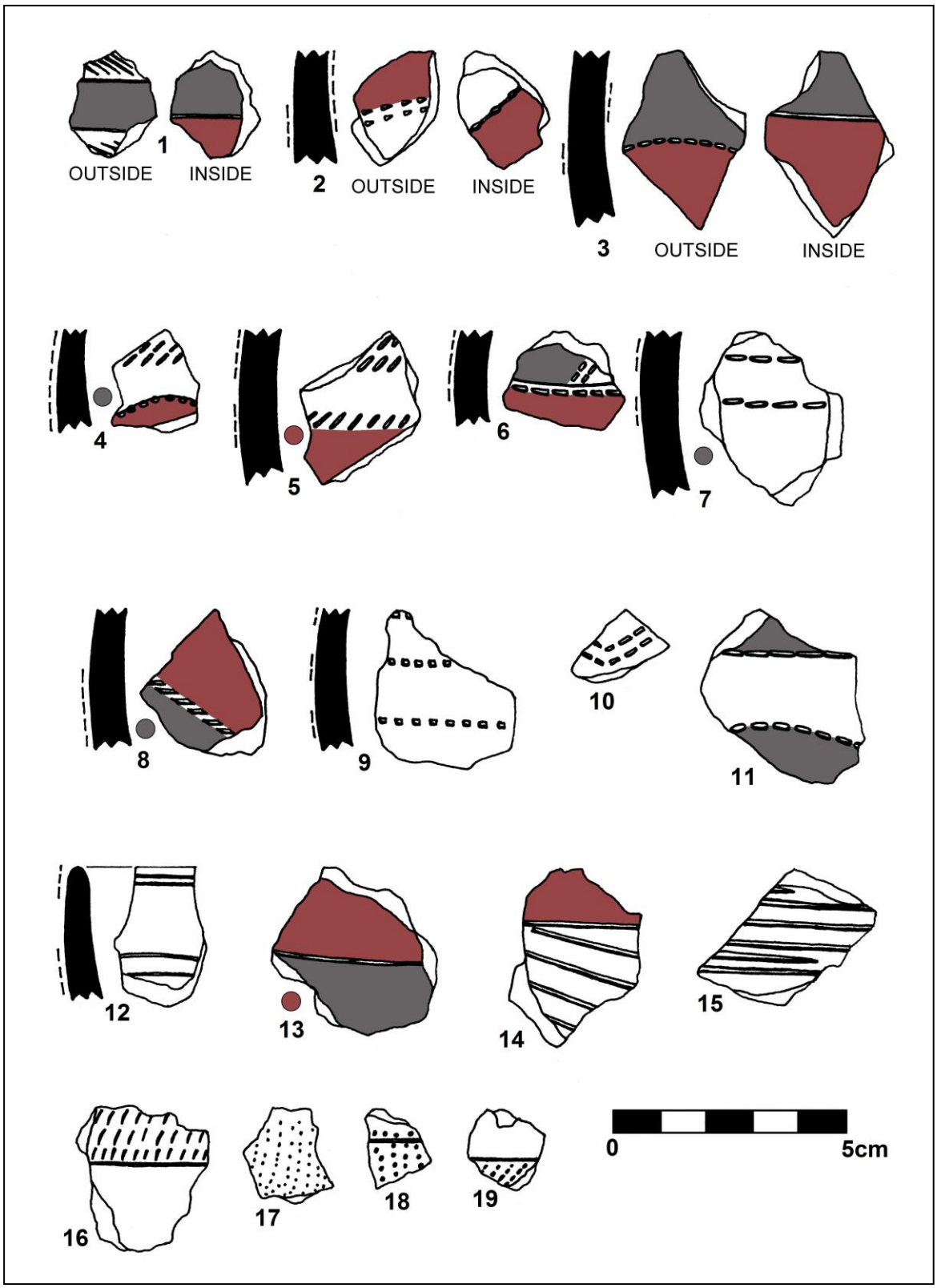

Figure 6.17: Early *Moloko* facies jar and bowl types from Site 37-C1-11: Class 7 (No. 9, 10, 11 & 14-19), Class 18 (No. 12) and Class 19 (No. 1-8 & 13). (Grey colour - grey colour inside, red dot - red ochre colour inside).

CHAPTER 7

THE *LETSIBOGO* FACIES

7.1 Introduction

The middle phase (AD 1500 - AD 1700) of the *Moloko* ceramic branch can be divided into the *Letsibogo*, *Madikwe* and the *Olifantspoort* facies (Huffman 2002:12, 2007:186). These three facies share roughly the same motifs differing only in decoration technique. *Madikwe* facies potters used an incision technique while *Letsibogo* facies potters used a dragged punctate technique. The *Olifantspoort* facies differs in that the design field is dominated by the triangle motif, often incorporating multiple bands of fine stamping or narrow incision (Huffman 2007:193). With such close similarities at the ceramic level it can be argued that corresponding parallels will be found in the layout of settlements. Continuity in patterns of settlement layout that cuts across temporal boundaries reflects a similar social organisation and associated worldview (Huffman 2007:23).

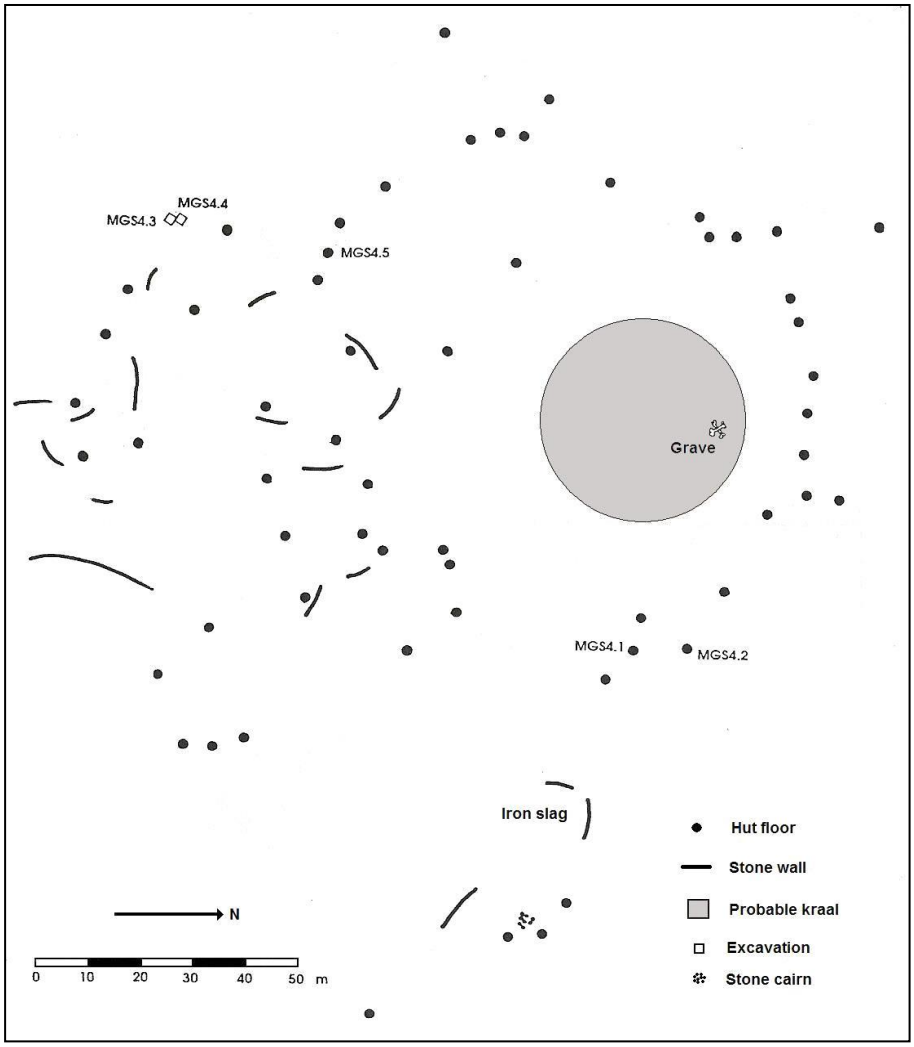

Figure 7.1: The Middle *Moloko* settlement of Magozastad (Boeyens 2003:66).

A good example of a *Madikwe* facies commoner settlement is the 17th-century Middle *Moloko* homestead at Magozastad near Marico, North West Province excavated by Boeyens (2003:66) (see Figure 7.1). The settlement featured the remains of 59 huts divided into two wards with some rudimentary stone walls. The houses were built in the typical Middle *Moloko* style having a raised platform to the back, a central fireplace, a sunken mortar to the left and a bench to the right. According to oral traditions the settlement could be ascribed either to the Rolong or to the Hurutshe (Boeyens 2003:67).

Many *Letsibogo* facies sites have been documented in east-central Botswana. At the Letsibogo Dam project, 19 *Letsibogo* facies sites dating to the 16th and 17th centuries were identified (Huffman & Kinahan 2003). The settlements consisted of hut remains and grain bin platforms without stonewalling and contained typical *Letsibogo* ceramics. Closer to Basinghall several cattle-post villages were recorded along the Bonwapitse River that show only cattle kraal remains with no obvious remains of agricultural activities, such as grain bins or grinding stones (Biemond 2011). These settlements become larger as one approaches the Limpopo River, with grain bin platform remains as evidence of grain production at Basinghall.

The *Letsibogo* sites at Basinghall were investigated to obtain a representative sample of decorated ceramics and material for radiocarbon dating. The most promising site, 37-C1-19, was selected for excavation, while a surface collection was undertaken at site 37-C1-15.

7.2 Excavations at Site 37-C1-19

Site name: *Motsikiri* (thatching grass) **S23°30'44.2" E27°05'02.9"**

Site description

Letsibogo sites at Basinghall are distributed around the floodplain on higher ground and in close vicinity to non-perennial pans. Some settlements were located in denser woodlands, probably to obtain firewood for metal-working activities. One of these sites, *Motsikiri,* is located in a silver cluster-leaf (*Terminalia sericea*) woodland area on soft Kalahari sands. Three prominent cattle kraals are marked by stands of blue buffalo grass (*Cenchrus ciliaris*) and brittle thorn (*Phaeoptilum spinosum*) (Figures 7.2 and 7.3).

Figure 7.2: General view of the main kraal.

Figure 7.3: *Cenchrus ciliaris* grass cover.

The settlement, which measures 320 m in extent and 140 m across, can be divided into two distinct wards, each identified by a prominent cattle kraal deposit (Figure 7.4). The larger kraal deposit of 60 m in diameter, with an adjacent smaller kraal deposit of 30 m in diameter to the north, denotes the first ward. The second ward is marked by a kraal deposit with a diameter of 50 m situated 100 m south-west from the main kraal (see Figure 7.4). The kraals are surrounded by open clearings that contain some shepherd's (*Boscia albitrunca*) and blue thorn (*Acacia erubescens*) trees. The open clearings around the kraal deposits indicate living spaces where houses were located (see Figure 7.4). The richest cultural deposits, as indicated by burrowing animal activities, are adjacent to the cattle kraal deposits.

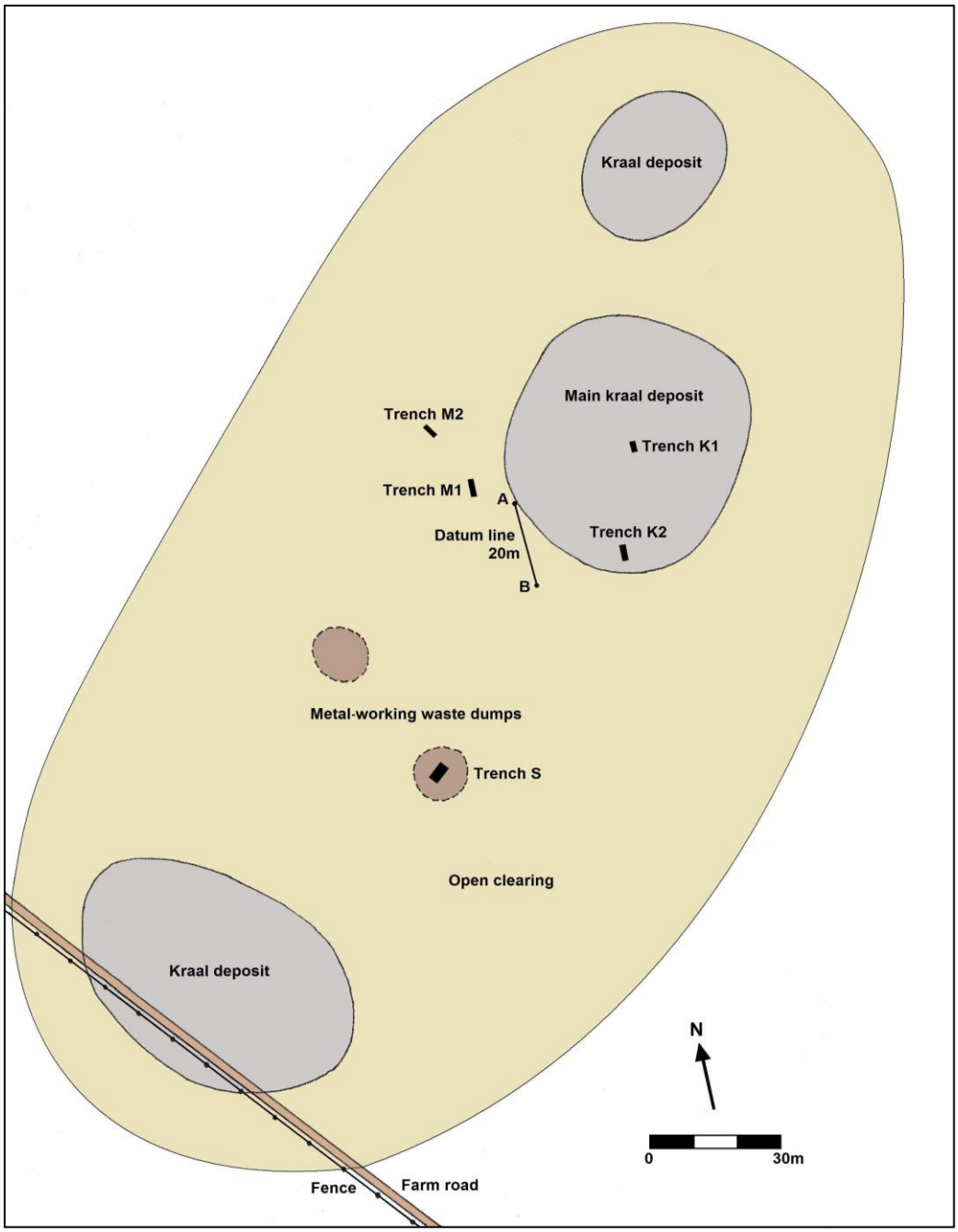

Figure 7.4: Settlement layout plan of Site 37-C1-19.

Two prominent slag concentrations were documented between the main kraals. It suggests a spatial division of activities where metal-working took place to the rear of the wooden palisades that demarcated homestead units. At Marothodi, an early 19th-century Tlokwa capital in the Bankenveld, iron-working areas were, for example, found between the stone enclosures of homesteads (Hall et al. 2006). No smelting furnaces, hut remains, grain bin platforms or stone walls were evident at the *Motsikiri* settlement. The site lies in soft Kalahari sands that probably cover some archaeological features. The closest water source is a non-perennial pan situated ± 500 m to the east of the site, with the Limpopo River ± 5 km away as the permanent water source.

Excavation methodology

The most prominent cattle kraal deposit, arguably that of the main ward, was selected for excavation. Burrowing animals have disturbed the kraal deposit exposing the compacted dung layer as well as cultural material from middens around kraal deposits. The kraal was probably fenced by a palisade of wooden posts that have not been preserved, leaving the edge of the dung as the only marker for the extent of the cattle kraal. In order to investigate metal-working activities at the settlement a test trench was excavated on a metal-working waste dump. A total area of 20 m² was excavated in March 2004 with the assistance of UNISA students and friends. The excavations were executed in 10 cm spits until sterile soil was reached. The excavated deposit was passed through a 1.5 mm sieve and all cultural materials were extracted, sorted and analysed.

Main kraal deposit

The main kraal deposit was tested by a trench placed in the middle of the kraal to determine its depth and stratigraphy. The trench (K1) was excavated as a 2 m x 1 m block divided into 1 m x 1 m squares assigned A and B (see Figures 7.5, 7.6 and 7.7). A second test trench was placed on the edge of the kraal deposit to locate possible fencepost remains. This trench (K2) was excavated as a 3 m x 1 m block divided into three 1 m x 1 m squares assigned A, B and C (see Figures 7.8, 7.9 and 7.10).

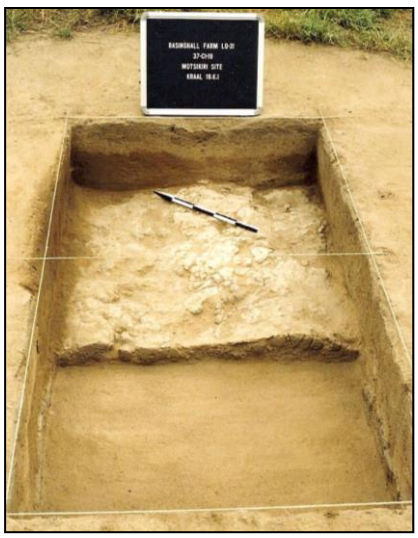

Figure 7.5: Test trench K1.

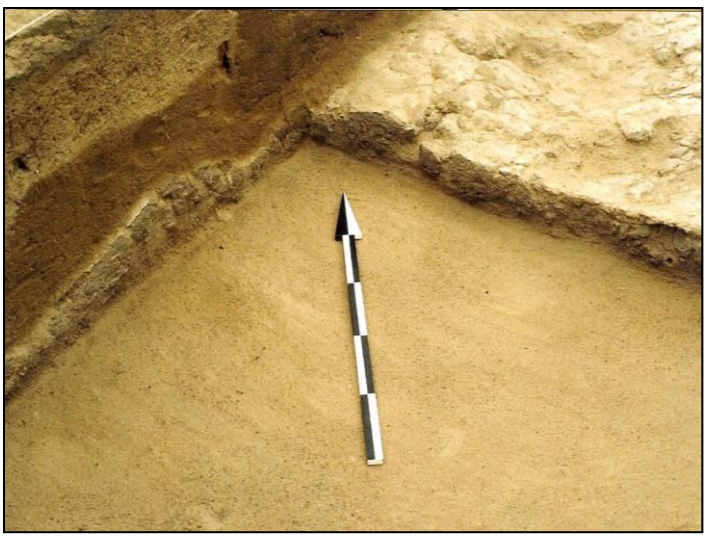

Figure 7.6: View of the stratigraphy in K1 block B.

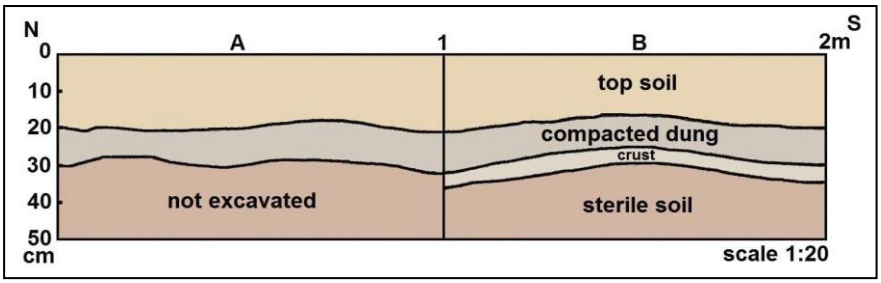

Figure 7.7: The eastern profile of test trench K1.

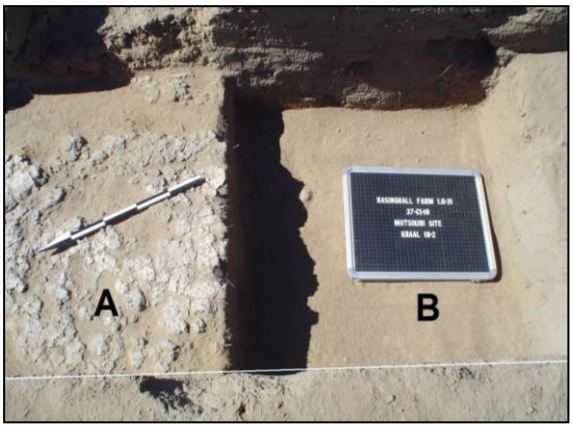

Figure 7.8: Northern section of test trench K2.

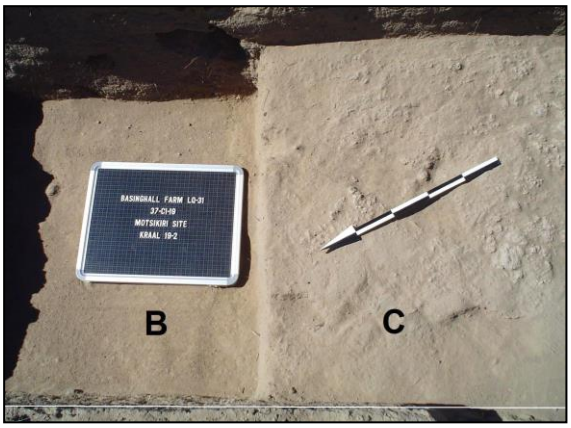

Figure 7.9: Southern section of test trench K2.

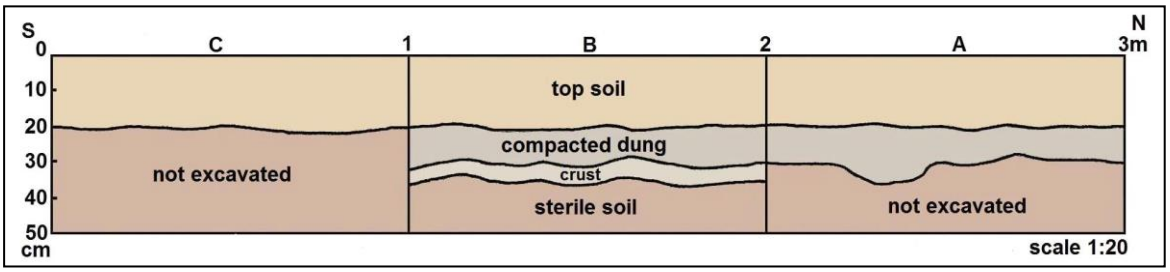

Figure 7.10: The western profile of test trench K2.

Stratigraphy

The stratigraphy of the kraal deposits is presented in the above profile drawings (see Figures 7.7 and 7.10). Four horizontal subdivisions were identified. The upper unit of around 20 cm consisted of yellow-grey soil. This was followed by a 10 cm white compacted dung layer. A solid grey-coloured crust of ± 5 cm under the dung unit was underlain by sterile sand that was excavated up to a depth of 50 cm. Square A of trench K1 was excavated up to the crust layer to expose the initial kraal floor. Square B (Figure 7.6) exposed the stratigraphy of the kraal deposit to a depth of 50 cm.

Since square B in trench K2 (Figures 7.8 and 7.9) demonstrated the stratigraphy of the deposit at the edge of the kraal, square A was excavated only up to the crust layer and square C up to the compacted dung layer. The extent and thickness of the kraal deposit suggest a period of occupation of 20 years or longer for the settlement.

Midden deposits

Midden deposits that accumulated around the kraal deposit were investigated through two test trenches, M1 and M2. Trench M1 was excavated as a 4 m x 1 m block divided into four 1 m x 1 m squares assigned A, B, C and D (Figures 7.11, 7.12 and 7.13). Trench M2 was excavated as a 3 m x 1 m block divided into three 1 m x 1 m squares designated A, B and C (Figures 7.14, 7.15 and 7.16).

Figure 7.11: Test trench M1.

Figure 7.12: View of the eastern profile of trench M1.

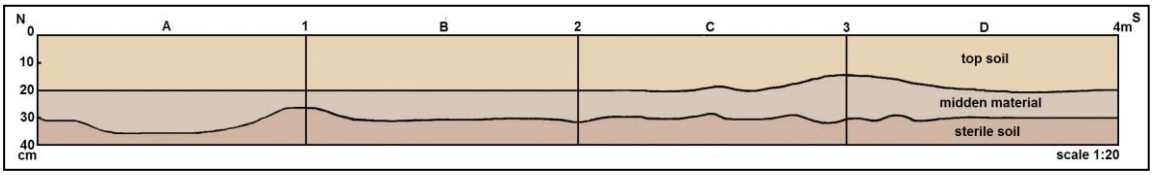

Figure 7.13: The eastern profile of test trench M1.

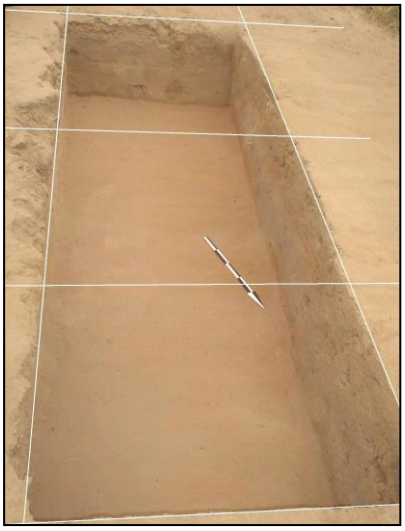

Figure 7.14: Test trench M2.

Figure 7.15: View of the western profile of trench M2.

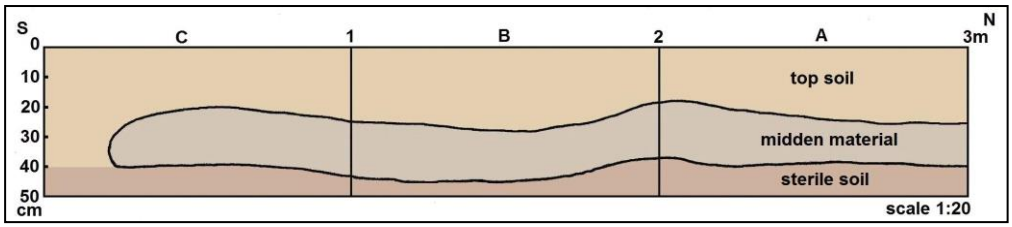

Figure 7.16: The western profile of test trench M2.

Stratigraphy

The stratigraphy in the midden deposits is presented in profile drawings (see Figures 7.13 and 7.16). Three horizontal subdivisions were identified. The first layer of approximately 20 cm formed a yellow upper layer followed by a grey ashy layer of 15-20 cm. This was underlain by sterile sand. Trench M1 was excavated to a depth of 40 cm and trench M2 to 50 cm.

Metal-working waste dump

A metal-working waste dump was tested by a trench (S) placed on an area with slag concentrations (Figure 7.17, 7.19 and 7.22). Trench S was excavated as a 4 m x 2 m block divided into eight 1 m x 1 m squares assigned A1, A2, B1, B2, C1, C2, D1 and D2.

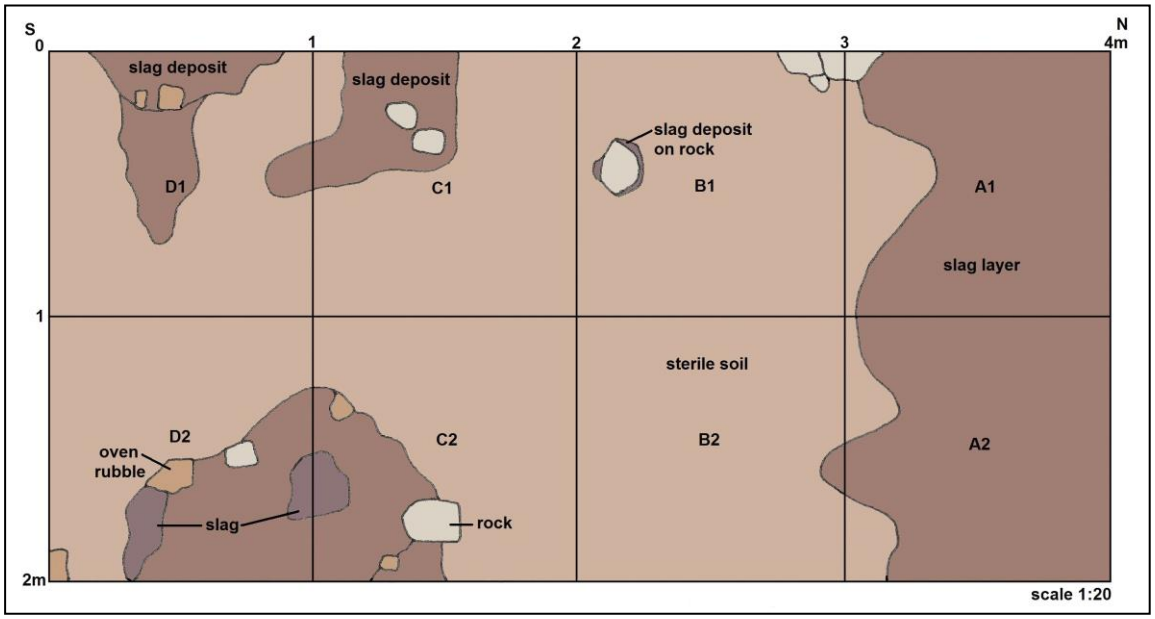

Figure 7.17: Plan indicating the layout of test trench S.

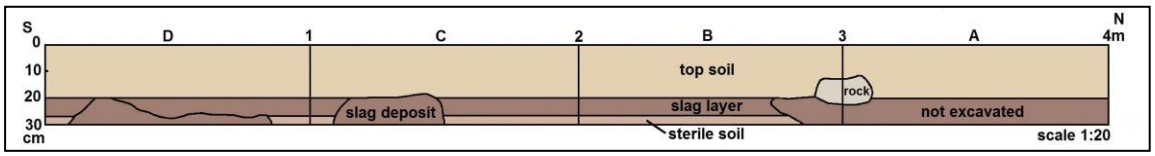

Figure 7.18: The western profile of test trench S.

Figure 7.19: Test trench S.

Figure 7.20: *In situ* slag deposit.

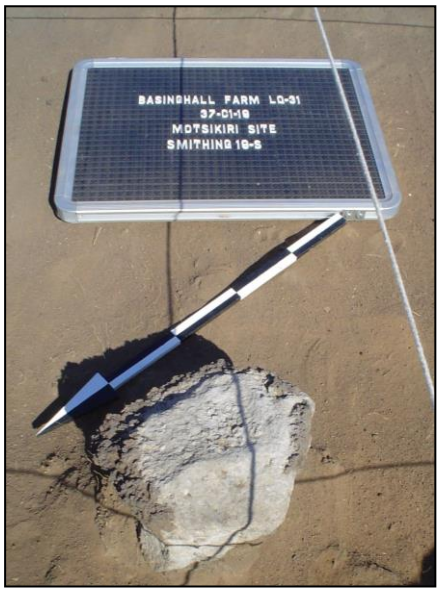

Figure 7.21: Slag deposit on rock.

Figure 7.22: Exposed slag layer in square A1 and A2.

Stratigraphy

The stratigraphy in the metal-working waste dump deposit is presented in a profile drawing (Figure 7.18). Three horizontal subdivisions were identified. A yellow-coloured upper layer of about 20 cm was followed by a brown slag concentration of ± 10 cm. The slag concentration was underlain by sterile sand. The trench was excavated to a depth of 30 cm.

In squares A1 and A2 the trench was excavated to a depth of 20 cm to expose the slag layer (Figure 7.22). A rock encrusted with a slag deposit was documented in square B1 (Figure 7.21). In squares C1 and D1 some *in situ* slag lumps were found (Figure 7.20). A mixture of sand and rubble from a forge that encrusts the molten lumps indicates an iron-forging waste dump. A lump of slag nodules, several iron ore pieces, furnace rubble and tuyère-supporting rocks from squares C2 and D2 possibly indicate a smelting furnace

dump. The presence of waste from two metal reduction activities at the dump confirms that both iron smelting and forging were performed at the settlement.

Dating

Charcoal fragments were retrieved from an undisturbed midden layer in trench M1 at a depth of 20-30 cm. A sample of 122 g charcoal was submitted to the CSIR Quaternary Dating Research Unit, Pretoria. It provided a radiocarbon date of 300 ± 15 years BP (Pta-9303), which calibrated to AD 1649 with a 1-sigma range of AD 1644 to AD 1658 (Southern hemisphere INTCAL 1998 adapted).

Cultural material finds

The finds from the surface collection and the test trench excavations yielded a representative sample of cultural material (Table 7.1). Of the 3597 ceramics 1956 (54%) sherds were undecorated and 458 (13%) decorated. The decorated potsherds are representative of the *Letsibogo* facies. The faunal sample consists of a total of 18 907 bone fragments, bone flakes and identifiable bones. An analysis of the animal bones lies beyond the scope of this study. The bead sample comprises four glass beads, 55 finished ostrich eggshell (OES) and six metal beads. Metal objects include iron bangle fragments and copper and iron wire pieces. Iron smelting debris of slag, ore and tuyère fragments were also recovered.

Table 7.1: Cultural material finds from Site 37-C1-19.

Trench	Pottery				Bone		Beads			Iron smelting			Other finds
	Undec	Dec	Rims	<1cm	UNID	ID	Glass	OES	Metal	Slag	Ore	Tuyère	
M1	636	110	94	692	12948	36	2	21	4	4.1kg	69g	34g	2 upper grinders
M2	704	136	101	279	3278	28		23	2	1.3kg	247g	18g	
K1	9	-	-	8	25	2		4		0.1kg			
K2	28	4	2	3	890	4		2					
S	560	87	48	201	1688	8	1	5		271kg	1521g	8820g	
Surface	19	121	54	-	-	-	1						
Total n	**1956**	**458**	**299**	**1183**	**18829**	**78**	**4**	**55**	**6**	**276.5kg**	**1837g**	**8873g**	

Undec - Undecorated sherds Dec - Decorated sherds OES - Ostrich eggshell
UNID - Unidentifiable bones ID - Identifiable bones

Ceramics

The excavated trenches yielded a total of 3457 potsherds. Sherds smaller than one centimetre in diameter (n = 1183, 34%) were not included in the analysis. The remaining 2274 (66%) sherds were analysed according to the procedure for the stylistic ceramic analysis outlined in Chapter 2. A summary of the analyses is presented in Table 7.2. The assemblage comprises 245 (11%) rim sherds, 337 (15%) decorated sherds and 1937 (85%) undecorated sherds. The two main vessel shapes identified are jars (n = 502, 22%) and bowls (n = 500, 22%) with 1272 (56%) indeterminate sherds. A total of 754 (33%) highly burnished sherds, 531 (23%) burnished sherds and 989 (44%) unburnished sherds were recovered. The ceramics in the collection are well made, burnished (56%), well fired and finely decorated. The colour of the vessels ranges from yellow-brown, red-brown to brown and with an average vessel thickness of between 5-15 mm. The collection yielded 91 sherds

that were parts of cooking vessels as they were soot-blackened by fire on the outside or had burned adhesives from overcooking on the inside.

The collection yielded 1218 identifiable vessel types. Of these 1078 (89%) were excavated and 140 (11%) collected on the surface. The surface collection comprises decorated and rim sherds only. The vessel types (Table 7.3) include jars (n = 113, 9%) and jar body sherds (sherds with no rims) (n = 439, 36%), constricted jars (n = 36, 3%) and constricted jar body sherds (sherds with no rims) (n = 11, 1%), bowls (n = 167, 14%) and bowl body sherds (n = 452, 37%). Samples of the vessel profiles identified in the collection are depicted in Figure 7.37. These include jars (No. 1-23), constricted jars (No. 24-42) and bowls (No. 43-64). The 485 decorated vessels were stylistically analysed according to the *Letsibogo* facies types outlined in Chapter 2 (see Figures 7.23 & 7.24 for decorated examples). The decorated vessel classes are illustrated in Figures 7.38-7.41 and the classification of the decoration motifs is presented in Table 7.4.

Table 7.2: Analysis of the excavated ceramic sherds from Site 37-C1-19.

Trench	Vessel	Rim	Dec	Undec	Out R	Out G	In G	Black	HB	B	UB	Total	< 1cm
M1	Jars	45	32	127	56	39		2	91	49	19	159	
	Bowls	49	78	119	107	98	174		162	28	7	197	
	Indeterminate			390				25	47	73	270	390	692
M2	Jars	49	52	201	100	74	7	12	153	54	46	253	
	Bowls	52	84	99	105	100	156		149	23	11	183	
	Indeterminate			404				44	24	114	266	404	279
K1	Jars			1						1		1	
	Bowls			8						4	4	8	8
K2	Jars	1	2	3	1	1	1		2	2	1	5	
	Bowls	1	2	6	5	7	7		8			8	
	Indeterminate			19					2	10	7	19	3
S	Jars	18	33	51	31	16			42	31	11	84	
	Bowls	29	51	53	98	55	109		50	33	21	104	
	Indeterminate	1	3	456	5	3		8	24	109	326	459	201
Total n		**245**	**337**	**1937**	**508**	**393**	**454**	**91**	**754**	**531**	**989**	**2274**	**1183**
Total %		**11**	**15**	**85**	**22**	**17**	**20**	**4**	**33**	**23**	**44**	**100**	

HB – Highly Burnished B – Burnished UB – Unburnished
Out R – Red outside Out G – Graphite outside In G – Graphite inside

Table 7.3: Analysis of the identifiable vessel types from Site 37-C1-19.

Vessel type	Undecorated		Decorated		Total n	Total %
	Ex	Sc	Ex	Sc		
Jars	74	8	28	3	**113**	**9**
Jar body sherds	307		85	47	**439**	**36**
Constricted jar	13	7	8	8	**36**	**3**
Constricted jar body sherds	9		1	1	**11**	**1**
Bowls	68	4	71	24	**167**	**14**
Bowl body sherds	243		171	38	**452**	**37**
Total n	**714**	**19**	**364**	**121**	**1218**	
Total %	**58**	**2**	**30**	**10**		**100**

Ex – Excavated Sc – Surface collection

Figure 7.23: Decorated *Letsibogo* facies jars.

Figure 7.24: Decorated *Letsibogo* facies bowls.

Letsibogo

A total of 514 motifs were employed on the 485 decorated vessels by utilising 26 *Letsibogo* facies motif classes as outlined in Figure 2.19. The dragged punctate line design of class IA1 (31.3%) is the motif most frequently used, followed by the dragged punctate double line of class IA2 (15%) and thirdly, rim notching, class IH1 (8.4%). Most decorative motifs were executed by a punctate technique with only 1.4% by an incision technique. The assemblage yielded 18 of the possible 26 *Letsibogo* facies classes outlined in Figures 2.20 and 2.21, which include:

Jars (n = 163, 34 %)
Class 1 (type 1a): Figure 7.38 (No. 1-4)
Class 3 (type 1b): Figure 7.38 (No. 5, 7-9)
Class 8 (type 2): Figure 7.38 (No. 6 & 11)
Class 9 (type 2 3): Figure 7.38 (No. 10, 13, 15 & 17) and Figure 7.39 (No. 1, 2, 7 & 8)
Class 11 (type 3): Figure 7.38 (No. 12, 14 & 16) and Figure 7.39 (No. 3, 6 & 9-11)
Class 12 (type 3 4): Figure 7.39 (No. 4 & 5)
Constricted jars (n = 18, 4 %)
Class 13 (type 1a): Figure 7.40 (No. 1-7 & 13)
Class 14 (type 1ab): Figure 7.40 (No. 9)
Class 15 (type 1b): Figure 7.40 (No. 11 & 12)
Class 17 (type 1ab 3): Figure 7.40 (No. 8, 10 & 15)
Class 19 (type 3): Figure 7.40 (No. 14)
Bowls (n = 304, 62%)
Class 20 (type 1a): Figure 7.41 (No. 1 & 14)
Class 21 (type 1ab): Figure 7.41 (No. 7, 9 & 15)
Class 22 (type 1b): Figure 7.41 (No. 13)
Class 23 (type 1a 4): Figure 7.41 (No. 2)
Class 24 (type 1ab 4): Figure 7.41 (No. 3, 4 & 6)
Class 25 (type 1b 4): Figure 7.41 (No. 5, 8 & 10)
Class 26 (type 4): Figure 7.41 (No. 11 & 12)

Two hundred vessels are coloured with red ochre on the outside, 306 vessels coloured with graphite on the outer surface and 234 vessels coloured with graphite on the inside.

Table 7.4: Analysis of the *Letsibogo* motif classes in the collection.

Class	1	3	8	9	11	12	13	14	15	17	19	20	21	22	23	24	25	26	Total	Total
Profile	**J**	**J**	**J**	**J**	**J**	**J**	**CJ**	**CJ**	**CJ**	**CJ**	**CJ**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**n**	**%**
Layout	**1a**	**1b**	**2**	**2,3**	**3**	**3,4**	**1a**	**1ab**	**1b**	**1ab,3**	**3**	**1a**	**1ab**	**1b**	**1a,4**	**1ab,4**	**1b,4**	**4**		
I A1		5	20	2	31			2	2		1		1	13		1	9	74	**161**	**31.3**
I A2		1	3	1	7				1	1	6	2	3	13	2		10	27	**77**	**15**
I A3			3		4						2			1		2	7	14	**33**	**6.4**
I A4					13	1					1			1	2		1	5	**24**	**4.6**
I B1			1						2					1			2	15	**21**	**4.1**
I B2																	2	1	**3**	**0.6**
I B3					4						2			1	1		1	1	**10**	**1.9**
I C3					3														**3**	**0.6**
I D1					2	1							1	1				3	**8**	**1.5**
I D2								1											**1**	**0.2**
I D3																	2	1	**3**	**0.6**
I F1			1		9						1				1		2	8	**22**	**4.3**
I F2			2		2											1		1	**6**	**1.2**
I F3					2	1											1		**4**	**0.8**
I H1	12						15	3				5	2		5	1			**43**	**8.4**
I H2	2						2												**4**	**0.8**
I H3	7						4			1		1	1		2	2			**18**	**3.5**
II A2																	1	1	**2**	**0.4**
II B1															1			5	**6**	**1.2**
II B2					1													3	**4**	**0.8**
II C1			1		1										1			1	**4**	**0.8**
II C2				1															**1**	**0.2**
II D1			2		4					1	1						3	22	**33**	**6.4**
II D2					1											2		2	**5**	**1**
II D3			1		1													6	**8**	**1.5**
II E2					6											1	1	2	**10**	**1.9**
Total n	**21**	**6**	**34**	**4**	**91**	**3**	**21**	**6**	**5**	**3**	**14**	**8**	**8**	**31**	**15**	**10**	**42**	**192**	**514**	
Total%	**4.1**	**1.2**	**6.6**	**0.8**	**17.7**	**0.6**	**4.1**	**1.2**	**1**	**0.6**	**2.7**	**1.5**	**1.5**	**6**	**2.9**	**1.9**	**8.2**	**37.4**		**100**
Out R			16	1	44	1					3			7	3	2	8	115	**200**	
Out G		4	24	2	52	2	2	3	2	1	10	4	2	25	7	2	17	147	**306**	
In G		1	1				2	2	2		10	6	2	25	6	3	18	156	**234**	

J – Jar CJ – Constricted Jar B – Bowl
Out R – Red outside Out G – Graphite outside In G – Graphite inside

Beads

A total of 68 beads were recovered. These were fashioned from OES (n = 55) and metal (n = 9), but there were also a few glass trade beads (n = 4).

Figure 7.25: Glass beads recovered from Site 37-C1-19.

The glass beads are typical of the Khami Indo-Pacific series trade beads (Figure 7.25). Khami Indo-Pacific series beads are found in large numbers at archaeological sites all over southern Africa as well as on the east African coast from the early 15th century through much of the 17th century (Wood 2011:77). The beads are mostly short and irregular-shaped cylinders. Information on the type, colour, diaphaneity, shape and diameter of the beads is provided in Table 7.5.

Table 7.5: Glass beads recovered from Site 37-C1-19.

Series	Colour	Diaphaneity	Shape	Length mm	Size mm	Total n
Khami Indo-Pacific	Cream	Translucent	Cylinder	4.0	6.0	1
Khami Indo-Pacific	Blue-green	Opaque	Cylinder	4.7	6.0	1
Khami Indo-Pacific	Yellow	Translucent	Oblate	2.5	4.2	1
Khami Indo-Pacific	Black	Opaque	Oblate	1.1	2.2	1

The 55 finished OES beads recovered from the excavations consist of 19 complete and 36 broken beads. Bead sizes range from 3-11 mm in diameter with 55% between 4-6 mm in diameter (Figure 7.26). Eleven beads in the collection were blackened. Bead details and sizes for complete beads are presented in Table 7.6.

Table 7.6: OES beads recovered from the excavations.

Size mm	3-3.9	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	Total n
Complete	4	1	1	2	1	2		1	12
Complete blackened	1	2	1	1	2				7
Broken	2	9	12	4		1	3	1	32
Broken blackened		1	3						4
Total n	**7**	**13**	**17**	**7**	**3**	**3**	**3**	**2**	**55**

Figure 7.26: Ostrich eggshell beads.

Metal artefacts

The extensive metal-working waste dumps documented at the site, in addition to the iron-smelting debris and numerous metal objects recovered from the excavations, reflect the activities of a metal-working community (Table 7.7). The worked iron objects include pieces of wire, spear/arrow shaft fragments, adze fragments, a corroded needle, beads and coiled bangle fragments (3-5 mm in diameter) (Figures 7.27 and 7.28). The worked copper objects (Figures 7.27 and 7.28) comprise pieces of wire, twisted wire, a broken shackle, beads and coiled bangle fragments (3-5 mm in diameter).

Table 7.7: Various metal artefacts recovered from the excavations.

Trench	Beads	Bangle fragments	Wire fragments	Other
M1	4 Fe + 3 Cu	13 Fe coiled + 6 Cu coiled	1 Fe + 5 Cu (Ø-1mm)	Spear shaft, blade fragment
M2	2 Fe	19 Fe coiled + 4 Cu coiled	2 Fe + 1 Cu (Ø-1mm)	Adze, needle, broken shackle

K1	1 Cu	1 Fe coiled		
K2		1 Fe coiled		
S		3 Fe coiled	2 Fe + 2 Cu (Ø-1mm)	Spear shaft, iron fragments
Total n	**6 Fe + 4 Cu**	**37 Fe + 10 Cu**	**3 Fe + 8 Cu**	

Fe – Iron Cu – Copper

Figure 7.27: Recovered metal artefacts: copper wire (1-4), adze and blades (5-8), spear/arrow shafts (9 &10), iron wire (11 &12) and a needle (13).

Figure 7.28: Recovered metal artefacts: Copper beads and wire (1), coiled copper bangle fragments (2), iron beads (3) and coiled iron bangles (4).

The metal-working debris recovered from the excavations is summarised in Table 7.1. It includes 276.5 kg slag, 1837 g iron ore and 8820 g tuyère fragments. The debris from test trench S is summarised in Table 7.8. It consists of 271.4 kg slag, 1521 g iron ore, 8820 g tuyère fragments, 7963 g furnace rubble and 116 g molten iron drops (Figures 7.29-7.31). The slag, furnace rubble and molten iron drops are waste discarded after the smelting process. The chips of iron ore are probably pieces that were discarded together with the slag and furnace debris.

Table 7.8: Metal-working debris recovered from trench S.

Block	Slag (kg)	Ore (g)	Tuyère (g)	Furnace rubble (g)	Molten iron (g)
A1	17.0	123	834	431	1
A2	20.4	91	619	735	15
B1	24.6	195	1018	960	10
B2	48.8	118	720	197	4
C1	33.8	236	1130	1258	7
C2	28.5	97	1606	1263	5
D1	43.5	394	752	1135	25
D2	54.8	267	2141	1984	49
Total n	**271.4**	**1521**	**8820**	**7963**	**116**

Figure 7.29: Iron slag nodules and fragments.

Figure 7.30: Furnace rubble (top row), molten iron drops and iron ore chips (middle row) and iron ore (bottom row).

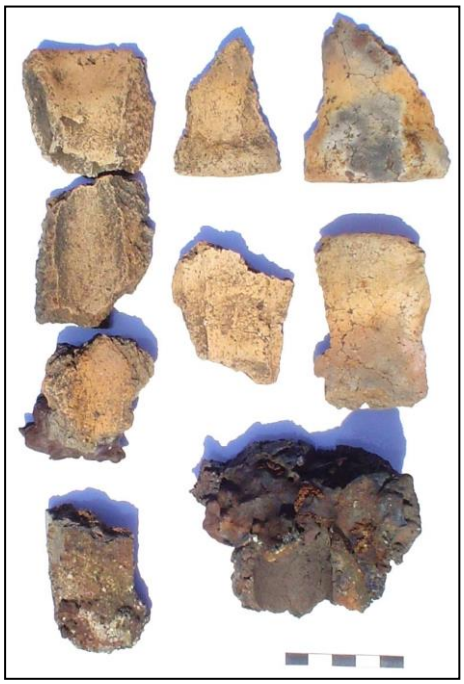

Figure 7.31: Tuyère fragments.

Figure 7.32: Abraded potsherds and a whey stopper.

Other clay artefacts

A total of four tools made from fragments of discarded ceramic vessels form part of the ceramic collection. Each has an abraded area in the form of a flattened arc produced by scraping or moulding tasks. The objects could have featured as moulding tools used in the

production of ceramic vessels or as pot scrapers (Figure 7.32). A whey stopper was also recovered.

Worked stone

Two fragments of lower grinding stones were collected as surface finds. In addition, two upper grinding stones, probably used for grinding sorghum or millet, were recovered in trench M1.

Figure 7.33: Lower grinding-stone fragments.

Figure 7.34: Upper grinding stones.

7.3 Investigations at Site 37-C1-15

Site name: *Mmalapaneng* (Blacksmith plover) **S23°30'56.7" E27°07'02.0"**

Site description

The site is situated on a rise at the edge of the floodplain. It is divided by a fence, with the western half positioned in an agricultural field. Cultivating activities have exposed cultural material, including hut rubble concentrations that serve to demarcate the extent of the settlement. No intact hut floor remains could be located amongst the hut rubble concentrations. The site measures about 100 m across with a cattle kraal deposit of approximately 20 m in diameter in the middle. The cattle kraal deposit can be recognised by the white-grey colouration of the dung as well as stands of blue buffalo grass (*Cenchrus ciliaris*). An arc of seven hut rubble concentrations is apparent on the south-western section of the cattle kraal deposit. From the surface collection it became evident that artefactual materials were invariably to be found around and on hut rubble concentrations and also in the area between the houses and the kraal deposit. The *Letsibogo* facies pottery found in the vicinity of the kraal indicates that it is a Middle *Moloko* feature. No middens or other settlement features were observed during the survey.

Cultural material finds

The surface collection concentrated mainly on obtaining rim sherds and decorated ceramics for the ceramic analysis.

Ceramics

The surface collection yielded a total of 520 identifiable vessels (Table 7.9). The vessels included 96 (19%) jars, 180 (35%) jar body sherds, 23 (4%) constricted jars, 12 (2%) constricted jar body sherds, 106 (20%) bowls and 103 (20%) bowl body sherds. The 447 decorated vessels were stylistically analysed according to the *Letsibogo* facies types outlined in Chapter 2. A sample of the decorated vessel classes is illustrated in Figures 7.35 and 7.36.

Table 7.9: Analysis of the identifiable vessel types from Site 37-C1-15.

Vessel type	Undecorated	Decorated	Total n	Total %
Jars	58	38	**96**	**19**
Jar body sherds		180	**180**	**35**
Constricted jars	5	18	**23**	**4**
Constricted jar body sherd		12	**12**	**2**
Bowls	10	96	**106**	**20**
Bowl body sherds		103	**103**	**20**
Total n	**73**	**447**	**520**	
Total %	**14**	**86**		**100**

Figure 7.35: Decorated *Letsibogo* facies jars.

Figure 7.36: Decorated *Letsibogo* facies bowls.

Letsibogo

A total of 651 motifs were employed on the 447 decorated vessels by utilising 37 *Letsibogo* facies motif classes as outlined in Figure 2.19. The dragged punctate line design of class IA1 (18.4%) is the motif most frequently used, followed by the dragged punctate double line of class IA3 (11.2%). Most decorative motifs were executed by a punctate technique with only 3.9% by an incision technique. The assemblage yielded 21 of the possible 26 *Letsibogo* facies classes outlined in Figures 2.20 and 2.21, which include:

<u>Jars</u> (n = 276, 54 %)
Class 1 (type 1a): Figure 7.45 (No. 1-8)
Class 2 (type 1ab): Figure 7.45 (No. 9 & 10)
Class 3 (type 1b): Figure 7.45 (No. 11, 13-15)
Class 4 (type 1a): Figure 7.45 (No. 12) and Figure 7.46 (No. 4)

Class 5 (type 1a): Figure 7.46 (No. 10)
Class 7 (type 1a): Figure 7.46 (No. 8 & 9)
Class 8 (type 2): Figure 7.46 (No. 1-3 & 5-7)
Class 9 (type 2 3): Figure 7.46 (No. 12); Figure 7.47 (No. 2, 3, 5, 6 & 8-11) and Figure 7.48 (No. 2-7, 9 & 14)
Class 10 (type 1a): Figure 7.46 (No. 11); Figure 7.47 (No. 1, 4 & 7) and Figure 7.48 (No. 1 & 8)
Constricted jars (n = 35, 6 %)
Class 13 (type 1a): Figure 7.49 (No. 1-3, 6 & 7)
Class 14 (type 1ab): Figure 7.49 (No. 4, 8, & 12)
Class 15 (type 1b): Figure 7.49 (No. 5, 13, 15 & 16)
Class 17 (type 1ab 3): Figure 7.49 (No. 9, 10 & 11)
Class 18 (type 3): Figure 7.49 (No. 14)
Bowls (n = 209, 40%)
Class 20 (type 1a): Figure 7.50 (No. 1)
Class 21 (type 1ab): Figure 7.41 (No. 7, 9 & 15)
Class 22 (type 1b): Figure 7.50 (No. 7 & 10) and Figure 7.53 (No. 6 & 7)
Class 23 (type 1a 4): Figure 7.41 (No. 2)
Class 24 (type 1ab 4): Figure 7.50 (No. 2 & 3)
Class 25 (type 1b 4): Figure 7.50 (No. 4-6, 8, 9 & 11-16); Figure 7.51 (No. 1-3, 5, 6 & 8) Figure 7.52 (No. 1-5, 7, 8 & 10-14) and Figure 7.53 (No. 1, 3, 4, 8, 10 & 11)
Class 26 (type 4): Figure 7.51 (No. 4, 7, 9 & 10); Figure 7.52 (No. 6 & 9) and Figure 7.53 (No. 2, 5 & 9)

The ceramic sample from site *Mmalapaneng* contains 239 vessels coloured with red ochre on the outside, 337 vessels coloured with graphite on the outside and 198 vessels coloured with graphite on the inside.

Table 7.10: Analysis of the *Letsibogo* motif classes in the collection.

Class	1	2	3	4	6	8	9	11	12	13	14	15	16	17	18	19	20	22	24	25	26	Total	Total
Profile	J	J	J	J	J	J	J	J	J	CJ	CJ	CJ	CJ	CJ	CJ	CJ	B	B	B	B	B	n	%
Layout	1a	1ab	1b	1b2	1b23	2	23	3	34	1a	1ab	1b	1a3	1ab3	1b3	3	1a	1b	1ab4	1b4	4		
I A1		1			1	9	13	41			1	2			1	3		5	1	13	29	**120**	**18.4**
I A2			2		1	5	7					1		3	1	1		8	4	25	1	**59**	**9.0**
I A3						5	4	17						1	1	4		5		13	23	**73**	**11.2**
I A4						1	3	20								2					1	**27**	**4.1**
I B1					1	2	1	6												1	3	**14**	**2.2**
I B2						3	1	1						1						4	1	**11**	**1.7**
I B3						1		2					1					2		5	1	**12**	**1.8**
I C1				1				2				2								1		**6**	**0.9**
I C2							1	1												2	1	**5**	**0.8**
I C3							4	5	1							5				6	2	**23**	**3.5**
I D2						1																**1**	**0.2**
I D3						2		4							1							**7**	**1.1**
I E1								1														**1**	**0.2**
I E2						1	2														1	**4**	**0.6**
I E3						1		2														**3**	**0.5**
I F1								15												3	3	**21**	**3.2**
I F2						1		1										2		5		**9**	**1.4**
I F3								1												4	7	**12**	**1.8**
I F4								1										3		3	2	**9**	**1.4**
I G1				1			1					1				1		2		5	2	**13**	**2.0**

I G2			1																	1	1	**3**	**0.5**
I G3			1				3													1		**5**	**0.8**
I H1	12									1	1		1	2					2			**19**	**2.9**
I H2	2	1								1									1			**5**	**0.8**
I H3										3							2					**5**	**0.8**
II A1																				2		**2**	**0.3**
II A2								2													2	**4**	**0.6**
II B1					2		5	3							1				1	15	3	**30**	**4.6**
II B2								12														**12**	**1.8**
II C1							1	2												1	5	**9**	**1.4**
II C2																				2		**2**	**0.3**
II D1							4	10						1		1				6	17	**39**	**6.0**
II D2							4		2				1			1				5	7	**20**	**3.1**
II D3							3	9	2											4	9	**27**	**4.1**
II E1																					1	**1**	**0.2**
II E2							1	8	5											4	13	**31**	**4.7**
II E3							1	1												1	4	**7**	**1.1**
Total n	**14**	**2**	**4**	**2**	**5**	**32**	**59**	**167**	**10**	**5**	**2**	**6**	**3**	**8**	**5**	**18**	**2**	**27**	**9**	**132**	**139**	**651**	
Total%	**2.2**	**0.3**	**0.6**	**0.3**	**0.8**	**4.9**	**9.1**	**25.7**	**1.5**	**0.8**	**0.3**	**0.9**	**0.5**	**1.2**	**0.8**	**2.8**	**0.3**	**4.1**	**1.4**	**20.2**	**21.3**		**100**
Out R				1		9	10	70	6	1	1			2	1	4	7		1	29	97	**239**	
Out G				1		17	27	99	7			1	1		1	12	18		3	41	109	**337**	
In G										1	1		1	2	1	12	20		3	43	114	**198**	

J – Jar CJ – Constricted Jar B – Bowl
Out R – Red outside Out G – Graphite outside In G – Graphite inside

7.4 Conclusion

At Site 37-C1-19 (*Motsikiri*) *Letsibogo* people lived in a large village that comprised three cattle kraals surrounded by houses and granaries. Although no houses or granaries were unearthed during the excavations, the various classes of cultural material from the midden and kraal deposit confirm that the site is a 17th-century settlement. The relative quantities of cultural material recovered suggest a period of occupation of more than 20 years. The slag dumps indicate major metal-working activities at the settlement. Altogether the extensive cattle kraal deposits and scale of iron smelting activities suggest an important cattle-keeping village.

The highly decorated ceramics have a close resemblance to those of other *Letsibogo* facies sites in eastern Botswana. The dragged punctate technique is dominant. Only 1.4% of the motifs were executed using the incision decoration technique, which predominates in the *Madikwe* facies.

Site 37-C1-15 (*Mmalapaneng*) on the edge of the floodplain is situated closer to the Limpopo River. Recent cultivation activities have unearthed a fair amount of ceramics, thus providing a good collection of *Letsibogo* facies pottery. The dragged punctate technique is again dominant at the site with only 3.9% of the motifs executed by incision.

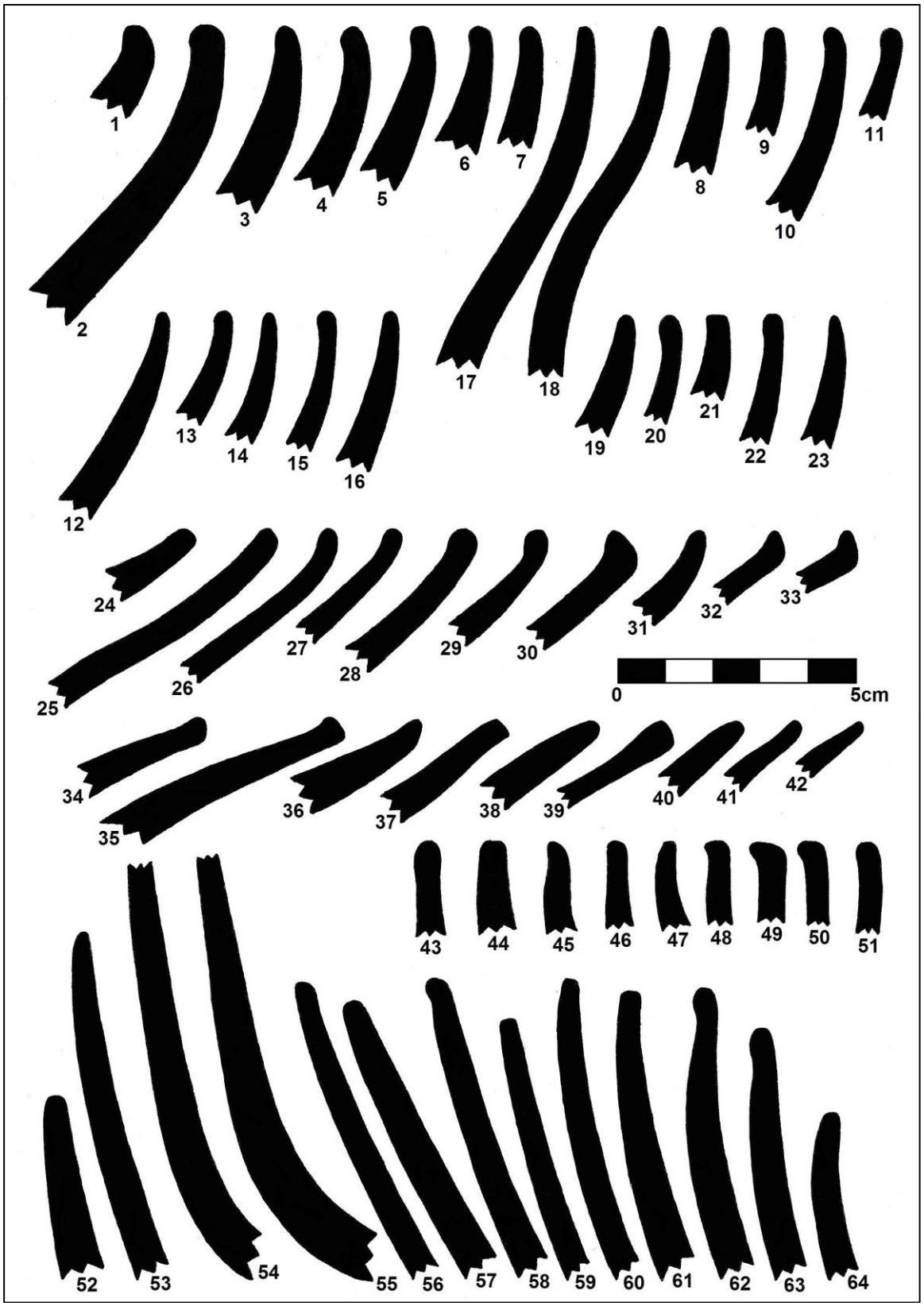

Figure 7.37: Vessel profiles from Site 37-C1-19: jars (No. 1-23), constricted jars (No. 24-42) and bowls (No. 43-64).

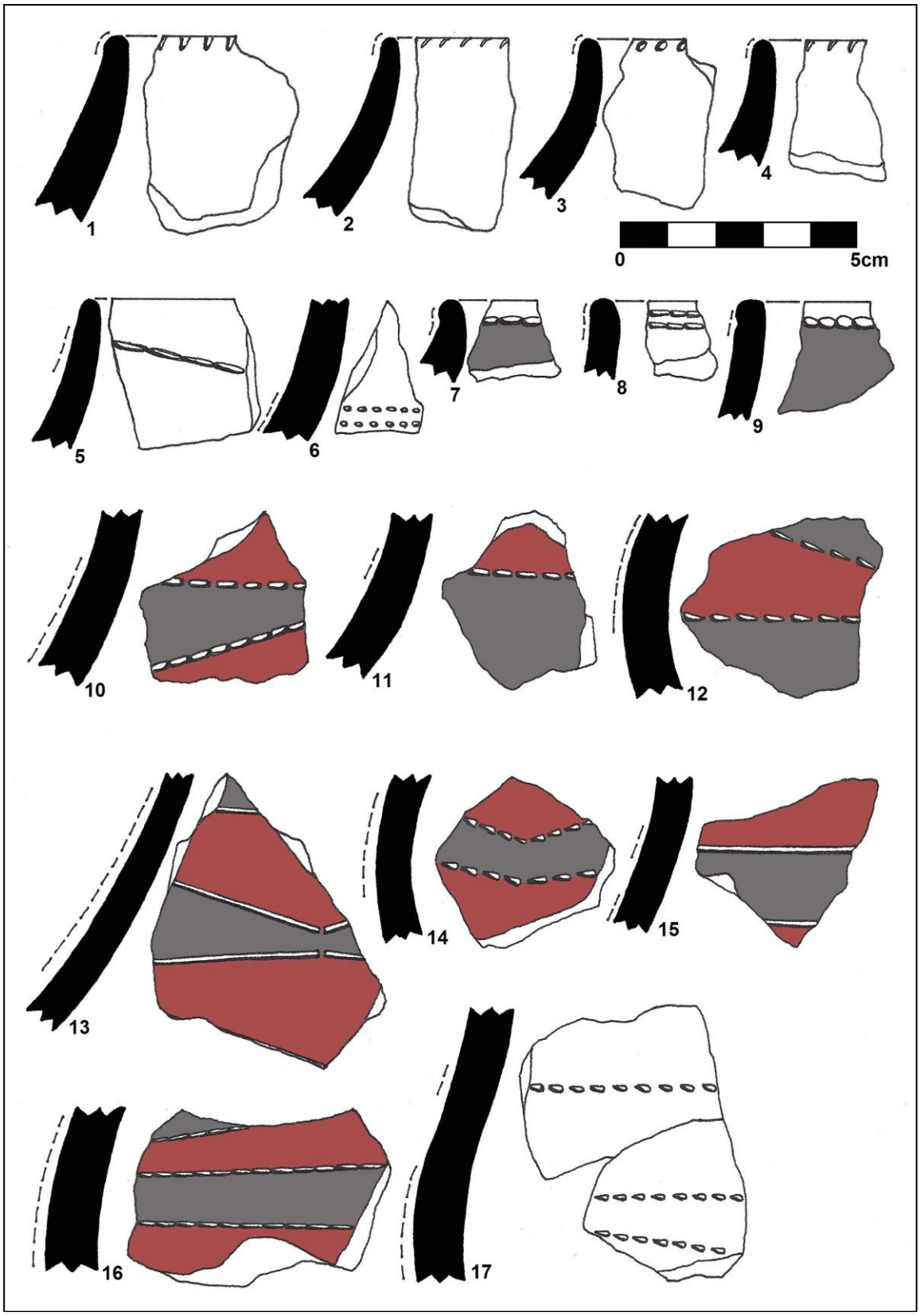

Figure 7.38: *Letsibogo* facies jar types from Site 37-C1-19: Class 1 (No.1-4), Class 3 (No. 5, 7-9), Class 8 (No. 6 & 11), Class 9 (No. 10, 13, 15 & 17) and Class 11 (No. 12, 14 & 16).

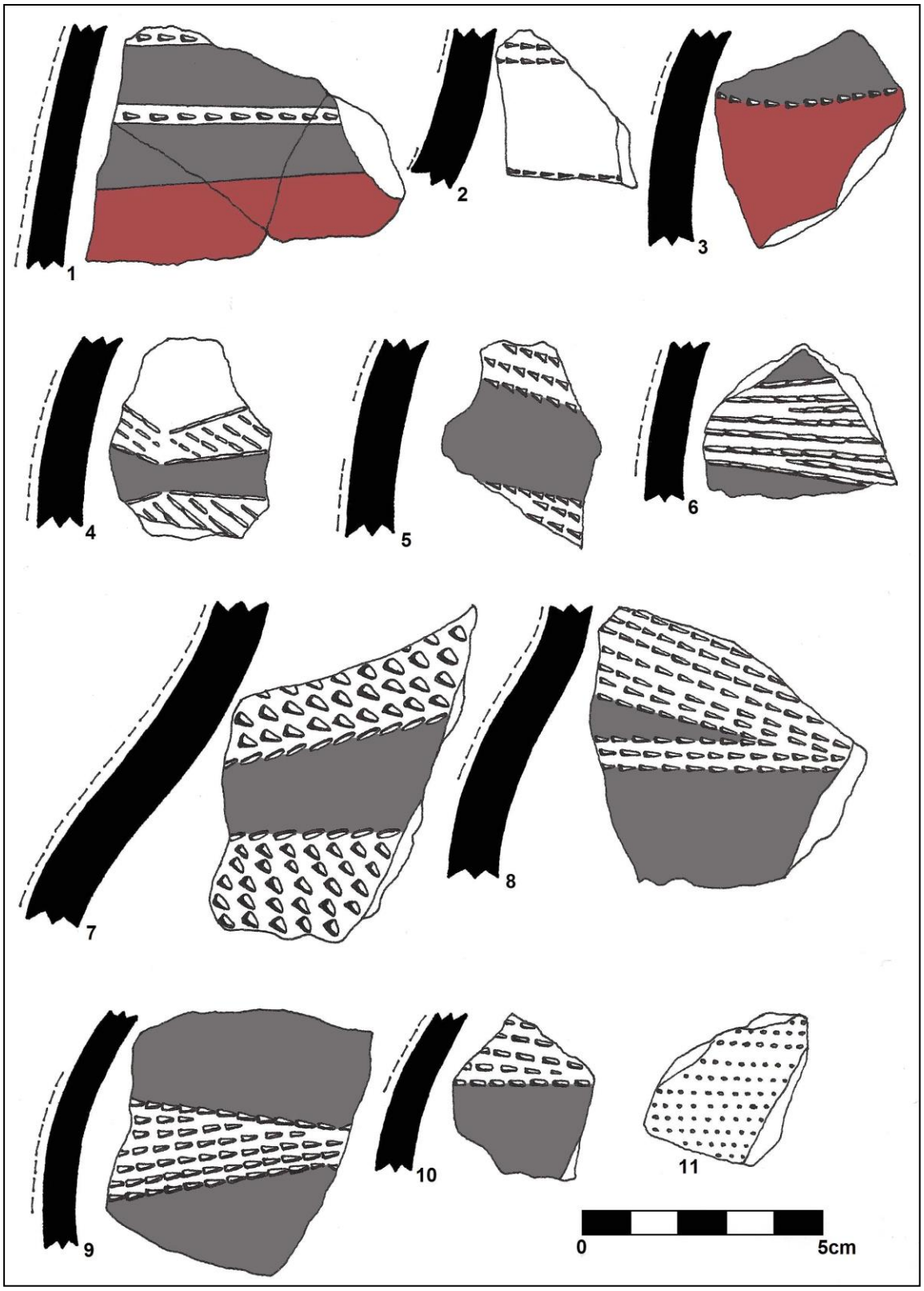

Figure 7.39: *Letsibogo* facies jar types from Site 37-C1-19: Class 9 (No. 1, 2, 7 & 8), Class 11 (No. 3, 6, 9, 10 & 11) and Class 12 (No. 4 & 5).

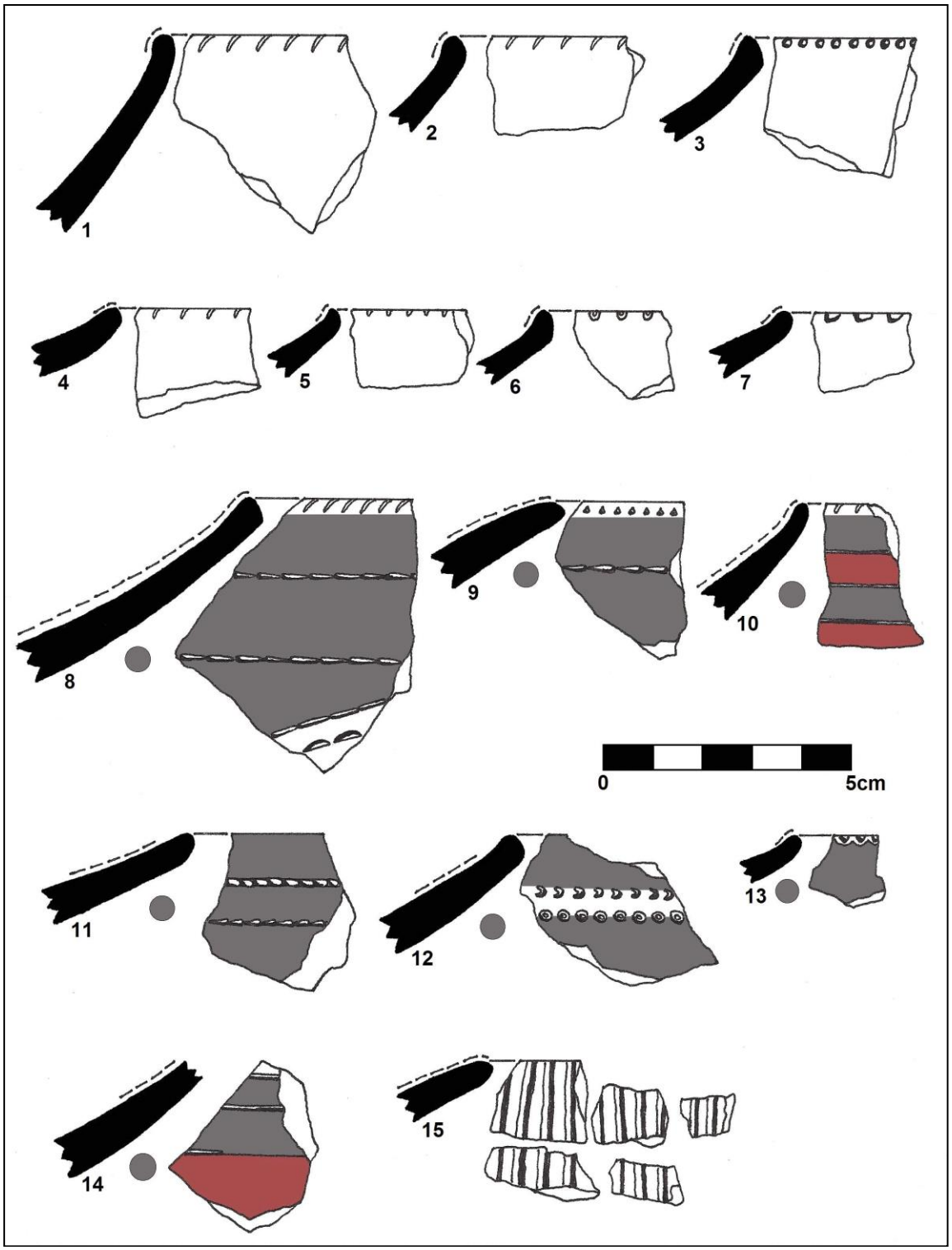

Figure 7.40: *Letsibogo* facies constricted jar types from Site 37-C1-19: Class 13 (No.1-7 & 13), Class 14 (No. 9), Class 15 (No. 11 & 12), Class 17 (No. 8, 10 & 15) and Class 19 (No. 14).

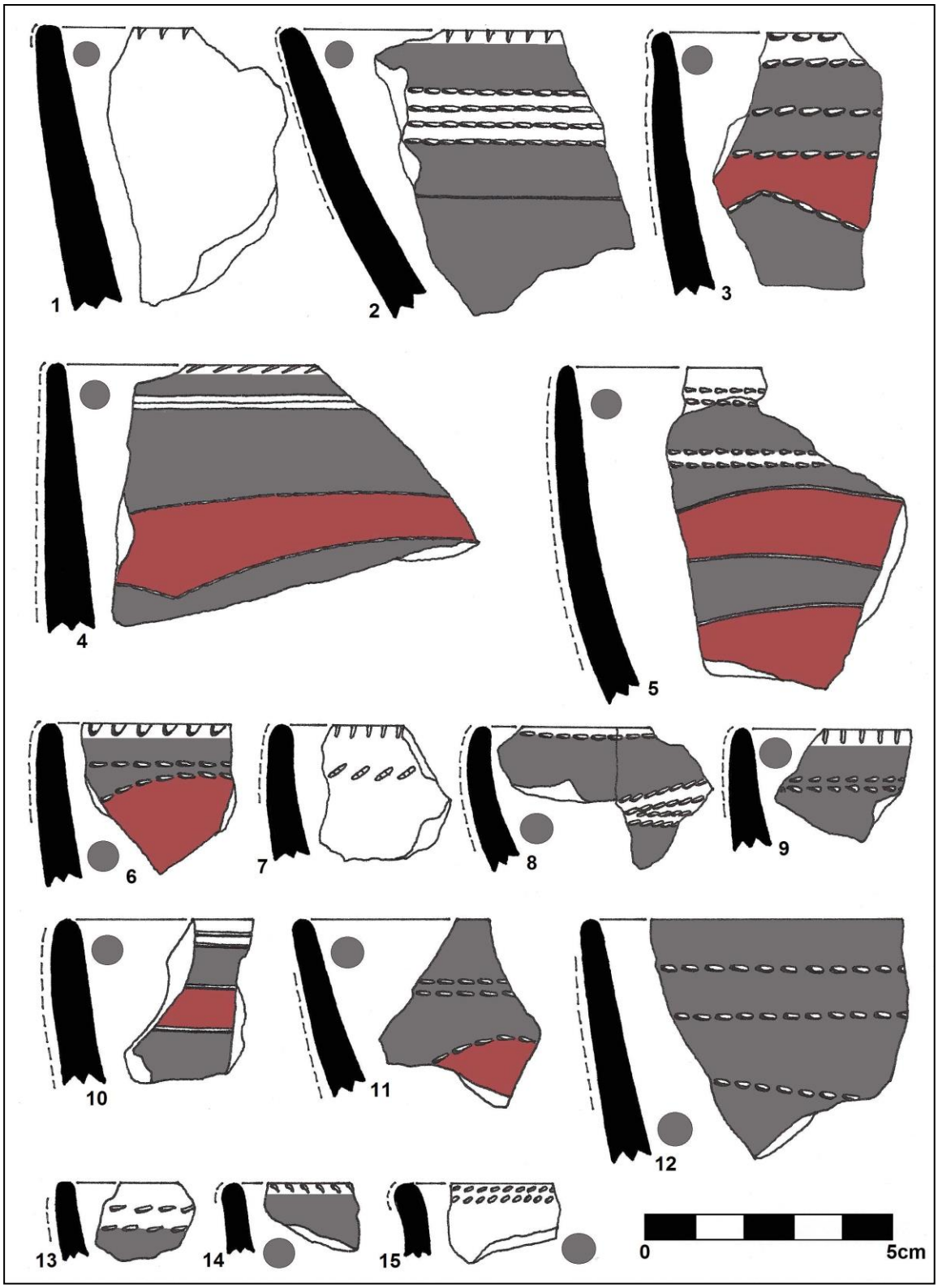

Figure 7.41: *Letsibogo* facies bowl types from Site 37-C1-19: Class 20 (No.1 & 14), Class 21 (No. 7, 9 & 15), Class 22 (No. 13), Class 23 (No. 2) Class 24 (No. 3, 4 & 6), Class 25 (No. 5, 8 & 10) and Class 26 (No. 11 & 12).

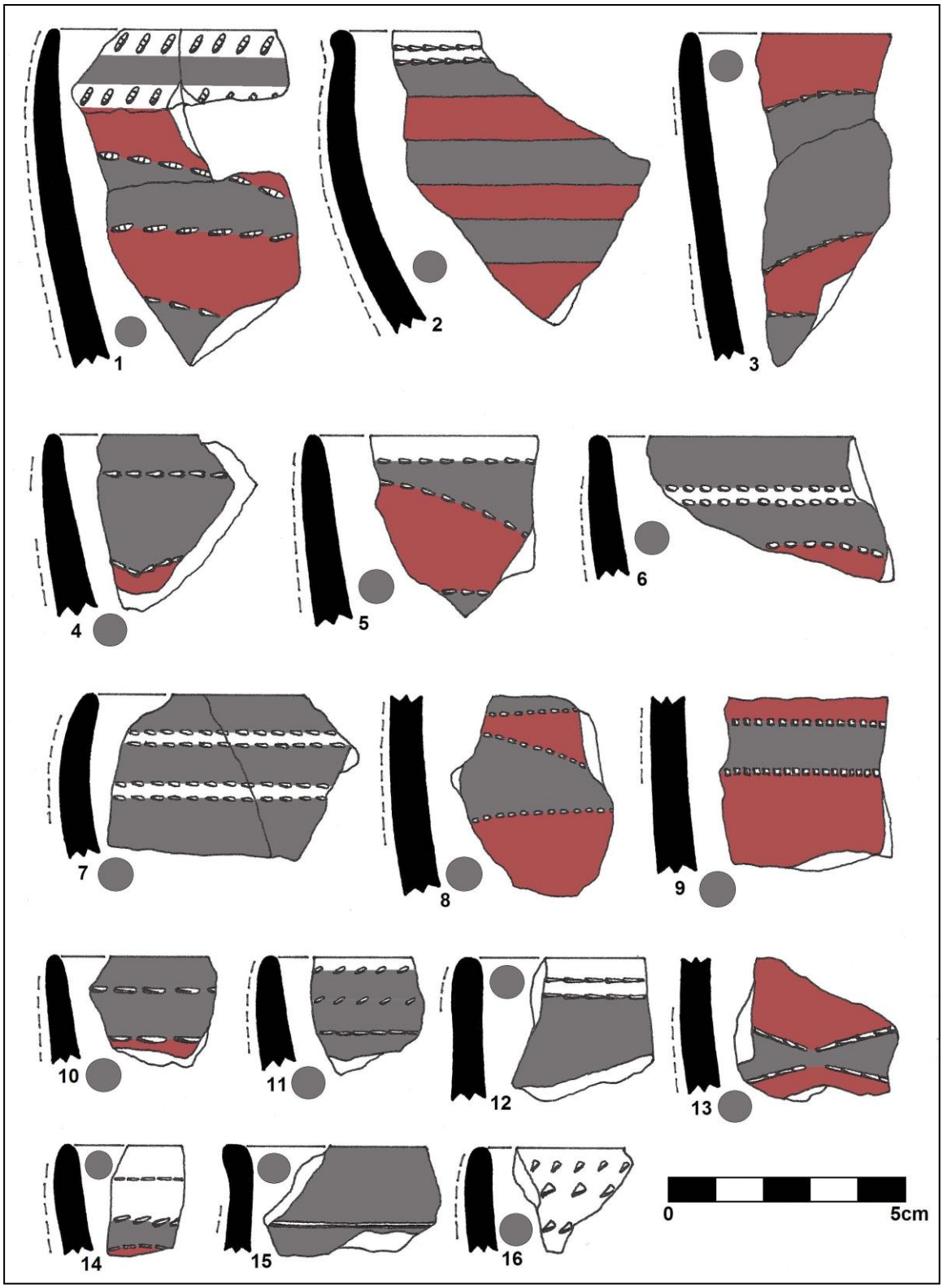

Figure 7.42: *Letsibogo* facies bowl types from Site 37-C1-19: Class 22 (No. 12), Class 25 (No. 1, 2, 4-7, 10, 11, 14 & 16) and Class 26 (No. 3, 8, 9, 13 & 15).

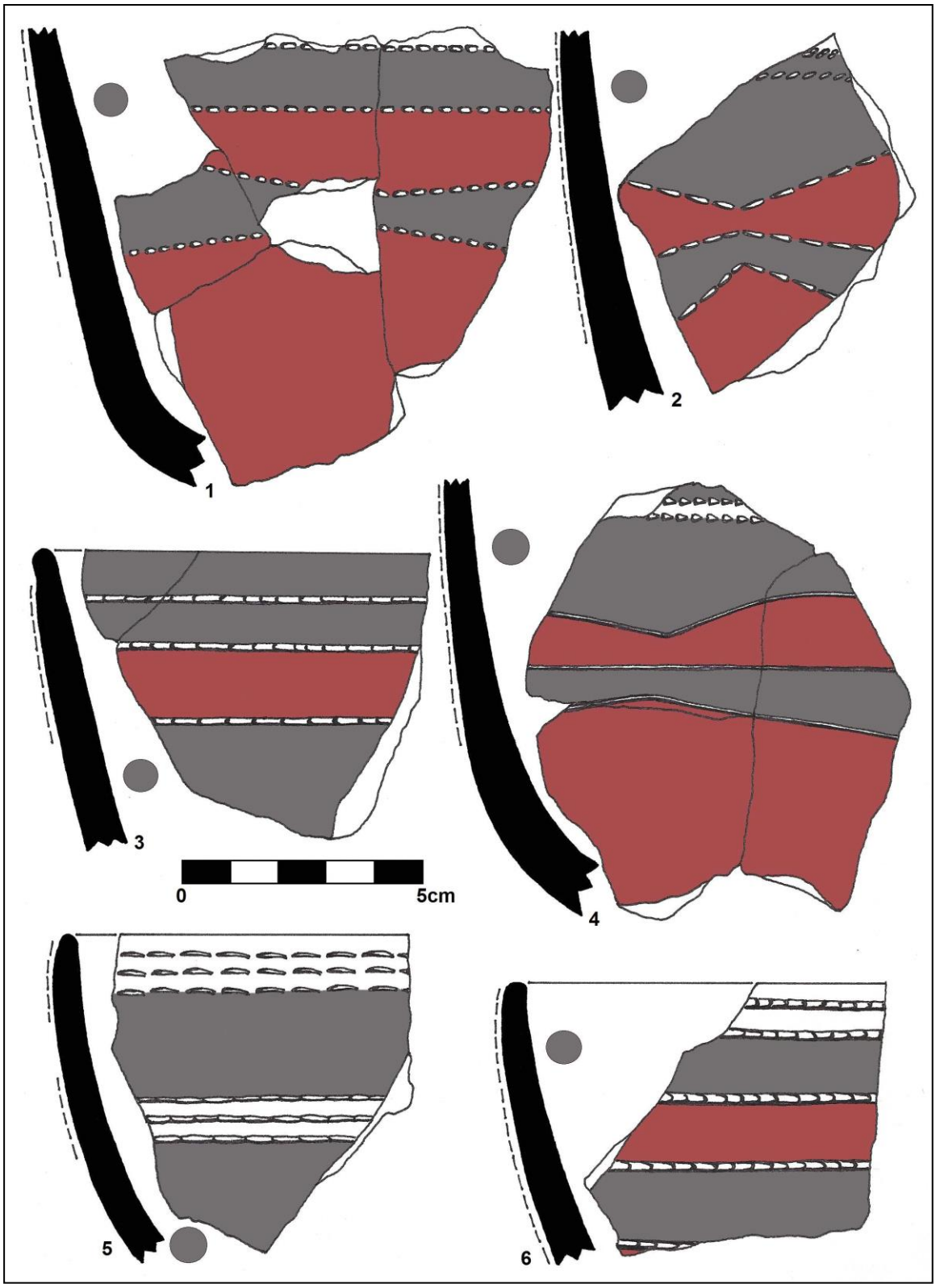

Figure 7.43: *Letsibogo* facies bowl types from Site 37-C1-19: Class 25 (No.1-6).

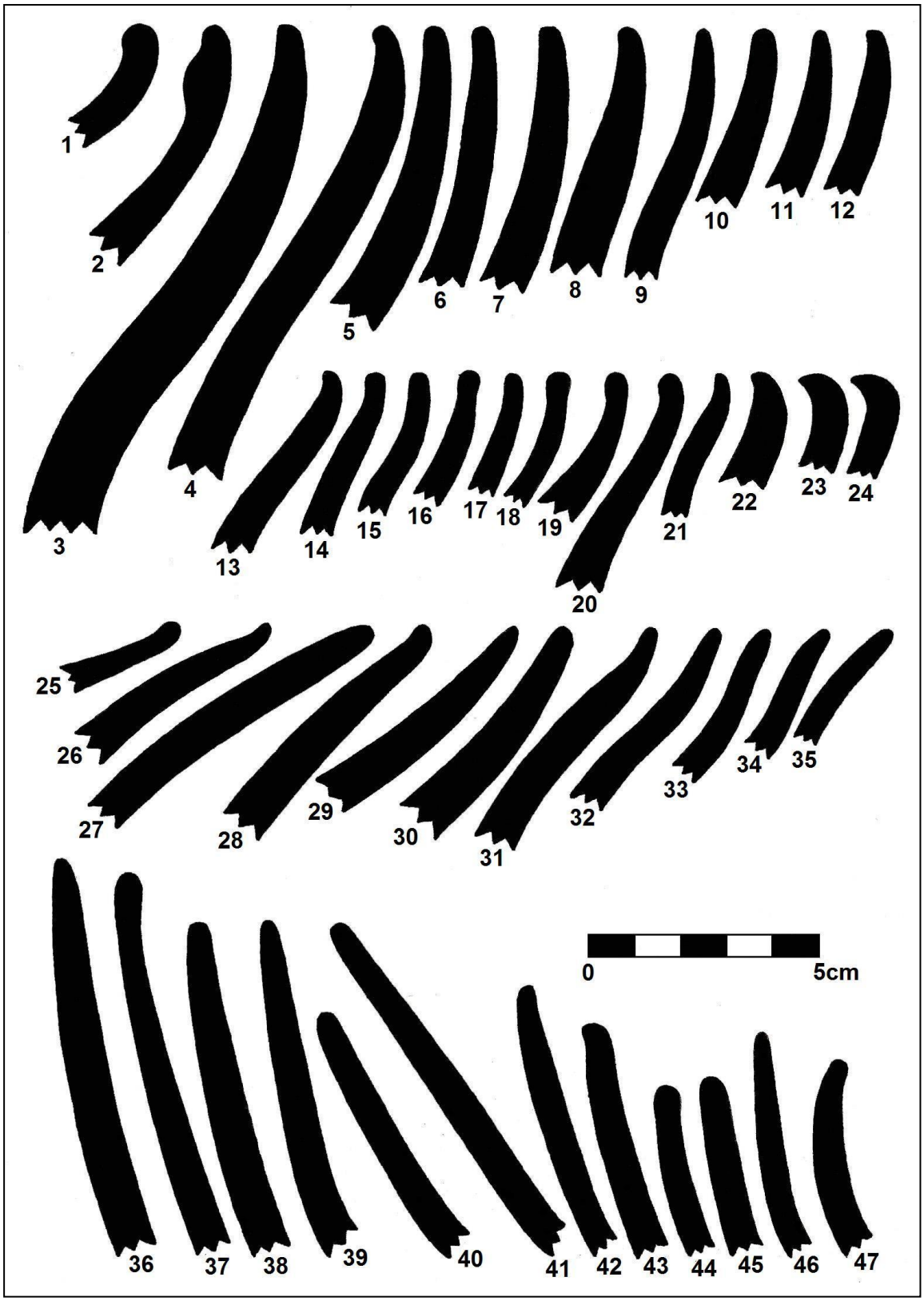

Figure 7.44: Vessel profiles from Site 37-C1-15: jars (No. 1-24), constricted jars (No. 25-35) and bowls (No. 36-47).

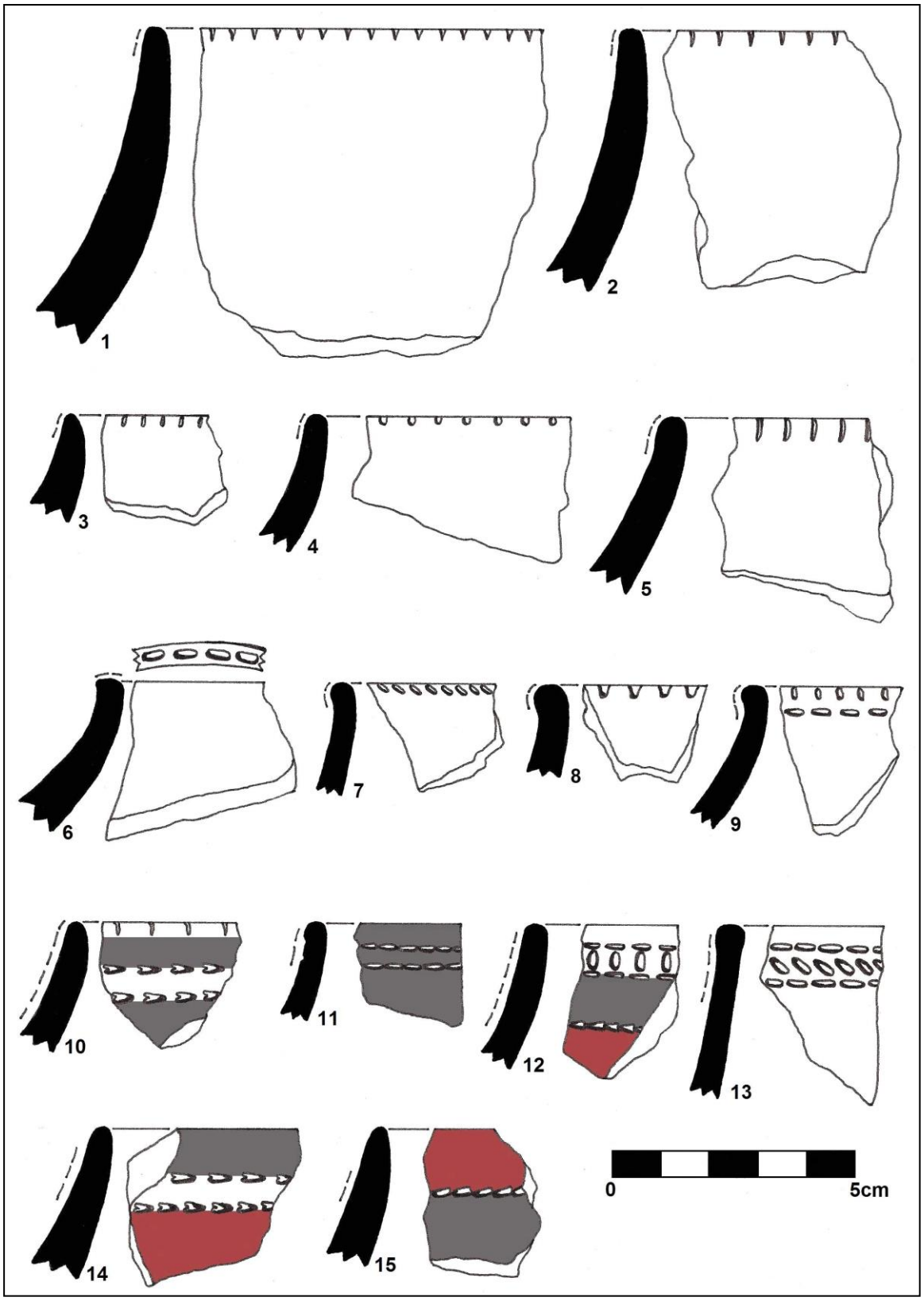

Figure 7.45: *Letsibogo* facies jar types from Site 37-C1-15: Class 1 (No.1-8), Class 2 (No. 9 & 10), Class 3 (No. 11, 13-15) and Class 4 (No. 12).

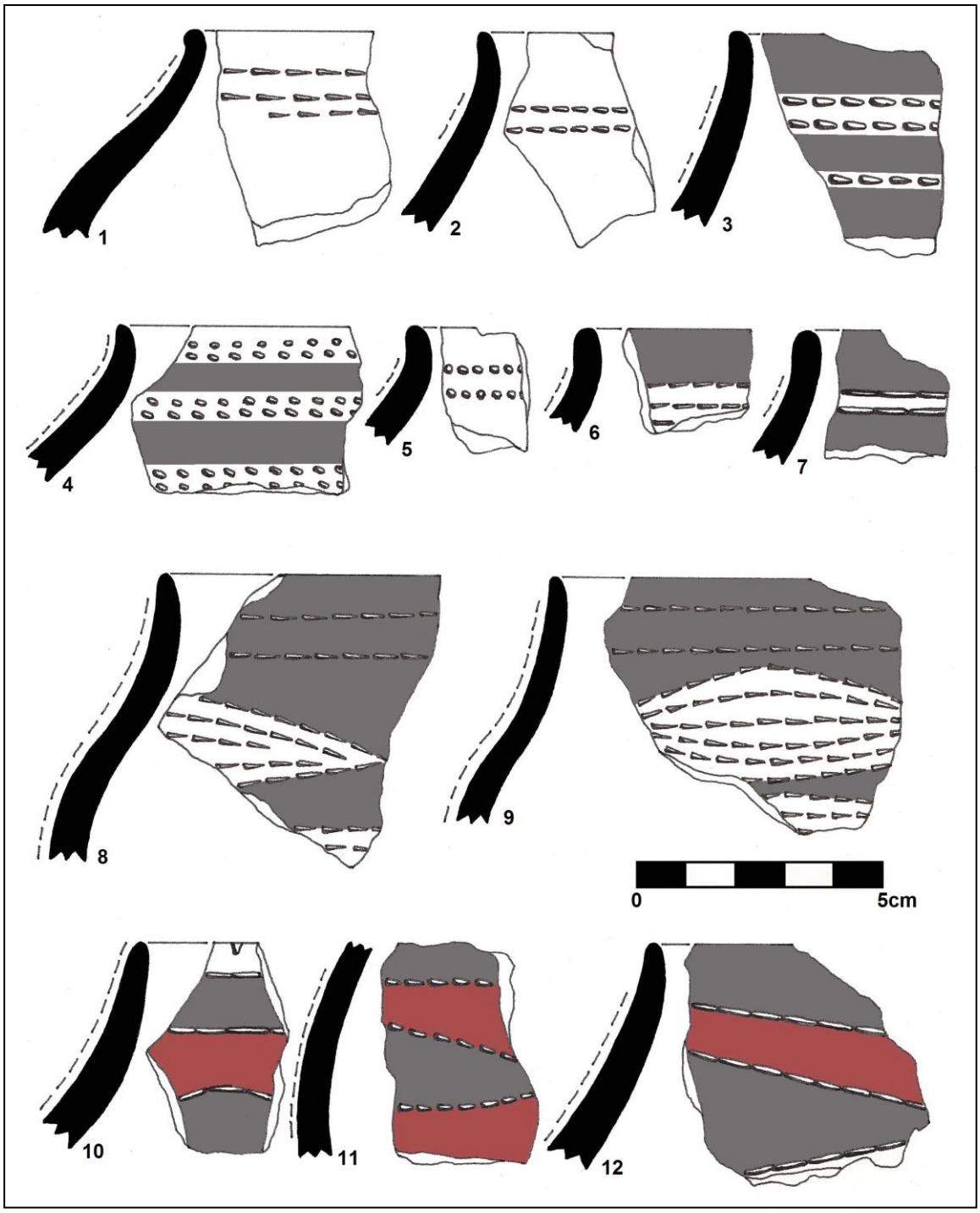

Figure 7.46: *Letsibogo* facies jar types from Site 37-C1-15: Class 4 (No. 4), Class 5 (No. 10), Class 7 (No. 8 & 9), Class 8 (No.1-3 & 5-7), Class 9 (No.12), and Class 10 (No. 11).

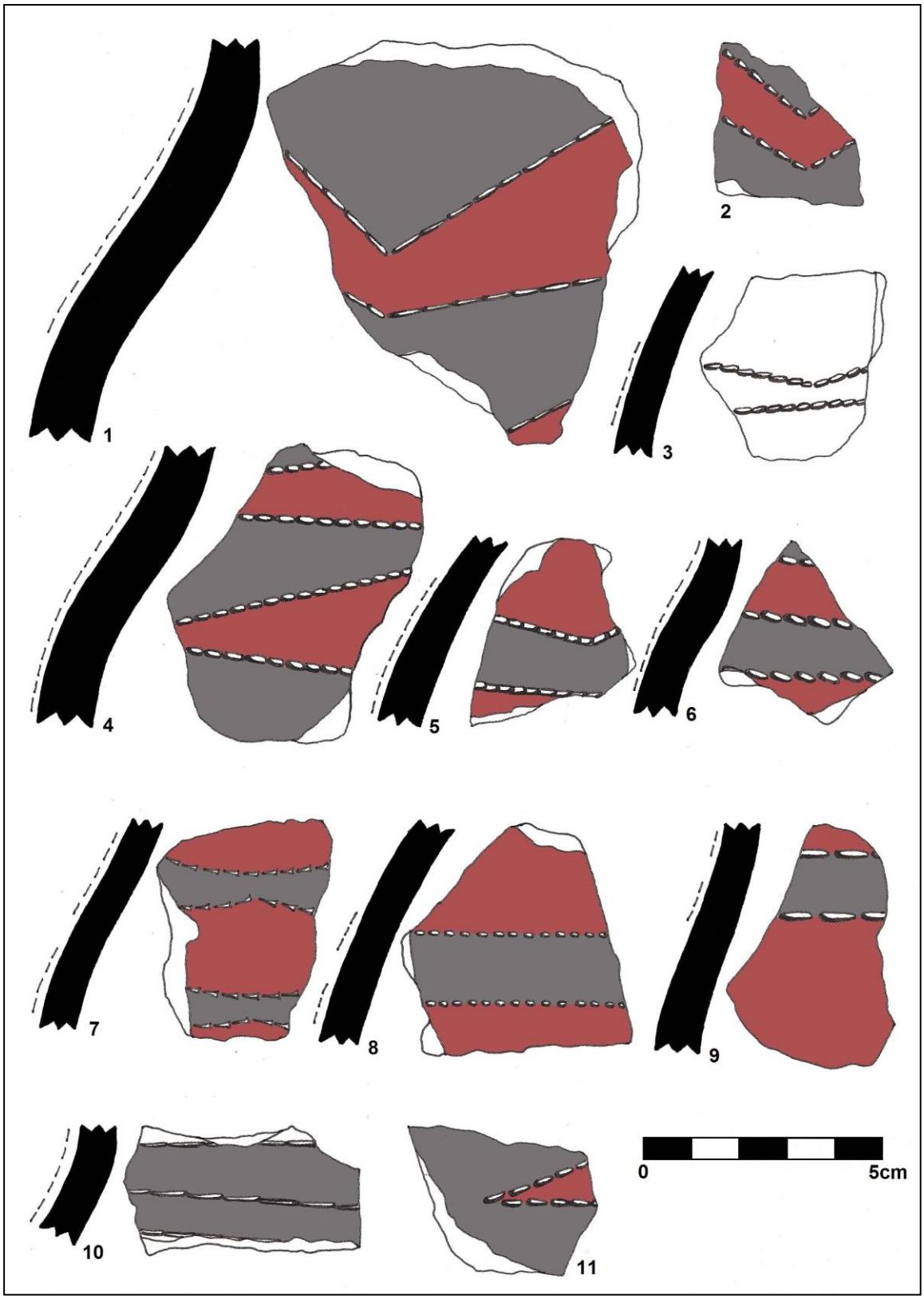

Figure 7.47: *Letsibogo* facies jar types from Site 37-C1-15: Class 9 (No. 2, 3, 5, 6 & 8-11) and Class 10 (No. 1, 4 & 7).

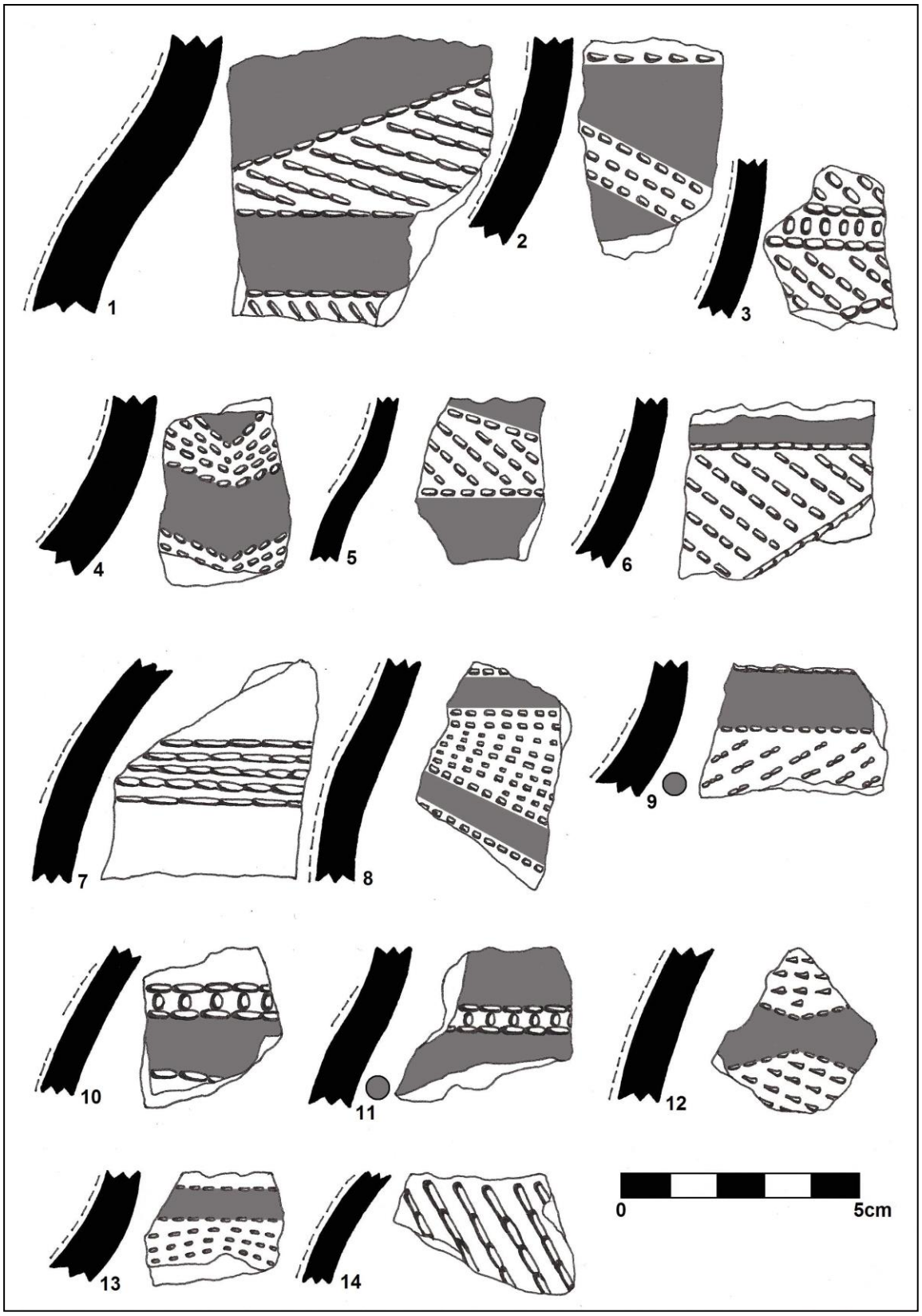

Figure 7.48: *Letsibogo* facies jar types Site 37-C1-15: Class 9 (No. 2-7, 9 & 14) and Class 10 (No. 1 & 8). (Grey dot - graphite colouring on the inside).

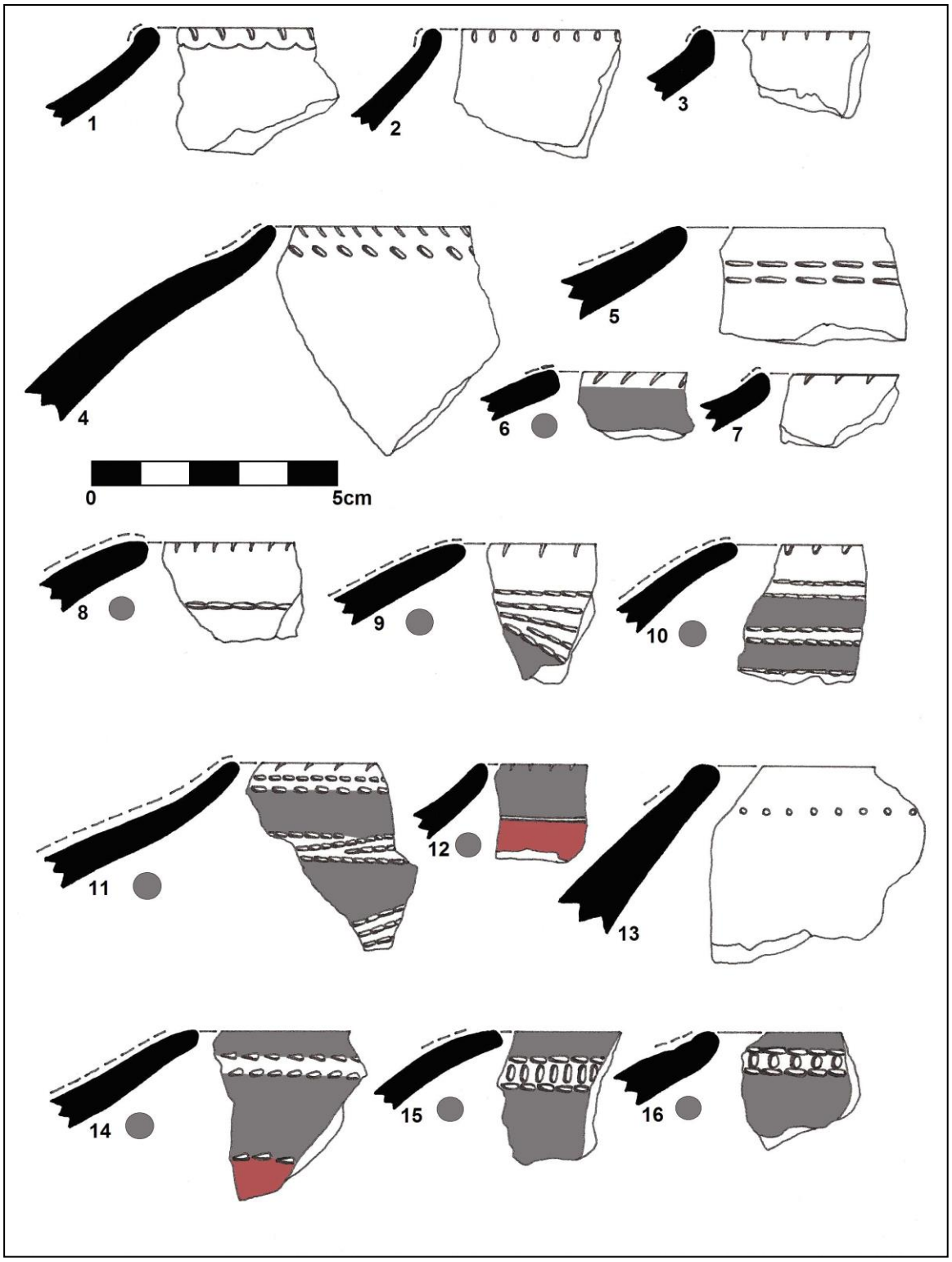

Figure 7.49: *Letsibogo* facies constricted jar types from Site 37-C1-15: Class 13 (No.1-3, 6 & 7), Class 14 (No. 4, 8 & 12), Class 15 (No. 5, 13, 15 & 16), Class 17 (No. 9, 10 & 11) and Class 18 (No. 14). (Grey dot - graphite colouring on the inside).

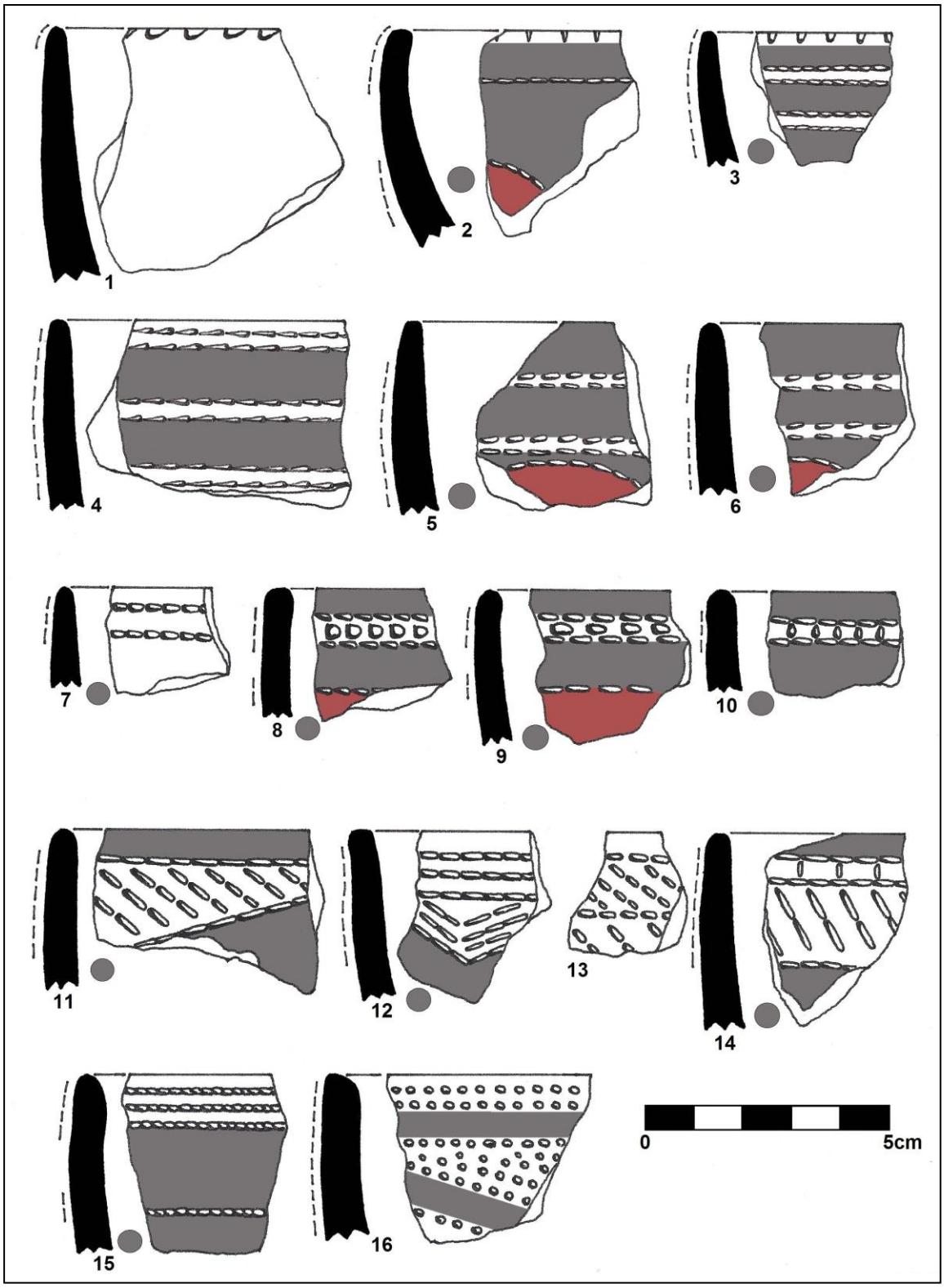

Figure 7.50: *Letsibogo* facies bowl types from Site 37-C1-15: Class 20 (No.1), Class 22 (No. 7 & 10), Class 24 (No. 2 & 3) and Class 25 (No. 4-6, 8, 9 & 11-16). (Grey dot - graphite colouring on the inside).

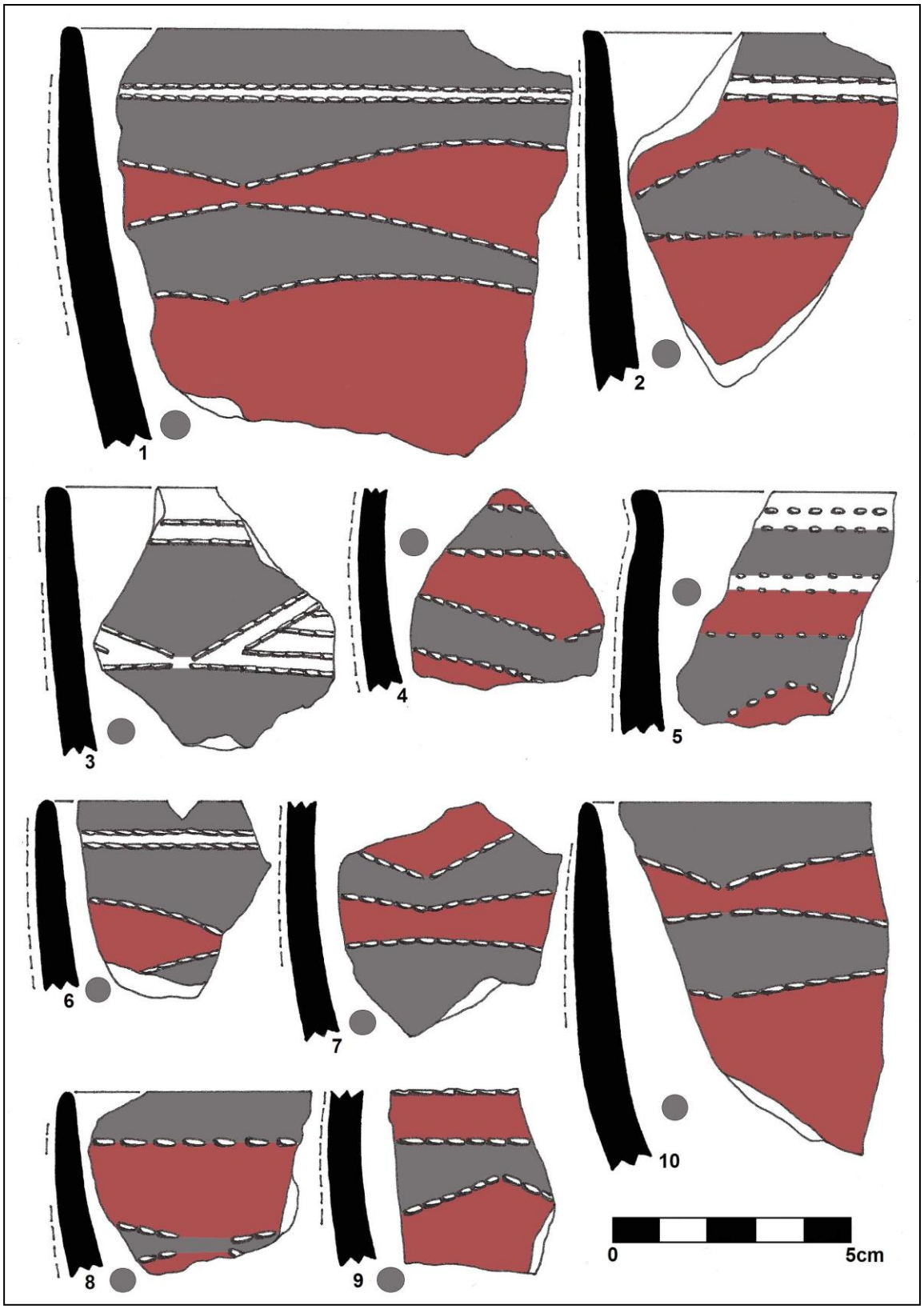

Figure 7.51: *Letsibogo* facies bowl types from Site 37-C1-15: Class 25 (No. 1-3, 5, 6 & 8) and Class 26 (No. 4, 7, 9 & 10). (Grey dot - graphite colouring on the inside).

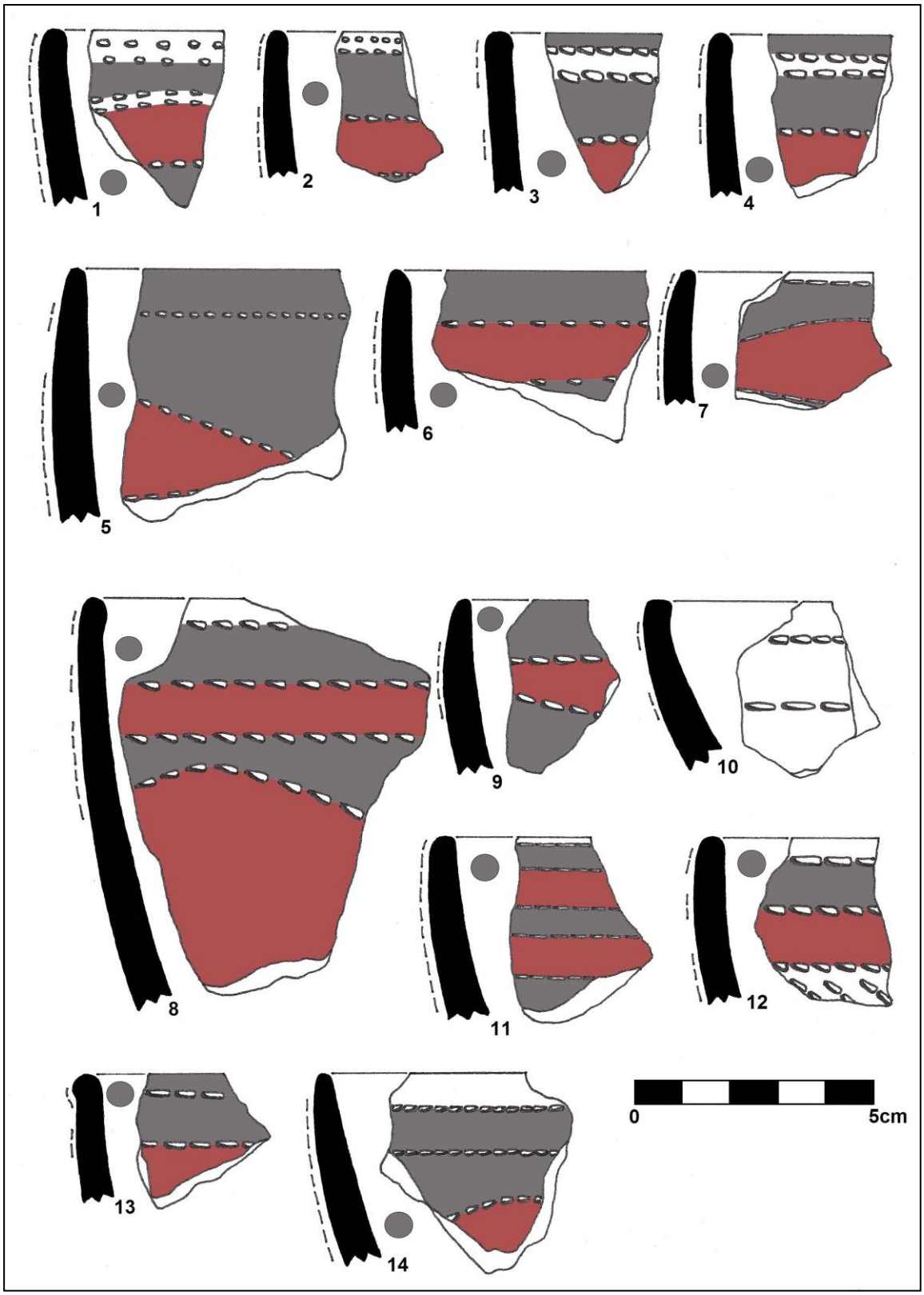

Figure 7.52: *Letsibogo* facies bowl types from Site 37-C1-15: Class 25 (No. 1-5, 7, 8 & 10-14) and Class 26 (No. 6 & 9). (Grey dot - graphite colouring on the inside).

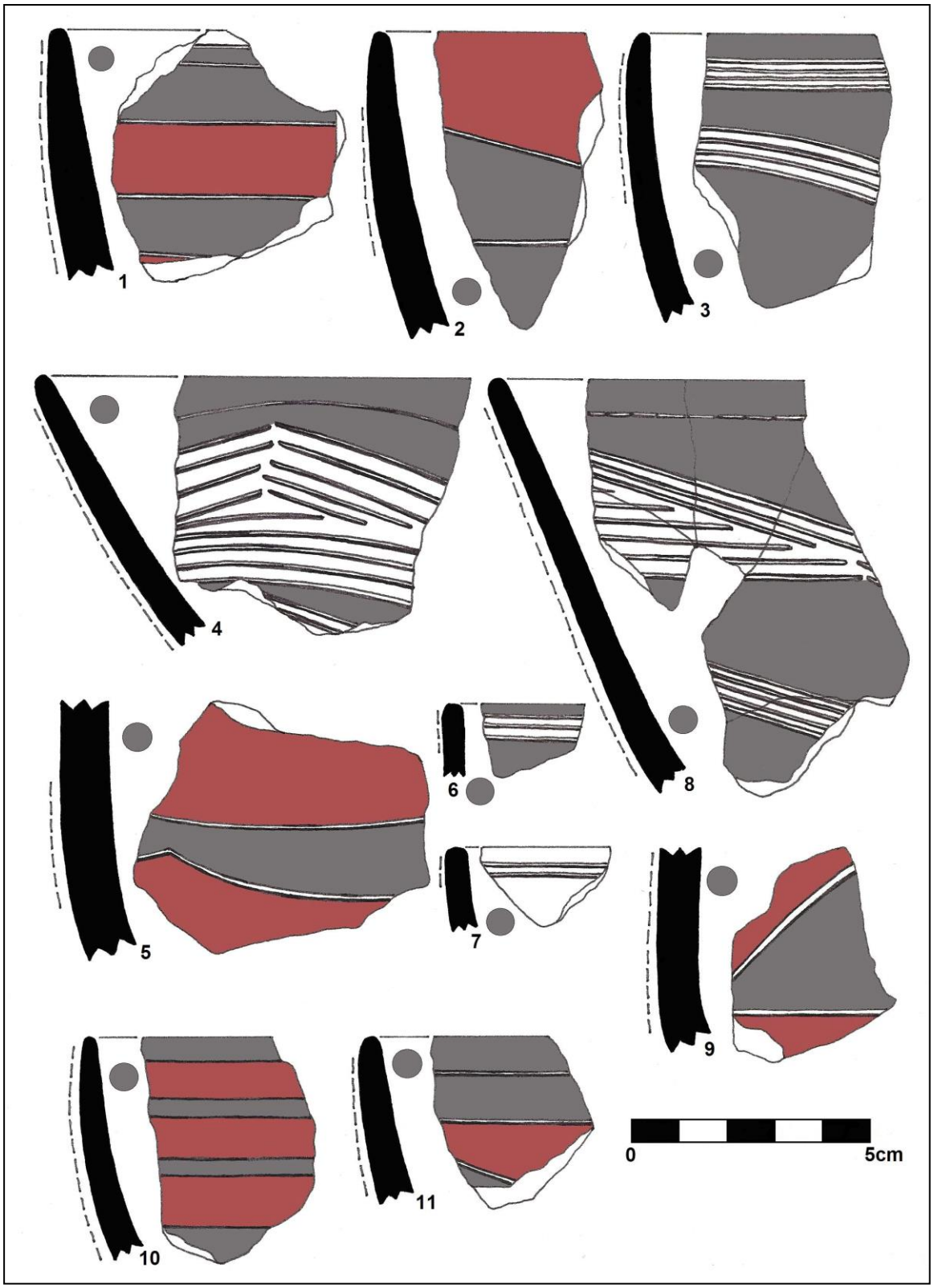

Figure 7.53: *Letsibogo* facies bowl types from Site 37-C1-15: Class 22 (No. 6 & 7), Class 25 (No. 1, 3, 4, 8, 10 & 11) and Class 26 (No. 2, 5 & 9). (Grey dot - graphite colouring on the inside).

CHAPTER 8

THE GRAIN BIN PLATFORM SITES

8.1 Introduction

Late *Moloko* settlements were organised according to the Central Cattle Pattern in which a circle of households and associated structures, such as granaries, were arranged around a central cattle kraal system (Huffman 2007:25). The remains of granaries found in the research area consist of raised *daga*-built (a mixture of mud and dung) containers placed on a support of wooden poles and stones (Moifatswane 1993:85-88; Huffman 2007:8). A granary is constructed by digging a circular trench into which foundation stones are placed (Larsson & Larsson 1984:167). A large flat stone is usually positioned in the centre of this stone circle. Wooden poles placed horizontally across the stone circle form the foundation for a floor. Walls are built on the foundation and sealed at the top with a layer of branches or twigs and *daga*. The grain bin is then roofed with thatch. Openings are left on the side to remove the grain and are closed by wooden shutters or sealed with *daga*. The only archaeological evidence for such a granary will be a circle of stones, often with a central large stone, as the remainder of a platform, and sometimes floor fragments with pole impressions. These grain bin platform bases form a characteristic feature at many archaeological sites in eastern Botswana (Van Waarden 1998:144-146; Huffman 2007:11, Figure 1.17).

Figure 8.1: A Dithakong homestead by Daniell (Bradlow & Bradlow 1979:88).

The Truter-Somerville expedition visited the southernmost Tswana, the Tlhaping, at Dithakong in 1801 (Bradlow & Bradlow 1979). Samuel Daniell, a renowned artist, was a member of the expedition. He sketched some grain bins and a household area at the town of Dithakong (Bradlow & Bradlow 1979:88, see Figure 8.1). Note the stones at the base of the grain bin and the reed-fenced household yards.

The explorer Emil Holub (1881(I):367-374), who visited the Ngwato town of Shoshong in 1874, sketched a homestead with a grain bin in the background, as well as the chief's kraal and *kgotla* (see Figures 8.2 and 8.3; note the reed palisade around the house and the grain bin to the left of the house). Holub (1881(I):374, 391) described the components of a homestead and the *kgotla* as follows: "*The Bamangwato workmanship differs very little from that of all other Bechuana tribes; their huts, though somewhat smaller and more slightly built, are most like those of the Barolongs, but they have larger corn-bins of unbaked clay than any I saw elsewhere...The king's residence, as usual, was built round the kotla ... The place was a circular space enclosed by a fence of strong stakes, the entrance being on the south side, opposite to which was an opening leading to another smaller enclosure, which was the king's cattle-kraal, where his farm stock was kept at night, the horses being accommodated in the kotla itself*."

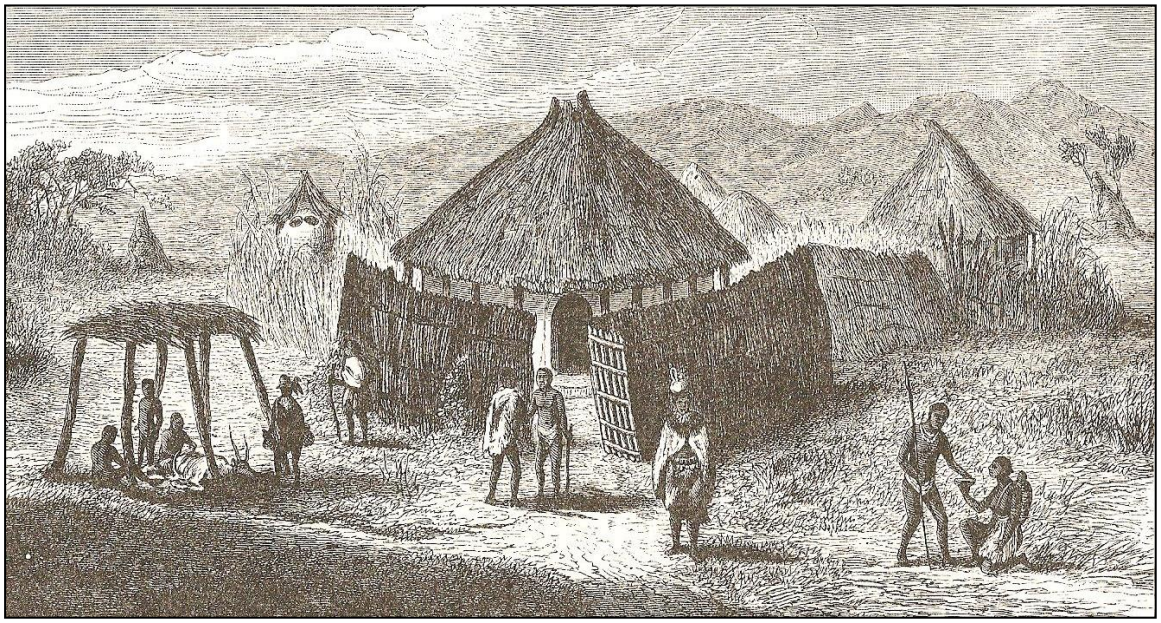

Figure 8.2: A Ngwato homestead by Emil Holub (1881(I):372).

At Basinghall stone is a scarce resource that was not used for walling around kraals and living spaces. These areas were probably enclosed by wooden posts and reeds as described above. The few available stones were used to construct grain bin platform bases and to fashion lower grinding stones, two characteristic features of the grain bin sites at Basinghall.

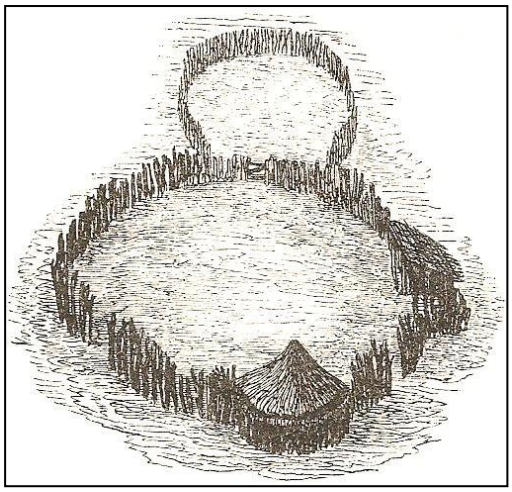

Figure 8.3: The chief's *kgotla* and kraal sketched by Emil Holub (1881(I):374).

Criteria used for the classification of grain bin sites were the size of a settlement, the clustering of grain bin platforms and the presence or absence of lower grinding stones. All grain bin localities were mapped to determine the extent of each site and the clustering of grain bins within a site. Three types of grain bin sites were accordingly identified:

A Larger sites with an extent of more than one hectare with numerous grain bin platforms, sorghum and millet lower grinding stones and mostly undecorated pottery. One or more cattle kraals are characteristic features of this type.

B Smaller sites of less than one hectare with no observable lower grinding stones. A central kraal with clusters of grain bin platforms and undecorated pottery served as characteristic features.

C Grain bin sites of about one hectare in extent associated with glass and other material remains from the historical contact period.

During the survey 43 grain bin sites were recorded at Basinghall. Of these nine were larger grain bin sites that may occupy an area of 3 ha to 15 ha (Type A). They consist of four to five wards arranged around a large central cattle kraal system. Secondly, 25 smaller grain bin sites of less than one hectare in size were recorded that exhibit a central kraal deposit with clusters of grain bin platforms distributed around the kraal (Type B). The three grain bin sites associated with glass and material from the historical contact period comprise Type C.

A diagnostic grain bin site from each category was selected and mapped by GPS followed by a surface collection of decorated ceramics and other cultural material. At one of the large grain bin sites, Site 37-C1-25 (*Makgarapeng*), an exploratory trench was excavated to obtain a representative sample of decorated ceramics and material for radiocarbon dating to establish a settlement chronology. Site 37-A3-10 (*Kgokong*), a small grain bin site, was documented and a surface collection was undertaken. Finally, a site from the historical period, Site 37-C1-35 (*Manoko*), was recorded and a surface collection was made.

8.2 Excavation at the large grain bin Site 37-C1-25

Site name: ***Makgarapeng*** (place of pebbles) **S23°31'05.4" E27°06'24.7"**

Site description

The large grain bin sites are distributed along the floodplain on higher-lying ground close to non-perennial pans. One of these settlements, site *Makgarapeng*, is located on the south-western slope of a limestone ridge in an open clearing that incorporates a few shepherd's (*Boscia albitrunca*) and smelly shepherd's (*Boscia foetida*) trees. Three prominent cattle kraals are marked by grey soils, stands of blue buffalo grass (*Cenchrus ciliaris*) and brittle thorn (*Phaeoptilum spinosum*) bush (Figures 8.4 and 8.5). The closest water source is a non-perennial pan situated ± 500 m to the east of the site. The Limpopo River, the permanent water source, is ± 3 km away.

The settlement covered an area of approximately 4 ha. It measured about 325 m in length and 300 m across, and was divided into four distinct wards each identified by a cluster of grain bin bases (Figure 8.8). The inventory for the site includes 123 grain bin platform bases and 21 lower grinding stones. The main kraal deposit of ± 50 m in diameter is centrally located. It has been highly disturbed through bioturbation. Two smaller undisturbed kraal deposits in close vicinity to the main kraal deposit measure approximately 20 m and 17 m in diameter respectively. No smelting furnaces, hut remains or stone walls have been recorded at the site.

This site was selected for recording in view of the numerous, apparently undisturbed, features. The spatial arrangement of surface features suggests that most of the grain bin base stones and many lower grinding stones are most likely *in situ*. The grain bin base stones are packed in circles of about 1 m to 1.5 m in diameter and some also contain a central stone (Figures 8.6 and 8.7). Several grain bin platforms are grouped in double or multiple clusters. Their alignment suggests that each cluster probably represents the grain bins of a single household.

Figure 8.4: General view of the site.

Figure 8.5: The cattle kraal deposit.

Figure 8.6: A circular grain bin platform.

Figure 8.7: Grain bin platform with a central stone.

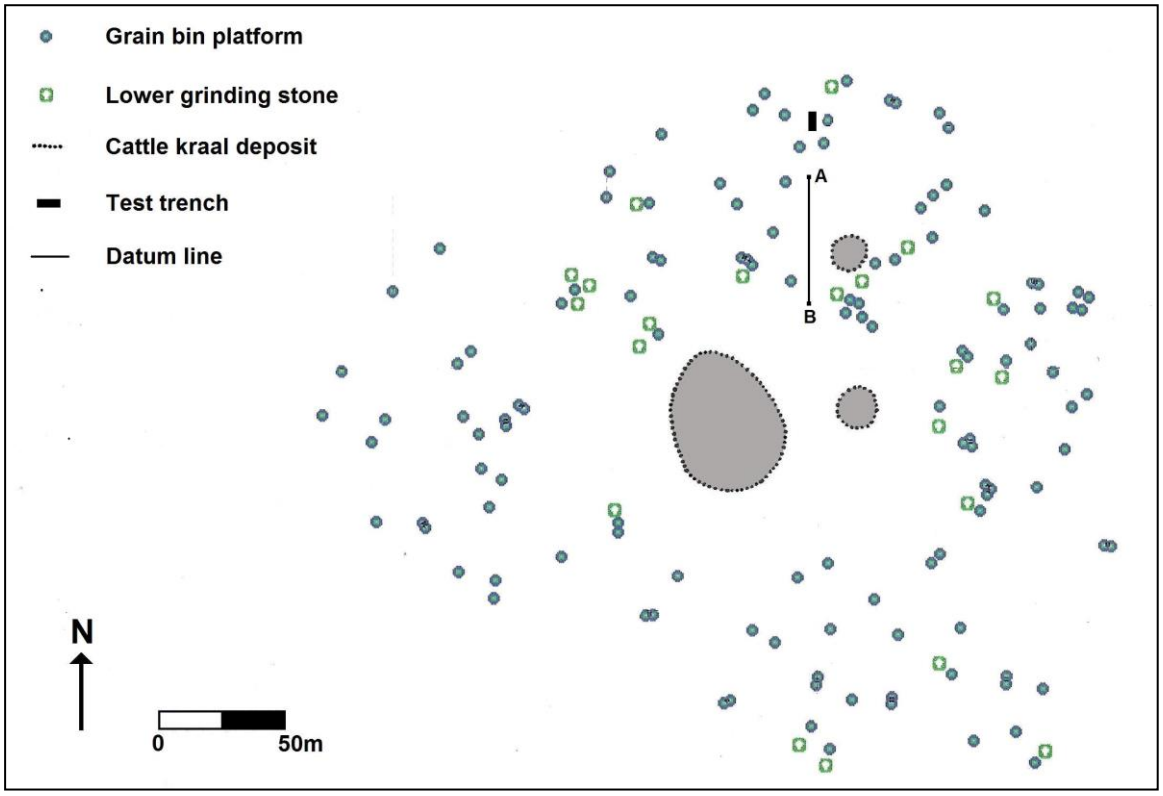

Figure 8.8: Settlement layout of Site 37-C1-25.

Excavation methodology

The grain bin sites in general lack evidence for demarcated middens. A search for midden material yielded an insubstantial midden area on the northern perimeter of the site. A few potsherds and animal bones that had been displaced through bioturbation suggested an underlying midden deposit. This locality was selected for exploratory excavation. A test trench of 3 m² was excavated in October 2004. The excavation progressed in 10 cm spits until sterile soil was reached. The excavated deposits were passed through a 1.5 mm sieve and all cultural material was extracted, sorted and analysed.

The midden deposit

The midden deposit identified on the northern perimeter of the site was investigated by test trench M. The trench was excavated as a 3 m x 1 m block divided into three 1 m x 1 m squares designated A, B and C.

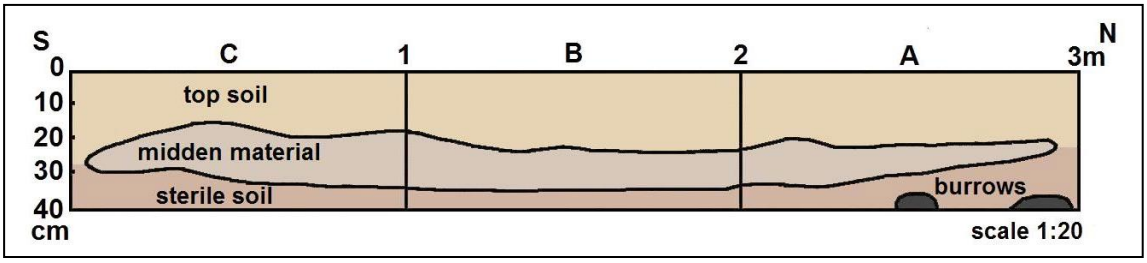

Figure 8.9 The western profile of Trench M.

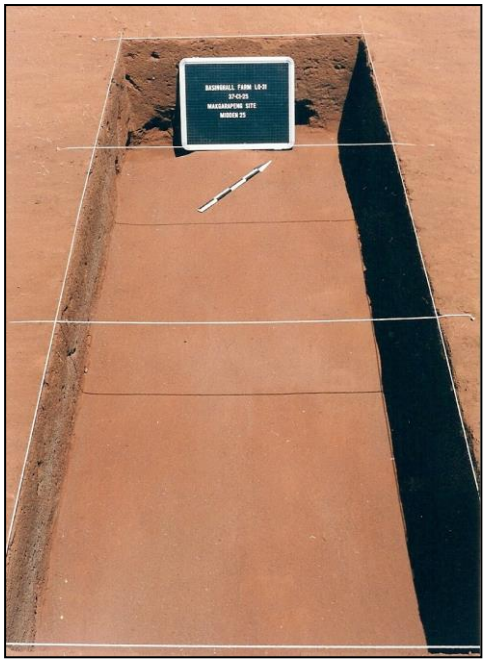

Figure 8.10: Test trench M.

Figure 8.11: View of the western profile of Trench M.

Stratigraphy

The stratigraphy of the midden deposit is presented in a profile drawing (Figure 8.9). Three horizontal subdivisions were identified. The yellow-coloured upper layer of approximately 20 cm followed on a thick grey ashy layer of 15-20 cm. The cultural layer was underlain by sterile sand that was excavated to a depth of 40 cm.

Dating

Charcoal fragments were retrieved from an undisturbed midden layer at a depth of 20-30 cm. A sample of 60 g charcoal was submitted to the Centre for Applied Isotope Studies, University of Georgia, USA. It provided a radiocarbon date of 315 ± 25 years BP (UGAMS

03982), which calibrated to AD 1644 with a 1-sigma range of AD 1637 to AD 1652 (Southern hemisphere INTCAL 1998 adapted).

Cultural material finds

Finds from the surface collection and the test trench excavation yielded a representative sample of cultural material (see Table 8.1). Of the 483 ceramics 441 (91%) sherds were undecorated and 42 (9%) decorated. The decorated potsherds are representative of the *Letsibogo* facies. The faunal sample consists of a total of 21 424 bone fragments, bone flakes and identifiable bones. Analysis of the animal bones lies beyond the scope of this study. The recovered beads consist of 33 glass beads, 12 complete ostrich eggshell (OES) beads, five freshwater mussel shell beads, four bone beads and nine metal beads. Metal objects include copper wire pieces, an iron spear fragment and an iron bangle fragment.

Table 8.1: Cultural material finds from Site 37-C1-25.

Block	Pottery				Bone		Beads					Other finds
	Undec	Dec	Rims	<1cm	UNID	ID	Glass	OES	Shell	Bone	Metal	
A	132	3	15	16	7576	39	6	2	4	1	3Cu	Cu wire
B	140	1	8	32	7326	22	11	4		1	2Cu;1Fe	Spear
C	146	1	8	35	6428	33	16	6	1	2	3Cu	Fe bangle
Surface	23	37	32	-	-	-	-	-	-	-	-	
Total n	**441**	**42**	**63**	**83**	**21 330**	**94**	**33**	**12**	**5**	**4**	**8Cu;1Fe**	

Undec - Undecorated sherds Dec - Decorated sherds Fe - Iron Cu - Copper
OES - Ostrich eggshell UNID - Unidentifiable bones ID - Identifiable bones

Ceramics

The excavated trench yielded a total of 506 potsherds. Sherds smaller than one centimetre in diameter (n = 83, 16%) were not included in the analysis. The remaining 423 (84%) sherds were analysed according to the procedure for the stylistic ceramic analysis outlined in Chapter 2. A summary of the analyses is presented in Table 8.2. The assemblage comprises 31 (7%) rim sherds, 5 (1%) decorated sherds and 418 (99%) undecorated sherds. A total of 5 (1%) highly burnished sherds, 46 (11%) burnished sherds and 372 (88%) unburnished sherds were recovered. The ceramics in the collection are not particularly well made, mostly unburnished and somewhat underfired. Vessel colour ranges from yellow-brown, red-brown to brown with an average vessel thickness of between 5 to 15 mm. The collection yielded 21 sherds that were evidently part of cooking vessels since they are soot-blackened by fire on the outside or have burnt organic remains on the inside.

Table 8.2: Analysis of the excavated ceramic sherds from Site 37-C1-25.

Block	Rim	Dec	Undec	Out R	Out G	In G	Black	HB	B	UB	Total	< 1cm
A	15	3	132	1	1		13	-	19	116	135	16
B	8	1	140	1	1	1	3	-	9	132	141	32
C	8	1	146				5	5	18	124	147	35
Total n	**31**	**5**	**418**	**2**	**2**	**1**	**21**	**5**	**46**	**372**	**423**	**83**
Total %	**7**	**1**	**99**				**5**	**1**	**11**	**88**	**100**	

HB – Highly burnished B – Burnished UB – Unburnished
Out R – Red colour on outside Out G – Graphite colour on outside In G – Graphite colour on inside

Table 8.3: Analysis of the identifiable vessel types from Site 37-C1-25.

Vessel type	Undecorated		Decorated		Total n	Total %
	Ex	Sc	Ex	Sc		
Jars	16	12		2	**30**	**43**
Jar body sherds	1		1	9	**11**	**16**
Constricted jar	4	2		3	**9**	**13**
Constricted jar body sherds				1	**1**	**1**
Bowls	2	2	2	3	**9**	**13**
Bowl body sherds			2	8	**10**	**14**
Total n	**23**	**16**	**5**	**26**	**70**	
Total %	**33**	**23**	**7**	**37**		**100**

Ex – Excavated Sc – Surface collection

The collection yielded 70 identifiable vessel types. Of these 28 (40%) were excavated and 42 (60%) surface-collected sherds. The surface collection comprises decorated and rim sherds only. The vessel types (Table 8.3) include jars (n = 30, 43%) and jar body sherds (sherds with no rims) (n = 11, 16%), constricted jars (n = 9, 13%) and constricted jar body sherds (sherds with no rims) (n = 1, 1%), bowls (n = 9, 13%) and bowl body sherds (n = 10, 14%). Samples of the vessel profiles identified in the collection are depicted in Figure 8.36. These include jars (No. 1-24); constricted jars (No. 25-27) and bowls (No. 28-33). The 31 decorated vessels were stylistically analysed according to the *Letsibogo* facies types outlined in Chapter 2 (examples are shown in Figure 8.12). The decorated vessel classes are illustrated in Figures 8.37 and 8.38 and the classification of the decoration motifs is presented in Table 8.4.

Figure 8.12: Decorated jars (top row); bowls (bottom row).

Letsibogo facies

A total of 35 motifs were employed on the 31 decorated vessels by utilising eight *Letsibogo* facies motif classes as outlined in Chapter 2, Figure 2.19. The dragged punctate line design of Class I A1 (34.2%) is the motif most frequently used, followed by the dragged punctate double line of Class I A2 (20%) and, thirdly, a dragged punctate arcade, Class II B1 (14.3%). Most decorative motifs were executed by a punctate technique with only 8.6% by an incision technique. The punctate technique is thus the dominant decoration technique confirming that the collection is a *Letsibogo* facies assemblage. The assemblage yielded 11 of the possible 26 *Letsibogo* facies classes outlined in Chapter 2, Figures 2.20 and 2.21.

The site is accordingly interpreted as a *Letsibogo* settlement. The *Letsibogo* facies vessel classes include:

Jars (n = 12, 39 %)
Class 1 (type 1a): Figure 8.37 (No. 2)
Class 6 (type 1b 2 3): Figure 8.37 (No. 4)
Class 8 (type 2): Figure 8.37 (No. 7)
Class 9 (type 2 3): Figure 8.37 (No. 9)
Class 11 (type 3): Figure 8.37 (No. 10-12 & 14)
Constricted jars (n = 4, 13 %)
Class 15 (type 1b): Figure 8.37 (No. 6)
Class 18 (type 1b 3): Figure 8.37 (No. 3)
Class 19 (type 3): Figure 8.37 (No. 5, 8 & 13)
Bowls (n = 15, 48%)
Class 22 (type 1b): Figure 8.38 (No. 3, 4 & 5)
Class 25 (type 1b 4): Figure 8.38 (No. 1 & 2)
Class 26 (type 4): Figure 8.38 (No. 6-14)

The collection contains 14 vessels coloured with red ochre on the outside, 21 vessels with graphite on the outside and 15 vessels with graphite on the inside.

Table 8.4: Analysis of the *Letsibogo* motif classes in the collection.

Class	**1**	**6**	**8**	**9**	**11**	**15**	**18**	**19**	**22**	**25**	**26**	**Total**	**Total**
Profile	**J**	**J**	**J**	**J**	**J**	**CJ**	**CJ**	**CJ**	**B**	**B**	**B**	**n**	**%**
Layout	**1a**	**1b23**	**2**	**23**	**3**	**1b**	**1b3**	**3**	**1b**	**1b4**	**4**		
I A1			1	1				1	2	2	5	**12**	**34.2**
I A2			1			1	1		1	1	2	**7**	**20.0**
I A3							1				2	**3**	**8.6**
I B1		1									1	**2**	**5.7**
I B2		1						1				**2**	**5.7**
I E1					1					1	1	**3**	**8.6**
I H3	1											**1**	**2.9**
II B1				1	2						2	**5**	**14.3**
Total n	**1**	**2**	**2**	**2**	**3**	**1**	**2**	**2**	**3**	**4**	**13**	**35**	
Total%	**2.9**	**5.7**	**5.7**	**5.7**	**8.6**	**2.9**	**5.7**	**5.7**	**8.6**	**11.4**	**37.1**		**100**
Out R		1	1	1	3			2		1	5	**14**	
Out G		1	1	1	4	1	1	2	2	1	7	**21**	
In G						1	1	2	2	2	7	**15**	

J – Jar CJ – Constricted Jar B – Bowl
Out R – Red outside Out G – Graphite outside In G – Graphite inside

Beads

A total of 63 beads were recovered. These were fashioned from OES (n = 12), freshwater mussel shell (n = 5), bone (n = 4) and metal (n = 9). A total of 33 Khami Indo-Pacific series glass trade beads were also identified. The glass beads exhibit a range of colours (Figure 8.13). Imported Khami Indo-Pacific series beads are found at inland southern Africa sites and on the east African coast from the early 15th century onwards up to the end of the 17th century (Wood 2011:77). They are mostly short and irregular-shaped cylinder beads. Information on the type, shape, diaphaneity and diameter of the beads is given in Table 8.5.

Table 8.5: Glass beads recovered from Site 37-C1-25.

Series	Colour	Diaphaneity	Shape	Length ratio	Size < 2.5	Size 2.5-3.5	Size 3.5-4.5	Size 4.5-5.5	Total n
Khami Indo-Pacific	Oyster white	Translucent	Cylinder	Short			1		**1**
Khami Indo-Pacific	Yellow	Translucent	Cylinder	Short				3	**3**
Khami Indo-Pacific	Yellow	Translucent	Oblate	Short	1				**1**
Khami Indo-Pacific	Lime yellow	Translucent	Cylinder	Short		1			**1**
Khami Indo-Pacific	Green	Translucent	Cylinder	Standard				1	**1**
Khami Indo-Pacific	Green-blue	Translucent	Cylinder	Short			1		**1**
Khami Indo-Pacific	Light blue	Translucent	Cylinder	Short		4	3		**7**
Khami Indo-Pacific	Dark blue	Translucent	Cylinder	Short		5	2		**7**
Khami Indo-Pacific	Dark blue	Translucent	Cylinder	Standard		1	1		**2**
Khami Indo-Pacific	Red brown	Opaque	Cylinder	Short		3	3		**6**
Khami Indo-Pacific	Red brown	Opaque	Cylinder	Standard		2			**2**
Khami Indo-Pacific	Black	Opaque	Cylinder	Short			1		**1**
Total n					**1**	**16**	**12**	**4**	**33**

Figure 8.13: Glass beads recovered from the excavations.

The 12 OES beads comprise nine complete and three broken beads. Bead sizes range from 4-9 mm in diameter with two beads that were blackened (Figure 8.14). Two beads are ochre stained, which probably resulted from the use of ochre pigments as body decoration. The bead sample also contains five beads produced on freshwater mussel. Bead details and sizes are presented in Table 8.6.

Table 8.6: OES and shell beads recovered from the excavations.

Size mm	3-3.9	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	Total n
Complete		1	2	1	1	3	8
Complete blackened			1				1
Broken		1	1				2
Broken blackened					1		1
Fresh water mussel	2		1	1		1	5
Total n	**2**	**2**	**5**	**2**	**2**	**4**	**17**

Figure 8.14: Ostrich eggshell beads (1-11); freshwater mussel shell beads (12-16). Beads 1 & 2 are ochre stained and beads 6 & 8 are blackened.

The 13 unfinished OES bead fragments that have been recovered (see Figure 8.15) can be grouped into four production stages: Stage 1 is represented by prepared irregular discs/blanks; stage 2 as the drilling of the central perforation; during stage 3 the edges of perforated blanks were chipped to create a roughly circular form with the discarded waste

as chips of 2-4 mm in diameter; and stage 4 as the rounding of edges in a grooved stone to produce a final product of finished beads.

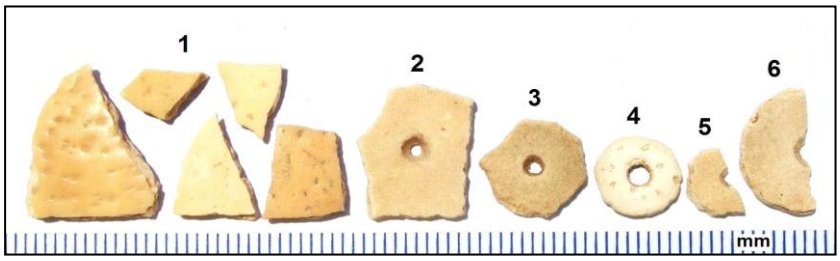

Figure 8.15: The production stages of OES beads: stage 1 (1), stage 2 (2), stage 3 (3) and stage 4 (4-6).

In addition, four bone beads respectively 21, 22, 23 and 12 mm in length were recovered (Figure 8.16). The three longer beads were made from a long-bone shaft of a small animal and heat treated whereas the shorter bead has a softer bone texture.

Figure 8.16: Bone beads recovered from the excavation.

Metal artefacts

The worked iron objects include an iron spear fragment (Figure 8.17), a bead (5.5 mm in diameter) and a coiled bangle fragment (4 mm in diameter) (Figure 8.18). The worked copper objects (Figure 8.18) include pieces of intertwined copper wire and eight beads (2.5-4.5 mm in diameter). No evidence for metal-working activities at the settlement was found.

Figure 8.17: Iron spear fragment.

Figure 8.18: Metal artefacts: copper wire (1), copper beads (2-8), iron bead (9) and a coiled iron bangle (10).

Worked stone

A total number of 21 lower grinding stones were recorded as surface finds. The majority of these are probably *in situ* as they occur close to grain bin platforms where they would have been used to process cereals (see Figure 8.6 and 8.8). The grinding stones exhibit deep oval-shaped hollows and were probably applied in grinding sorghum or millet. They differ from the lower grinding stones with shallow pitted hollows for grinding maize identified at a 17th-century *Madikwe* facies site near Thabazimbi, Limpopo Province, which lies 100 km south of Basinghall (Huffman 2006:67). The ceramic collection at the Thabazimbi site also includes vessels decorated with *Letsibogo* motifs (Huffman 2006:55).

Figure 8.19: *In situ* lower grinding stone.

Figure 8.20: *In situ* lower grinding stone.

8.3 Investigations at a small grain bin Site 37-A3-10

Site name: *Kgokong* (blue wildebeest) **S23°29'39.9" E27°06'49.8"**

Site description

Small sites of less than one hectare are the most numerous grain bin settlement type at Basinghall. They are located on higher-lying ground around the floodplain. One of these sites, *Kgokong*, is situated on the edge of a grassy plain where an open clearing with a few umbrella thorn trees (*Acacia tortilis*) reveals its presence (Figures 8.21 and 8.22).

The settlement measures about 100 m in diameter and covers an area of approximately 0.8 ha. A central cattle kraal deposit of ± 30 m in diameter is marked by grey-coloured soil. It has been greatly disturbed through bioturbation. A total of 21 grain bin platform bases and one lower grinding stone were recorded (Figure 8.23). The base stones are packed as circles of about 1 m to 1.5 m in diameter and some contain a central stone (see Figures 8.24 and 8.25). The platforms are grouped into six clusters (see Figure 8.23). Each cluster probably represents the grain bins of a single household. No hut remains or stone walls were observed.

Figure 8.21: General view of the site.

Figure 8.22: The cattle kraal deposit.

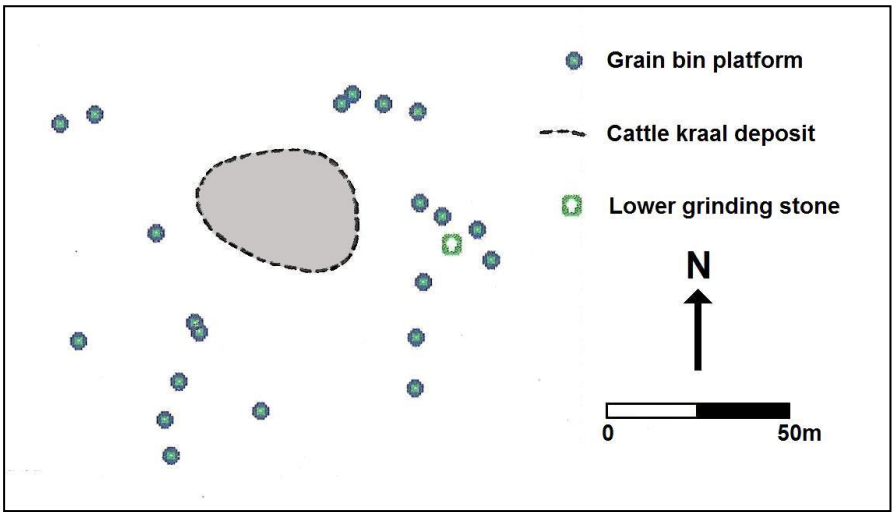

Figure 8.23: Settlement layout of Site 37-A3-10.

Figure 8.24: Grain bin platform 1.5 m in diameter.

Figure 8.25: Grain bin platform 1.0 m in diameter.

Cultural material finds

The surface collection concentrated mainly on obtaining rim sherds and decorated ceramics for the purpose of a ceramic analysis.

Ceramics

The surface collection yielded seven identifiable vessels (Figure 8.26). The vessels included five undecorated jar sherds and two undecorated bowl sherds. A tool made from a vessel fragment with an abraded area in the form of a flattened arc produced by scraping or moulding tasks was also collected (Figure 8.26 No.6). This type of site generally contains low frequencies of cultural material as demonstrated by an entire lack of decorated vessels in the surface collection.

Figure 8.26: Undecorated jars (1-5); undecorated bowls (7 & 8); abraded potsherd (6).

8.4 Investigations at grain bin Site 37-C1-35

Site name: ***Manoko*** (peanuts) **S23°31'03.7" E27°07'06.8"**

Site description

Three grain bin sites, each about one hectare in extent, associated with glass and other material of the historical contact period were identified during the survey. One of these sites, *Manoko*, is situated on a rise at the edge of the floodplain. It is divided by a farm road and a fence with the south-western part positioned in an agricultural field. Cultivation activities have exposed ceramics and objects from the historical period.

The site, which measures about 100 m across, contains two cattle kraal deposits of approximately 20 m and 30 m in diameter respectively (Figures 8.29). The kraal deposits can be recognised by the white-grey colour of the dung deposit as well as a few brittle thorn shrubs (*Phaeoptilum spinosum*) (Figures 8.27 and 8.28). Dung accumulations eventually transform into a white, crumbly deposit and often signal the presence of an abandoned kraal

(Huffman 2007:8). This phenomenon was particularly useful in locating settlements at Basinghall. In the undisturbed north-eastern part of the site seven grain bin platforms and a lower grinding stone were identified (Figures 8.30 and 8.31). The south-western half of the site is extensively disturbed by the development of an agricultural field and a farm road. The only indication that the site extends to this part is the grey discolouration of the soil from the second kraal deposit and some surface finds around the kraal area (Figure 8.29).

Figure 8.27: General view of the site.

Figure 8.28: The cattle kraal deposit.

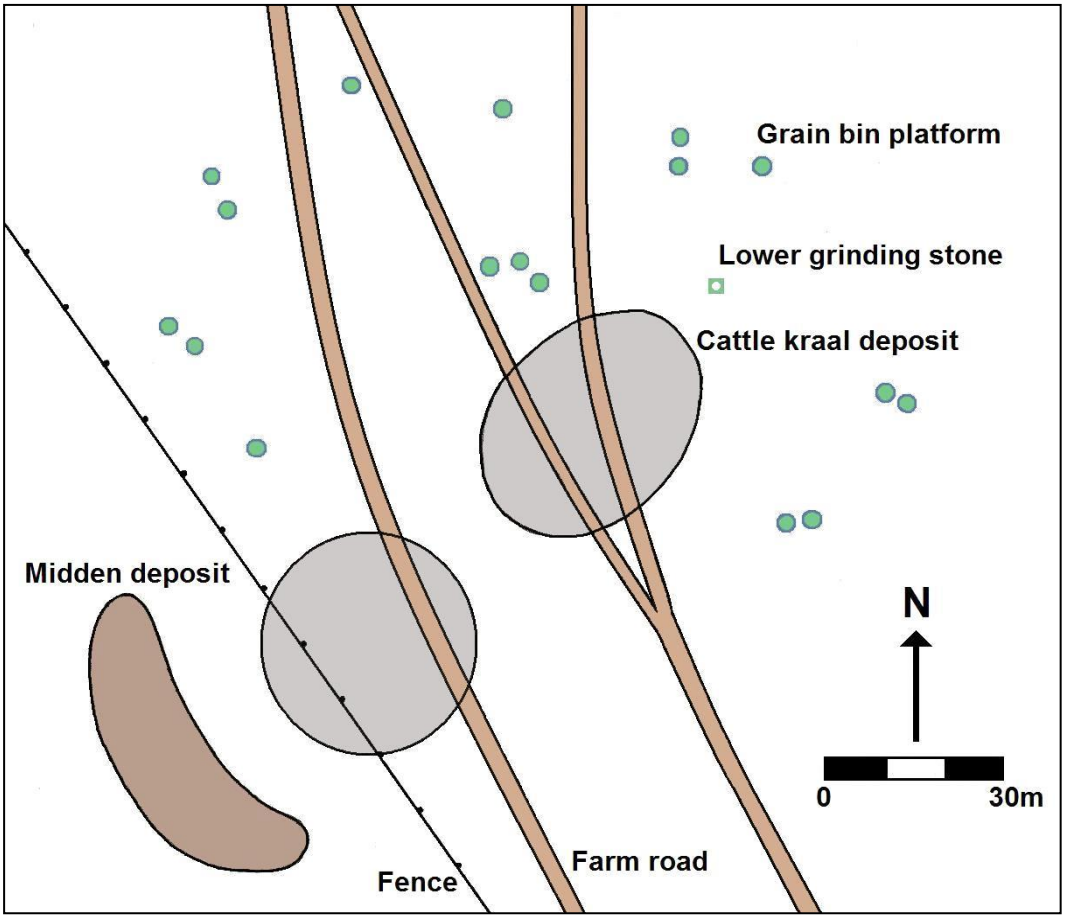

Figure 8.29: Settlement layout of Site 37-C1-35.

Figure 8.30: Larger grain bin platform.

Figure 8.31: Grain bin platform with a central stone.

Cultural material finds

The aim of the surface collection was mainly to obtain rim sherds and decorated ceramics for the purpose of a ceramic analysis and also to collect artefacts from the historical contact period.

Ceramics

The surface collection yielded a total of 104 identifiable vessels (Table 8.7). The vessels included 36 jars, 15 jar body sherds, 21 constricted jars, 22 bowls and 10 bowl body sherds. Samples of the vessel profiles identified in the collection are depicted in Figure 8.39. These include jars (No. 1-22), constricted jars (No. 23-33) and bowls (No. 34-43). The decorated ceramics in the collection show characteristics of the *Letsibogo* facies (Figure 8.32). The 40 decorated vessels were stylistically analysed using the *Letsibogo* and Early *Moloko* facies motif charts (Chapter 2, Figures 2.15 and 2.19). A sample of decorated vessel classes are illustrated in Figures 8.40-8.42.

Figure 8.32: Decorated vessels from Site 37-C1-35.

Table 8.7: Analysis of the identifiable vessel types from Site 37-C1-35.

Vessel type	Undecorated	Decorated	Total n	Total %
Jars	33	3	**36**	**35**
Jar body sherds		15	**15**	**14**
Constricted jars	16	5	**21**	**20**
Bowls	15	7	**22**	**21**
Bowl body sherds		10	**10**	**10**
Total n	**64**	**40**	**104**	
Total %	**62**	**38**		**100**

Letsibogo

A total of 55 motifs were employed on the 40 decorated vessels by utilising 16 *Letsibogo* facies motif classes as outlined in Chapter 2, Figure 2.19, and three Early *Moloko* facies motif classes as outlined in Figure 2.15. The dragged punctate double line design of Class I A2 (14.5%) is the motif most frequently used, followed by the incised triangle design of Class II C1 (12.7%). The punctate technique is the main decoration technique (70%), which confirms that the collection is predominantly a *Letsibogo* assemblage. Only 30% of motifs were executed with an incision decoration technique, which is a typical trend for a Late *Moloko* facies such as *Buispoort* (Huffman 2007:203-205). The assemblage yielded 12 of the possible 26 *Letsibogo* facies classes outlined in Chapter 2, Figures 2.20 and 2.21. The main occupation at *Manoko* is accordingly interpreted as a *Letsibogo* settlement.

The *Letsibogo* facies classes include:

Jars (n = 18)
Class 1 (type 1a): Figure 8.40 (No. 2)
Class 4 (type 1b 2): Figure 8.40 (No. 1)
Class 6 (type 1b 2 3): Figure 8.40 (No. 3)
Class 8 (type 2): Figure 8.40 (No. 5)
Class 9 (type 2 3): Figure 8.40 (No. 4, 6, 7 & 9)
Class 11 (type 3): Figure 8.40 (No. 8, 10-14)
Constricted jars (n = 5)
Class 13 (type 1a): Figure 8.41 (No. 3)
Class 14 (type 1ab): Figure 8.41 (No. 2, 4, & 5)
Class 15 (type 1b): Figure 8.41 (No. 1)
Bowls (n = 17)
Class 22 (type 1b): Figure 8.42 (No. 3, 4, 7 & 11)
Class 25 (type 1b 4): Figure 8.42 (No. 1 & 2)
Class 26 (type 4): Figure 8.41 (No. 6-13) and Figure 8.42 (No. 5, 6, 8, 9, 10, 12 & 13)

The collection contains 12 vessels coloured with red ochre on the outside, 19 vessels coloured with graphite on the outside and 11 vessels coloured with graphite on the inside.

Table 8.8: Analysis of the *Letsibogo* motif classes in the collection.

Class	**1**	**4**	**6**	**8**	**9**	**11**	**13**	**14**	**15**	**22**	**25**	**26**	**Total**	**Total**
Profile	**J**	**J**	**J**	**J**	**J**	**J**	**CJ**	**CJ**	**CJ**	**B**	**B**	**B**	**n**	**%**
Layout	**1a**	**1b2**	**1b23**	**2**	**23**	**3**	**1a**	**1ab**	**1b**	**1b**	**1b4**	**4**		
I A1		1				1		1	2		1		**6**	**10.9**
I A2		1		1	1				1		2	2	**8**	**14.5**
I A4					3	1							**4**	**7.3**
I B3			1			1							**2**	**3.6**
I C1									1	1		1	**3**	**5.5**
I C2												2	**2**	**3.6**
I C3									1				**1**	**1.8**
I F1						2							**2**	**3.6**
I F2					1	1					1		**3**	**5.5**
I F3					1								**1**	**1.8**
I H1	1						1	1					**3**	**5.5**
II A1					1								**1**	**1.8**
II A2												3	**3**	**5.5**
II B1			1		1								**2**	**3.6**
II B2											1		**1**	**1.8**
II C1					3	3					1		**7**	**12.7**
*I C2										1			**1**	**1.8**
*I D2										3		1	**4**	**7.3**
*III C1						1							**1**	**1.8**
Total n	**1**	**2**	**2**	**1**	**11**	**10**	**1**	**2**	**5**	**5**	**6**	**9**	**55**	
Total%	**1.8**	**3.6**	**3.6**	**1.8**	**20.0**	**18.2**	**1.8**	**3.6**	**9.1**	**9.1**	**10.9**	**16.4**		**100**
Out R					4	2					2	4	**12**	
Out G		1			3	2			1	4	2	6	**19**	
In G									1	2	2	6	**11**	

J – Jar CJ – Constricted Jar B – Bowl
Out R – Red outside Out G – Graphite outside In G – Graphite inside
* – motif from Figure 2.15

Historical objects

Artefacts from the historical contact period collected during the survey consist of metal objects, glass bottle fragments and European ceramics. The metal artefacts include the remains of a bully beef tin similar to those used by English soldiers at around AD 1900, a wagon part, a boot buckle and a fragment of a three-legged cast iron cooking pot.

The glass bottle fragments include alcohol bottles, a castor oil bottle and a medicine bottle (Lastovica & Lastovica 1982:33-47). The European ceramics comprise fragments of an industrial slipware cup, a white ware plate and a glazed stoneware bottle (Klose 2007:125, 156, 157). A sherd from a painted glass bowl was also collected.

Figure 8.33: Metal objects collected during the survey.

Figure 8.34: Glass bottle fragments.

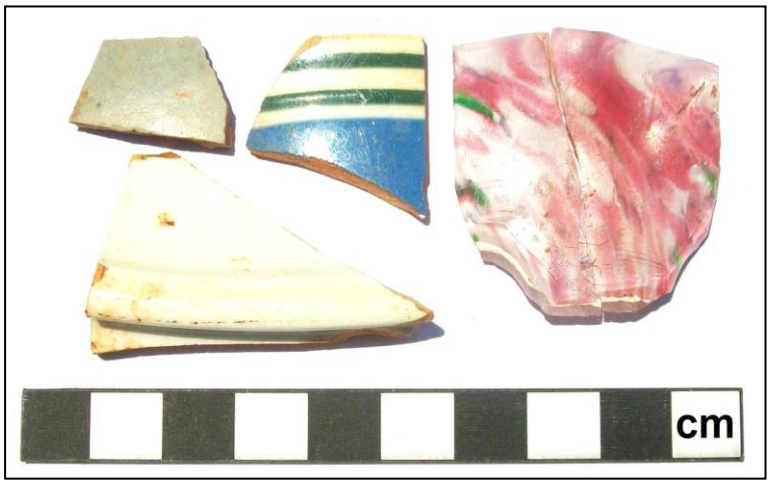

Figure 8.35: European ceramic fragments and a glass bowl fragment.

8.5 Conclusion

Late *Moloko* people lived in villages that consisted of cattle kraals surrounded by houses and granaries. The only archaeological remains of their settlements that are usually found include granary bases which consist of packed stone circles. The spatial patterning of grain bin platforms can be used to demarcate the extent of a settlement. The 43 grain bin platform sites recorded at Basinghall were grouped into three types: Type A comprises large grain bin platform sites, Type B represents the more numerous small grain bin platform sites, while Type C grain bin sites are associated with the historical period. A representative site from each category was selected for more intensive investigation, which included mapping, exploratory trenching and the surface collection of archaeological remains.

Site 37-C1-25 (*Makgarapeng*) was selected as a diagnostic example of a large grain bin site. Excavations in a midden recovered sufficient cultural material to confirm that the site is indeed a 17th-century settlement. The relative quantities of cultural material recovered from the excavation suggest a period of occupation of more than 20 years. The sample of decorated ceramics indicates that this was a *Letsibogo* settlement.

Smaller grain bin sites are more abundant at Basinghall. Each site of this settlement type contains the dung deposit of a single cattle kraal with an arc of grain bin platforms around the perimeter. All Type B sites exhibit markedly low densities of cultural material. A surface collection at one of the settlements, Site 37-A3-10 (*Kgokong*), yielded a small sample of undecorated ceramics. These were probably small cattle posts that were briefly or intermittently occupied.

A diagnostic site from the third category, namely Site 37-C1-35 (*Manoko*), is associated with glass and material from the historical period when there was increasingly interactive contact between African farmers and European settlers. The decorated African farmer ceramics from the surface collection are characterised by punctate and incised bands, triangles and arcades that can be assigned to *Letsibogo* facies decoration designs. The small sample of indigenous ceramics and objects of European origin suggest a cattle post with a brief occupation history.

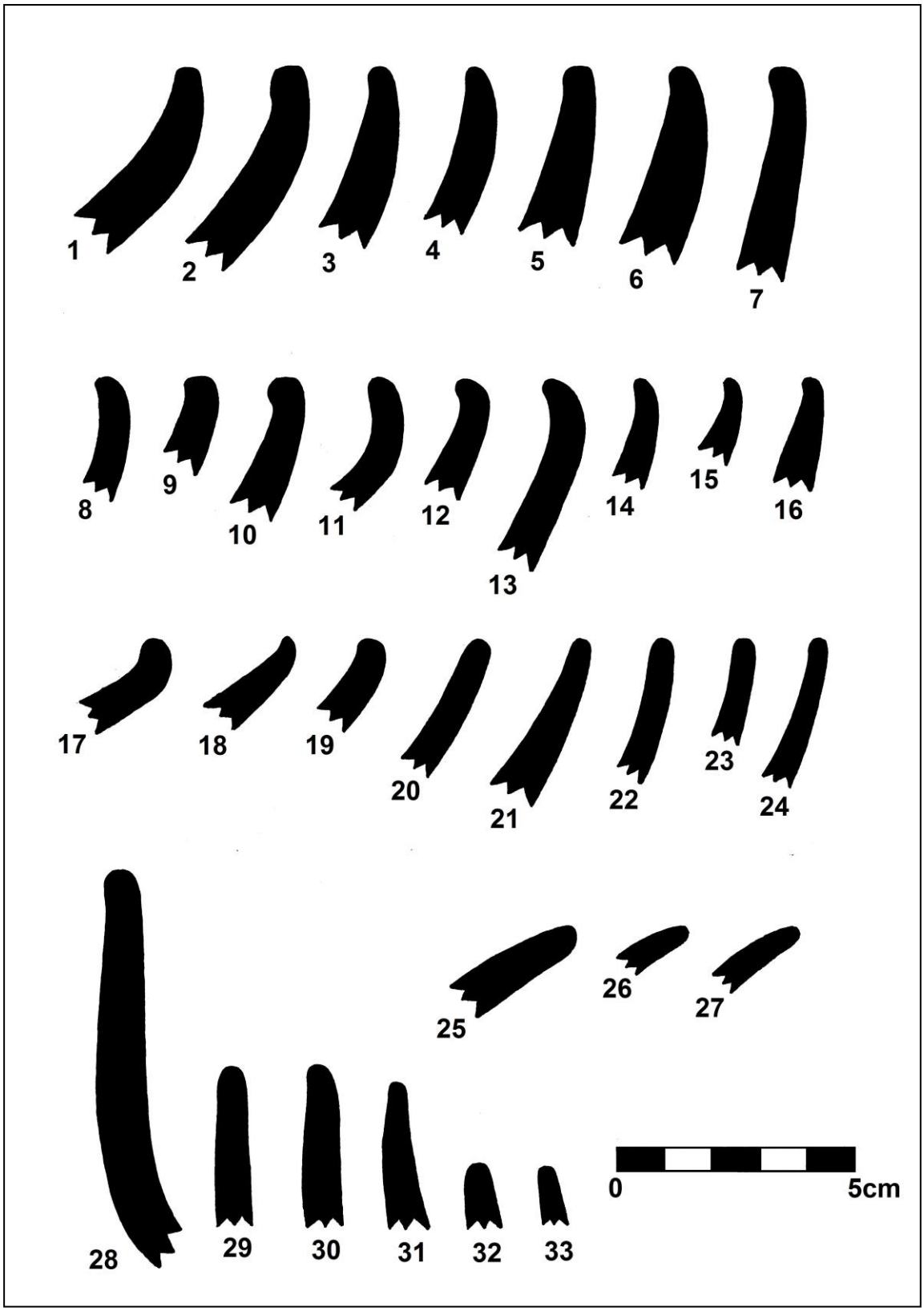

Figure 8.36: Vessel profiles from Site 37-C1-25: jars (No. 1-24), constricted jars (No. 25-27) and bowls (No. 28-33).

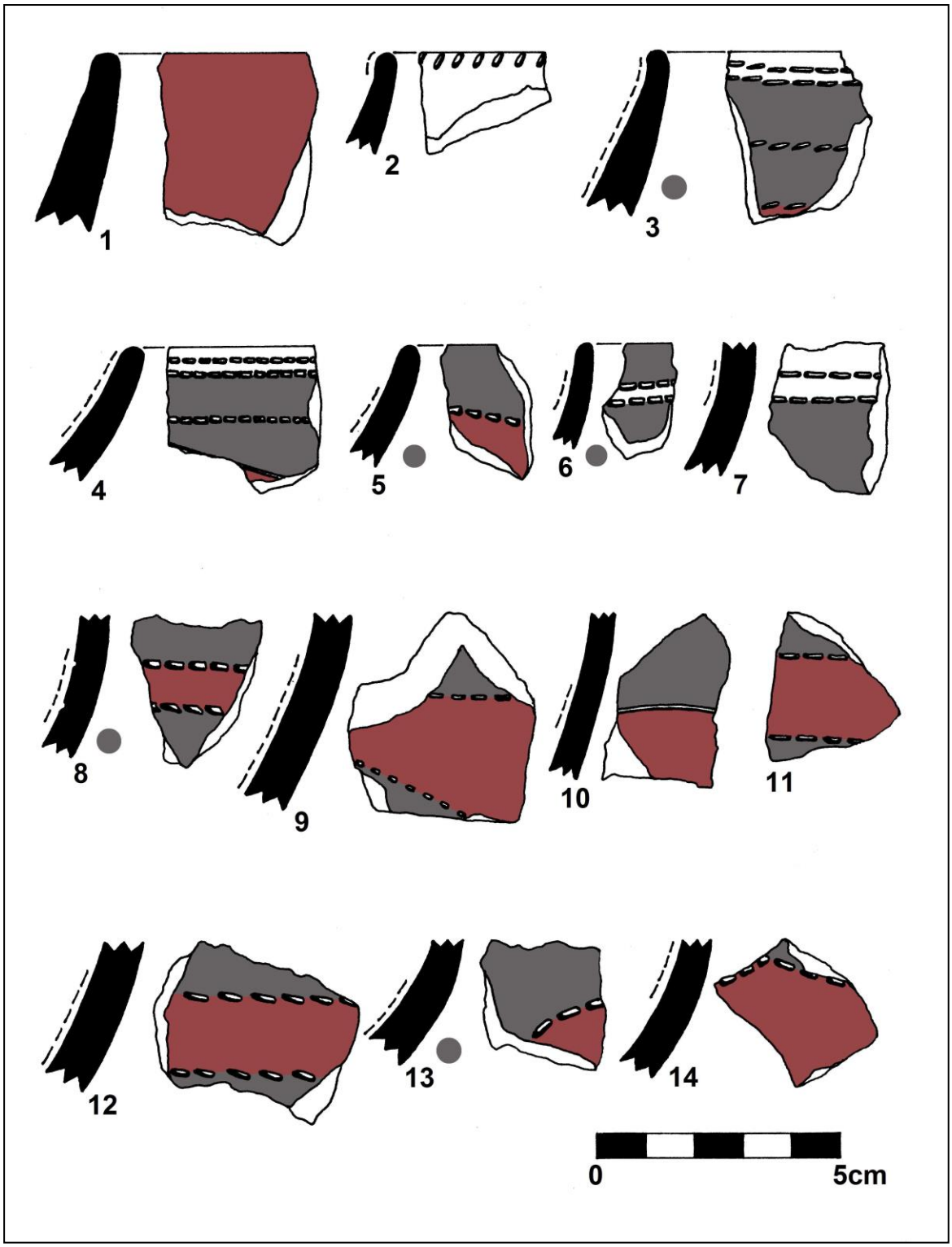

Figure 8.37: *Letsibogo* facies jar types from Site 37-C1-25: Class 1 (No.2), Class 6 (No. 4), Class 8 (No. 7), Class 9 (No. 9), Class 11 (No. 10-12 & 14) and constricted jar types identified: Class 15 (No. 6), Class 18 (No. 3) and Class 19 (No. 5, 8 & 13). Sherd No.1 is not decorated but is coloured with ochre.

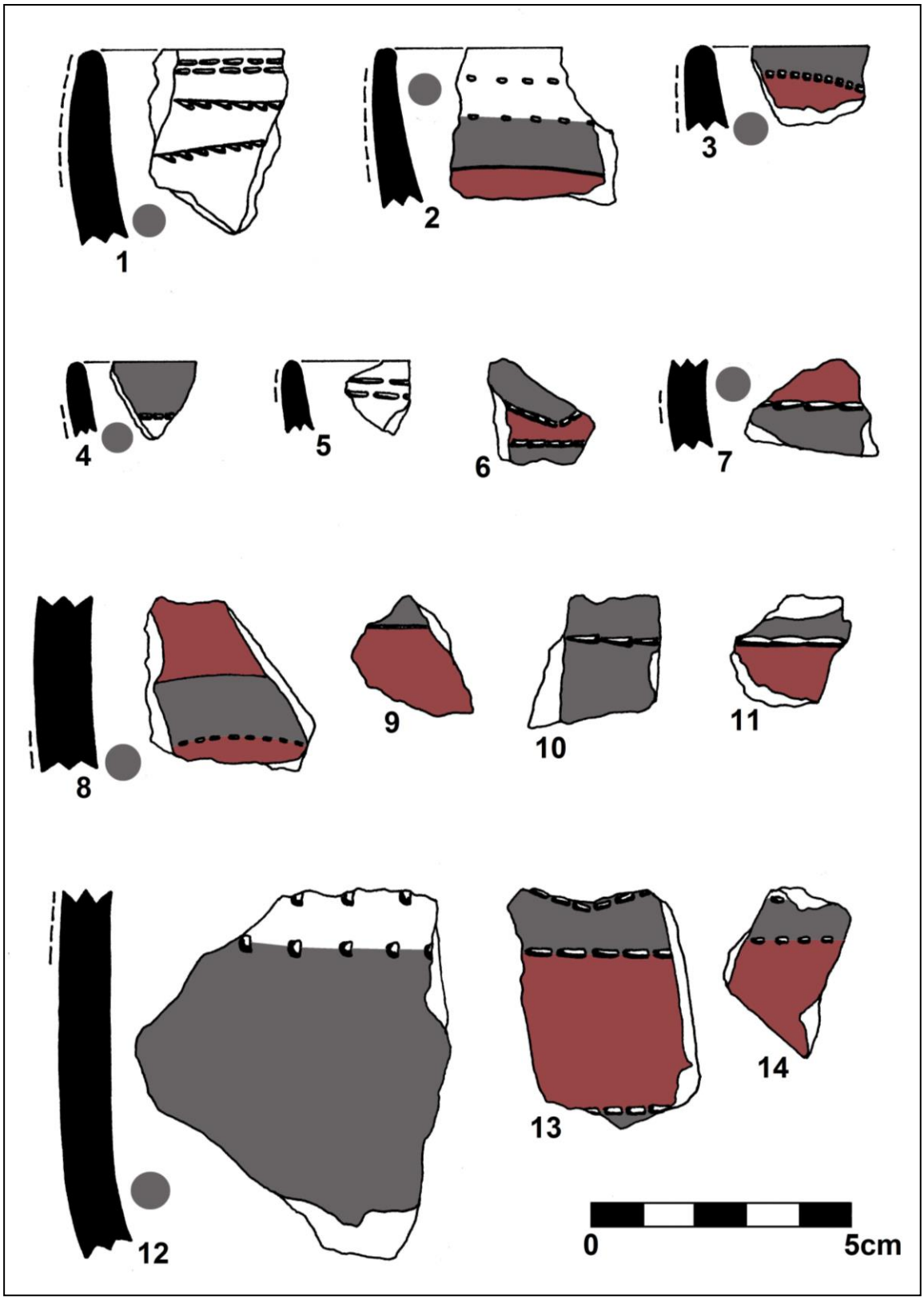

Figure 8.38: *Letsibogo* facies bowl types from Site 37-C1-25: Class 22 (No.3, 4 & 5), Class 25 (No. 1 & 2) and Class 26 (No. 6-14).

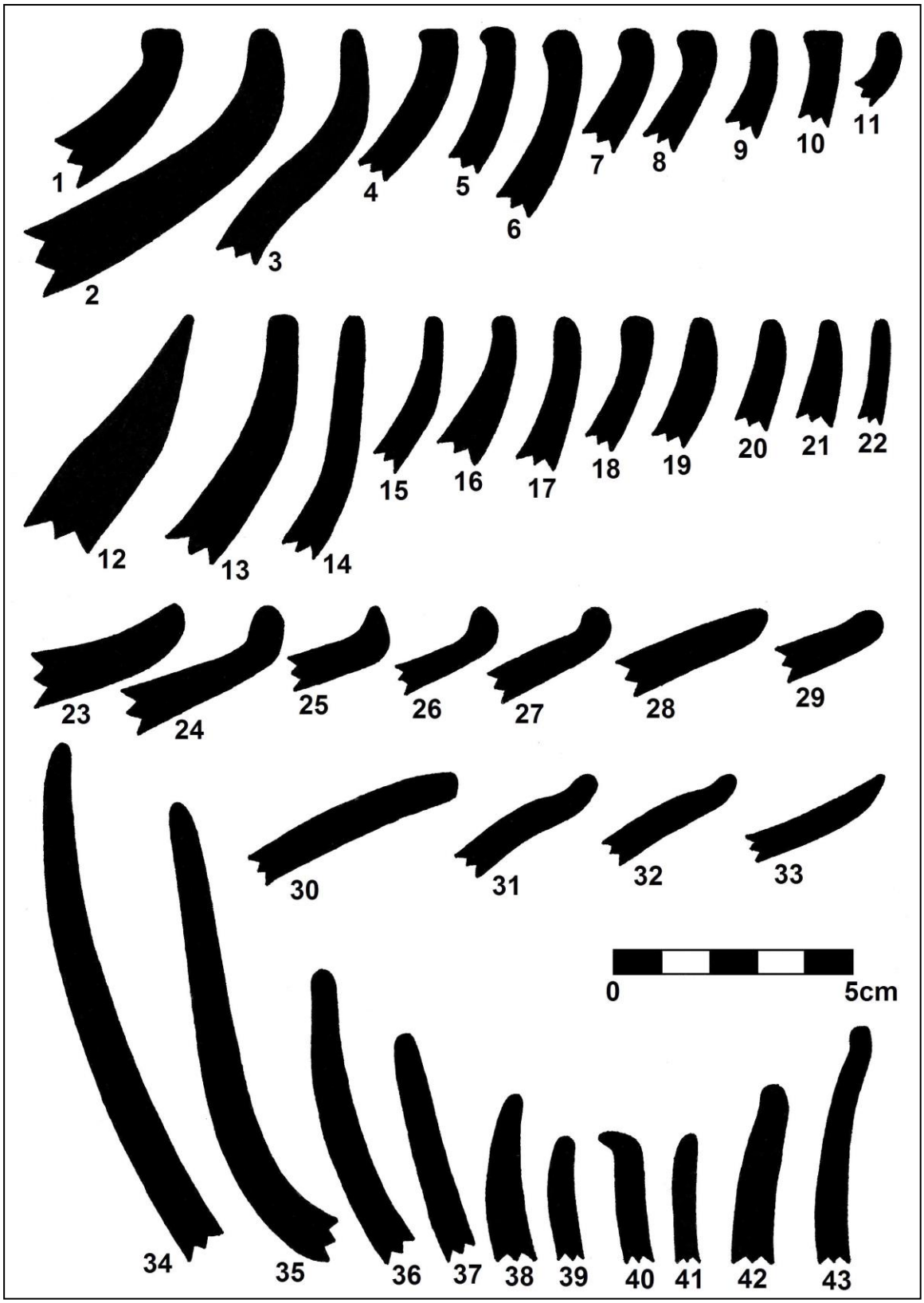

Figure 8.39: Vessel profiles from Site 37-C1-35: jars (No. 1-22), constricted jars (No. 23-33) and bowls (No. 34-43).

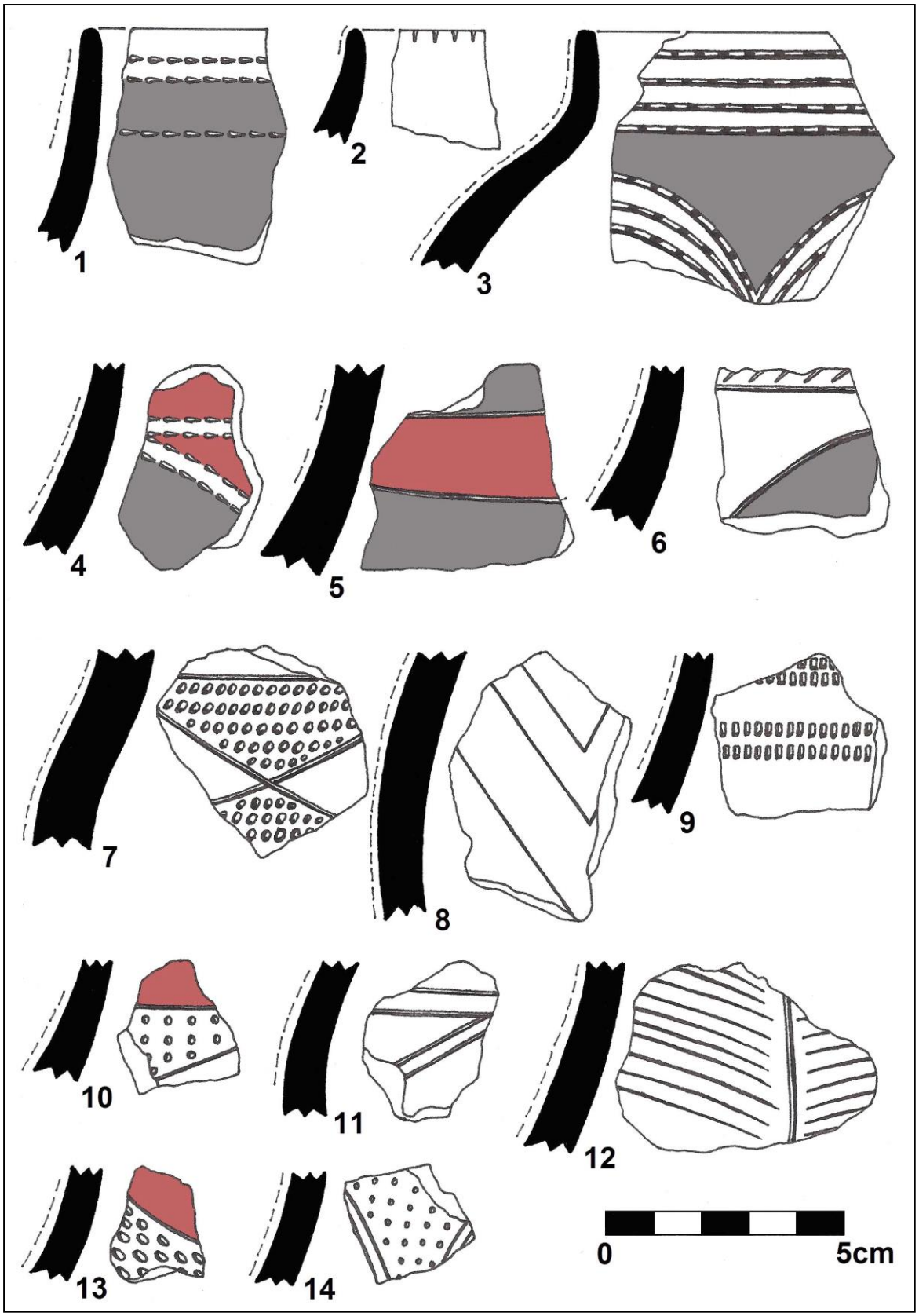

Figure 8.40: *Letsibogo* facies vessel types from Site 37-C1-35: Class 1 (No.2), Class 4 (No. 1), Class 6 (No. 3), Class 8 (No. 5), Class 9 (No. 4, 6, 7 & 9) and Class 11 (No. 8, 10-14).

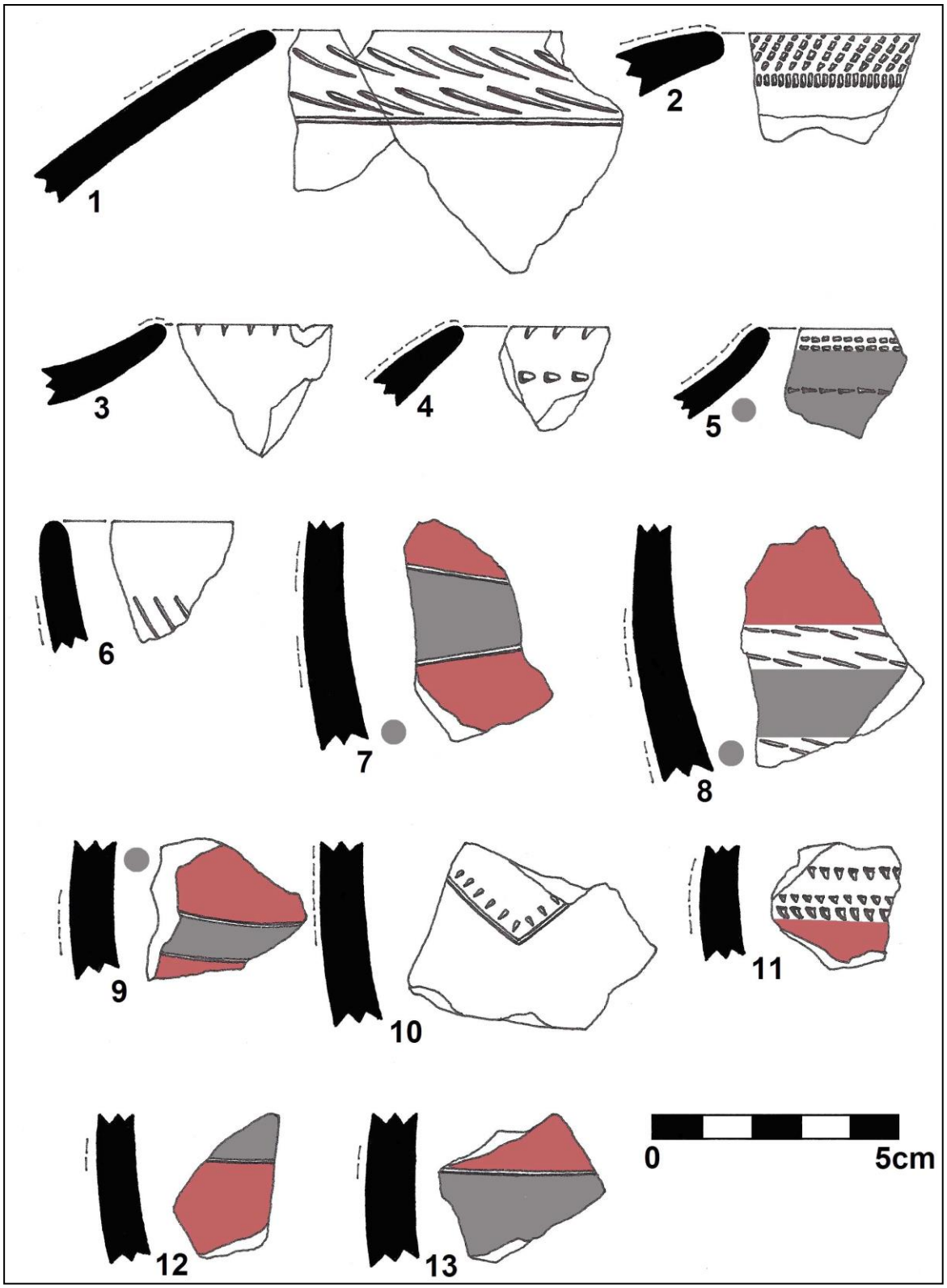

Figure 8.41: *Letsibogo* facies constricted jar types from Site 37-C1-35: Class 13 (No. 3), Class 14 (No. 2, 4 & 5), Class 15 (No. 1) and Class 26 (No. 6-13).

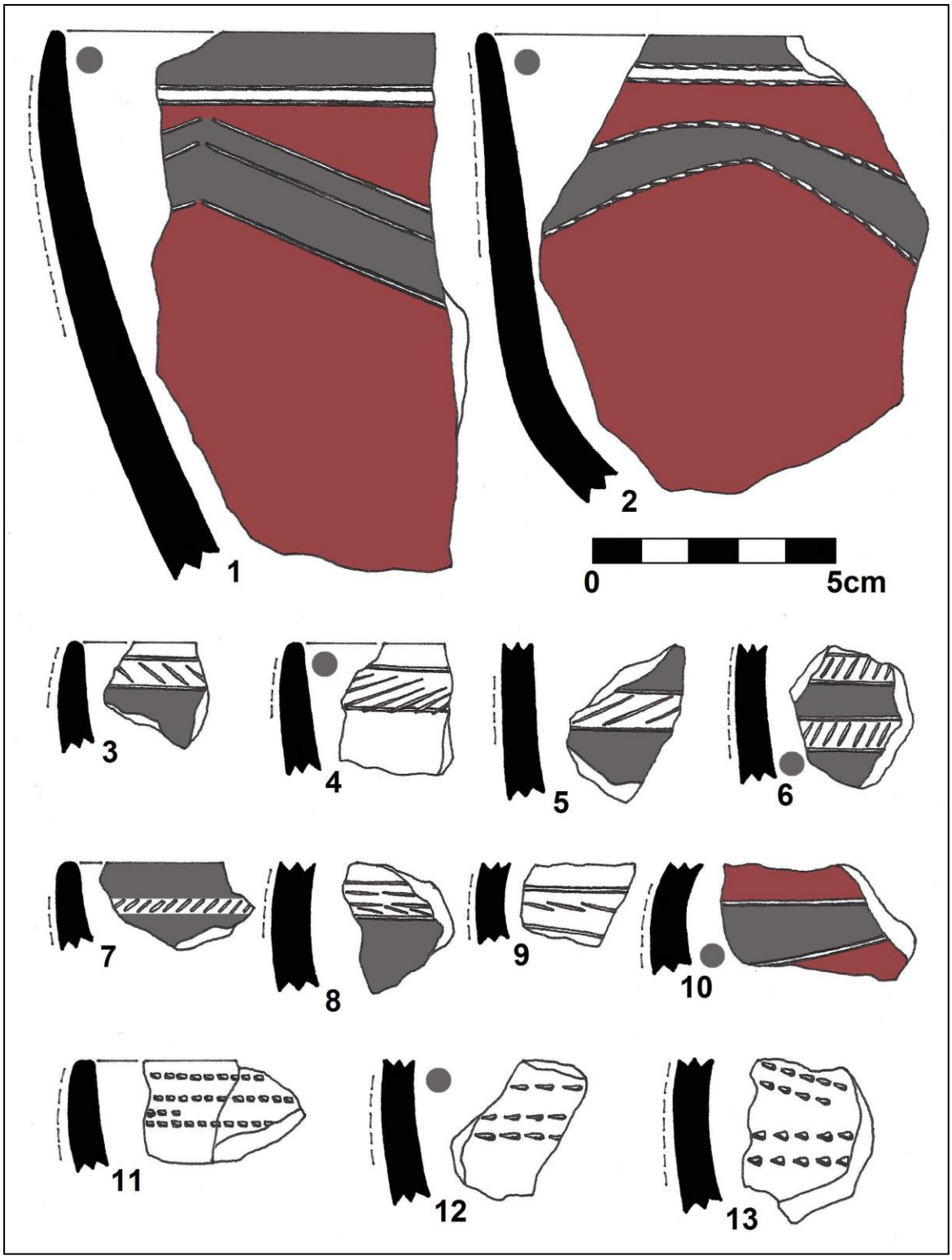

Figure 8.42: *Letsibogo* facies bowl types from Site 37-C1-35: Class 22 (No. 3, 4, 7 & 11), Class 25 (No. 1 & 2) and Class 26 (No. 5, 6, 8, 9, 10, 12 & 13).

CHAPTER 9

RECONSTRUCTING THE IRON AGE SEQUENCE ON BASINGHALL

9.1 Introduction

In the previous chapters I have used data from archaeological investigations to demonstrate that there were various phases of settlement at Basinghall by groups of farming communities who used different styles to produce their ceramic wares. The main purpose of this chapter is to apply the data from the ceramics, the series of radiocarbon dates and the bead seriation to construct a settlement sequence for the Iron Age at Basinghall.

Various methodologies have been used in ceramic classification to investigate the migrations of agropastoralist communities into southern Africa (Calabrese 2005:1). In this study I apply Huffman's (1979, 1980, 1989a, 2007) model according to which multidimensional types in ceramic style are used to construct seriations that allow us to recognise and assign ceramic collections to groups of people. Stylistic ceramic analysis, which has been discussed at length in Chapter 2, has been used to define and redefine the various ceramic expressions recorded at Basinghall. In the seriation of a ceramic sequence the stylistic design structure of each ceramic facies in a collection is analysed in an attempt to connect the archaeological units with some known groups of people (Huffman 2007:115). Thus a seriation organises ceramic types into a sequence of stylistic similarity where the most similar types are arranged as a group based on an underlying structure of interrelated variables to determine stylistic continuity and, therefore, continuity in group identity through time (Huffman 2007:115). In the following example the herringbone design field has been used to assemble different components of the *Eiland* sequence: *Happy Rest* (AD 500 - AD 750), *Diamant* (AD 750 - AD 1000), *Eiland* (AD 1000 - AD 1300) and *Broadhurst* (AD 1300 - AD 1430) (Huffman 2007:226).

Stylistic changes through time may include minor differences of the same ceramic type (profile, motif and layout), the size of the designs and the simplification of complex designs (Huffman 2007:115). Seriations can also demonstrate a discontinuity in style that may result from interacting with a new group moving into a region (Huffman 2007:115). Such a ceramic change should be at an assemblage level and the change should be abrupt and widespread. Thus, if a migration of people occurred into a region, the new group and new style must have existed somewhere else earlier (Huffman 1989b:6, 2007:115).

Radiocarbon dating is used to verify the seriation of a ceramic sequence. As in the example above, stylistic continuity can be substantiated if different ceramic assemblages exhibit the same design fields but are associated with dates that follow each other through time (Huffman 2007:115). In this chapter I use the radiocarbon dates obtained from excavated sites at Basinghall to reconstruct the Iron Age occupation sequence on the farm.

Another tool which can be applied to substantiate the seriation of a ceramic sequence is the use of a glass bead sequence. Imported glass beads that cover a period of 1200 years have been recovered from well-dated archaeological sites in southern Africa. A local glass bead sequence was developed from the bead data (Wood 2005, 2011). The excavations at Basinghall have produced a fair sample of glass beads. This bead sample will be compared to the regional bead sequence and the results used to verify the Iron Age sequence for Basinghall.

In the following section, the chronological arrangement of each facies identified during the archaeological investigations at Basinghall is discussed. The classification of the ceramics is substantiated with reference to the ceramic types outlined in Chapter 2. Glass bead data and other data are thereupon applied to complement and corroborate the seriation of the ceramic sequence.

9.2: The *Toutswe* sequence

Along the eastern Kalahari escarpment the middens of Middle Iron Age settlements have been colonised by blue buffalo grass (*Cenchrus ciliaris*). This makes sites easily identifiable on aerial photographs (Denbow 1979). As a result Denbow (1983, 1986) reconstructed the regional settlement pattern for the *Toutswe* chiefdom. According to Denbow's survey the *Toutswe* kingdom covered the central and eastern parts of Botswana. More recent research has established that the boundaries of the *Toutswe* chiefdom extended to the Palapye-Mahalapye-Shoshong area (Huffman 2007:391) (see area in orange Figure 9.1). The survey conducted at Basinghall, which lies approximately 100 km outside the currently known boundaries of the *Toutswe* chiefdom, produced a sample of 10 *Toutswe* facies sites (Figure 9.2). A further survey west of Basinghall at the Mmamabula Energy Project (MEP) recorded another eight *Toutswe* sites (Biemond 2008). The new research has expanded the chiefdom's borders by 100 km to the south (see area shaded in blue in Figure 9.1) so that it now covers a total area of 20 000 km².

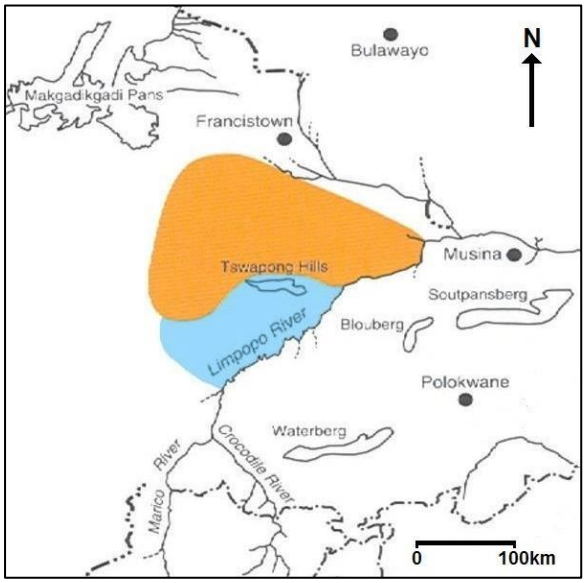

Figure 9.1: The area of the *Toutswe* chiefdom (orange-shaded area - Huffman 2007:151; blue shaded area - new research). Figure based on Huffman (2007).

Denbow (1984:34-36) proposed a three-tier settlement hierarchy for the *Toutswe* chiefdom dominated by three primary hilltop sites, Toutswemogala, Bosutswe and Sung, each covering more than four hectares. The three levels of sites can be distinguished by the size of their middens, the area covered with houses and grain bins, and by the length of occupation. Toutswemogala, which covers ten hectares with over one metre of cultural deposit, was occupied between the eleventh and thirteenth centuries AD. Secondary hilltop sites, such as Taukome and Lose, were also occupied for periods of up to 200 years but are smaller, each being about 0.2-0.5 hectares in size. The third tier of settlements includes open sites such as Kgaswe and Maiphetwane that were occupied for periods of fifty years or less and are 0.2 hectare or less in size. Denbow argued that large sites were occupied by more prosperous people while the less affluent built their villages on lower-lying surrounding hills. He proposed Sung, in the vicinity of the town of Shoshong, as the southern capital. Huffman (2007:391) argues that the striking hierarchies around Toutswemogala, Bosutswe and Shoshong reflect political rather than social stratification. Instead of social factors, these hilltop locations were most likely chosen for defence (Huffman 1986a, 1996; Calabrese 2000).

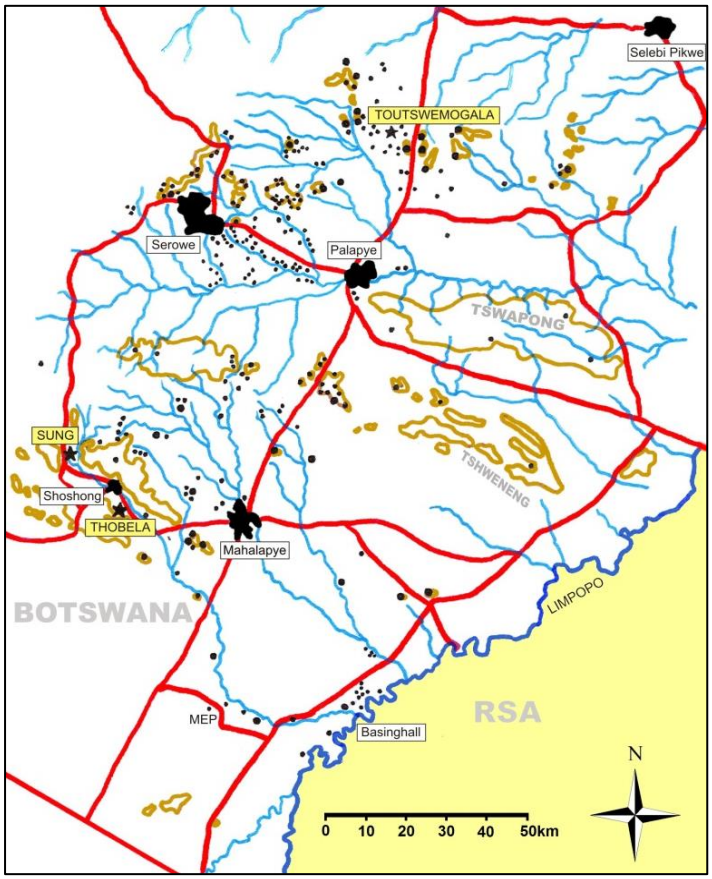

Figure 9.2: *Toutswe* sites and capitals (redrawn from Denbow 1984:27).

My investigation at Thobela Hill, which lies 10 km south of the town of Shoshong, revealed a large *Toutswe* hilltop site (see Figure 9.2). The inhabitants of the nearby Thobela village regard the hill as sacred. This impressive site with a deposit of possibly more than one metre deep is situated on top of a steep-sided hill with a stonewalled

entrance. Rather than Sung, this settlement was probably the southern *Toutswe* capital that controlled the area up to Basinghall.

Radiocarbon dates

The *Toutswe* chiefdom, which rose to power at around AD 1000, dominated an extensive area by about AD 1200 (Denbow & Wilmsen 1986:1512) after which it declined in importance, resulting in complete abandonment of the region by AD 1290. Table 9.1 lists radiocarbon dates from various prominent *Toutswe* sites that confirm the *Toutswe* facies timeline. Excavations at *Toutswe* sites at Basinghall provided radiocarbon dates for a period of more than 250 years, which covers the entire time span of the *Toutswe* chiefdom's rule. Such a long sequence is found in most facies and reflects continuity on various levels (Huffman 2007:319).

Table 9.1: Radiocarbon dates* for various *Toutswe* sites.

Site	Lab number	Age B.P.	Intercepts	1 Sigma range	References
Basinghall A3-1	Pta-9392	1010 ±40	AD 1030	AD 1015 - 1136	Chapter 4
Basinghall C1-8	Pta-9167	870 ±45	AD 1217	AD 1179 - 1259	Chapter 4
Basinghall C1-4	Pta-9169	760 ±50	AD 1283	AD 1266 - 1296	Chapter 4
Taukome	I – 11,409	995 ±75	AD 1035	AD 1007 – 1175	Denbow 1982
Thatswane	I – 11,414	1025 ±80	AD 1024	AD 990 – 1159	Denbow 1982
	I – 11,415	840 ±75	AD 1248	AD 1179 – 1281	Denbow 1982
Toutswemogala	I – 11,413	990 ±50	AD 1037	AD 1009 – 1179	Denbow 1982
	GX – 3774	860 ±105	AD 1225	AD 1147 – 1284	Lepionka 1977
	I – 11,412	775 ±75	AD 1278	AD 1236 – 1298	Denbow 1982
	GX – 3773	750 ±95	AD 1285	AD 1243 – 1314	Lepionka 1977
Kgaswe		960 ±80	AD 1055,1086,1151	AD 1019 – 1210	Denbow & Wilmsen 1986
		940 ±80	AD 1162	AD 1026 – 1225	Denbow & Wilmsen 1986
		860 ±80	AD 1225	AD 1162 – 1277	Denbow & Wilmsen 1986
Lose	β – 24519	1070 ±60	AD 1007	AD 977 – 1030	Kiyaga – Mulindwa 1990
	β – 24514	920 ±70	AD 1175	AD 1037 – 1236	Kiyaga – Mulindwa 1990
	β – 24518	750 ±60	AD 1285	AD 1266 – 1301	Kiyaga – Mulindwa 1990
	β – 24516	730 ±50	AD 1291	AD 1277 – 1304	Kiyaga – Mulindwa 1990
	β – 24515	690 ±60	AD 1301	AD 1285 – 1397	Kiyaga – Mulindwa 1990

*Calibrated by Southern hemisphere INTCAL 1998 adapted

Ceramics

Toutswe pottery is generally characterised by comb-stamping and incisions on a narrow (sometimes applied) band in the neck of the vessels. The collection from Basinghall Site 37-C1-8 confirms this trend in that 80% motifs are decorated as bands in the lower neck with 32% comb-stamped. *Toutswe* facies ceramics are also characterised by comb-stamped filled triangles on the body of the vessels. Some bowls have broad comb-stamped rims.

Denbow (1982) suggested a transitional step (*Thatswane*) as the progenitor of *Toutswe* ceramics. The ceramics were first identified at Thatswane Hill, a site five kilometres to the south of Toutswemogala (Denbow 1981:72). They were also found in the lower stratums at other prominent *Toutswe* sites in east-central Botswana (Huffman 2007:319). Some of the transitional steps in ceramic traditions were brief and also spatially restricted

(Huffman 2007:319). In the early 11th century the *Thatswane* developed from the *Zhizo* facies as a short transitional step (see Figure 9.3) to become the *Toutswe* facies (Huffman 2007:150).

A few decorated sherds in the ceramic collection from Site 37-A3-1 at Basinghall were identified as *Thatswane* transitional step vessels (Figure 4.97). Although it is not easy to distinguish between the two facies, the *Thatswane* transitional step decorations are much more crudely executed and placed higher in the neck of jars (position 2) (Figure 9.3 and 9.4). Motifs include crude incised bands from the *Toutswe* decoration motif classes I H3, I I1, and I I3 (from Figure 2.4), as well as crude comb-stamping. The pottery is coarsely made, mostly unburnished and less well fired with a grey-brown to black colour that derives from the particular source of clay that has been used.

At the early 13th-century Site 37-C1-8 classical *Toutswe* pottery was recorded. The ceramics have been carefully shaped, burnished and are more finely decorated than earlier wares. The final stage of the *Toutswe* sequence is recognised by ceramics identified at the late 13th-century Site 37-C1-4. The ceramics from this locality show a progressive influence of K2/Mapungubwe motifs incorporated in the *Toutswe* design field. At all the *Toutswe* sites an *Eiland*/*Moritsane* facies component is recognised as discussed at length in Chapter 4.

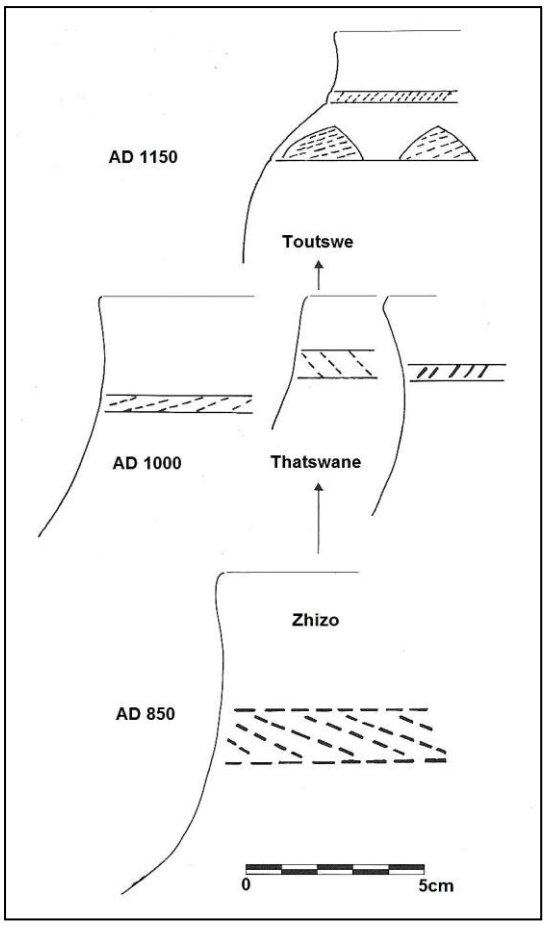

Figure 9.3: *Toutswe* sequence (Huffman 2007:150).

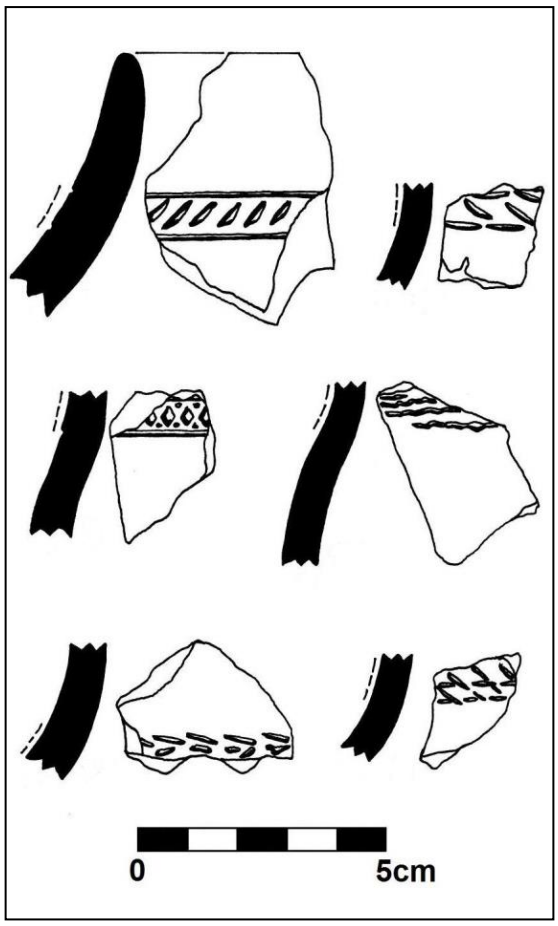

Figure 9.4: *Thatswane* pottery from Basinghall.

Site 37-A3-1 (*Lekotsane*)

A mixing of ceramic units at this multi-component settlement distorts the results obtained in the analysis. Together the *Toutswe* (Figure 9.5) and *Thatswane* facies vessels (37.3%) represent the main facies identified in the collection. The profiles of the undecorated pottery (Figure 4.94) confirm that the jar, beaker and thickened rim bowl shapes belong to *Toutswe* wares. The high percentage of jars to bowls and the percentage of highly burnished sherds compare well to other *Toutswe* collections. Based on these facts we can interpret the site to be predominantly an early *Toutswe* facies settlement.

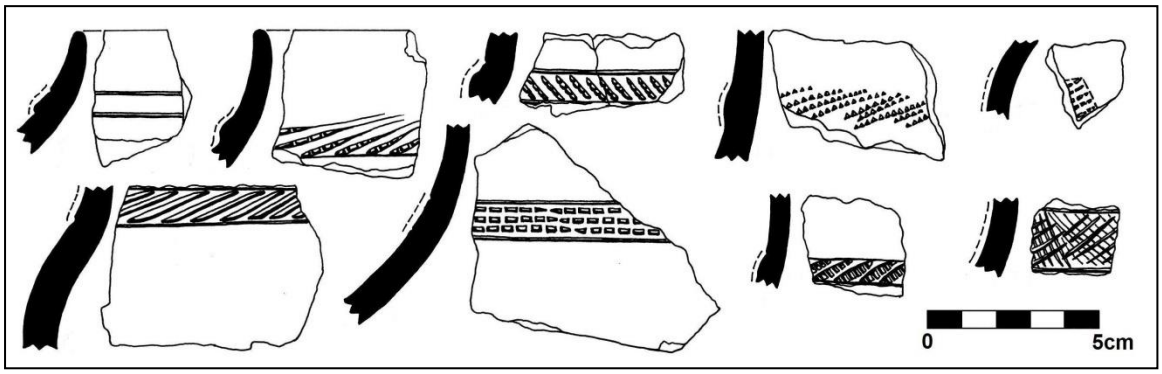

Figure 9.5: 11th-century *Toutswe* pottery from Site 37-A3-1.

The foreign ceramics identified in the collection are from the newly defined *Moritsane* facies (see Chapter 2), which reflects a probable resettlement of the site in the 13th century. A later *Letsibogo* facies was also identified. These ceramics are highly decorated and thus over-emphasise the percentage of decorated vessels in the collection. A more detailed discussion of these ceramics follows in the section on the *Letsibogo* facies.

Site 37-C1-8 (*Letamong*)

Toutswe facies ceramics (Figure 9.6) comprise 79% of the ceramic assemblage from this site and it is accordingly interpreted to be predominantly a *Toutswe* settlement. Of the decorated vessels 92.3% are jars and only 2.4% bowls, a trend characteristic of *Toutswe* wares. From the profile drawings in Figure 4.83 we observe the typical *Toutswe* profiles, e.g. long-neck recurved jars with or without an applied band in the lower neck, beakers

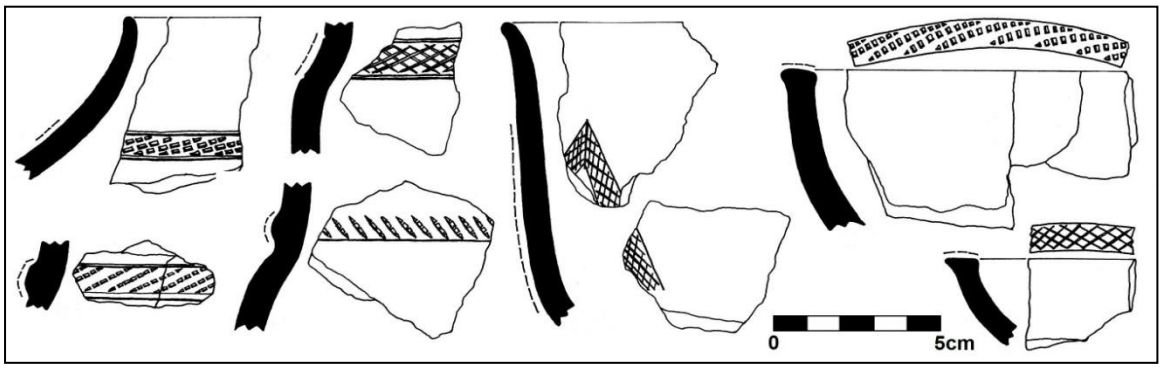

Figure 9.6: Early 13th-century *Toutswe* pottery from Site 37-C1-8.

and thickened-rim open bowls. The most frequent decoration techniques are comb-stamping (44.4%), oblique incision (17.3%) and crosshatching (12.8%). A presence of eight out of 11 possible *Toutswe* vessel classes in the collection demonstrates the high representation of classical *Toutswe* ceramics from the early 13th century. Intrusions of other ceramic facies at the site comprise *Eiland* (5.7%) and *Moritsane* (10.7%) facies vessels. They were probably traded from nearby communities.

Site 37-C1-4 (*Onjombo*)

The high incidence of 77% *Toutswe* facies ceramics in the collection suggests a *Toutswe* settlement (see Figure 9.7 for examples). The relative frequencies of decorated *Toutswe* vessels differ to some extent from the previous site, namely 99% jars, 1% beakers and no decorated bowls in the sample. Only five out of 11 possible *Toutswe* classes are represented in the collection, which is inconsistent with a classical *Toutswe* facies. Fewer jars have applied bands in the neck, a smaller number of bowls have thickened rims and an altogether absence of decorated rims confirms a divergence from classical *Toutswe* pottery during the final days of the *Toutswe* chiefdom. A ceramic intrusion at the site in the form of *Moritsane* facies pottery (23%) is dominated by highly decorated and coloured bowls.

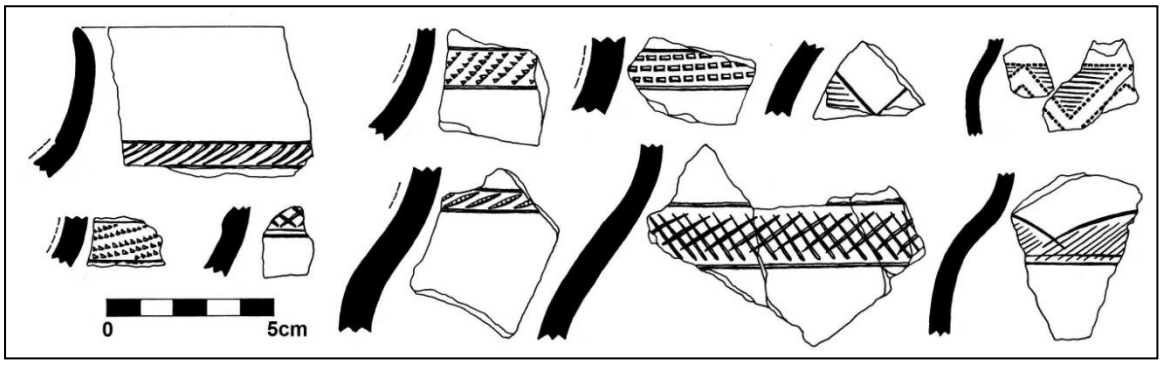

Figure 9.7: Late 13th-century *Toutswe* pottery from Site 37-C1-4.

9.3 The *Eiland* sequence

Middle Iron Age *Eiland* ceramics, decorated with emblematic herringbone motifs, are well represented in the archaeological record of the southern African interior. Little is known, however, about the nature of *Eiland* settlements, the identity of the potters or the eventual discontinuation of this ceramic style. It is generally held that the *Eiland* ceramic sequence that originated in the Early Iron Age can be divided into the following phases: *Happy Rest* (AD 500 - AD 750), *Diamant* (AD 750 - AD 1000), *Eiland* (AD 1000 - AD 1300) and *Broadhurst* (AD 1300 - AD 1430) (Huffman 2007:226). In this study I concentrate on the Iron Age settlement of the second millennium AD and only briefly discuss the *Diamant* facies settlement at Basinghall. The ceramic expressions from the *Eiland* facies onwards are discussed in more detail.

Based on an assessment of ceramic assemblages from known and recently excavated sites in south-eastern Botswana, as well as associated radiocarbon dates, I propose a new sequence to account for an evident stylistic change. It is suggested that in south-eastern

Botswana the 12th-century *Eiland* facies generated a *Moritsane* facies (AD 1200 - AD 1400), followed by a redefined *Broadhurst* facies, which begins in the 14th-century and ended in the 15th-century with the arrival of *Moloko* people (Sotho-Tswana speakers) on the landscape.

In the course of CRM research conducted in Botswana, I identified *Moritsane* facies pottery from south of the Tswapong mountain range (eastern Botswana), along the Limpopo River and as far as the fringes of the Kalahari escarpment to the west, as well as down to the Kanye area (south-eastern Botswana) as the southernmost border (see Figure 9.8). The final *Broadhurst* facies, as redefined, is distributed around the Gaborone area in south-east Botswana.

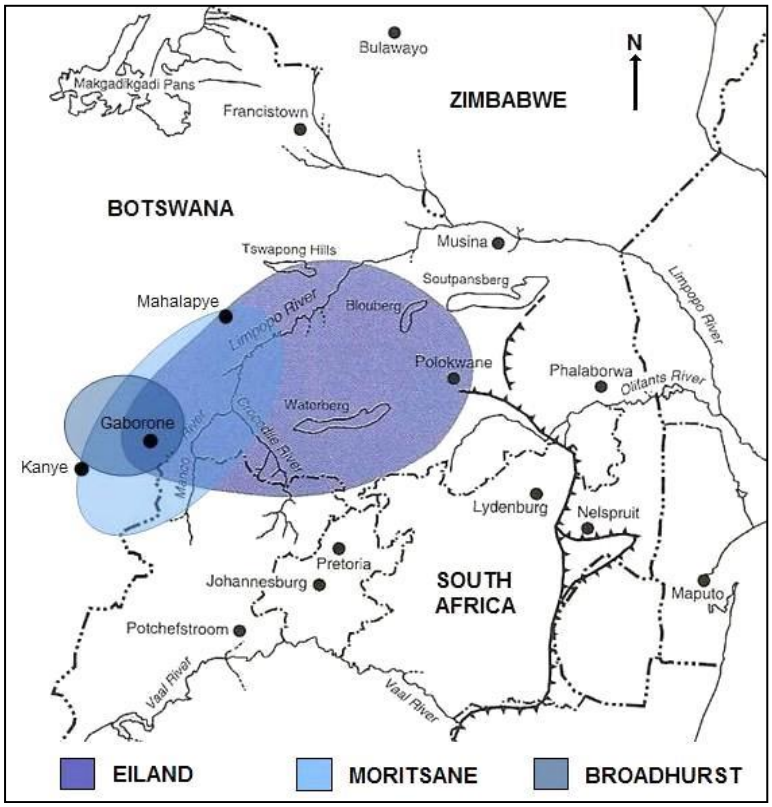

Figure 9.8: *Eiland* sequence distribution area (purple-shaded area – *Eiland* facies (Huffman 2007:227); light blue-shaded area – *Moritsane* facies; blue-shaded area – *Broadhurst* facies).

Radiocarbon dates

The *Eiland* facies dates from AD 1000 to about AD 1200 with the 13th century as the transition between the *Eiland* and the *Moritsane* facies. The *Eiland* facies was first identified at the Eiland Salt works near Tzaneen in Mpumalanga Province (Klapwijk & Evers 1987:41-43). Similar ceramics were identified in collections excavated from Ficus (Moore 1981), Bambo Hill near Polokwane (Evers 1988:46-60), Soutpansberg (Loubser 1991:443-445), Rooiberg RU2 (Hall, S. 1981:35-40) and Kirstenbos in the Waterberg (UNISA collection). Radiocarbon dates for the *Eiland* facies from a number of *Eiland* sites are given in Table 9.2.

Table 9.2: Radiocarbon dates* for various *Eiland* sites.

Site	Lab number	Age B.P.	Intercepts	1 Sigma range	References
Eiland	Pta-1668	1000 ±55	AD 1039	AD 1018 - 1163	Evers 1988
Eiland	Pta-1522	850 ±50	AD 1244	AD 1204 - 1273	Evers 1988
Eiland	Pta-1745	825 ±50	AD 1262	AD 1231 - 1278	Evers 1988
Silver Leaves	Pta-2090	860 ±50	AD 1235	AD 1182 - 1273	Evers 1988
Ficus	Wits-781	1080 ±50	AD 1007	AD 980 - 1025	Moore 1981
Tavhatshena	Wits-1437	900 ±110	AD 1204	AD 1163 - 1244	Loubser 1991
Wentzel	Pta-4513	990 ±50	AD 1041	AD 1013 - 1187	Huffman 1990

*Calibrated by Southern hemisphere INTCAL 1998 adapted

In south-eastern Botswana Denbow (1981:66-73) found ceramics that are similar to *Eiland* ceramics at Moritsane and Broadhurst with respectively 13th- and 15th-century dates. These findings assign the *Eiland*-like ceramics to the final expression of the *Eiland* sequence. The new *Moritsane* facies, dating from AD 1200 to AD 1400, therefore follows on the *Eiland* facies, transforming into the *Broadhurst* facies at around AD 1400. The well-made *Moritsane* ceramics are much finer and have more herringbone motifs per centimetre than *Eiland* ceramics. In contrast, the *Broadhurst* ceramics identified at the Broadhurst, Fikeng and Phatana sites in south-eastern Botswana include mostly thickened-rim vessels with coarser decoration techniques that mainly comprise comb-stamped herringbone motifs. In my analysis and construction of the *Moritsane* facies design structure, material from the Moritsane site housed in the National Museum in Gaborone and ceramics from collections made by Denbow (1981:70) and Evers (1988:46-60) were investigated. The radiocarbon dates for the *Moritsane* and *Broadhurst* facies sites are given in Table 9.3.

Table 9.3: Radiocarbon dates* for *Moritsane* (M) and *Broadhurst* (B) facies sites.

Site	Lab number	Age B.P.	Intercepts	1 Sigma range	References
Basinghall (M)	Pta-9442	670 ±50	AD 1367	AD 1293 - 1400	Chapter 5
Moritsane (M)	I - 11,823	855 ±75	AD 1230	AD 1167 - 1277	Denbow 1981
Broadhurst (B)	Wits-837	590 ±50	AD 1411	AD 1396 - 1427	Denbow 1981
Fikeng (B)	Beta-33582	600 ±70	AD 1406	AD 1379 - 1427	Campbell et. al 1991
Phatana (B)	Beta-32493	610 ±60	AD 1403	AD 1379 - 1421	Campbell et.al 1991

*Calibrated by Southern hemisphere INTCAL 1998 adapted

Ceramics

Diamant facies

This Early Iron Age facies was first identified at a site on the farm Diamant in the Thabazimbi area, Limpopo Province (Aukema 1989). The distribution area for this facies extends from the Tswapong mountain range in eastern Botswana and the Soutpansberg and Waterberg mountain ranges in the Limpopo Province south to the Magaliesberg mountain range as the southernmost border. The Diamant site is situated about 100 km south of Basinghall. The pottery is characterised by broad line incision and stamping techniques in bands filled in by a predominantly herringbone motif (Figure 9.9).

Site 37-C1-67 at Basinghall is located on red loam soils close to the Limpopo River. No surface features other than potsherds, burned hut rubble and grinding stones are visible.

As explained in Chapter 5, a study of the *Diamant* facies falls beyond the scope of this project.

Figure 9.9: *Diamant* facies pottery from Site 37-C1- 67 at Basinghall.

Eiland facies

The *Eiland* facies developed from the Early Iron Age *Diamant* facies (Huffman 2007:226). The ceramics are characterised by herringbone and crosshatched incisions with laddered borders and decoration-filled arcades and triangles, often with red ochre colouring. The herringbone motifs were executed by a coarse incision technique with the individual bands generally wider than one centimetre. In general the design technique is much coarser and the motifs larger than those of the succeeding *Moritsane* facies (see Figure 9.10 for examples).

Figure 9.10: *Eiland* facies pottery from Basinghall.

Moritsane facies

I introduce the *Moritsane* facies for south-eastern Botswana to reflect internal stylistic changes observed in the *Eiland* sequence during my ceramic study.

The 13th-century settlement at Moritsane Hill near the town of Gabane, west of Gaborone, is situated on the flat top of a steep-sided hill. The site was excavated by Jim Denbow and the Botswana National Museum in the early 1980s (Campbell & Main 2003:118). A kraal/midden deposit of about 50 m across and 850 cm deep covers the larger part of the hilltop. The remains of a few huts and granaries are evident on the northern and eastern side of the summit but none were excavated. The excavations exposed the burial of a child wearing a band of ochre-stained ostrich eggshell (OES) beads around the waist and strings of yellow and green glass beads around the wrists. Numerous carved bone points, animal bones and a cowrie seashell were also recovered. The domestic animal bones comprised only cattle bones and no sheep or goat remains (Cohen 2010:156). The ceramic collection was not analysed by the excavators but is housed in the Botswana National Museum and was examined for this study.

The pottery is characterised by the prevalence of finely incised multiple bands of herringbone and crosshatched decorations bounded by laddered borders and decoration-filled arcades, often with the application of red ochre. The herringbone motifs, measuring less than one centimetre in width for a single band, display finer incisions than those found in the *Eiland* facies. Vessel shapes include some thickened-rim pots with inward-sloping necks and poorly defined shoulders, constricted jars and bowls (Figures 9.12 and 9.13). Well-made, finely decorated wares with burnishing distinguish this facies, which exhibits a refinement that is comparable to *Mapungubwe* ceramics.

Ceramics from the Moritsane site (see Figure 9.11) differ from *Broadhurst* ceramics in being more finely decorated through the use of mainly an incision technique. The *Broadhurst* facies ceramics from the chronologically later sites are coarsely decorated with a comb-stamping technique (see Figure 9.17).

Figure 9.11: *Moritsane* facies pottery from Moritsane Hill.

Figure 9.12: *Moritsane* pot from Moritsane Hill (housed in the Botswana National Museum).

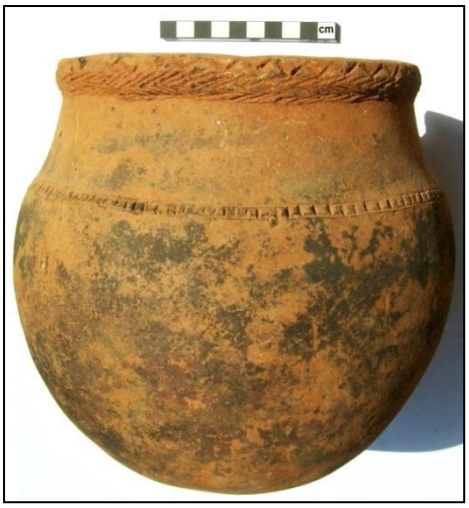

Figure 9.13: *Moritsane* pot from Ranaka Site 45-C4-14 (housed in the Botswana National Museum).

Broadhurst facies

Huffman (2007:226) argues that the *Eiland* facies developed into what he calls the *Broadhurst* facies. *Broadhurst* facies pottery is described by him as vessels decorated with finely incised and stamped herringbone motifs (Huffman 2007:233). The sherds displayed in Figure 16.68 (p. 233) in his *Handbook* (2007) originate from the archaeological site at Moritsane Hill and are kept in the Botswana National Museum (personal communication Huffman 2006). As discussed below, I argue that the *Broadhurst* facies ceramics should represent the main ceramic types from the name site Broadhurst as presented by Denbow (1981). Unfortunately the main ceramic collection from the Broadhurst site is no longer housed at the Botswana National Museum. Ceramics from other *Broadhurst* facies sites were additionally investigated for this study.

The *Broadhurst* facies pottery can be best described from the collection recovered at the Broadhurst name site and published by Denbow (1981). The *Broadhurst* facies site is located in a northern suburb of Gaborone on a stream terrace overlooking the Notwane River. An oval midden approximately 4 m in diameter and 20 cm deep was exposed by a bulldozer (Denbow 1981:66). The midden was excavated as a rescue operation during a residential suburb development. Apart from pottery, fragmentary faunal remains were also recovered. There were no structural features.

The Broadhurst type site ceramic collection of 63 vessels comprises 19 jars, 25 constricted bowls and three open bowls, 38 (60%) of which were decorated with a comb-stamped technique, 12 (19%) by incision and 11 (17%) by comb-stamping plus incision. Thickened rims were present on 47 (75%) vessels. Two vessels were decorated with a punctate technique using *Letsibogo* facies motifs. Additionally to the above-mentioned collection, 33 Early *Moloko* sherds (see Figure 9.19) were identified in the remaining small ceramic collection housed at the Botswana National Museum (own observations). Figure 9.14 presents a summary of the decoration motifs present on the *Broadhurst* facies

vessels. Comb-stamped herringbone (a-d) motifs comprise 78% of the design field, while incised herringbone (e-h) motifs 15% and crosshatching (i-j) motifs 7%.

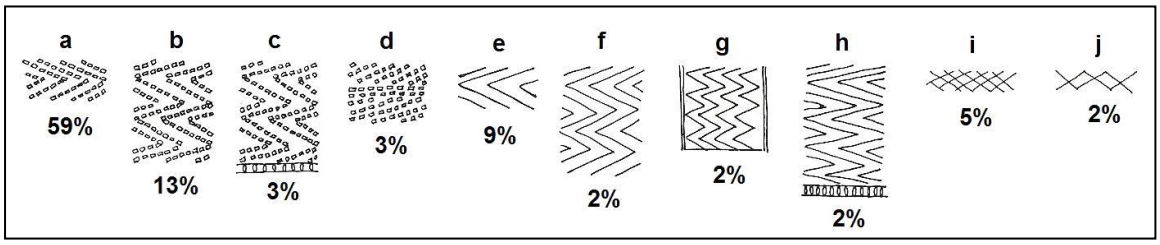

Figure 9.14: *Broadhurst* facies motifs in the Broadhurst ceramic collection (Denbow 1981:67).

Incised and crosshatching motifs as well as shoulder arcades filled with herringbone or cross-hatching, common to the *Moritsane* facies, are lacking in the sample from the Broadhurst type site. Denbow (1981) suggested that differences in the frequency of particular motifs and decoration techniques between the ceramic collections from Moritsane Hill and Broadhurst represent developmental trends within the *Eiland* sequence in south-eastern Botswana. He argues that the occurrence of comb-stamping, thickened rims and certain other distinguishing stylistic elements (Figure 9.15) suggests that the Broadhurst site ceramics belong to a final phase in the *Eiland* sequence. Other similar sites investigated in south-eastern Botswana by Denbow show continuity between the *Broadhurst* facies and 15th- to 16th-century ceramics. A surface collection from Site 55-Bl-8 (Denbow 1981:71) exhibits combinations of *Broadhurst* motifs with *Moloko* traits such as punctate-bordered lozenges (Figures 9.16 and 9.19). About a third or more of the ceramics recovered from the early 15th-century *Broadhurst* sites of Fikeng (Figures 9.17 and 9.18) and Phatana can be attributed to Early *Moloko* ceramics (own observation of collections from these sites held at the Botswana National Museum). Such ceramic changes reflect increased interaction or even the incorporation of Middle Iron Age groups to varying degrees into Late Iron Age societies, with a consequent loss of their former ceramic identity.

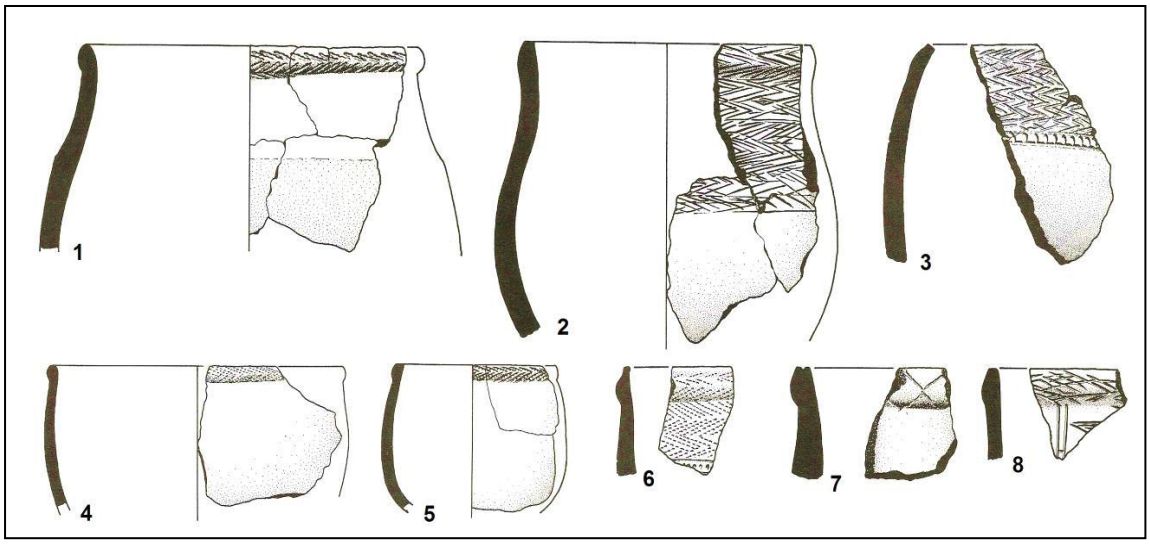

Figure 9.15: *Broadhurst* facies pottery from the Broadhurst type site. Comb-stamped herringbone (1, 4-6); incised herringbone (2 & 3) and crosshatching (7 & 8) (Denbow 1981:68 & 69).

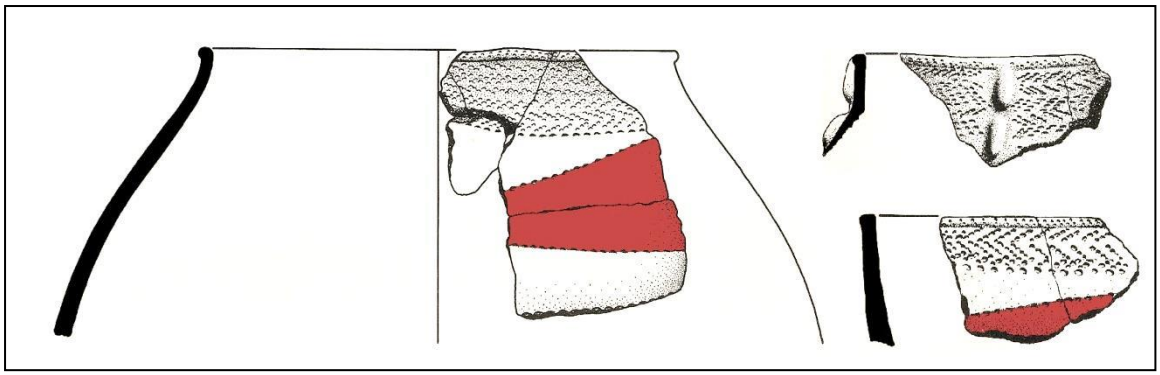

Figure 9.16: Surface-collected pottery from Site 55-B1-8 (Denbow 1981:71).

Figure 9.17: *Broadhurst* facies pottery from Fikeng Site 45-D3-7.

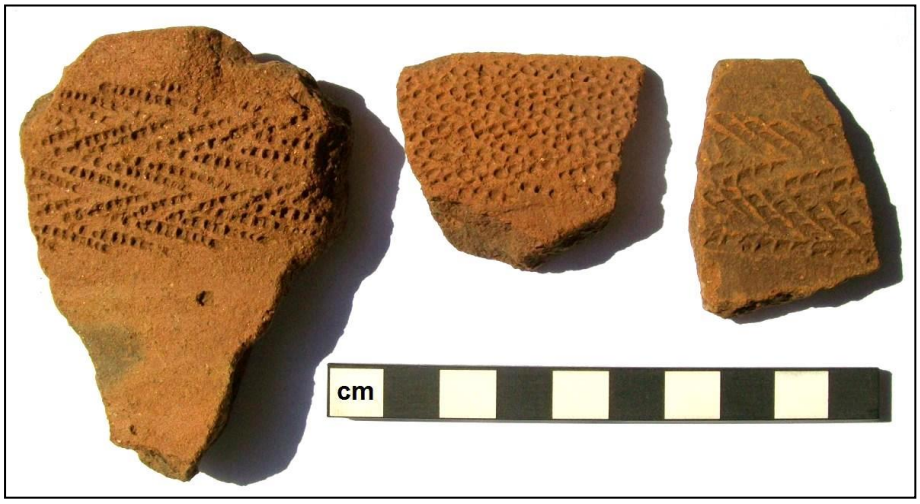

Figure 9.18: *Broadhurst* facies pottery from Fikeng Site 45-D3-7.

Figure 9.19: Early *Moloko* pottery from the Broadhurst type site collection.

Site 37-C1-7 (*Setlhong*)

The site is dominated by *Moritsane* facies ceramics that constitute 98% of decorated vessels in the collection. The decorated vessels show a ratio of 49.4% jars to 45.3% bowls. In the category for jar types the collection contains fewer jars (57.4%) with 10.8% constricted jars. Only 2.1% of motifs at *Setlhong* were executed with a comb-stamping decoration technique whereas the Moritsane Hill site collection shows a higher percentage of comb-stamping. At *Broadhurst* facies sites such as Fikeng the main decoration technique is comb-stamping (Figures 9.17 and 9.18). A trend towards highly decorated bowls coloured with red ochre on both the inner and outer surface is a characteristic of ceramics associated with the *Eiland* sequence.

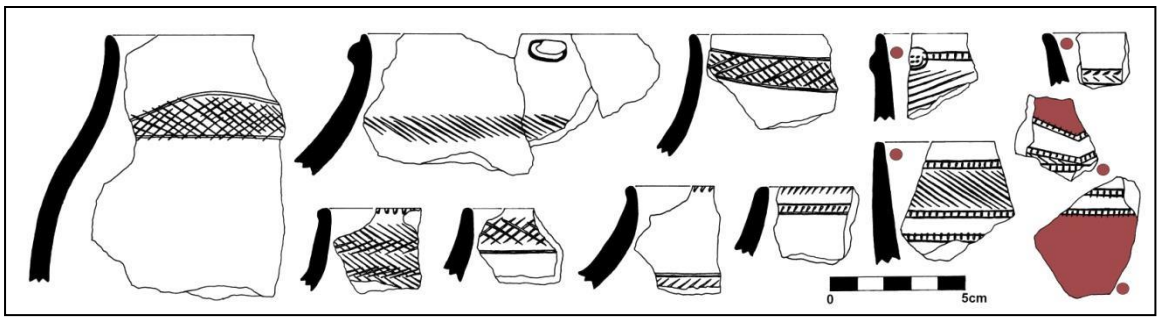

Figure 9.20: *Moritsane* facies pottery from Site 37-C1-7 at Basinghall.

Site 37-C1-52 on Holmlea Farm

The *Moritsane* facies represents 55.6% and the *Eiland* facies 6.9% of the ceramics at the site. The *Eiland* facies component additionally identified in the collection suggests a

longer settlement timeline for the site. The *Eiland* facies vessels are coarsely decorated and less burnished. The decorated jar in Figure 5.25 (No. 2) is a typical *Eiland* facies jar. This particular example, which is decorated in four layout positions with typical *Eiland* facies motifs, represents one of the most complex decorated vessels encountered in the *Eiland* collections analysed for this study.

Site 37-C1-61 on Riversley Farm

The analysis of the surface collection demonstrates a slightly higher relative ratio for the *Moritsane* (32.4%) versus the *Toutswe* (28.3%) facies. Whereas the findings do suggest a main occupation by people producing *Moritsane* ceramics with intrusive *Toutswe* ceramics, the difference is statistically insignificant. Excavations are required at Site 37-C1-61 on Riversley to establish the settlement chronology and to determine the distributional pattern of the different ceramic phases. The site holds great potential for future research in view of its location at a strategic watering point on a bend of the Limpopo River.

9.4 The Early *Moloko* facies

Huffman (1989a:173-178) proposes a model in which the early Sotho-Tswana or *Moloko* people migrated from eastern Africa and settled in the Mpumalanga and Limpopo Provinces, spreading south-westward into south-eastern Botswana and the interior of the North West Province. Figure 9.21 depicts early *Moloko* vessel types from sites such as Icon and Tavhatshena that Huffman (1989a:175) employed in his model. The settlement at Icon in the Limpopo Province, which dates to around AD 1330 (Hanisch 1979:72), is regarded as the earliest recorded type ceramic unit and the progenitor facies of the early *Moloko* phase (Huffman 2002:9). Key features of the *Icon* facies are multiple incised bands followed by triangular motifs separated by colour (Huffman 2007:185). Bowls are usually decorated with triangular designs on the rim (see Figure 9.21). Red ochre and graphite were used as colouring on the vessels. In order to obtain a representative ceramic sample with a view to defining the *Icon* facies design structure, Huffman used selected ceramics from collections at sites such as Icon (Figure 9.22 No. c), Tavhatshena (Figure 9.22 No. a, b, e and g) and Nagome (Figure 9.22 No. h). As a guiding principle Huffman (2007:119) analysed at least two, often three or more, assemblages to define and illustrate the design structure of a facies.

The settlement at Icon, situated near the Mapungubwe National Park in the northern Limpopo Province, was investigated by Hanisch (1979). At the time of Hanisch's pioneering research the cultural affinities of the Icon site and ceramics were unknown and the design structure and evolution of the *Moloko* Branch had not yet been established. The site measures about 200 m across with the central part disturbed by modern farming activities that include cattle kraals and agricultural gardens. Hanisch (1979:72) excavated three trenches, about 50 m apart, covering a total area of 87 m^2. A shallow midden in trench 2 produced a date of AD 1330 ± 50 (Pta-1652). The third trench produced large amounts of pottery, faunal material and beads. A total of 2542 sherds were recovered of which 16.7% were decorated.

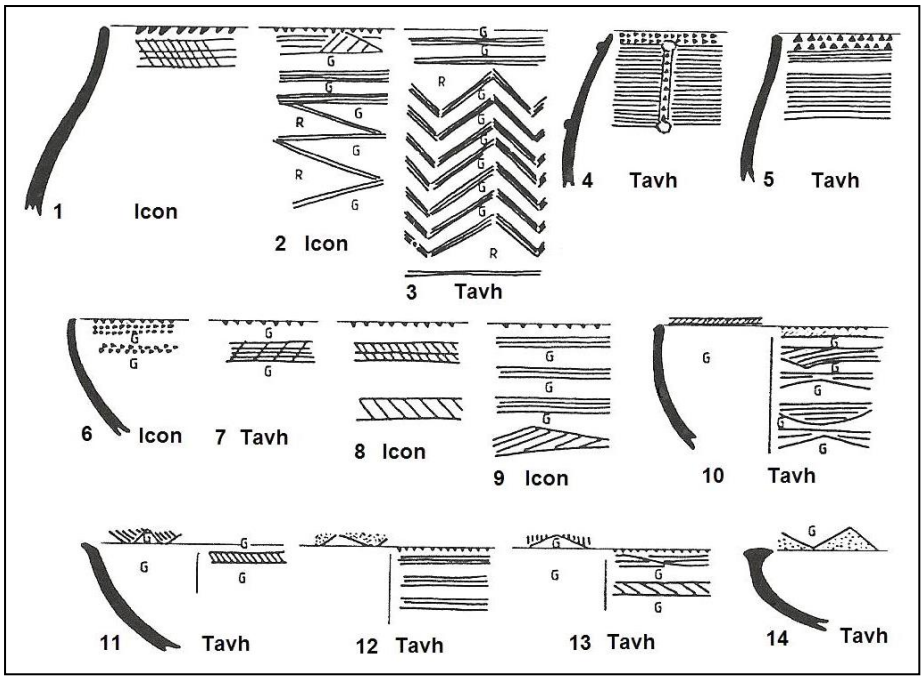

Figure 9.21: Ceramic types from collections of Icon (No. 1, 2, 6, 8 & 9) and Tavhatshena (No. 3, 4, 5, 7, 10-14) employed by Huffman in compiling the *Icon* facies design structure (Huffman 1989a:175).

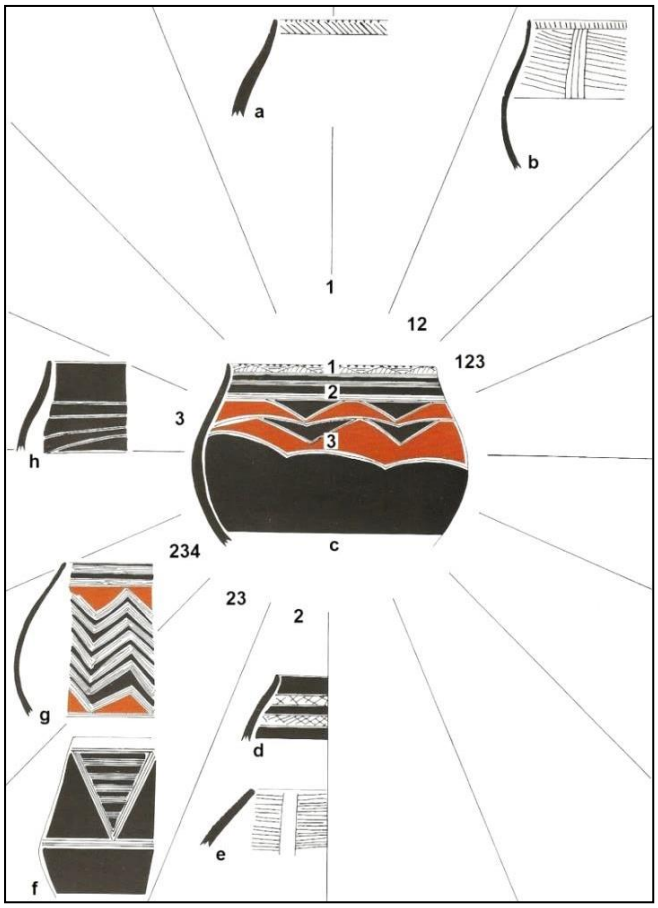

Figure 9.22: *Icon* facies design structure (Huffman 2007:184). Ceramics originate from Icon (No. c), Tavhatshena (No. a, b, e & g) and Nagome (No. h).

Hanisch (1979:74) describes the decoration techniques on the pottery as follows:

a) rim notching
b) broad line incision
c) unusual oval punctuates
d) fine stabs from a grass stalk
e) stamping of lines by the use of a piece of gourd
f) fine line incision
g) the use of colour - red ochre and graphite.

According to Hanisch (1979:74) the most common decoration technique was incision (79.76%) followed by oval depressions (11.76%). From the above techniques he then identified two categories of vessels; firstly, those decorated by rim notching and fine line incision and, secondly, those decorated by oval depressions. None of the vessels were decorated with combinations of the two techniques. I examined the ceramic collection housed at the Ditsong/African Window Museum. I could distinguish two distinct groups of ceramic variations: crudely decorated ceramics (see Figure 9.21 vessels 1 and 6) employing techniques a-e and finer decorated ceramics (see Figure 9.21 vessels 2, 8 and 9) employing techniques a and f. This suggests the possibility that two ceramic categories from different periods were present at the site.

The bead evidence supports the suggestion that there may have been two different occupation periods at Icon. A total of 773 beads were recovered from trench 3 (Hanisch 1979:76). These included 389 iron beads, two made on *Achatina* shell and 382 glass beads. The glass bead sample consists of yellow (1), red-brown (2), turquoise blue (62), small dark blue (253) and small white (64) beads. The yellow, red-brown and turquoise beads can be associated with the Middle Iron Age bead trade (Wood 2005:43-52) while the small white beads were only imported into southern Africa during the early 19th century (Saitowitz 1990:23-28; Wood 2000:90, 2008:186). This may imply a probable mixing of beads from different periods that may also extend to the ceramics. The problem now arises to which ceramic category can we apply the AD 1330 ± 50 date and to which group of ceramics do we assign the *Icon* label, namely the ceramics decorated with fine line incisions or the ceramic group with oval depressions? When compiling a design structure for a particular facies we have to be sure that we work with the ceramics of a single-component site or, where necessary, identify and eliminate possible intrusions from other facies of later periods. I therefore argue that the ceramics of the Icon site should be subjected to another critical study before the sample is used to define types in the *Icon* design structure.

Loubser (1991:193-217) investigated the site of Tavhatshena as part of his Venda ethno-archaeological study. The site is described as an ordinary cattle post of which his Venda informants had no former knowledge. Loubser excavated three trenches encompassing 16 m^2 so that the settlement was not investigated over a particularly large area. Trench one (12 m^2) was placed across a midden/kraal that had been severely disturbed by burrowing animals.

Loubser used the decorated ceramics from his excavations to construct a ceramic sequence of six facies consisting of *Mutamba, Eiland, Mapungubwe, Moloko, Khami* and

Tavhatshena ceramics. Three occupation levels, encompassing the six facies, were identified at the site dating to AD 1050 ± 110 (Wits-1437), AD 1290 ± 80 (Wits-1453) and AD 1580 ± 80 (Wits-1549). According to Loubser the first date can be associated with a *Mutamba* occupation, which also included *Eiland* and *Mapungubwe* sherds. The second date can be associated with *Moloko* ceramics. The third date is ascribed to a *Tavhatshena* occupation level that contained *Moloko* and *Khami* sherds. Loubser argued that the *Moloko* and *Khami* facies interacted to form the *Tavhatshena* facies. Loubser classified the ceramics by using key motifs associated with each facies: herringbone for *Eiland*, rim notching and incised bands for *Moloko*, triangular designs for *Khami* and a combination of the last two facies for *Tavhatshena* (Figure 9.23). Caution should be used when single key motifs are applied in the analysis of a ceramic collection. Key motifs can only be applied to separate different ceramic units. For the purpose of stylistic analyses more comprehensive collections from single-component sites that have been studied extensively should be used. Entire collections should be studied, and jars and bowls included in the analyses.

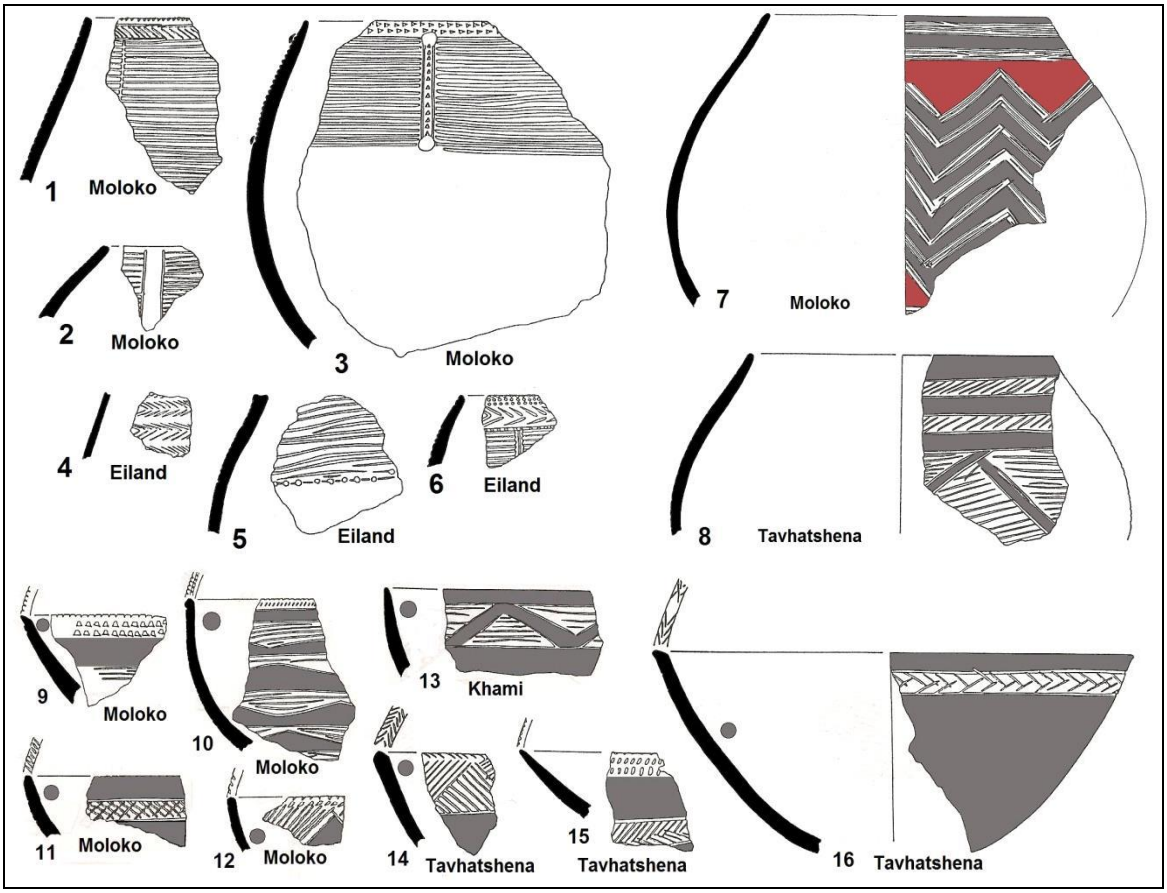

Figure 9.23: Pottery from Tavhatshena (Loubser 1991:199-210).

The rationale for constructing a ceramic sequence based on the identification of six facies in mainly one trench that moreover exhibited a bioturbated profile may be questioned. I argue that the three occupation layers represent *Mutamba* at AD 1050 ± 110 (Wits-1437), *Eiland* at AD 1290 ± 80 (Wits-1453) and *Tavhatshena* at AD 1580 ± 80 (Wits-1549). I further suggest that neither a *Moloko* nor a *Khami* facies can be identified at the site.

Loubser assigned some of the ceramics in Figure 9.23 (No. 1-3, 7, 9-12) to the *Moloko* facies. According to him the jars (No. 4-6) display characteristics of the *Eiland* facies. However, when we compare jar No. 3 with jar No. 6 the only difference is that vessel No. 6 has a herringbone band, a feature characteristic of *Eiland* ceramics. I argue that jars No. 1 to No. 6 are all *Eiland* facies vessels. I further suggest that the '*Moloko*' jar No. 7 is in fact a *Tavhatshena* vessel that displays incised bands and triangular motifs similar to the *Tavhatshena* jar No. 8. I would classify bowls No. 9, 11, 15, and probably No. 16, as *Eiland* vessels while I agree that the remainder (vessels No. 10, 12-14) are *Tavhatshena* facies bowls.

The identification of '*Moloko*' facies ceramics from Tavhatshena is not convincing. I suggest that the ceramics should not be incorporated in an *Icon* facies design structure but should rather be called *Eiland/Tavhatshena* ceramics. The triangular decorations on the broad rims of the '*Moloko*' ceramics at Tavhatshena are lacking in the facies that follow from the *Icon* facies, for example the *Letsibogo*. These '*Moloko*' ceramics moreover "disappear" in the northern Limpopo Province by the end of the 14th century (Loubser 1991:381). I argue that they never existed and that these *Icon* ceramics are early *Tavhatshena* pottery.

Early *Moloko* ceramics identified at Nagome Hill near Phalaborwa, Mpumalanga Province were collected during rescue excavations by Evers and Van der Merwe (1987). At this 13th-century *Kgopolwe* facies site (the eastern variant of the *Eiland* facies, see also Huffman 2007:248) a few sherds spread across the site were identified as early *Moloko* (Evers & Van der Merwe 1987:103). Based on the context and distribution, the identification is questionable and it is problematic to incorporate the sample into an *Icon* facies design structure. In summary, the *Icon* facies ceramic types and design structure should be revisited and verified by investigations at single-component sites that have been comprehensively studied and excavated.

Oral traditions view the origins of the Sotho-Tswana to be in the vicinity of the Great Lakes in eastern Africa, whence they migrated south, probably through western Zimbabwe and eastern Botswana (Schapera 1953:14). The early presence of the Tswana in eastern Botswana is also suggested by their creation myth, which relates that the first humans and the ancestral Batswana emerged from the waterhole at Matsieng, a rock engraving site near present-day Mochudi. The first migration was by people who are represented today by the Kgalagadi who settled in the eastern parts of Botswana (Schapera 1953:14). A current point of view holds that the *Eiland* sequence people evolved into the Kgalagadi (Tlou & Campbell 1997:92). Campbell (1989, 1998:41) identified *Eiland*-like ceramics in the Central Kalahari Game Reserve and Sekoma Pan dating well into the 16th century and later. He suggests a continuation into the Late Iron Age, probably with the Bakgalagadi as the potters.

The second Sotho-Tswana migration of Morolong's followers, the ancestors of the Rolong and Tlhaping, settled in south-eastern Botswana and in the North West Province between AD 1200 and AD 1350 (Schapera 1953:14; Breutz 1989:4). They incorporated some of the existing San and Kgalagadi groups. In south-eastern Botswana decorated ceramics from the *Moritsane* and *Broadhurst* facies (e.g. thickened decorated rims) are occasionally present at early *Moloko* sites whereas early *Moloko* sherds are often found at

Moritsane and *Broadhurst* facies sites. The data support interaction between the various groups. *Moritsane* vessels are finely made with neat decorations while Sotho-Tswana ceramics seem to be coarser and with more robust decorations. Early *Moloko* and *Letsibogo* facies motifs feature prominently in these early *Moloko* assemblages.

According to oral traditions, the third migration between AD 1350 and AD 1400 brought the ancestors of all other Sotho-Tswana groups (Schapera 1953:15; Breutz 1989:6). They settled at Mabjanamatshwana near Brits in the North West Province as the Baphofu (those who venerate the eland) under chief Malope (Breutz 1989:4). Shortly afterwards they split up into the Hurutshe, Kwena and Kgatla clusters. I argue that the ceramics produced by the people of the third migration introduced the comb-stamped Sotho-Tswana pottery into the Bankenveld region. A discussion of the supporting evidence for this statement falls beyond the scope of this project.

Radiocarbon dates

The Early *Moloko* facies, dating from ± AD 1300 to AD 1500, has a distribution area that includes the North West Province and south-eastern, central and eastern Botswana. Boeyens (1998:72, 106-108) investigated early *Moloko* facies sites at Bokkop and Rietfontein in the Marico district of the North West Province. The Rietfontein site dates to ± AD 1430 with ceramics similar to RU3 recognised by Hall (1981:49) in the Rooiberg area dating to ± AD 1470. Revil Mason's (1986:275-291) Roberts Farm phase sites, including Roberts Farm, Ifafi and Bultfontein in western Gauteng, display similar Early *Moloko* motifs. Excavations in the Pilanesberg National Park, where an AD 1400 date has been assigned to similar Sotho-Tswana pottery (L'Abbe *et al.* 2008:29), may also support this premise. Similar ceramics were also found in Botswana at the base of Modipe Hill that dates to ± AD 1475 (Labounty 1995:52; Pearson 1995), at Mochudi (Segobye 1987:51), and at Thamaga and Phatana (Van Waarden 1998:149). Some sites near Ranaka in Botswana seem to have ceramics of both the *Eiland* and Early *Moloko* facies, suggesting trade or possible production on site, which implies assimilation or intermarriage (Lane 1996:21). The radiocarbon dates for some of the above-mentioned Early *Moloko* facies sites are provided in Table 9.4.

Table 9.4: Radiocarbon dates* for Early *Moloko* sites.

Site	Lab number	Age B.P.	Intercepts	1 Sigma range	References
Basinghall C1-11	Pta-9476	1000 ±110	AD 1033	AD 987 - 1202	Chapter 6
MEP 36-D2-9	UGams 03594	525 ±30	AD 1428	AD 1419 - 1438	Biemond 2011
Pilanesberg 121	Pta-9304	620 ±40	AD 1400	AD 1312 - 1412	L'Abbe *et al.* 2008
Rietfontein 2.2	Pta-7049	550 ±45	AD 1424	AD 1410 - 1439	Boeyens 1998
Rietfontein 3.1	Pta-7065	470 ±50	AD 1452	AD 1434 - 1485	Boeyens 1998
Ifafi 35/85	Wits-1598	440 ±30	AD 1470	AD 1450 - 1495	Mason 1986
Roberts Farm 28/75	RL 198	440 ±95	AD 1470	AD 1430 - 1640	Mason 1986
Fikeng	Beta-33582	600 ±70	AD 1408	AD 1317 - 1421	Campbell *et al.* 1991
Phatana	Beta-32493	610 ±60	AD 1405	AD 1312 - 1424	Campbell *et al.* 1991
Broadhurst	Wits-837	590 ±50	AD 1411	AD 1396 - 1427	Denbow 1981

*Calibrated by Southern hemisphere INTCAL 1998 adapted

Ceramics

The Early *Moloko* facies from Basinghall displays particular design elements that are clearly different from the *Icon* facies early *Moloko*-style ceramics. Several vessels display horizontal incised or punctated bands, key features of the later *Letsibogo* and *Madikwe* facies that are filled in by motifs common to *Eiland*, including herringbone, oblique incisions and crosshatched motifs. Based on the key features of the later *Letsibogo* and *Madikwe* facies identified in the Basinghall collection, Huffman (personal communication in 2006) classified the excavated ceramics from Site 37-C1-11 as an early *Madikwe* facies. However, the introduction of an alternative Early *Moloko* facies to account for the above-mentioned design elements, particularly those derived from Eiland motifs and associated with a specific geographical distribution, might be imperative.

Interaction between communities produces transformations on different levels. Calabrese (2000, 2005) convincingly demonstrated that Zhizo ceramics were not completely replaced by the successive Leopard's Kopje ceramics in the Limpopo-Shashe region but that both ceramic expressions continued to be produced and used at some settlements. Stylistic changes in a ceramic facies are also not uncommon in frontier communities. It can be expressed through an overlap of discrete pottery traditions or in subtle stylistic changes, such as the lack of a full range of motifs, the absence of burnish or ochre or changes in vessel form or in the position of motifs (Reid & Segobye 2000:64; Calabrese 2005:17, 133). This may either result through isolation from the core group or the incorporation of traits in the course of contact with foreign groups across a frontier. Reid and Segobye (2000:64) speculate whether differences in the ceramics between frontier and core communities result from the presence of diverse societies in remote areas or whether such a remote community "developed a pottery tradition of their own which incorporated elements from the core areas".

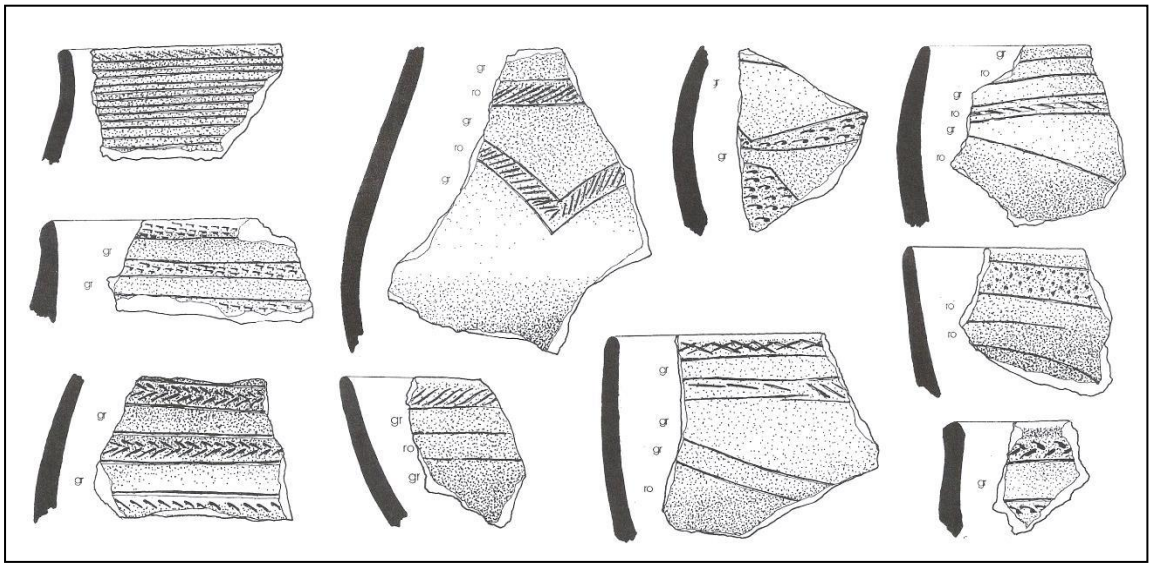

Figure 9.24: Early *Moloko* pottery from Rietfontein, Marico district (Boeyens 1998:163-171).

Ceramics retrieved by Boeyens (1998:72, 106-108) from Rietfontein in the Marico district (see Figure 9.24) demonstrate that features of the *Eiland* facies had been

incorporated into the pre-Madikwe ceramic design field. *Eiland* motifs, including herringbone and crosshatching, fill in some of the bands on the vessels. These early *Moloko* characteristics developed a century later into the classic 17th-century *Madikwe* facies ceramics identified at Magozastad, a short distance away (Boeyens 1998:112-119). The Roberts Farm phase sites investigated by Mason (1986:275-291), including Roberts Farm, Ifafi and Bultfontein in western Gauteng, display similar characteristics (see Figure 9.25).

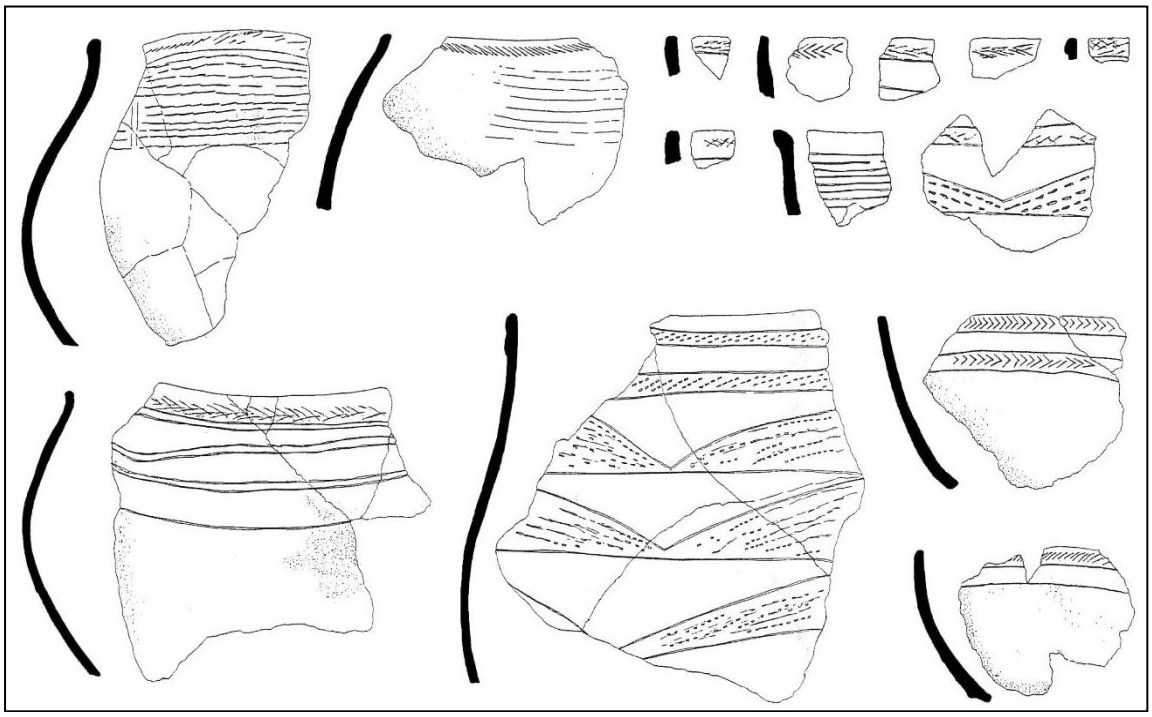

Figure 9.25: Early *Moloko* pottery from Roberts Farm phase sites, western Gauteng (Mason 1986:275-290).

Site 37-C1-11 (*Mmamphuphama*)

The Early *Moloko* facies is represented by 306 decorated vessels and the *Moritsane* facies by two decorated vessels in the collection from this locality. The decorated vessels

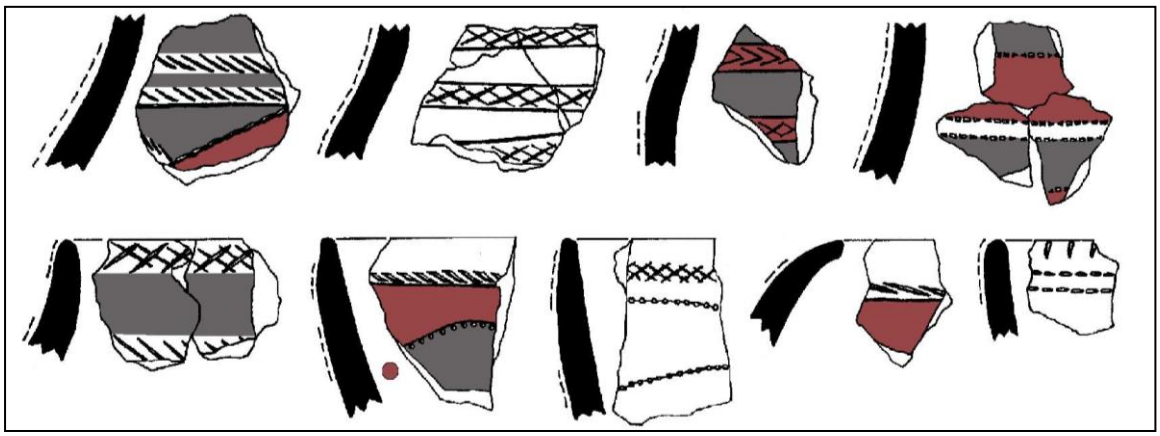

Figure 9.26: Early *Moloko* facies pottery from Site 37-C1-11.

show a ratio of 49% recurved jars, 12% constricted jars and 39% bowls. Early *Moloko* motif classes II E1 (12.1%) as oblique incision, II C1 (11.5%) as a punctate band and II A1 (9.3%) as an incised band are the most frequently utilised motifs in the assemblage. The decoration techniques used are dominated by incision (68.9%) followed by punctates (23.6%), rim-notching (3.9%) and comb-stamping (3.6%) (see Figure 9.26 for examples). The assemblage yielded 15 out of a possible 19 Early *Moloko* ceramic classes.

9.5 The *Letsibogo* facies

In eastern Botswana a distinctive *Moloko* ceramic unit with red and black colouring bordered by dragged punctates has been recorded two decades ago. During an archaeological survey for the building of the Letsibogo Dam near Selibe-Pikwe in eastern Botswana this ceramic unit was recognised and named after the eponymous site (Campbell *et al.* 1996; Huffman & Kinahan 2003).

Huffman (2002:12) maintains that the *Icon* facies developed into the *Letsibogo*, *Madikwe* and *Olifantspoort* facies as Middle *Moloko* phases. The three facies share roughly the same motifs differing only in the decoration technique. The *Letsibogo* facies is characterised by a dragged punctate technique and the *Madikwe* facies by an incision technique. The *Olifantspoort* facies differs in that triangular motifs dominate the design field, incorporating multiple bands of fine stamping or narrow incision (Huffman 2007:193). In his *Handbook* Huffman (2007:187) maps the spread of the *Letsibogo* facies in eastern Botswana and in the western Limpopo Province. A broader distribution area to the south is suggested as some *Letsibogo* facies vessels were also found during a Phase 2 Archaeological Impact Assessment (AIA) project near Thabazimbi, Limpopo Province, at a 17th-century *Madikwe* facies site which Huffman (2006:55) reckons to be associated with maize production. My research on the ceramic collections at the National Museum in Gaborone confirmed that many more sites in central and south-eastern Botswana contain *Letsibogo* ceramics. *Letsibogo* pottery was also identified in the Madikwe Game Reserve (North West Province) (personal observations, 2011). Pottery from Millbank in the Limpopo Province (Van Schalkwyk 2000) assigned to the *Letsibogo* facies by Huffman has been omitted from the analyses for this dissertation because of the likelihood of a double-component site, with an early date for an *Icon* facies and a later date for Hananwa pottery, a splinter group originating from the Hurutshe-Tswana (Boeyens 1998:32).

Radiocarbon dates

Dates from the 16th and 17th centuries were obtained for *Moloko* sites at the Letsibogo Dam in the Motloutse River (Huffman & Kinahan 2002/2003). These dates suggest that *Letsibogo* people had settled there from the 15th century onwards (Campbell *et al.* 1996:52). *Letsibogo* ceramics from Phase 2 AIA mitigations at sites investigated for the Mmamabula Energy Project (MEP) (Biemond 2011) in the immediate region of Basinghall have also been incorporated in the analysis of the *Letsibogo* facies for this study. Of the 16 *Letsibogo* sites identified at Basinghall two were dated and the results are presented in Table 9.5.

Table 9.5: Radiocarbon dates* for *Letsibogo* facies sites.

Site	Lab number	Age B.P.	Intercepts	1 Sigma range	References
Basinghall C1-19	Pta-9303	300 ±15	AD 1649	AD 1644 - 1658	Chapter 7
Basinghall C1-25	UGams 03982	315 ±25	AD 1644	AD 1637 - 1652	Chapter 8
MEP 36-D2-14	UGams 02961	390 ±30	AD 1509, 1595, 1616	AD 1456 - 1630	Biemond 2011
Letsibogo - 79A	β - 80094	400 ±70	AD 1570, 1596, 1618	AD 1452 - 1654	Van Waarden 1999
Letsibogo - 2	β - 80092	360 ±70	AD 1533, 1547, 1635	AD 1476 - 1657	Van Waarden 1999
Letsibogo - 127	β - 81224	360 ±70	AD 1533, 1547, 1635	AD 1476 - 1657	Van Waarden 1999
Letsibogo - 16	β - 81225	280 ±70	AD 1660	AD 1638 - 1804	Van Waarden 1999

*Calibrated by Southern hemisphere INTCAL 1998 adapted

Ceramics

The *Letsibogo* facies ceramics are characterised by dragged punctate lines or short grooves in horizontal bands in the neck of vessels and with arcades or lozenges bordered by dragged punctate lines filled in with red ochre and graphite on the shoulder and body of vessels. A fair number of vessels display rim-notching, for example 13% in the collection from Site 37-C1-19. Highly decorated bowls coloured with graphite on the inside of the vessels, generally more than 50% vessels of a collection, also characterise this facies.

Ceramics documented from early *Moloko* sites in the region, dating to the 15th century, display some characteristics of the *Letsibogo* facies. As an example, the *Moloko* component in the Broadhurst type site ceramic collection (see Figure 9.19) displays several *Letsibogo* motifs. At the early *Moloko* site MEP 36-D2-9 dating to about AD 1425 a fair number of *Letsibogo* ceramics (see Figure 9.27) were recovered (Biemond 2011). Vessels decorated by rim-notching, dragged punctate lines and bands, arcades, triangles and lozenges bordered by dragged punctate lines filled in with red ochre and graphite colouring were identified in this collection.

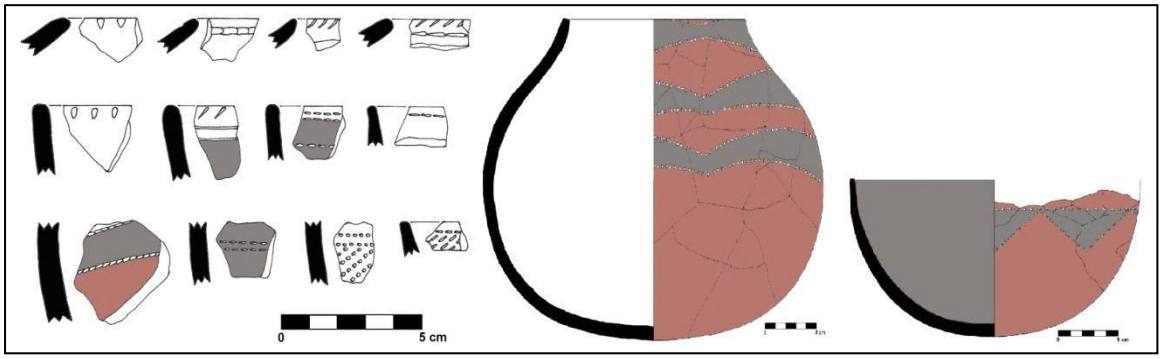

Figure 9.27: *Letsibogo* ceramics from the 15th-century *Moloko* site MEP 36-D2-9 (Biemond 2011).

Sites dating to the 16th and 17th centuries display the classical Letsibogo facies ceramic characteristics. For the stylistic analysis of the *Letsibogo* facies I used 16th- and 17th-century assemblages from the Letsibogo Dam housed in the Botswana National Museum in Gaborone and the assemblages from Basinghall Farm. In addition, *Letsibogo* ceramics from the Phase 2 mitigation of Site 36-D2-14 from the Mmamabula Energy Project were also incorporated in the analysis.

Ceramic assemblages collected around the Shoshong area during CRM projects and now housed at the Botswana National Museum in Gaborone contain predominantly *Letsibogo* facies ceramics. Some assemblages have associated bead collections that date to the 19th century (personal observations). Shoshong, as already pointed out in Chapter 1, was the capital of the Bakaa for a period of 150 years until this group was incorporated into the Ngwato confederacy in AD 1849 (Schapera 1945:111). A large Late Iron Age town around Manale Hill was identified during a CRM project conducted in the Shoshong region. The site of 9 ha in extent comprises several wards (Biemond 2007). There are no stone walls and the homesteads were probably partitioned with poles and reeds as sketched by the traveller Emil Holub (1881(I):372) (see Figure 8.2). The shallow middens contain pottery from a late *Letsibogo* facies that was evidently produced by the Bakaa, probably at the time of the *difaqane* (Figure 9.28).

Figure 9.28: Late *Letsibogo* ceramics from the site at Manale Hill, Shoshong region (Biemond 2007).

This late *Letsibogo* facies developed from the earlier 17th-century *Letsibogo* ceramic assemblages. I call it the *Shoshong* facies of the *Letsibogo* sequence. The ceramics are characterised by triangles, lozenges and horizontal bands bordered by dragged punctate lines filled in with red ochre and graphite. Although some sites at Basinghall show elements of this later facies, the stylistic analysis of this facies falls beyond the scope of this dissertation.

At Basinghall a few *Letsibogo* facies sherds were identified in the ceramic collection of the Early *Moloko* site 37-C1-11. The sherds are decorated with dragged punctate lines and bands separated by red ochre and graphite (see Figure 9.26). In the 17th century the facies evolved into classic *Letsibogo* as presented in the collections from site 37-C1-15, 37-C1-19 and 37-C1-25 (see Figure 9.29 and 9.30). The 19th-century late *Letsibogo* ceramics from sites 37-A3-1 and 37-C1-35 are influenced by motifs used by other Tswana tribes on the landscape at that time such as the Kwena and Ngwato (see Figure 9.31 and 9.32).

Site 37-C1-19 (*Motsikiri*)

The collection from *Motsikiri* represents the classical *Letsibogo* facies (Figure 9.29). The decorated vessels show a ratio of 38% jars to 62% bowls. The vessels comprise recurved jars, constricted jars and deep bowls. The trend for highly decorated deep bowls coloured with graphite on the inner surface is a typical characteristic of *Moloko* Branch ceramics (Hall 1998:249). The most frequent decoration techniques were dragged punctate lines (31.3%) and dragged punctate bands (21.4%). The predominant use of a punctate decoration technique confirms that the collection is a *Letsibogo* facies assemblage. Only 1.4% of motifs were executed with an incision decoration technique, which is typical of the *Madikwe* facies (Huffman 2007:201). With 18 out of 26 possible *Letsibogo* vessel classes present in the collection the site is accordingly interpreted as a *Letsibogo* settlement.

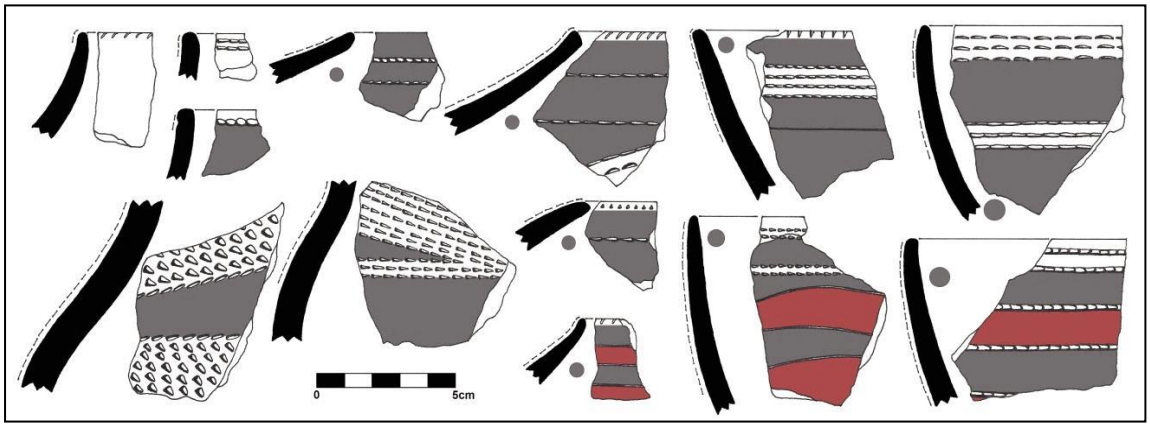

Figure 9.29: 17th-century *Letsibogo* pottery from Site 37-C1-19.

Site 37-C1-15 (*Mmalapaneng*)

The ceramics collected from *Mmalapaneng* show a ratio of 60% jars to 40% bowls. The vessel shapes resemble those from the previous site, *Motsikiri*. The most frequent decoration techniques were also dragged punctate lines (18.4%) and dragged punctate bands (20.2%) (Figure 9.30). The punctate decoration technique is predominantly used with only 3.9% of motifs executed with an incision technique. With 21 out of 26 possible *Letsibogo* vessel classes present in the collection *Mmalapaneng* was evidently a *Letsibogo* settlement.

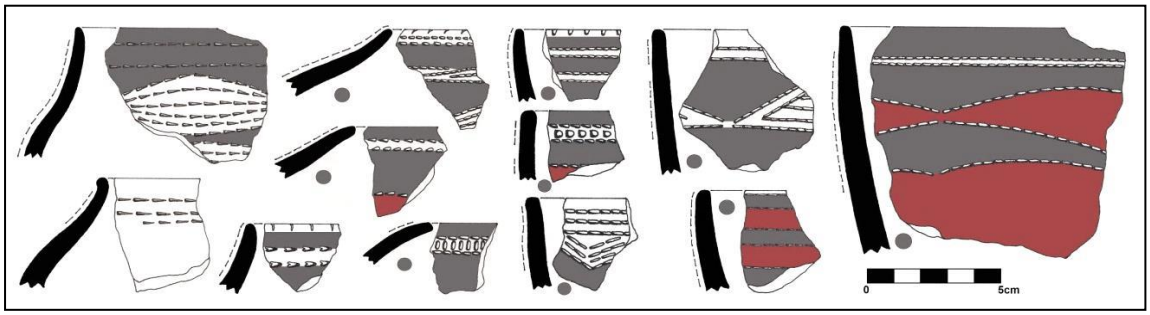

Figure 9.30: 17th-century *Letsibogo* pottery from Site 37-C1-15.

Site 37-C1-25 (*Makgarapeng*)

The ceramic collection from the large grain bin site *Makgarapeng* belongs to the classic *Letsibogo* ceramic unit. The vessels constitute recurved jars, a few short-necked jars, constricted jars and deep bowls. The most frequently used decoration techniques were again dragged punctate lines (34.2%) and dragged punctate bands (28.6%). The punctate technique was mainly used, with incision accounting for only 8.6% of the motifs. With 11 out of possible 26 *Letsibogo* vessel classes present in the collection it can be inferred that it was a *Letsibogo* settlement.

Site 37-C1-35 (*Manoko*)

The bulk of the ceramics sampled at *Manoko* is representative of the late *Letsibogo* facies (Figure 9.31). The sample includes some motifs from *Moloko* ceramics associated with a Kwena/Ngwato origin. A punctate technique was mainly used (70%), which confirms that the collection is predominantly a *Letsibogo* assemblage. Incision was used for 30% of motifs, which is a typical for a Late *Moloko* expression such as the *Buispoort* facies (Huffman 2007:203-205). With 12 out of 26 possible *Letsibogo* vessel classes present in the collection the site is interpreted as a *Letsibogo* facies settlement.

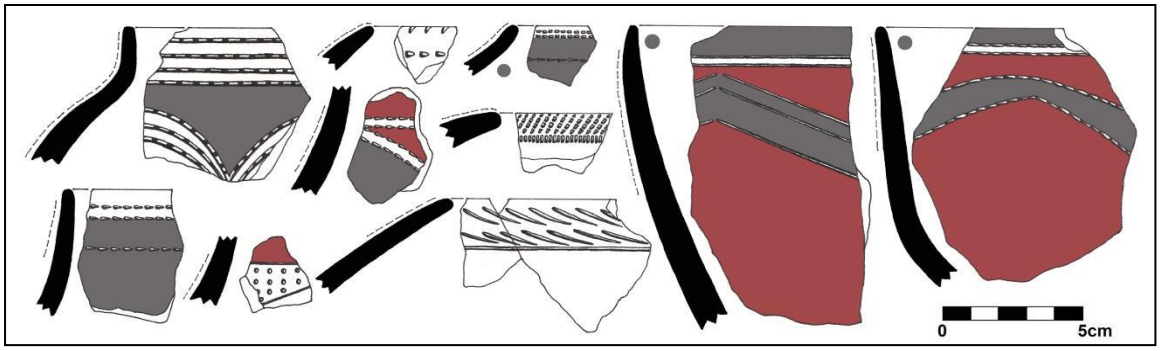

Figure 9.31: 19th-century *Letsibogo* pottery from Site 37-C1-35.

Site 37-A3-1 (*Lekotsane*)

The *Letsibogo* facies is represented by 88 (46%) of the decorated vessels in the *Lekotsane* collection (Figure 9.32). Punctates were used (62%) followed by incised decorations (38%), which confirms that the collection is predominantly a *Letsibogo* assemblage. Punctate double lines (15%) and an incised single line (15%) are regular motifs. The assemblage yielded eight of the possible 26 *Letsibogo* facies classes; therefore the later component of the site is accordingly classified as a *Letsibogo* settlement.

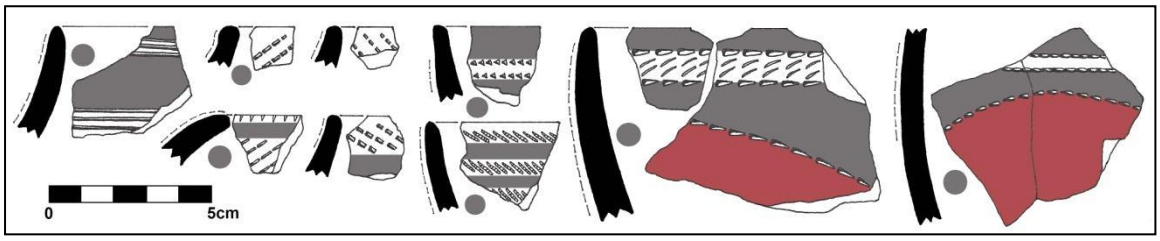

Figure 9.32: 19th-century *Letsibogo* pottery from Site 37-A3-1.

9.6 The glass bead sequence at Basinghall

Glass beads were traded for more than a thousand years into the interior of southern Africa (Saitowitz 1990:12-19; Wood 2005:1-3). Beads are the most abundant imported artefacts in Iron Age archaeological deposits and, when present, are used to interpret several features of archaeological sites. These include the reconstruction of trade patterns and routes, determining cultural affiliations and refining site chronology (Wood 2011:68). The glass bead sequence for southern Africa and definitions were developed based on morphological and technological attributes and are supported by the chemical analyses of the glass used to produce the beads (Robertshaw et al. 2010:1809; Wood 2011:68). Radiocarbon chronologies from well-excavated sites were applied to define and date the bead series (Robertshaw et al. 2010:1899). In general the glass bead data seem to confirm the settlement sequence based on ceramics and radiocarbon dates. In this study I use glass beads from the excavations to calibrate the chronology of Iron Age settlement at Basinghall in the second millennium AD.

The terminology used to classify the beads from Basinghall is based on the methodology developed by Marilee Wood (2005, 2011 and 2012). The glass beads from Basinghall are all drawn beads and fall into the shape categories of tube, cylinder or oblate (Figure 9.33). The shapes result from the production method and are based on the ratio between size (diameter) and length (Tables 9.6 and 9.7) and to what degree they were reheated or rounded. Tubular beads have parallel straight sides with the ends left untreated or slightly rounded by reheating. Cylindrical beads have characteristics of both a tube and an oblate: the central section still has straight sides with the ends heat-treated to form a rounded profile. Oblate beads are uniform, well-formed and have been heat-treated to the point that the entire length of the bead has a smooth well-rounded profile. Diaphaneity of beads refers to the transparency of the glass and can be categorised as transparent, translucent or opaque (see Table 9.8). The colour names are based on Wood (2011:35-38) who used the Munsell Book of Colours (1976) with adjustments to assign colour names for Munsell numbers.

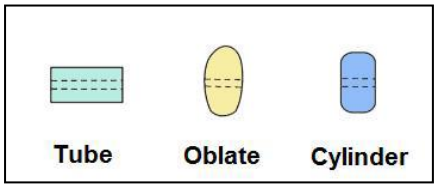

Figure 9.33: Bead shapes identified at Basinghall.

Table 9.6: Bead sizes (diameter).

Size	Bead diameter
Minute	≤ 2.5 mm
Small	> 2.5 - 3.5 mm
Medium	> 3.5 - 4.5 mm
Large	> 4.5 - 5.5 mm
Very large	> 5.5 mm

Table 9.7: Bead length ratios.

Length ratio	Formula
Disc	Length = < 0.2 diameter
Short	Length = > 0.2 - < 0.8 diameter
Standard	Length = > 0.8 - <1.2 diameter
Very long	Length = > 2 diameter

Table 9.8: Glass diaphaneity (Wood 2011:70).

Diaphaneity	Description
Transparent	Objects can be clearly seen through the glass
Transparent-translucent	Glass is slightly cloudy (often due to bubbles)
Translucent-transparent	Glass is cloudy but light passes easily through bead
Translucent	Light passes through entire bead
Translucent-opaque	Glow of light from most of bead
Opaque-translucent	Slight glow of light at edges of bead
Opaque	No light seen through edge of bead

The sequence constructed by Wood (2005:39-61, 2011:67-84) consists of the following bead series: Zhizo, K2 Indo-Pacific, East Coast Indo-Pacific, Mapungubwe Oblate, Zimbabwe, Khami Indo-Pacific and European. Other than the Zhizo and Zimbabwe series, all of the above-mentioned series were identified in the Basinghall collection and are discussed respectively in the following section.

K2 Indo-Pacific series (AD 950 - AD 1220)

The K2 Indo-Pacific series (Figure 9.34) is characterised by drawn tubular beads with the ends of some beads slightly rounded by heat treatment. They are smaller in diameter and longer than the East Coast Indo-Pacific series. The bead colours range from turquoise to various shades of blue-green and green. The diaphaneity ranges from transparent to translucent. They are made of a durable glass that is not prone to corrosion. The importation of the Zhizo series beads ceased in about the mid-10th century when they were replaced by K2 Indo-Pacific series beads. By the time the capital in the Shashe-Limpopo confluence area moved from K2 to Mapungubwe Hill in about AD 1220 (Huffman 2007:376) the K2 Indo-Pacific beads were no longer being imported.

Figure 9.34: K2 Indo-Pacific series beads from the Shashe Limpopo confluence area (Wood 2005: plate 3).

Figure 9.35: K2 Indo-Pacific series beads from *Toutswe* sites at Basinghall.

The characteristics of the excavated K2 Indo-Pacific series beads from *Toutswe* sites at Basinghall resemble those from the Shashe-Limpopo confluence area. Their shape, size, length, colour and diaphaneity are the same (Figure 9.35).

The 50 early glass beads excavated at Site 37-A3-1 constitute K2 Indo-Pacific 33 (n = 33, 66%), East Coast Indo-Pacific red-brown (n =12, 24%) and East Coast Indo-Pacific black (n = 5, 10%) series beads. A ratio of nearly 2:1 points to the greater availability of K2 Indo-Pacific beads than East Coast Indo-Pacific beads at the time of settlement. A date of 1010 ± 40 years BP for the Toutswe settlement is, therefore, substantiated by the bead data as the K2 Indo-Pacific series were the main imported trade beads at that time.

The 100 early glass beads that have been recovered from Site 37-C1-8, a *Toutswe* facies occupation, comprise K2 Indo-Pacific (n = 32, 32%), East Coast Indo-Pacific red-brown (n = 29, 29%) and East Coast Indo-Pacific black (n = 39, 39%) series beads. The ratio between K2 Indo-Pacific and East Coast Indo-Pacific is nearly 1:2, which may imply a decline in the availability of K2 Indo-Pacific beads by 870 ± 45 years BP.

The 72 early glass beads from Site 37-C1-4 comprise K2 Indo-Pacific (n = 29, 40%) and East Coast Indo-Pacific (n = 43, 60%) series beads. The ratio of 2:3 suggests that lesser numbers of K2 Indo-Pacific beads were acquired by 760 ± 50 years BP although they were still in circulation. The K2 series was manufactured up to AD 1220 but glass beads were usually curated and often treasured as heirlooms, and therefore stayed in circulation long after they were imported (Robertshaw *et al.* 2010; Wood 2011, 2012; Prinsloo *et al.* 2012).

East Coast Indo-Pacific series (AD 950 - AD 1600)

The East Coast Indo-Pacific series beads (Figure 9.36) are larger in diameter and shorter in length than the K2 Indo-Pacific series. The beads vary considerably in size with cylinders as the dominant shape. Some oblates appear in the series but the shape was not intentionally produced (Wood 2000:80). The yellow, orange, green and blue-green beads are translucent to opaque-translucent, while the red-brown and black beads are opaque. Pale coloured red-brown and black beads can be mistaken for white beads as they are prone to corrosion and often devitrify, displaying a dull white patina on the exterior (Robertshaw *et al*. 2010:1907; Wood 2011:44). The yellow and green East Coast Indo-Pacific beads arrived in the Shashe-Limpopo region at the same time as the K2 Indo-Pacific beads. The red-brown beads post-date the Zhizo capital of Schroda, since none were found there. Black beads appear only late in the K2 sequence and can be used as a broad temporal marker. When the capital shifted from K2 to Mapungubwe Hilltop at AD 1220 red-brown and black beads became dominant at both K2 and on Mapungubwe Hilltop (Wood 2005:143–144).

The East Coast Indo-Pacific beads recovered from *Toutswe* site 37-A3-1 consist of 12 red-brown and five black beads (Figure 9.37). The ratio between the East Coast Indo-Pacific red-brown and black beads is 2.4:1. The presence of black beads (that appear late in the K2 sequence) indicates a settlement at a date later than 1010 ± 40 years BP. The site was probably resettled by *Toutswe* people in the 12th or 13th century as indicated by a

presence of a *Moritsane* facies in the ceramic collection. An absence of Mapungubwe Oblate beads places the settlement also in a pre-Mapungubwe time frame.

Figure 9.36: East Coast Indo-Pacific series beads from the Shashe-Limpopo confluence area (Wood 2005: plate 7).

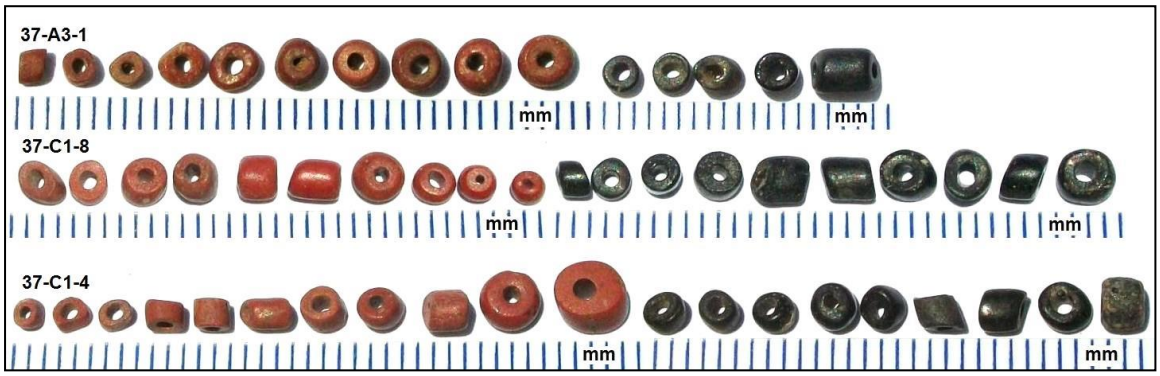

Figure 9.37: East Coast Indo-Pacific series beads from *Toutswe* sites at Basinghall.

At *Toutswe* site 37-C1-8 the East Coast Indo-Pacific beads comprise 29 (43%) red-brown and 39 (57%) black beads. The ratio between East Coast Indo-Pacific red-brown and black beads is 1:1.4. The results confirm a trend in the Shashe-Limpopo region for a dominance of black and red-brown beads by the beginning of the 13th century. Black beads are rare at settlements that predate Mapungubwe (Wood 2011:51). The presence of Mapungubwe Oblate beads and the particular colours place the date of the settlement to around the Mapungubwe period.

At *Toutswe* site 37-C1-4 the East Coast Indo-Pacific beads comprise 28 (65%) red-brown and 15 (35%) black beads. The ratio between East Coast Indo-Pacific red-brown and black is nearly 2:1. Although the bead sample is relatively small we note a preference for red-brown beads. The presence of Mapungubwe Oblate beads places the settlement into a Mapungubwe period time frame.

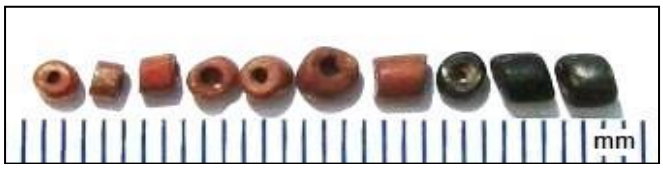

Figure 9.38: East Coast Indo-Pacific series beads recovered from *Moritsane* Site 37-C1-7.

Ten glass beads were recovered at the *Moritsane* facies Site 37-C1-7 (Figure 9.38). The seven red-brown and three black beads belong to the East Coast Indo-Pacific series. With an absence of temporal markers it is difficult to place the beads into a timeframe. Towards the end of K2 and the beginning of Mapungubwe at AD 1220 red-brown and black beads dominate bead collections in the Shashe-Limpopo confluence area (Wood 2000:82, 2005:183, 2011:44). A potential oversupply of Indo-Pacific beads at that time could have spread the beads to societies on the borders of the Mapungubwe state. It is also possible that the elite Mapungubwe series beads were reserved for the ruling classes, thus never reaching the *Moritsane* people.

Mapungubwe Oblate series (AD 1220 - AD 1300)

Mapungubwe Oblate beads (Figure 9.38) are characterised by small, drawn oblate beads that are uniformly shaped. The smallest and most uniform beads were found in large numbers on Mapungubwe Hill. In commoner areas near Mapungubwe, in Zimbabwe and also Botswana the beads tend to be larger and more irregular in shape and many are cylinders. The colours include opaque black, translucent to opaque-translucent blue-green, light green, yellow and orange and transparent to transparent-translucent cobalt blue and plum. At Mapungubwe Hill the most popular colour was black followed by blue-green, blue and yellow. The Mapungubwe Oblate series began to arrive in the Shashe-Limpopo region after AD 1220 and replaced the East Coast-Indo Pacific series beads. At Basinghall the bead collections from *Toutswe* sites 37-C1-8 and 37-C1-4 contain five Mapungubwe Oblate series beads (see Figure 9.40) placing the settlements into a Mapungubwe period time frame.

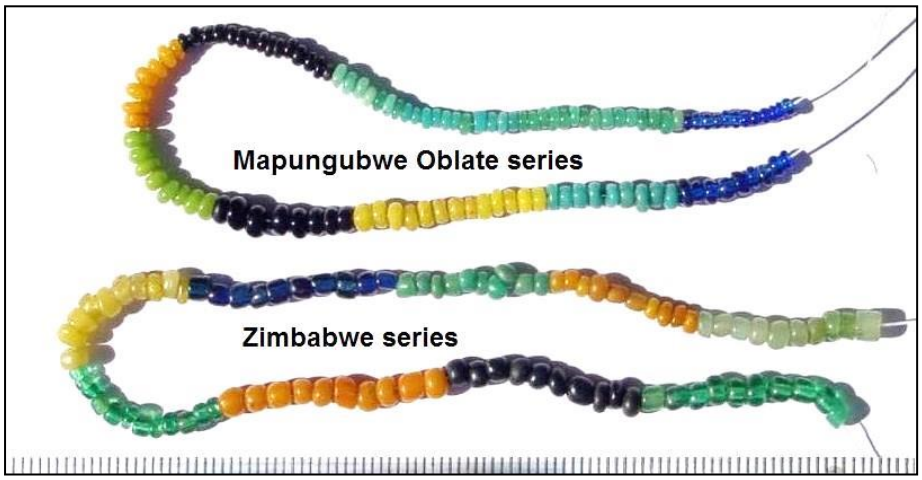

Figure 9.39: The Mapungubwe Oblate and Zimbabwe series beads (Wood 2011:83). The Zimbabwe series beads are notably more irregular.

In a Mapungubwe-period burial at K2 seven large, spherical, blue-green wound beads were discovered (Steyn *et al.* 1999; Wood 2000:82, 2011:121). These large wound beads were interspersed with many small drawn beads; some were still embedded in the perforations of the larger beads (Figure 9.41). These beads found around the neck area of the buried infant suggest a necklace. A number of the opaque-translucent blue-green beads display a whitish rim on the ends of the beads. At Basinghall a broken bead resembling the blue-green beads and with a whitish rim was identified in the bead

collection of site 37-C1-8, confirming an early 13th-century occupation at the site (see Figure 9.40 No. 4).

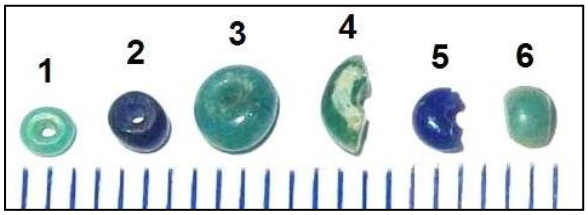

Figure 9.40: Mapungubwe oblate series: Site 37-C1-8 (1-3); similar to K2 burial (4); site 37-C1-4 (5 & 6).

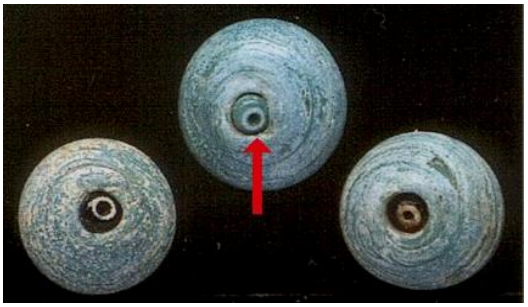

Figure 9.41: K2 burial beads (Wood 2005: plate 6).

Zimbabwe series (AD 1300 - AD 1450)

At the end of the 13th century the Mapungubwe Oblate series was replaced by the Zimbabwe series beads. In contrast to the Mapungubwe Oblate series the Zimbabwe series displays larger, longer and mostly cylindrical beads. The glass chemistry is the same as the Mapungubwe Oblate series but there are distinctive changes in glass translucency and colour (Wood 2011:77). The blue-green and yellow glasses are more transparent and the colours are softer. The cobalt blue beads are less transparent as well as darker and duller in colour. A new dark green transparent and a pale translucent greyish-green glass emerge in this series. Black beads are present in lesser numbers. This series is present at sites throughout Zimbabwe, Botswana and the northern parts of South Africa. During the Phase 2 mitigation of Site 36-D2-14 for the Mmamabula Energy Project (Biemond 2011) a few Zimbabwe series beads were uncovered at the 16th-century *Letsibogo* facies site (Figure 9.42).

Figure 9.42: Zimbabwe series beads recovered from MEP Site 36-D2-14 (Biemond 2011).

Khami Indo-Pacific (AD 1450 - AD 1700)

The Khami Indo-Pacific series that began to arrive in southern Africa in the early 15th century reflects a shift in trading patterns for the region by replacing the Mapungubwe Oblate and Zimbabwe series. The beads (Figure 9.43) are larger than earlier series, shorter in length and the shapes are mostly cylindrical. The bead colours include opaque black and red-brown, translucent-opaque to opaque-translucent blue-green, green, yellow, orange and blue and translucent-opaque off-white. These beads are found in large numbers in most areas of southern Africa from the early 15th century to the end of the 17th century.

Khami series beads were identified at several *Letsibogo* facies sites at Basinghall. Four beads were excavated at Site 37-C1-19 and 33 at Site 37-C1-25. The short and irregular-

shaped cylindrical beads represent the complete range of Khami Indo-Pacific series colours (Figure 9.44). The presence of Khami series beads places the *Letsibogo* settlements in a 17th-century timeframe and this is substantiated by the radiocarbon dates obtained for the sites. A trade network linked to the Khami state at that time may have facilitated the spread of the beads to societies on the borders of the state, as far as the *Letsibogo* territory.

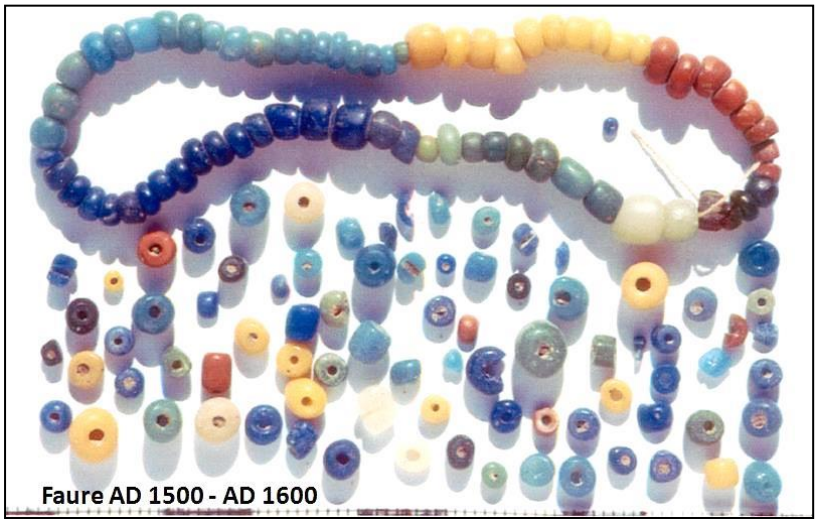

Figure 9.43: Khami series beads from Faure, northern Limpopo Province (Wood 2005: plate 4).

Figure 9.44: Khami series glass beads recovered from Site 37-C1-25.

European beads (AD 1650 - AD 1900)

European beads were produced in great quantities and traded over the whole world from centres of bead production such as Venice, Amsterdam and Bohemia (Saitowitz 1990:12-19). In the 17th century the bead production centres in India were destroyed by the Dutch whereupon they then imported beads from Europe for trade in Africa. Local African people still wanted the traditional beads from India and these had to be copied by European bead makers. The first production dates of some of these beads are known, making them useful in determining the earliest possible dates for a given assemblage. For example, the small drawn opaque pure white as well as pink beads began to arrive in southern Africa in the early 19th century - probably around AD 1830 (Wood 2000:90; Wood 2008:186). By comparing assemblages from known and well-dated sites we can follow the ways in which bead types were traded and changed through time. The Zulu king Dingane's capital, Mgungundlovu (AD 1828 - AD 1839), was one of the earliest sites where pure white and pink seed beads were identified (Saitowitz 1990:23-28).

At Basinghall a couple of European beads were identified in the collection of site 37-A3-1 only. The presence of a pink bead dates the *Letsibogo* component at the site to the 19th century (Figure 9.45).

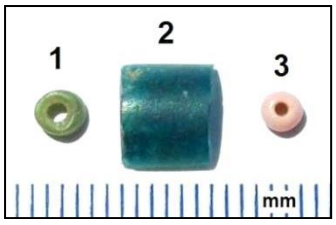

Figure 9.45: Khami Indo-Pacific series (1) and European beads (2 & 3) from Site 37-A3-1.

The small green bead from Site 37-A3-1 (Figure 9.45) is possibly a Khami series bead and associated with the 19th-century *Letsibogo* settlement.

The bead sequence at Basinghall

The development of a glass bead sequence for Basinghall provides a complementary method of interpreting the data obtained from the excavated sites. It is frequently difficult to place sites in a timeframe because of ceramic sequences that continue over longer periods and radiocarbon dates that can encompass a long time range. By adding the bead data a more accurate date for a site can be obtained. In Table 9.9 the bead data for excavated sites at Basinghall are summarised and the sequence is presented in Figure 9.46.

Table 9.9: Glass bead data from excavated sites at Basinghall.

Site	Age B.P.	K2 IP	EC IP red-brown	EC IP black	Mapungubwe	Khami	Total
37-A3-1	1010 ± 40	33 (65%)	12 (23%)	5 (10%)		1 (2%)	51
37-C1-8	870 ± 45	32 (31%)	29 (28%)	39 (38%)	4 (3%)		104
37-C1-4	760 ± 50	29 (38%)	28 (36%)	15 (19%)	2 (3%)	3 (4%)	77
37-C1-7	670 ± 50		7 (70%)	3 (30%)			10
37-C1-19	300 ± 15					4	4
37-C1-25	315 ± 25					33	33

The K2 Indo-Pacific series is a distinct marker for the 250 year period of *Toutswe* settlement at Basinghall. The early period is marked by a dominance of K2 Indo-Pacific beads that declined in importance towards the end of the *Toutswe* chiefdom's reign by AD 1290. The first import and trade dates for the red-brown and black East Coast Indo-Pacific beads and their dominance during the 13th century mark the final period of the *Toutswe* chiefdom and the trade with nearby *Moritsane* communities. The Mapungubwe Oblate series is very specific to the 13th century. Middle *Moloko* sites can be dated by the occurrence of the Zimbabwe series as in the case of the *Letsibogo* site at the Mmamabula Energy Project. The Khami Indo-Pacific series dates the *Letsibogo* sites probably up to the 18th century. Most of the grain bin sites at Basinghall date to this period. Nineteenth-century sites are marked by European beads and more research on this time period will shed light on the more recent settlement of Iron Age farming communities at Basinghall.

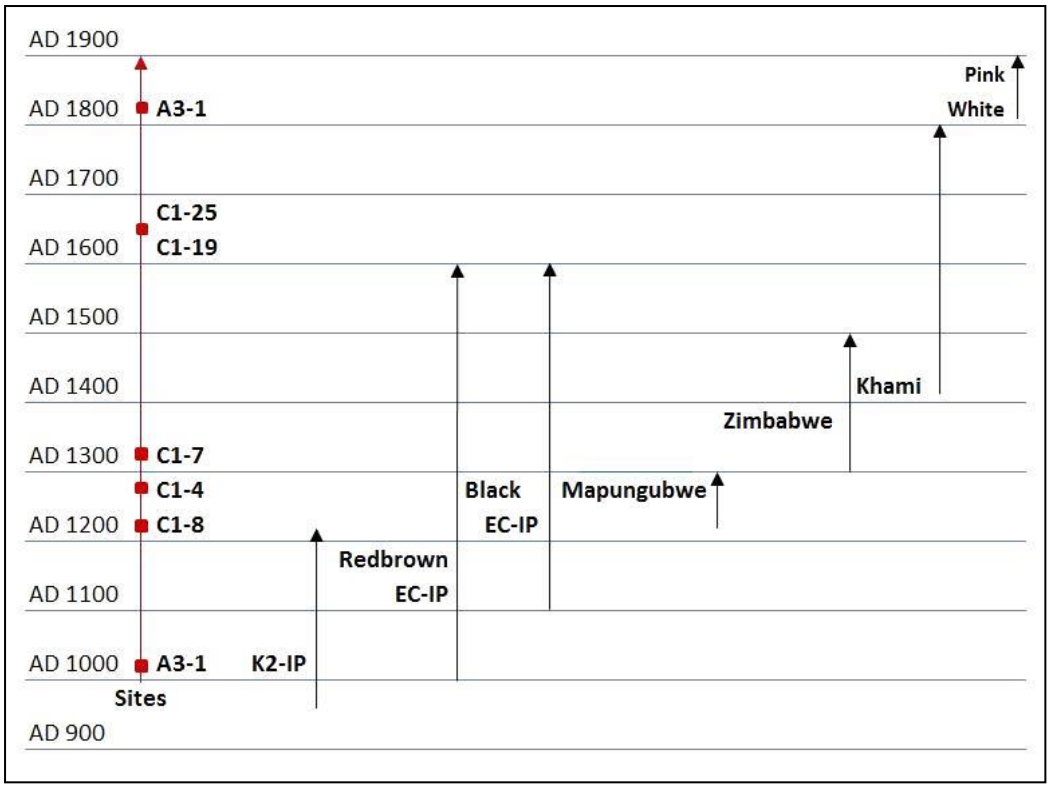

Figure 9.46: The bead sequence from excavated sites at Basinghall.

9.7 OES bead production and chronology

For many thousands of years beads made from OES were strung and worn as necklaces, arm bangles and around the body. OES beads were also sewn on headbands and used to decorate karosses, other clothing/apparel, hunting and gathering gear. OES beads are extremely durable and are ubiquitous at Stone Age localities but are also commonly found at African farming settlements. OES fragments and incomplete beads that can be linked to the different stages of bead production are recovered from middens and activity areas where bead manufacture took place, for example around fire places (Kandel & Conard 2005:1712). The beads from the middens at Basinghall are in various stages of production suggesting that the local farming communities manufactured their own beads. Studies on the production of OES beads demonstrated that African farmers often produced their own beads (Tapela 2001).

The finished OES beads recovered from the excavations at Basinghall consist of complete and broken beads (Table 9.10). Bead sizes range from 3-12 mm in diameter with 79.4% beads between 4-8 mm in diameter. Noticeable differences were found in the percentages of complete beads recovered from Middle Iron Age settlements at Basinghall in comparison to the Late Iron Age sites. The bulk of the beads were recovered from earlier settlements. The *Toutswe* sites yielded 94.5% complete beads while a mere 2.5% was recovered from *Moritsane* and 3% from *Moloko* settlements. While *Moritsane* settlements delivered very low numbers of finished OES beads, the amounts of unfinished beads and fragments that were recovered certainly reflect considerably high levels of production. The excavations were focussed on midden areas, which probably

account for the predominance of bead blanks, incomplete beads and fragments that represent waste from the production sequence.

Table 9.10: Finished OES beads recovered from the excavations.

Site	Group	3-3.9	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12 +	Total n	Total %
37-A3-1	*Toutswe*	16	107	131	130	87	53	32	22	2	4	**584**	**24.5**
37-C1-8	*Toutswe*	66	205	235	281	170	84	38	19	10	3	**1111**	**46.6**
37-C1-4	*Toutswe*	2	39	210	112	92	40	21	25	12	4	**557**	**23.4**
37-C1-7	*Moritsane*	1	14	7	10	10	9	4	3	1		**59**	**2.5**
37-C1-11	Early *Moloko*		1				1					**2**	**0.1**
37-C1-19	*Letsibogo*	7	13	17	7	3	3	3	2			**55**	**2.2**
37-C1-25	*Letsibogo*	2	2	5	2	2	4					**17**	**0.7**
Total n		**94**	**381**	**605**	**542**	**364**	**194**	**98**	**71**	**25**	**11**	**2385**	
Total %		**3.9**	**16.0**	**25.4**	**22.7**	**15.3**	**8.1**	**4.1**	**3.0**	**1.0**	**0.5**		**100**

It seems likely that the exponential availability of imported glass beads could contribute to an inverse pattern in the percentages of OES beads recovered at sites from different periods. During earlier stages glass beads as prestige items would have been scarce and not readily available to lower status groups. The higher volume of OES at some sites at Basinghall may perhaps also result from the production of goods destined for trade or exchange by these lower status groups. Calabrese (2005:370-371) argues that such groups did not directly participate in the prestige goods economy but provided raw materials, labour and possibly finished goods. A cache of commodities from another small *Toutswe* settlement provides support that OES beads indeed featured in trade. A pot found on the floor of a homestead at Kgaswe B55 contained 5000 OES beads, more than 2600 glass beads and wound wire (Denbow 1986:19; Tapela 2001:62). According to Reid and Segobye (2000:60-61) the particular context may imply that OES featured more in localised trade. The higher volume of OES at some sites at Basinghall may accordingly also result from the production of goods destined for trade or exchange by lower status groups. The markedly lower numbers of OES beads at more recent settlements probably reflect changes in trade patterns.

The data for the unfinished OES bead fragments recovered from the excavations are presented in Table 9.11. The sizes of unfinished bead fragments range from 4-12 mm in diameter with 35.5% beads between 4-10 mm in diameter. All fragments smaller than 4 mm in diameter (59.2%) represent chips as discard material from the production process.

Table 9.11: Unfinished OES bead fragments recovered from the excavations.

Site	Group	< 4	4-4.9	5-5.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12 +	Total n	Total %
37-A3-1	*Toutswe*	72	1	26	38	20	19	11	8	7	7	**209**	**3.6**
37-C1-8	*Toutswe*	565	26	64	106	130	109	110	93	62	38	**1303**	**22.2**
37-C1-4	*Toutswe*	1118		143	154	111	68	26	19	15	16	**1670**	**28.5**
37-C1-7	*Moritsane*	1716	266	266	140	140	53	52	40			**2673**	**45.5**
37-C1-11	Early *Moloko*									1		**1**	**0**
37-C1-19	*Letsibogo*											**0**	**0**
37-C1-25	*Letsibogo*	2	1	2	2	2	1			1	2	**13**	**0.2**
Total n		**3473**	**294**	**501**	**440**	**403**	**250**	**199**	**160**	**86**	**63**	**5869**	
Total %		**59.2**	**5.0**	**8.5**	**7.5**	**6.9**	**4.2**	**3.4**	**2.7**	**1.5**	**1.1**		**100**

OES beads are made by shaping and perforating fragments of eggshell. Two different pathways of manufacture have been found at Basinghall that differ in the order of drilling and trimming stages. The first pathway, as observed from the data obtained from *Toutswe* Site 37-C1-8 (see Figure 9.47), consists of four production stages: stage 1 is represented by prepared irregular discs/blanks; stage 2 by the drilling of a central perforation; during stage 3 the edges of perforated blanks were chipped and trimmed to create a roughly circular form with chips of 2-4 mm in diameter discarded as waste; in stage 4 a couple of rough beads threaded onto twisted sinew (often with soft fibre packed between individual beads to produce a rigid rod) (Tapela 2001:64; Orton 2008:1766), were rubbed in or with a grooved stone to round the edges, thereby producing a final product of even-sized beads.

Figure 9.47: The production stages of the first pathway: stage 1 (bottom row), stage 2 (second row), stage 3 (third row), waste chips (fourth row) and stage 4 (top row).

In the second pathway, as observed from the data obtained from *Toutswe* Site 37-C1-4, blanks were chipped and trimmed to create a roughly circular form *before* the central perforation was drilled (see Figure 9.48 second row). Beads from all stages of production were recovered and demonstrate that people at the Middle Iron Age settlements produced their own OES beads, and mainly by using the first pathway.

Figure 9.48: The production stages of the second pathway: stage 1 (bottom row), stage 2 trimming (second row), waste chips (third row), stage 3 drilling of blanks (fourth row) and stage 4 (top row).

Jayson Orton (2008) also recorded two different manufacturing pathways in the production of OES beads at Later Stone Age (LSA) sites in Namaqualand and the Northern Cape, while ethnographic accounts similarly refer to variable production processes. In pathway 1, as the dominant production strategy, blanks were drilled prior to being trimmed into rough discs. In pathway 2 blanks were first trimmed, where after the rough discs were perforated. However, pathway 2 was apparently rarely practised. The data from five LSA bead factory sites show that most breakage occurs during the drilling stage (Orton 2008). It would therefore be more prudent to first make the perforations and then chip perforated blanks into a roughly circular form. The study by Orton (2008) also demonstrated that the production process has not changed over the last 4000 years apart from using iron tools for some of the activities. Pathway 1 was probably used by most hunting-gathering groups and adopted by African farming communities when they settled in southern Africa.

I have already pointed out that the excavations were mainly in midden areas, which probably accounts for a noticeable presence of bead blanks, incomplete beads and discarded fragments. Many of these discarded fragments were irregular or broke during the manufacturing process. Blackened complete beads and incomplete blackened fragments are also present in the Basinghall OES bead sample. The dark colour was produced under anaerobic conditions in a fire before the OES fragments were fashioned into beads. The predominance of burnt beads in all stages of production at hunting-gathering localities with high levels of production suggests that OES beads were often intentionally burned for aesthetic purposes (Kandel 2005:9; Kandel & Conard 2005:1716).

9.8 Reconstructing the local Iron Age sequence at Basinghall

The first Iron Age farmers to settle at Basinghall late in the first millennium made ceramics typical of the *Diamant* facies. They lived in small villages (such as Site 37-C1-67) on the floodplain next to the Limpopo River. By AD 1000 the ceramics of this group had evolved into the *Eiland* facies. The people who made *Eiland* ceramics shared the landscape with newcomers of the *Toutswe* sequence. The *Toutswe* settlement chronology is corroborated by the transitional *Thatswane* facies (step), of which an 11th-century expression was recorded at Site 37-A3-1. By the beginning of the 13th century the *Toutswe* chiefdom was flourishing as attested by larger settlements (such as at Site 37-C1-8) but it declined towards the end of the 13th century (as seen at Site 37-C1-4). The ceramic data demonstrate that interactive processes took place between the people of the *Toutswe, Eiland* and *Moritsane* facies over the 280 years of *Toutswe* occupation at Basinghall.

Although the radiocarbon date alludes to an 11th-century occupation at the Early *Moloko* Site 37-C1-11, the presence of *Moritsane* ceramics in the collection suggests a 14th-century settlement. These progenitors of the *Letsibogo* facies expanded their occupation in the 16th and 17th centuries as reflected by the 16 *Letsibogo* sites that have been recorded. They built large villages (as seen at Site 37-C1-25) and herded many cattle (for example, as recorded at Site 37-C1-19). A later phase that developed from the *Letsibogo*, namely the *Shoshong* facies (recorded at Site 37-A3-1), demonstrates the influence of modern Tswana groups such as the Ngwato arriving in the area. There is also evidence

for contact with European traders (Site 37-C1-35). Figure 9.49 illustrates the Iron Age settlement sequences around the Limpopo floodplain at Basinghall during the second millennium AD.

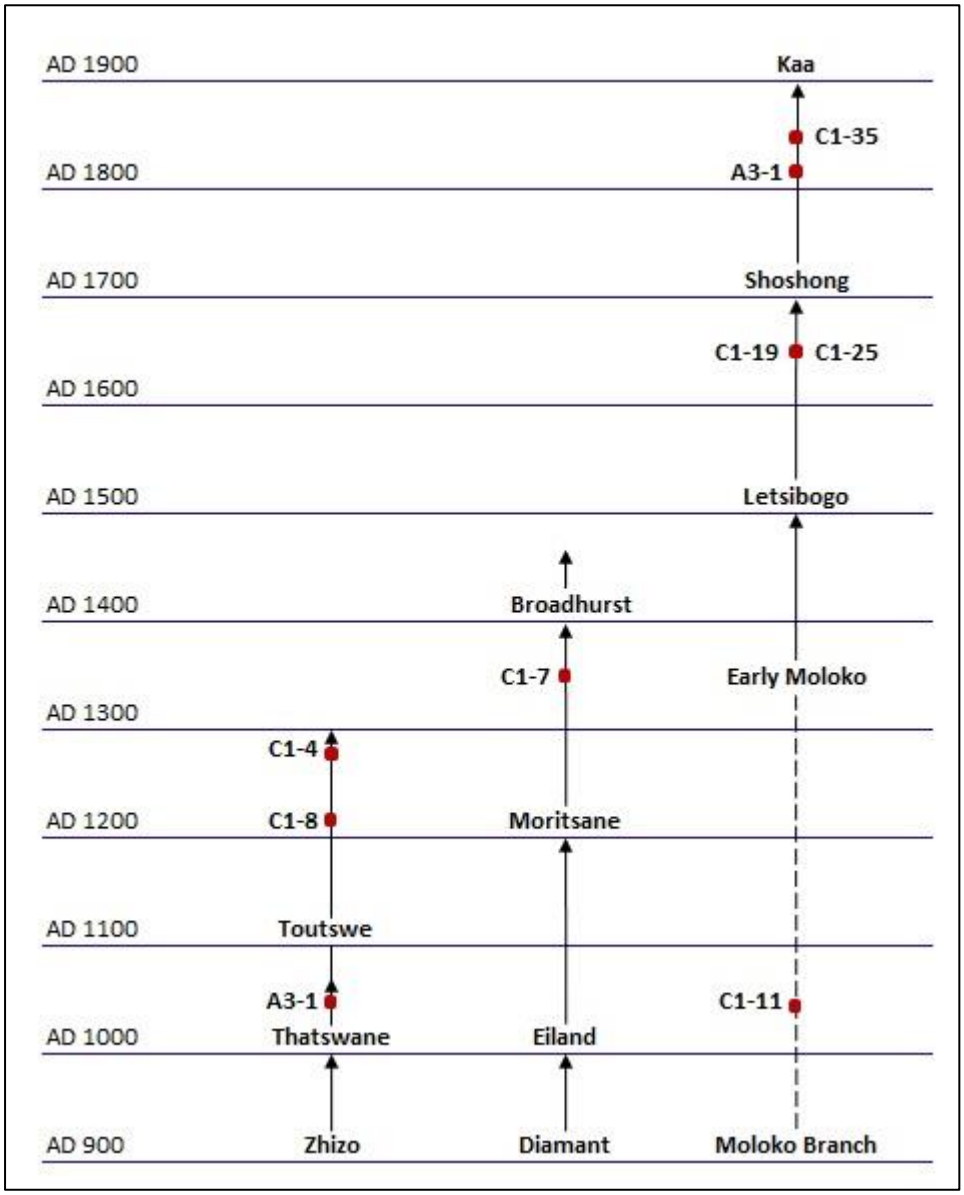

Figure 9.49: The Iron Age sequence at Basinghall.

9.9 Conclusion

The local Iron Age sequence around the Limpopo floodplain at Basinghall Farm during the second millennium AD commences with the settlement of *Toutswe* people during the 11th century as reflected in ceramics of the transitional *Thatswane* step. *Toutswe* rule culminated at the beginning of the 13th century and declined towards the end of the 13th century with an apparent movement out of the region by AD 1300.

The *Eiland* ceramic sequence at Basinghall has its origins in the Early Iron Age as expressed by a late first millennium *Diamant* facies. By AD 1000 *Diamant* ceramics had evolved into the *Eiland* facies (AD 1000 – AD 1200), followed by the *Moritsane* facies (AD 1200 – AD 1400). During the Middle Iron Age, communities with different ceramic traditions shared the landscape as demonstrated by the co-occurrence of *Moritsane* ceramics at *Toutswe* sites on Basinghall. The dynamics of this interaction still need to be fully explored, both locally and regionally.

The Late Iron Age commenced with the arrival and settlement of *Moloko* people at Basinghall. The Early *Moloko* facies identified at Basinghall shows particular design elements that are clearly different from the *Icon* facies Early *Moloko*-style ceramics. Out of this Early *Moloko* facies the *Letsibogo* and *Madikwe* facies developed as the Middle *Moloko* phase. The *Letsibogo* facies at Basinghall dates from the 16th and 17th centuries. Changes brought about by the arrival of modern Tswana groups in the area such as the Ngwato are reflected in *Letsibogo* ceramics. The arrival of European traders is marked by the introduction of material culture from the historical period at some of the Late Iron Age localities at Basinghall.

Bead data (glass and OES) were applied to aid the interpretation of other material cultural data obtained from the archaeological sites at Basinghall. A glass bead sequence for Basinghall was developed which includes the K2 Indo-Pacific series, red-brown and black East Coast Indo-Pacific series, the Mapungubwe Oblate series, the Khami Indo-Pacific series and European beads. OES bead production through time revealed a much more intensive OES bead production by Middle Iron Age communities than during the Late Iron Age.

CHAPTER 10

SUMMARY AND CONCLUSION

10.1 Introduction

The research area, encompassing the Limpopo floodplain on Basinghall Farm, is located on the western upper part of the Limpopo River. The inflow of river systems into the Limpopo upward of Basinghall, together with extensive meandering of the river in this region, contributes to the formation of large floodplain deposits with fertile soils for crop production. The inland pans and deep pools in the Limpopo provide generous resources for watering livestock during drier periods. This sets an ideal environment for agro-pastoralist settlement. The objective of this study was to reconstruct the local Iron Age sequence and settlement chronology around the Limpopo floodplain.

In Chapter One I provided a review of previous research, oral traditions and documentary data on the history of the region. It allowed for the construction of a preliminary settlement history for the successive groups of people that settled on Basinghall since the second millennium AD. Investigations into the earlier settlements of Basinghall commenced with a survey during which sites were recorded and surface collections made of mainly ceramics. Archaeological excavations were undertaken at a selection of sites over a period of two years. The data obtained on the various ceramic units were compared to other analysed ceramic assemblages (Huffman 2007 and others) to define the different facies. Chapter Two outlined the terminology and concepts used in the ceramic analyses of the different facies that have been identified through the investigations at Basinghall.

The archaeological survey was conducted by field walking the fertile band within two kilometres of the boundaries of the Limpopo River floodplain. This particular band contains a mosaic of the ecological requirements for agropastoralist subsistence and settlement. In Chapter Three the functioning of the river-floodplain ecosystem was investigated to provide an understanding of why African farmer communities preferred to situate their settlements and cattle posts within this environment. The annual flood pulse impacts significantly on the nutrients of soils and adaptations of most of the biota around a floodplain (Bayley 1995:154). I accordingly discussed the different soil types and vegetation zones that were utilised by the erstwhile inhabitants of Basinghall. The survey produced 75 Iron Age sites comprising the Early Iron Age *Diamant* facies, the Middle Iron Age *Eiland*, *Moritsane* and *Toutswe* facies, an Early *Moloko* and a *Letsibogo* (Middle *Moloko*) facies and, lastly, the grain bin platform settlements of the Late Iron Age and Historical period.

In the following section I summarise the investigations of the settlement sequence at Basinghall. I also evaluate the findings and review the contribution of this study and the prospects for future research.

10.2 The Iron Age sequence at Basinghall

In eastern Botswana the *Happy Rest* ceramic facies of the first early farmers, dating to AD 400, has been found at Maunatlala (Denbow 1984:175-194) and at Goo-Tau in the Tswapong Hills (Campbell 1998:39). Out of the *Happy Rest* facies the *Diamant* and *Eiland* facies developed. By AD 1000 the *Eiland* facies had spread to the region south of the Tswapong mountain range extending into south-eastern Botswana where it developed into a final *Broadhurst* facies (Denbow 1981:66-74). Campbell (1989, 1998:41) identified *Eiland*-like ceramics in the Central Kalahari Game Reserve and Sekoma Pan that date well into the 16th century and later. He suggests a continuation into the Late Iron Age, probably with the Bakgalagadi as the potters.

The earliest farmers to settle at Basinghall late in the first millennium AD produced ceramics of the *Diamant* facies. By AD 1000 *Diamant* ceramics had evolved into the *Eiland* facies. In Chapter Five I introduced the *Moritsane* facies for south-eastern Botswana to fill the gap that I recognised between the *Eiland* and the *Broadhurst* facies and that became apparent during my study of the ceramics. The fact that communities with different ceramic traditions shared the landscape is demonstrated by the introduction of *Toutswe* ceramics by newcomers to Basinghall. During a period of approximately 280 years of *Toutswe* presence at Basinghall evidence for interactive relationships between various groups is demonstrated by the *Moritsane* facies ceramics that date to the 14th century.

By about AD 750 farming communities that produced *Zhizo* ceramics spread from Zimbabwe south-westwards and settled in the Serowe-Shoshong area. The ceramic sequence evolved into *Thatswane* at around AD 1000. The *Thatswane*, as a transitional step or phase of the *Toutswe* facies, marks the rise of the *Toutswe* chiefdom. By AD 1050 three large villages, Toutswemogala, Bosutswe and Sung, had been established on hilltops, each occupying four or more hectares. The *Toutswe* elite placed their residences on steep-sided hilltops while the villages on lower-lying nearby hills were inhabited by people of lower status. In a class-based social system commoners lived in much smaller villages on the plains below (Denbow 1984:34-36).

The settlement chronology of the *Toutswe* sequence at Basinghall was investigated in Chapter Four. Settlement began during the 11th century as represented by the transitional *Thatswane* step of the *Toutswe* facies. The development of complex social and political systems by the beginning of the 13th century in the Shashe-Limpopo region and at *Toutswe* sites in Botswana is also evident at Basinghall in settlement and middens that are noticeably larger. Calabrese (2005:3-4), drawing on earlier work (Denbow 1983), links this growth in complexity to greater control of cattle wealth and the need to guard against raiding neighbouring groups. The decline of this chiefdom by the end of the 13th century is also reflected at the Basinghall sites from this period. The *Toutswe* people seemed to have moved out of the region by AD 1300. The decline of the *Mapungubwe* state also occurred around this time (Huffman 2007:392). Previous research has shown the boundaries of the *Toutswe* chiefdom to extend to the Palapye-Mahalapye-Shoshong area (Huffman 2007:391). The investigations conducted at Basinghall, which lies approximately 100 km outside these boundaries, identified a sample of ten *Toutswe* sites.

Data from this study have demonstrated that the extent and influence of the *Toutswe* chiefdom were much more comprehensive.

The arrival of proto-Sotho-Tswana groups from East Africa during the 14th century AD marks the commencement of the Late Iron Age (Huffman 1989a:173-178). During the movement of the *Moloko* people through eastern Botswana into south-eastern Botswana and the North West Province interior they also settled in the Basinghall area as attested by the ceramic data from Site 37-C1-11. The 11th-century radiocarbon date designates the site as one of the earliest *Moloko* sites recorded. However, the presence of *Moritsane* ceramics in the collection suggests a 14th-century date for this locality. Chapter Six considers the Early *Moloko* facies found at Basinghall, which is marked by particular design elements and a specific geographical distribution that are clearly different from the *Icon* facies Early *Moloko*-style ceramics. I argue in Chapter Nine that the *Icon* facies ceramics and their correlation with the arrival of the early Sotho-Tswana should be subjected to another critical study. The Early *Moloko* in Botswana is still under-researched and our understanding of this phase will only develop when more sites dating to this period are identified and also firmly dated.

At Basinghall Farm the Early *Moloko* facies evolved into the *Letsibogo* as a Middle *Moloko* phase. The *Letsibogo* facies is present in eastern, central and south-eastern Botswana. The *Letsibogo* facies at Basinghall (where 16 sites have been identified) dates from the 16th and 17th centuries. The discussions in Chapter Seven and Eight demonstrate that the *Letsibogo* people built large villages (Site 37-C1-25) and owned sizeable herds of cattle (Site 37-C1-19). Changes brought about by the arrival of modern Tswana groups in the area, such as the Ngwato, are reflected in the ceramics of the *Letsibogo* people (demonstrated by the *Shoshong* facies at Site 37-A3-1). The arrival of European traders is marked by the introduction of material culture from the historical period (Site 37-C1-35).

The settlement organisation recorded at the large number of Late *Moloko* sites (43) identified at Basinghall adheres to the Central Cattle Pattern. Grain bin bases, upper and lower grinding stones and undecorated ceramics represent the main features and cultural remains at these sites. Because of a shortage of stones at Basinghall the settlements were probably enclosed by a wooden palisade, as observed by the explorer Emil Holub (1881(I):367-374) on his visit to the Ngwato town of Shoshong. Two of the three grain bin sites investigated in Chapter Eight produced 16th-century (Site 37-C1-25) and 19th-century (Site 37-C1-35) dates and both localities yielded mainly *Letsibogo* ceramics.

In Chapter Nine I interrogated the data from the archaeological investigations to demonstrate that there were various phases of settlement at Basinghall by groups of farming communities who used different styles to produce their ceramic wares. The data from the ceramics, the series of radiocarbon dates and the bead seriation were then applied to construct a settlement sequence for African farmer settlement at Basinghall and beyond during the second millennium AD.

10.3 Research evaluation and contribution

I conducted my research on our family farm, Basinghall, which borders on the Limpopo River over a stretch of 11 kilometres. The floodplain ecosystem of the Limpopo River created an ideal environment for human settlement. Remains of the Earlier, Middle and Later Stone Age, the Early, Middle and Late Iron Age as well as the Historical period have been recorded during the archaeological survey. The study documented a complex settlement sequence and a high density of settlements within the particular environmental niche of a river floodplain. The reconstruction of the Basinghall settlement chronology was based mainly on the ceramics, radiocarbon dates and bead sequence. The results provide a valuable data base with significant implications for the broader region. The Limpopo moreover forms the boundary between Botswana and the northern Limpopo Province of South Africa. The findings of the Basinghall study accordingly serve as proxy data that can be applied to future archaeological investigations on both sides of the Limpopo River.

I have been fortunate to build up an in-depth knowledge of the research area and the general region over the period of more than 40 years that I have resided at Basinghall. This assisted me during the survey and in the interpretation of the environment. I trained my local farm labourers to develop the necessary skills to assist with the archaeological fieldwork, which included identifying traces of former settlements during surveys, excavating sites and sorting the recovered material. The sieved materials were subjected to two sorting processes. After the excavated soil was sieved and sorted the gravelly remainder was washed and again sorted. This methodology increased the glass bead sample significantly and many more OES bead fragments, bone flakes and very small metal fragments were retrieved than from much larger sites and excavations in south-eastern Botswana.

It was on account of the many Iron Age sites identified during the survey that I focused my research on reconstructing the sequence of Iron Age settlement around the floodplain. A period of approximately 280 years of *Toutswe* presence at Basinghall provides some detail on how lower-status *Toutswe* commoner groups lived and evolved on the landscape. The research has significantly expanded the borders of the *Toutswe* chiefdom by 100 km to the south so that it is now known to cover a total area of 20 000 km². The co-occurrence of different ceramic expressions at the Basinghall *Toutswe* sites demonstrates interacting relationships between *Toutswe* and *Eiland/Moritsane* groups. Future research will explore these interrelationships and investigate possible trade connections or intermarriage between commoner groups.

I set out to reconstruct the ceramic sequence. Based on the data from Basinghall I now propose the introduction of a new ceramic facies and the possible redefinition of a second. First, the *Eiland* sequence for south-eastern Botswana should be refined by the addition of a new facies, namely the *Moritsane* (AD 1200 - AD 1400). Secondly, the location of an Early *Moloko* expression on Basinghall adds to the known distribution of Early *Moloko* settlements in the region and questions the definition and designation of an ancestral *Icon* facies. The Early *Moloko* in Botswana is still under-researched and our understanding of this phase will only develop when more sites dating to this period are identified and also firmly dated.

A particularly interesting aspect of the study was the numerous *Letsibogo* settlements that have been recorded at Basinghall. This allows a much better understanding of the Middle *Moloko* period of the region. Some of *Letsibogo* sites at Basinghall yielded high proportions of decorated wares. The ceramics from Site 37-C1-15 were, for example, used by Huffman (2007:77) to illustrate the *Letsibogo* facies in his *Handbook to the Iron Age*. The investigation into an iron-smelting midden at Site 37-C1-19 confirms observations by early travellers that the Bakaa (*Letsibogo* facies) were prominent iron smelters.

The settlement layout of the more recent Tswana settlements, characterised by numerous grain bin structures, has been under-researched. The Basinghall grain bin sites provide much-needed detail on Late *Moloko* settlement organisation. The particular spatial patterning of prominent stone-built grain bin bases, with associated upper and lower grinding stones, demonstrates that the layout of these Tswana towns consisted of several wards with central cattle kraals. My preliminary investigations at several settlements provide a basis for future more in-depth research.

The development of a glass bead sequence for Basinghall provides a method that can be used to interpret data obtained from other sites in the region. The K2 Indo-Pacific series is a distinct marker for the 280-year period of *Toutswe* settlement at Basinghall. The early *Toutswe* period is marked by a dominance of K2 Indo-Pacific beads that declined in importance towards the end of the chiefdom's reign by AD 1290. The first dates for imports and trade for the red-brown and black East Coast Indo-Pacific beads and their predominance during the 13th century define the final days of the *Toutswe* chiefdom and trade with *Moritsane* communities. The Mapungubwe Oblate series is very specific to the 13th century and reflects contact with a wider social and political landscape. Early *Moloko* sites can be dated by the presence of the Zimbabwe series beads as in the case of the *Letsibogo* site at the Mmamabula Energy Project. The Khami Indo-Pacific series dates the *Letsibogo* sites probably up to the 18th century. Most of the grain bin sites at Basinghall date to this period. The 19th-century sites are associated with European beads and more research on this time period will shed light on the more recent settlement of African farming communities at Basinghall.

The scale of OES bead production and the chronology derived from the data revealed a much larger utilisation of OES by Middle Iron Age communities than during the Late Iron Age. Two different pathways of OES bead production were identified from Middle Iron Age middens. That beads from all stages of production were recovered demonstrate that people at these settlements produced their own OES beads.

10.4 Conclusion

A review of previous research, oral traditions and documentary data on the history of the region allowed the construction of a preliminary settlement history for the successive groups of people that settled on Basinghall since the second millennium AD. A more detailed reconstruction of the occupation sequence at Basinghall during the Iron Age was made possible by information gathered during a survey around the floodplain, the excavation of selected sites together with data obtained from radiocarbon dates and the glass bead series, but primarily, the ceramic analyses.

The proposed cultural succession at Basinghall comprises an Early Iron Age *Diamant* ceramic facies, the Middle Iron Age *Eiland*, *Moritsane* and *Toutswe* ceramic facies and, finally, the Early *Moloko*, *Letsibogo* (Middle *Moloko*) and the *Shoshong* (Late *Moloko*) ceramic facies of the Late Iron Age and Historical era. Most of the documented grain bin sites were probably occupied by people of Kwena or Ngwato origin as reflected by historical accounts. In the 19th century the inhabitants then present on the Limpopo floodplain and adjacent landscapes came into contact with European traders, thereby introducing the historical period for Basinghall and the region.

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