

Making Pots in Manaledi: People, Material and History

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Abstract

The Manaledi clay mine is composed of two shallow, linear quarries, one producing a red clay and the other a white clay; these are mixed together in proportion of two parts red to one part white to compose a strong potting clay. The mine and clays are closely associated with village ancestors and various conditions or rituals must be observed during mining and potting. Archaeological survey has found Zhizo and Happy Rest sherds as well as iron smelting furnaces. Microscopic examination of these sherds along with contemporary Manaledi pots has revealed that this clay has been used by makers of pottery since the Early Iron Age about 1400 years ago and continues to be used today. We report in this paper a brief summary of the evidence for this long history of potting and current Manaledi conceptions of their relation to the latter part of this history.

Introduction

Manaledi potters are arguably the most skilled in Botswana's Tswapong region today producing large pots holding as much as 50 litres of liquids as well as a variety of small functional and decorative wares. During the first phases of our continuing work in 2010 and 2014 there were 18 potters in the village, all women, of whom five derived their disposable income almost entirely from the craft. Among the most successful of these is Gaothome Lebonetse; she and her niece Lesedi Mhaladi provided most of the information we gained about contemporary potting in the village and much of the oral history we recorded. We also learned much from the village leader Kgosi Batlhwatse Mapulane, who is among the few women in such a position.

Manaledi is a small village in the Tswapong Hills of southeastern Botswana (Figure 1); it is rural with a population of about 300 people, one of the least populated localities in Tswapong. Although too small to be included in the *Botswana Guide to Villages*, it has perhaps the most elaborately ornamented *kgotla* (official public gathering place) in Botswana (Figure 2). The village is home to traditional potters with known family histories of potting for as many generations as can be remembered. Rich clay deposits are about six kilometres from the village. On our first visit in 2010 to discuss the proposed work we were told by several people that Manaledi was located specifically with relation to this clay source and ancestral villages had 'always' been located in the vicinity for this reason. Manaledi potters affirm that this clay was mined by their forebears for at least five generations; they believe much longer. Thus, these oral histories project use of the Manaledi clay back to the mid-nineteenth century.

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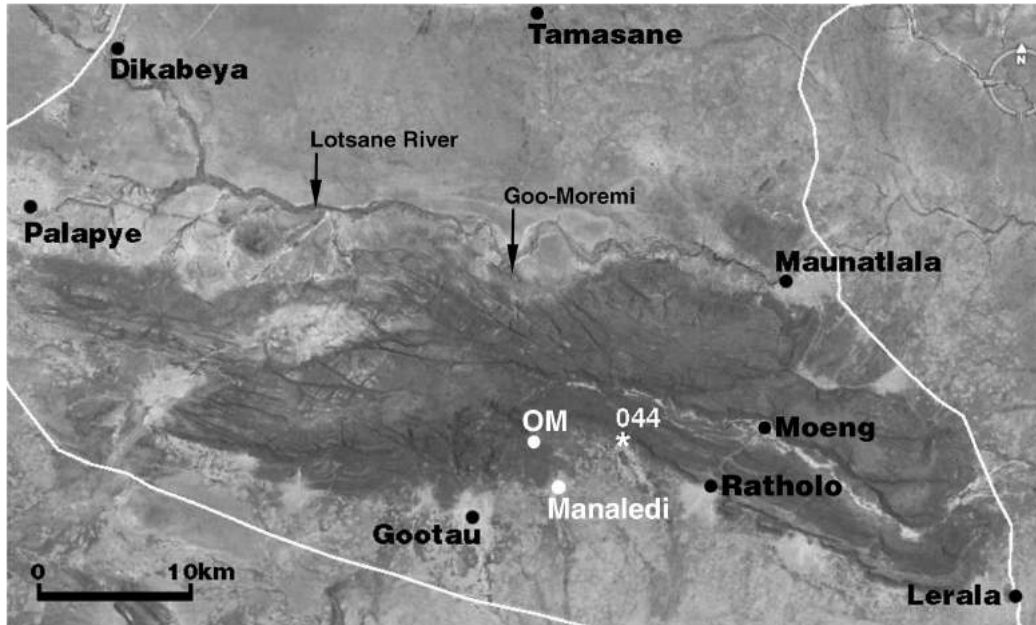
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Figure 1: Map of the Tswapong Hills with principal places marked



Photograph by Edwin Wilmsen

Indeed, a scatter of sherds over some 1300 meters reveals a much longer history of earlier settlement. Recovered sherds suggest occupation by makers of Early Iron Age and possibly Middle Iron Age wares as well as proto-historic eighteenth to nineteenth century wares clearly related to current Manaledi pottery.

Figure 2: Manaledi *kgotla* with the hare totem and the *kgosi's* office behind it



Source: by Edwin Wilmsen

Contemporary Manaledi Potters

Phenyo Thebe first visited Manaledi in 2006 as part of our survey of potters in Botswana (Thebe *et al.* 2009; Wilmsen *et al.* 2009; Wilmsen *et al.* 2016). In 2010 and 2014 Anne Griffiths interviewed Lebonetse

and Lesedi with the aid of Goitseone Molatlhegi, who was then doing field research for her BA specialising in Archaeology at the University of Botswana (Figure 3). In 2016 Thebe and Griffiths extended these interviews to include Kgosi Mapulane.

Figure 3: Anne Griffiths and Molatlhegi interviewing Lebonetse in 2014



Source: by Edwin Wilmsen

Lebonetse, who was aged 57 in 2010, was born in Manaledi and consequently identifies as a Motswapong since her mother was also from the village. (All the Manaledi people with whom we spoke identified themselves as Motswapong; apparently the aversion to this term recorded by Motzafi-Haller (1993) is no longer felt). Her family, however, is not related to the Manaledi kgosi but is in the *batlhanka* (commoner) social-political class. She attended school up to Standard 6 in Ratholo and did Standard 7 in Maunatlala, nearby villages in Tswapong (Figure 1). Somewhat unusually for a woman in her generation, she married after leaving school, but she has been a widow since 1990.

Her husband was also from Manaledi, and the marriage was according to Tswana custom rather than introduced statutory law. She did not inherit her *lelwapa* (homestead) from her parents but she and her late husband got it in 1984 through the then recently established Land Board. Initially the *lelwapa* was in her husband's name but she changed it to her name after he died. She and her husband had four daughters and three sons. The eldest is an independent seamstress in Selebi-Phikwe making traditional dresses for sale, three others completed Form Five, one of whom did mechanical engineering at the University of Botswana and is now a soldier in the Botswana Defence Force and another is a plumber at the Orapa diamond mine, two have managerial positions in a Selebi-Phikwe tyre company, and the youngest is still in school. This is a noteworthy rural family achievement in Botswana today. When asked if any of her children pot, she said 'Nobody, they live in the city'.

Lebonetse has never worked formally but ploughs a field acquired from the local Palapye Land Board through meetings held at Manaledi *kgotla*. Her husband was the one who applied for the field and the certificate was initially in his name, but recently she changed it to her name. She has a cattle post in Manaledi which she got with her husband who was a migrant labourer in the South African gold mines and constantly bought cows with his earnings, so that is how they got to have it. None of her relatives, other than her children, help with ploughing or cattle management.

Lebonetse got interested in pottery and also saw it as a form of livelihood in 1977. Her mother was a potter who married very young and left her own mother to live with her husband's family in Ratholo, so she learned from her in-laws. Lebonetse, also separated from her mother upon marriage to return to Manaledi, learned from a woman named Gaoarelwe Kashima in Manaledi who was related neither to her nor her husband. She went through a five year apprenticeship coming daily to Gaoarelwe's place in the village. At the time she was the only person learning from her. She originally worked as Gaoarelwe's helper, transporting clay and wood for firing. She was a general helper - pounding the clay, mixing, etc. -dealing with the logistical support for all the stages of pot making; as a result, she makes pots like the woman who taught her (cf. Thebe 2017).

In return for her work she was given some pots to sell for herself. Eventually, having seen the process she started making her own pots, both large water-storage/beer-brewing pots and small decorated wares, for sale. She is now considered to be the Manaledi 'pottery guru' and her image is memorialised on one of the *kgotla* buildings. Asked when she became a potter, she replied 'in 1980' because before then she was just learning. The resources she needs for potting are few and simple namely 'clay, shells [river mussel], and small round stones [granite river pebbles] for polishing, and a flat plank [piece of fruit-crate, ice cream stick, or similar] for pulling up the clay'. The shells come from the Lotsane River and the stones from Goo-Moremi Gorge (Figure 1).

Red hematite for decorating is obtained from Chadibe at the foot of the Tswapong Formation in the Tshweneng Hills which is 35 kilometres to the south where it has been mined at least since the 1890s. Local calcrete is used for white pigment. Locals, and peoples from surrounding villages like Maunatlala, where there are no longer local potters, buy her wares. Clay pots are good for cooking vegetables, samp, and *bogobe* (porridge) and people still buy them for that. *Dingaka* (indigenous doctors) also buy traditional pots from her to prepare their medicines. In 2010 in response to the question if potting is her main source of income she replied 'it is not adequate because sometimes there is a period when the pots are not bought and then there is a period when they are bought'. However, in 2014, as a sign of how times change, to the same question she responded firmly 'Yes, definitely, the market is good' and she can live on potting alone. In 2016, however, we learned that she also brews beer in several of her large pots and sells the brew in the village. A measure of her success is seen in her ability to employ people who are not potters to pound clay, 'A lot of work goes to that', she says.

Lesedi also says she can make a living from potting 'all year round'; although she does her pots mostly at weekends she still thinks she can make a living from them. She sells separately from Lebonetse and says both her water pots and decorative pots sell well. Sometimes she works for *Ipelegeng* (government's public works programme) to supplement her income, mostly during periods of drought. Lesedi, age 33 in 2014, was born in Manaledi and has a sister and three brothers, also in the village. She went up to Standard 7 at school. She has two children, both girls, one born in 2003 and one in 2010; the children stay with her. Like many Batswana women of her generation she has never married and is not with either of the fathers of the children (cf. Griffiths 1997). The father of her younger child provides support. When asked if she helps her aunt with ploughing, she replied 'No, she helps her parents'. Lesedi went through an apprenticeship with Lebonetse beginning in 2011 that lasted two years and makes the same pots as her teacher 'functional pots for water and also decorative pots'. Her sister is not interested in potting; on the other hand, a few other women started training with her but 'pulled back'. She doesn't think they have any interest. When asked why, she said 'Pot making requires patience; most were not patient enough'. This resonates with Lebonetse's perception that potting 'needs a level of delicacy'.

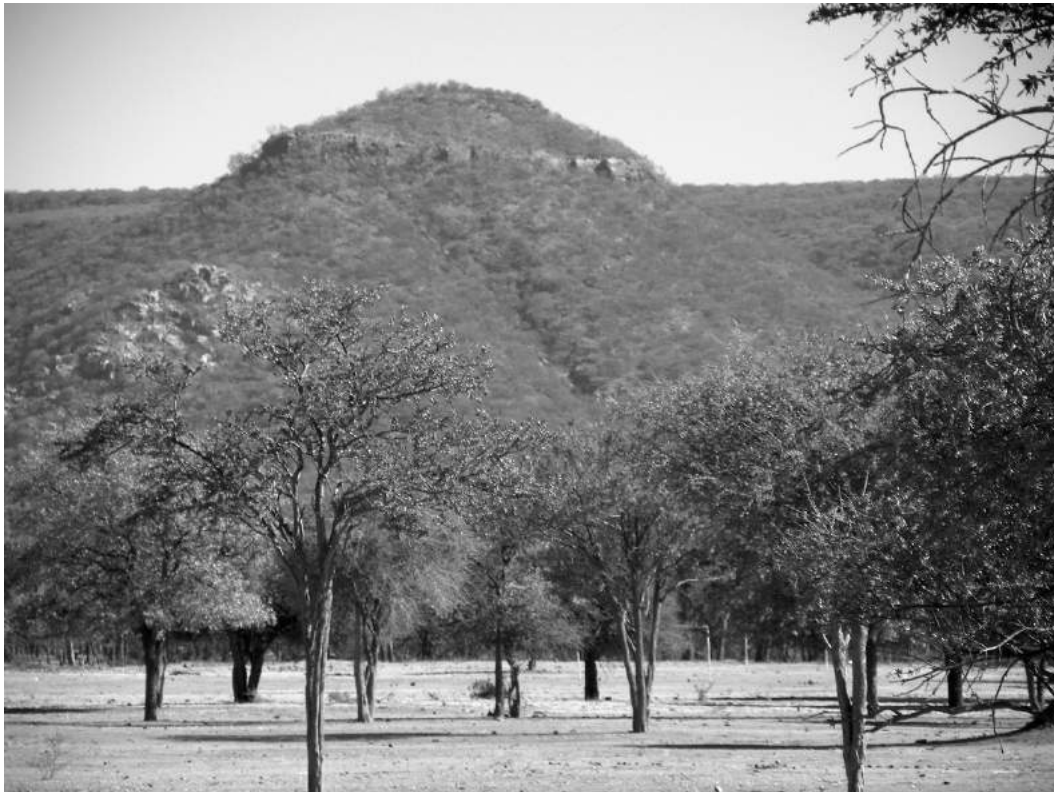
Ancestors and Clays

The clay mines lie at the foot of the Tswapong Hills, but the hills here are more than a mere topographical

feature and are closely associated with Manaledi *badimo* (ancestors). The name, Lentswe lora Mahoko ('Hills of Words'), expresses the dialectic between the landscape, the clay, the potters, the village, and the ancestors. An incident from our 2014 visit illustrates this relationship. There had been two years of unusually plentiful rain resulting in a dense undergrowth of tortuous spear grass and goatheads in which Lebonetse lost her way while leading us the short distance between the two mines. When she recovered her bearings she told us the Hills were strong and wanted us to get to the mine because we were good people who employ villagers at generous but not envy-inducing wages, observe proper etiquette in conversation, and obtain permission from the *kgosana* (village headman) before beginning work. In contrast, a few months earlier a geology party prospecting for manganese had been lost for more than a day despite their cell phones and GPS devices because they had not respected the Hills -that is, the ancestors.

Another incident emphasizes the veneration which many Manaledi people still feel toward the Hills occurred in 2016 when Kgosi Mapulane took us to the site of the original eighteenth century Manaledi at the foot of Manaledi Hill at the base of which is the sacred kopje on the top of which communication with the ancestors is carried out (Figure 4). She brought along the village *ngaka* (indigenous doctor) responsible for calling rain who was happy to show us the kopje but most reluctant to take us to the top where scared drumming and other rituals take place. This was where the national unity torch was brought by Kgosi Mapulane as part of celebrating Botswana's 50 years of independence. The *kgosi* said she wanted us to see it, so he went ahead to ritually cleanse the hill before researchers Phenyio Thebe and Edwin Wilmsen were allowed to follow. Another researcher, Anne Griffiths had a broken toe so could not climb the hill. The *Kgosi* was reluctant to leave her alone as she feared that the ancestors might come down from the hill and catch her unawares saying 'you colonial daughter of Livingstone, we've got you now!'

Figure 4: Manaledi Hill as seen from the *kgotla*



Source: by Edwin Wilmsen

Before collecting clay, potters must seek permission through the *kgosi* or *ngaka* who communicates with the ancestors on this kopje. During digging, there are a number of additional mostly silent communications with the ancestors. There are also a number of taboos: diggers cannot gossip or speak negatively and no noise should be made while removing the ancestors' soil, the clay. Pregnant women can collect clay but those who are menstruating cannot; menstruating women are not allowed to touch clay or go near a firing place. Women who have aborted or people who have lost their mother, children, or husbands are also not allowed to handle clay and may not go into the potting house or firing place, otherwise pots crack. As a consequence of belonging to the ancestors, the clay is a very strong soil that speaks; for example, when someone is going to die in the village a lot of pots 'speak' by cracking during firing, it is believed. These restrictions relating to the reproductive cycle and association with the life cycle appear to be directed to ensuring the sanctity of ancestral generations. Lebonetse said 'when pots crack, the soil is sick' and the ancestors need attention. Appeal to ancestors is appeal to established authority; it would seem that ancestors are invoked as legitimisers of Manaledi control over the mines, the clays, and their products, pots.

Since the clay belongs to the ancestors it is an exclusive Manaledi resource; potters do not pay for the clay, they get it as members of Manaledi village. The clay mine has two quarries, 'the red one and the white one'. Lebonetse and Lesedi walk the 6 kilometres to the mine together, sometimes with a group of other village potters. They dig both clays during these trips, stockpiling them separately until enough is accumulated; they then hire a donkey cart to bring the clays to the village. They go once a year, only in the winter season because the quarries are easier to work when the clay is not gummy and there is no rain. Each potter fills two drums in her *lelwapa* one with red and one with white clay, and that does them for the year. A freshly cut tree branch is buried in each ore mass in the belief that the branches will lessen the disruption caused by extraction of the soils and thereby help bring rain (Molatlhegi 2010). When asked if all the diggers are women, the answer was 'Yes, only women. Ritualistically, it has to be only women'. A crucial question, given the heavy overburden of rocks, is: how did she know to come here for clay? To which Lebonetse replied, 'It is a generational thing'; she was taught by her teacher who was taught by an earlier generation. She does not know how long people have been coming here to get clay, and says 'as far as memory can go'.

Manaledi potters do not pot in winter, ostensibly because the clay is cold and it takes too long for pots to dry, but equally because the *badimo* only allow potting as well as related activities in summer. In reply to the question, 'Do other people come to get the clay?' both Lebonetse and Lesedi said 'No, we don't share the source'. Indeed, in the recent past Manaledi villagers mounted round-the-clock guard over the clay mines to prevent unauthorised use by others. In the distant past, however, the clay was freely available to all Tswapong Bapedi potters who had only to get permission from the Manaledi *kgosi*. Later, possibly when Babirwa settled in Tswapong, access became restricted.

The clay has such a reputation throughout the Hills villages that potters often ask for a small handful to add to their own clays believing that Manaledi clay strengthens their pots. We have not yet determined the entire reasons for this belief, but it seems to stem from the historic association of the clays with all Tswapong Bapedi ancestors. Manaledi potters do not go anywhere else to get clay, 'Only here, because it is the only good quality clay', they claim.

Clay has now become a scarce resource falling under recent minerals legislation (Environmental Assessment Act 2011). In 2016, Lebonetse told us that people had been stealing clay because permission to obtain the clay was no longer being granted to potters from other areas. Indeed, when we went to the clay mines on this visit with Lebonetse she found that the mines had been disturbed during a night raid and clay stolen for sale to potters in other villages. Her tools for digging had also been hidden (although one was found nearby). This shows that clay has become a resource that is sought after. Indeed, Kgosi Mapulane,

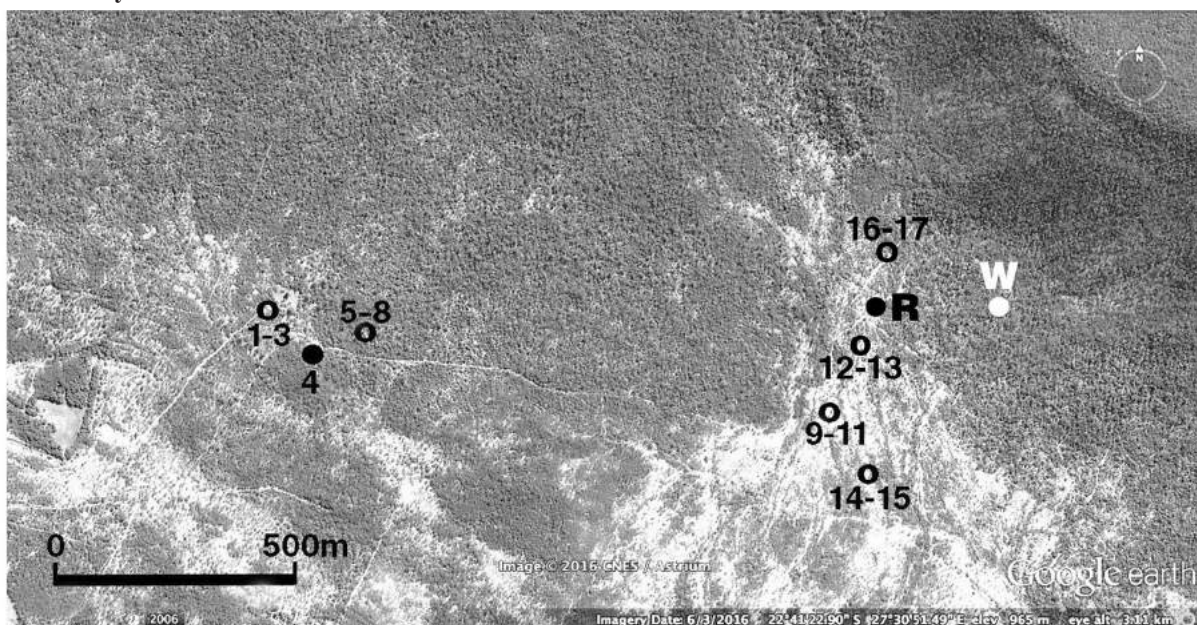
who was installed in 2015, is very keen to develop Manaledi village by acquiring certificates to land for a potters centre along with facilities for making bricks to be stored in warehouses she wants to be built close to the site of old Manaledi village, close to the hills.

However, this expansion of skills and distribution of resources raises questions about whether or not the enterprise is of a scope requiring an environmental impact assessment. Thebe, who has a contract environment and archaeology business offered to help her look into the matter to see if she can acquire a waiver. Otherwise the assessment will have to go ahead before they can get support from the Selebi-Phikwe Economic Diversification Fund in the nearby mining town of Selebi-Phikwe. Such assessments are expensive, coming in at a cost of around P120,000 (approximately US\$10,000.00). The scope of the regulation is very broad and it would be a great pity if village women like Lebonetse who have dug clay for decades find their access to a source of livelihood restricted.

Clays and Quarries

The mine is composed of two shallow, linear quarries presently about 180m apart; the red clay quarry lies near the edge of a shallow erosional fan at the foot of the Hills while the white clay quarry is slightly up slope (Figure 5).

Figure 5: Location of the mines and sherd sample sites; R marks the red mine, W marks the white mine, sample sites 1-8 have only later sherds while sites 9-17 have EIA wares

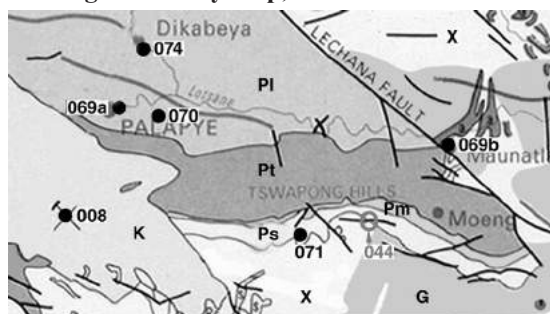


Source: by Edwin Wilmsen

The area is on the western margin of the Central Zone of the Limpopo Mobile Belt, a narrow region that has attracted considerable geological attention because of its position between the Kaapvaal craton to the south and the Zimbabwe craton to the north, both massive continental formations. A substantial literature spanning more than three decades, bracketed by Key and Hutton (1976) and Kramers *et al.* (2011), has resulted concerned primarily with the lithology and mineral forming history of the complex. This Central Zone displays evidence of a highly complex geological history extending from the Palaeoarchaeon 3700 million years ago to the Palaeoproterozoic 2000 million years ago (Boshoff *et al.* 2006). The Zone is characterised by a wide range of rocks predominantly gneiss, iron-bearing quartzite, and various granites (van Reenen *et al.* 1992; Holzer *et al.* 1998; Kroner *et al.* 1999).

The data show that the Central Zone underwent several pulses of heating and cooling. Mineral assemblages preserved in the rocks suggest they developed under temperature conditions that ranged from 950°C to 330°C at pressures from 9–10 kbar to 4–6 kbar (Hisada and Miyano 1996; Hisada *et al.* 2005; Van Reenen *et al.* 2004; Tsunogae and van Reenen 2006; Perchuk *et al.* 2006; Zeh *et al.* 2007; Rigby *et al.* 2008). (A kbar is 1000 times the current atmospheric pressure on the surface of the earth at sea level (about 1kg/cm²). These lithologies as recorded in the Tswapong area are shown on the government of Botswana's Geological Survey maps (Botswana Government Survey 1984 and 1998) where **G** designates granite and **X** designates banded quartzofeldspathic gneiss (Figure 6).

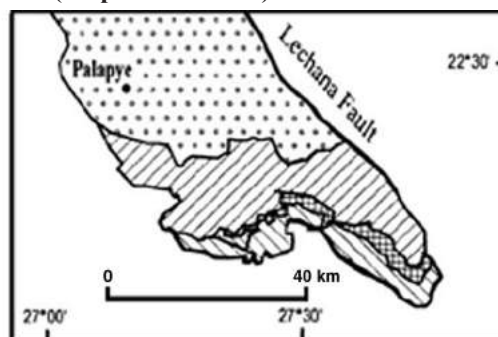
Figure 6: Tswapong Hills section of Botswana Geological Survey map, 1984.



PI	Varicoloured, micaceous siltstone and shale
Pt	Sandstone, quartzite, conglomerate, ironstone, shale, siltstone
Pm	Shale, siltstone and limestone
Ps	Manganiferous sandstone, quartzite, conglomerate, lava, tuff, shale
K	Coal, carbonaceous siltstone, mudstone, poorly cemented arkosic sandstone and rare tonstein
X	Banded, quartzofeldspathic gneiss
G	Granite

Source: Government of Botswana (1984)

Figure 7: Southern portion of Palapye Group (Mapeo *et al.* 2004).



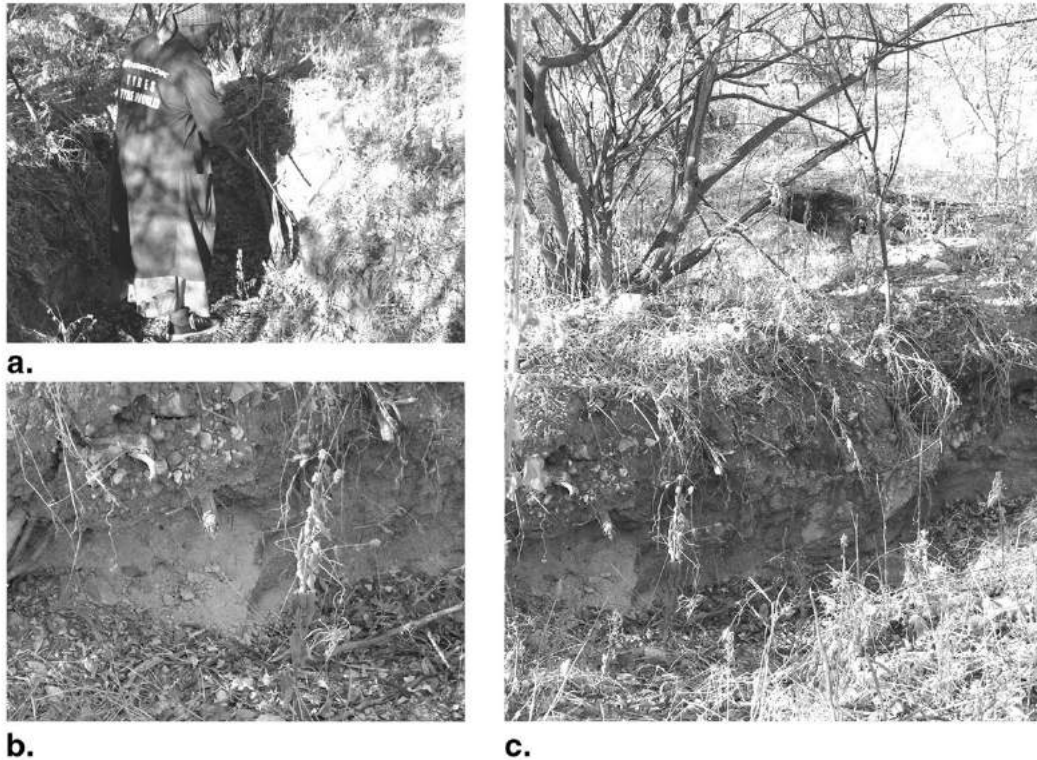
Formations	
	Lotsane
	Tswapong
	Moeng
	Selika

These older rocks are overlain by later lithologies of the Palapye Group (Figure 7), a folded sequence of sedimentary rocks deposited on the underlying granites and gneisses described above. The Palapye Group comprises five formations: Selika, Moeng, Tswapong, Lotsane, and Shoshong (Ermanovics *et al.* 1978 and Mapeo *et al.* 2004). Only the Selika –PS and the Moeng –PM formations are relevant to our discussion; a series of ridges and narrow stream-cut gorges isolate the others from the Maledi mine location. The Selika Formation has a conglomerate base overlain by massive iron and manganese quartzites with interbeds of shales and siltstones; indeed Tswapong is noted for its prehistoric and historic iron-working. The Moeng Formation is exposed in a narrow valley incised into the Hills; it consists of micaceous siltstones, shales, and iron quartzites with interbeds of limestones.

The mine, designated 044 on the map, is located at the intersection of exposures of three of these lithologies: quartzofeldspathic gneiss, granite, and conglomerate. The unconformity between the basement lithographies and the overlying sedimentaries is clearly demarcated in the profiles of the quarries, especially the white. This ore is in fact a pale grey grading into white tinged with patches of a very faint rose hue; the light colour suggests the ore is weathered from the quartzofeldspathic gneiss that predominates in the Central Zone. Lebonetse took us to the white quarry face as it was in July 2010 pointing with her iron mining-rod to the ore deposit under the overburden (Figure 8a). The unconformity between the pebbly

overburden and the underlying finer grained granitic ore is clearly visible (Figure 8b), and the serpentine lination of successive mining activity is seen in Figure 8c. The comparatively fine-grain structure of the overburden suggests that it originated in the Moeng Formation a tapered wedge of which cuts into the Selika at this point.

Figure 8: The white clay mine; a) Lebonetse pointing to clay stratum; b) clay stratum overlain by Moeng gravels, and c. view of former mine areas



Source: by Edwin Wilmsen

The red ore, more accurately described as a rich red-brown, is a weathering product of the granitic-granodiorites intruded into the gneiss here, the colour presumably derived from the massive iron quartzites that made the Hills a major iron working region from the Early Iron Age to recent decades. Lebonetse again pointed to the ore vein under a heavy overburden of conglomerates composed mostly of cobbles, with some pebbles, of all the lithologies mentioned above (Figure 9a). The unconformity between the ore and overburden is apparent (Figure 9b), although somewhat obscured by cobbles thrown back into the mine trench by potters in order to expose the ore; visibly this trench extends roughly 80 metres before being obliterated by undergrowth (Figure 9c).

Figure 9: The red clay mine; a) Lebonetse pointing to clay stratum; b) clay stratum overlain by Silika conglomerates, and c) view of former mine areas



a.



b.

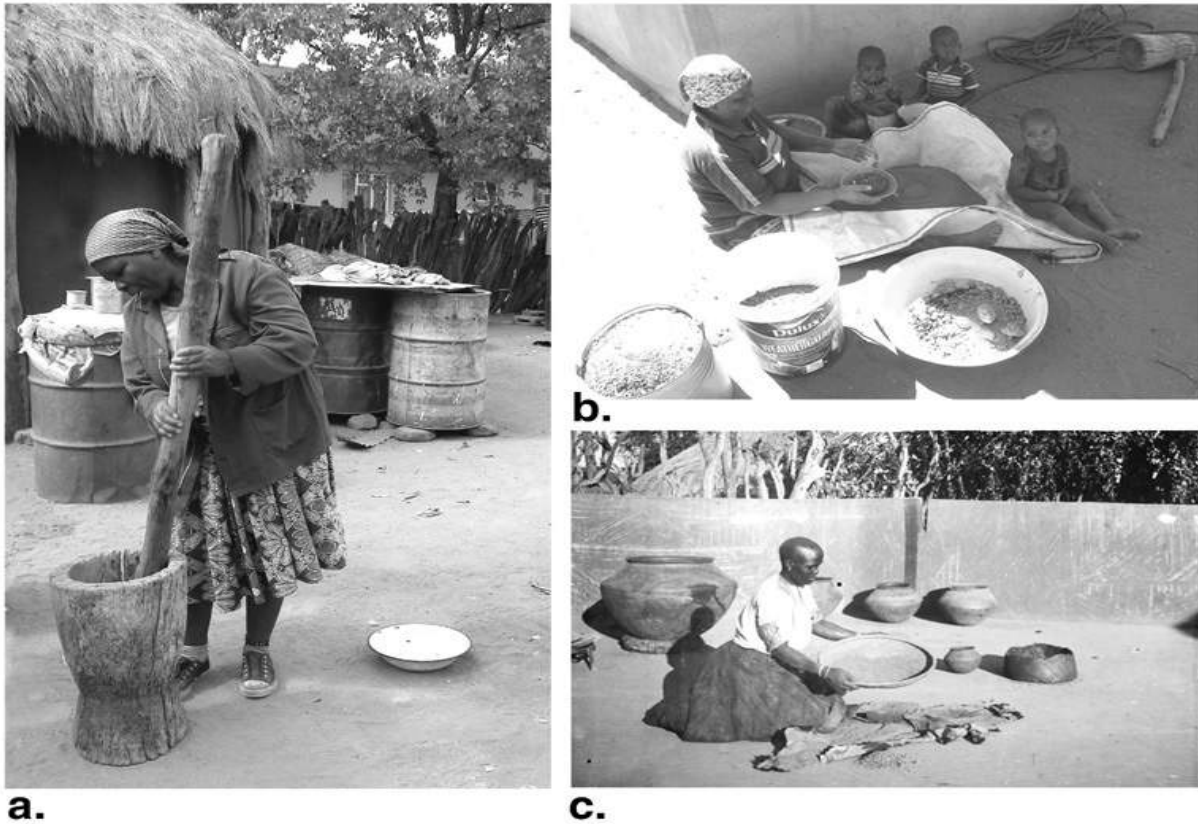


c.

Source: by Edwin Wilmsen

The red ore as mined is rich in clay with up to 90% clay composition while the white ore is relatively clay poor at 20% or less by volume; the white clay is also very coarse with larger grains sizes in the 4.0mm to 6.0mm range. Both clays are pounded individually to break-up the grains and then sifted together in proportion of two-parts red/one-part white to obtain 50-60% clay in the potting matrix with maximum grain size mostly in the 1.25mm to 2.25mm range. Pounding is done with an old *kika* (mortar) and *motshe* (pestle) formerly used to pound sorghum and maize (Figure 10a). Today sifting is done with a wire kitchen sieve (Figure 10b) whereas in the past flat baskets were used (Figure 10c).

Figure 10: a) Lebonetse pounding clay, b) Lebonetse sifting clay (photos: Edwin Wilmsen), and c) Kwena potter sifting in the 1920s (photo: Duggen-Cronin, courtesy of McGregor Museum, Kimberly)

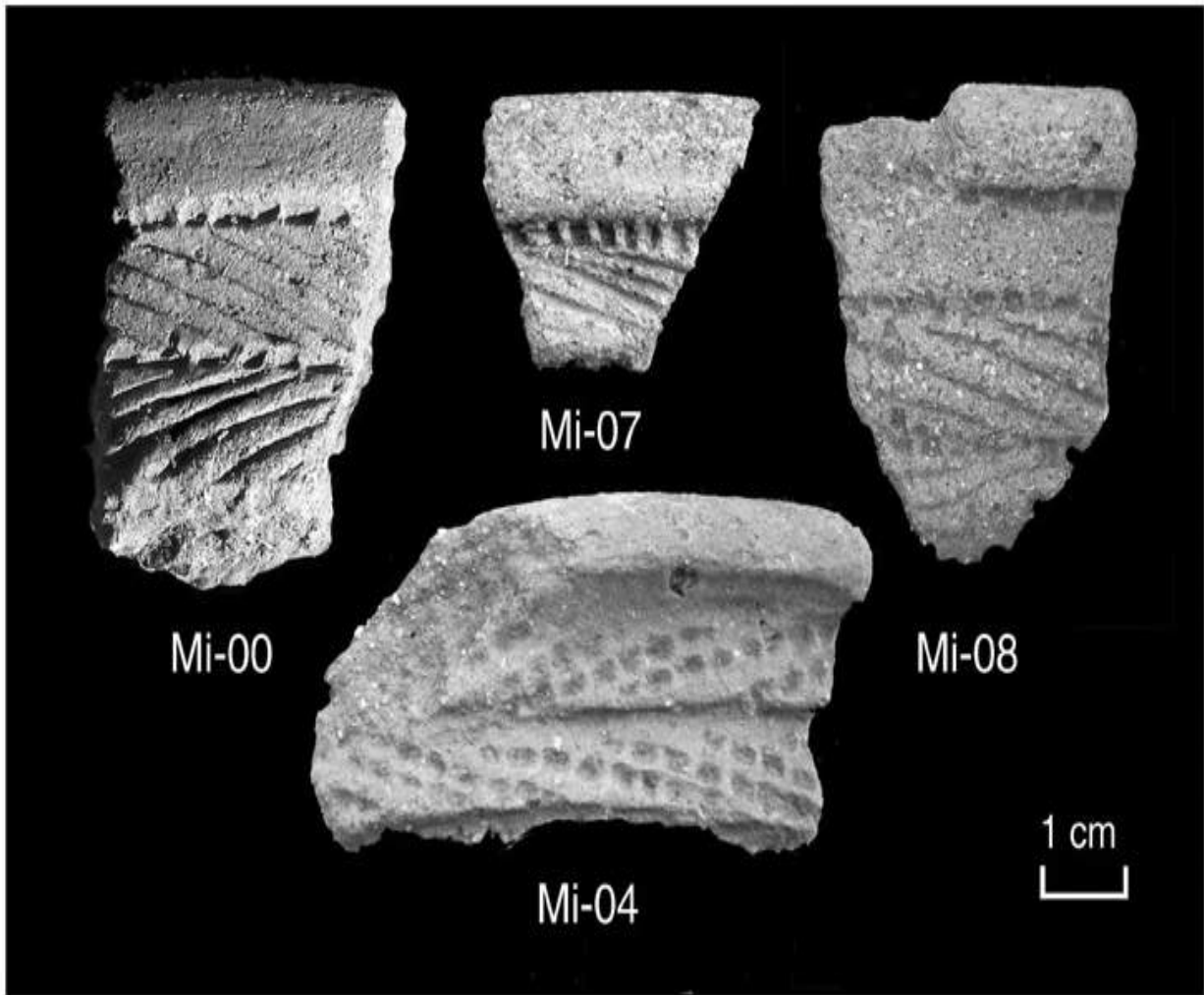


Iron Age potters must have acted accordingly; this opens a view not only to their potting behaviour but also to perishable items of their tool kit which heretofore have remained invisible. Analysis of these processes and structures thus provides a clearer view not only of the materials themselves but also integrates the role of materials in the definition and maintenance of social boundaries.

Pots of the Past and Present

Recovered surface sherds suggest occupation by makers of Early Iron Age Happy Rest (ca. AD 500-750) (Figure 11) wares and possibly Middle Iron Age Kalundu (ca. AD 1000-1300) wares, while others include Moloko black-and-red wares (ca. AD 1300-1700) and eighteenth century to nineteenth century wares clearly related to current Manaledi pottery (Figure 12).

Figure 11: Early Iron Age Sherds of Happy Rest type.



Source: by Edwin Wilmsen

Figure 12: Lebonetse holding two of her decorative pots (photo: PCT) with a large water/beer pot below; on the left are 2 recent sherds (Man-01 & Man-03) and 3 survey sherds (Mi-01, Mi-16, Mi-33)



Source: by Edwin Wilmsen

Conclusion

Almost 600 sherds were recovered in our surface survey, presenting evidence for substantial occupation of the Manaledi area for at least some 1400 years. The finds also include a fragment of a human figurine, unfortunately too small for specific identification, but such figurines are known to have been made by Zhizo as well as later southern African peoples. Several iron smelting sites were found as well as slag and tuyères. Two stone hut circles associated with a stone grain-bin base are perhaps the most interesting finds because they demonstrate that at least some parts of the survey area are still intact and not destroyed by wind/water erosion.

A Happy Rest sherd found among the grain-bin stones suggests these huts have been preserved for more than 1000 years, a mudstone ostrich eggshell bead-grinder provides evidence for some of the finery these people wore. We have analysed clays from both mines as well as sherds from the earliest EIA Happy Rest and later proto-historic periods along with pots made by Lebonetse and Lesedi and find that

most of these were made from Manaledi red and white clays mixed together. We are able to determine this by examining clays and sherds with microscopic magnification to identify the minerals in the clays and sherds; this is done in David Killick's archaeology laboratory at the University of Arizona in the United States of America (USA). We were fortunate that an easily identifiable mineral called prehnite is present in Manaledi clay but not in any other Botswana clay we have examined. As prehnite is present in almost all the sherds from all periods examined we can be confident that the same Manaledi clays have been used by potters since the Early Iron Age from about 1400 years ago.

Acknowledgements

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