Materiality and the making of the Tswana house from the early nineteenth century to the present

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This study explores the various factors that impacted on the materiality of the *ntlo*, the house of a married Tswana woman and her children, from the earliest recorded examples in the early nineteenth century, to the present. While the *kgotla* (the traditional male meeting place) features prominently in settlement research, the vernacular Tswana dwelling has received less attention. The study contradicts the simplistic and popular perception, that pre-industrial communities simply built their vernacular constructions with whatever material was available. It is found that, in addition to the availability of material, the critical determining factors that shaped materiality include gender, the earth and cosmology.
Keywords: Tswana, Kaditshwene, Mochudi, materiality, *ntlo*

Materialiteit en die maak van die Tswana huis vanaf die vroëe negentiende eeu tot die hede
Hierdie studie ondersoek die verskeie faktore wat 'n invloed uitgeoefen het op die materialiteit van die *ntlo*, die huis van 'n getroude Tswana vrou en haar kinders, vanaf die eersgenoteerde voorbeelde in die vroëe negentiende eeu tot op hede. Terwyl die *kgotla* (die tradisionele vergaderplek van mans) prominent in nedersettingsnavorsing gemeld word, het die volkseie Tswana-woning minder aandag ontvang. Die studie weerspreek die simplistiese en gewilde opvatting dat voor-industriële gemeenskappe eenvoudig hulle inheemse konstruksies gebou het met die materiaal wat tot hulle bekikking was. Benewens die beskikbaarheid van material, is die bevinding dat die kritiese bepalende faktore wat materialiteit gevorm het, geslag, die aarde en kosmologie insluit .
Sleutelwoorde: Tswana, Kaditshwene, Mochudi, materialiteit, *ntlo*

Early 19th century travellers, who travelled into the interior of South Africa, were surprised by the existence of Tswana agro-towns with populations of between 10 000 and 20 000 people. However, within a few decades many agro-towns were destroyed or simply abandoned because of the violent confrontations with Mzilikazi's marauding Ndebele, and with the aggressive Afrikaner Boers. Many Tswana tribes subsequently relocated further west to present day Botswana, where their vernacular villages continue to exist. This affords a researcher an architecturally diverse and geographically dynamic, but also culturally cohesive and chronologically uninterrupted, field of study.

The iconic image of an African village is one of round huts, surrounding cattle enclosures (Oliver 1999: 125). While this is a vivid mental image, it is simply too ambiguous for academic purposes. Whereas these enterprising explorers commented on the organic, but seemingly codified layout of settlements, later scholars readily recognised that the Tswana culture (based on the pre-eminence of cattle) synthesised their worldview, social structure and the physical layout of settlements into an arrangement that became known as the Central Cattle Pattern (CCP, figure 1). The CCP represents the homestead (*kgoro*) of an extended family. It consists of a roughly circular or elliptical core [court byre], with cattle stockades and the traditional meeting place (*kgotla*) surrounded by a fringe of the married women's houses. As Paul Lane (1998: 201) explains "each wife in a polygamous household has her own establishment or house (*ntlo, lelapa*). By this is meant the social group comprising the wife herself, her children and any other people directly attached to her." Traditionally and especially in pre-colonial times, the core is

an exclusively male domain and the residential edge is female territory, separated by a neutral interstitial space for circulation.

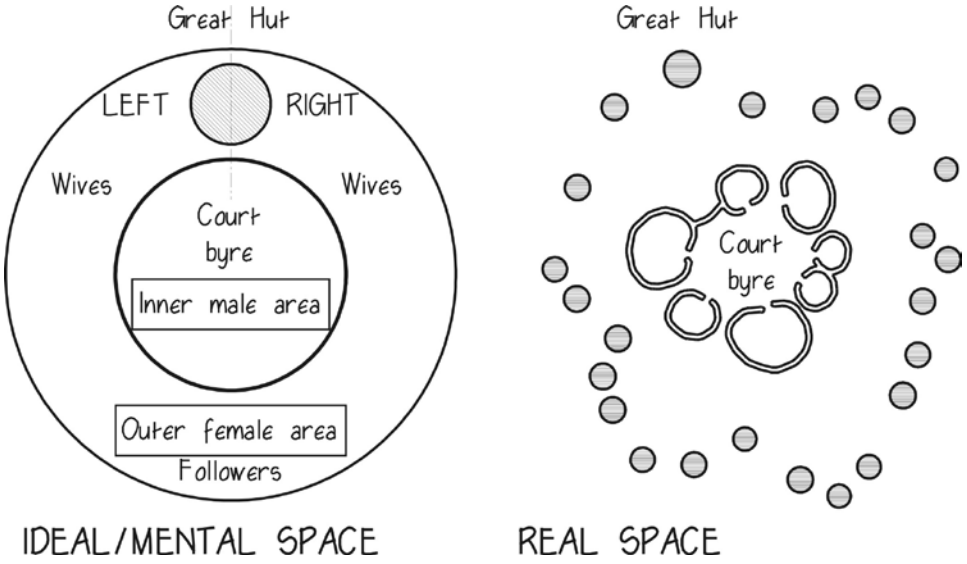

Figure 1
The Central Cattle Pattern (drawing by the author after Huffman 2007: 25, 29).

The CCP, with its specific characteristics, is quite a rigorous albeit idealised concept, which allows the definition of tested parameters. While the CCP is a convenient framework for researching Tswana settlement in general, previous research has been criticised for concentrating on the central zone, and neglecting the surrounding houses (Lane 1998: 187). Research with an architectural focus has also been rather sparse. My own investigations to date were mostly on form, function and geometry, without much reference to making. With this article I hope to contribute to research by contextualising the evolution of vernacular Tswana houses and their material expression.

In terms of this study "material" refers to the physical elements of construction; the *sine qua non* of building. "Materiality" refers to the purposeful articulation of the structure, defining or enclosing social space, not only as an ecologically appropriate arrangement, but especially as a response to cultural and economic exigencies.

The popular perception is that vernacular builders, especially in pre-industrial times, selected and manipulated readily available materials simply for their ability to enclose and span space, in order to protect the inhabitants against inclement weather and intruders. The reality is considerably more complex and multi-dimensional. It was found that in addition to the availability of material, the critical determinants that shaped construction include (1) custom and convention, (2) defence and privacy, (3) gender, (4) nature and the earth, and (5) cosmology and ritual. This is certainly not a comprehensive list.

Dithakong

Dithakong is the Tlhaping capital, east of Kuruman in the Northern Cape, which had been a major destination for several of the earliest 19th century expeditions from the Cape to the interior of the subcontinent. This agro-town is also referred to in colonial literature as Litakun, Litakoo or Lattakoo.

Samuel Daniell visited Dithakong in 1801, as part of the official Truter-Somerville expedition. The party was surprised at the size which was estimated to be as big as contemporaneous Cape Town, and include 2 000 to 3 000 huts, and 10 000 to 15 000 people (Barrow 1806: 391). William Burchell stayed in Dithakong in 1812, and describes it as a collection of little villages, each centred on a chieftain and spread over an area of approximately 3km across (Burchell 1824: 512). Missionary John Campbell followed in 1813 (figure 2) and again returned in 1820. However, Burchell (1824: 24) describes how the town was intermittently relocated (every four to six years), and describes the Tlhaping as semi-sedentary. Consequently, archaeologists have not managed to find the remains of any of these sites because they were constructed using earth, grass and timber only. Another missionary Robert Moffat, accompanied Campbell in 1820. They subsequently built the first missionary station in the region, in Kudumane (present-day Kuruman), where the Thlaping had moved by then.

Bell, Burchell, Campbell, and Daniell, among others, produced well-known sketches, engravings and watercolour illustrations (figure 3). Burchell, a trained naturalist, also wrote a seminal book, entitled *Travels in the interior of southern Africa, Volume 2* (1824), devoting 242 of 619 pages to "Litakun". It is probably the most extensive and scholarly account of pre-colonial Tswana customs and constructions. It is still available and the fact that Walton quotes him verbatim and extensively (1956: 53-57) is evidence of the authority and detail.

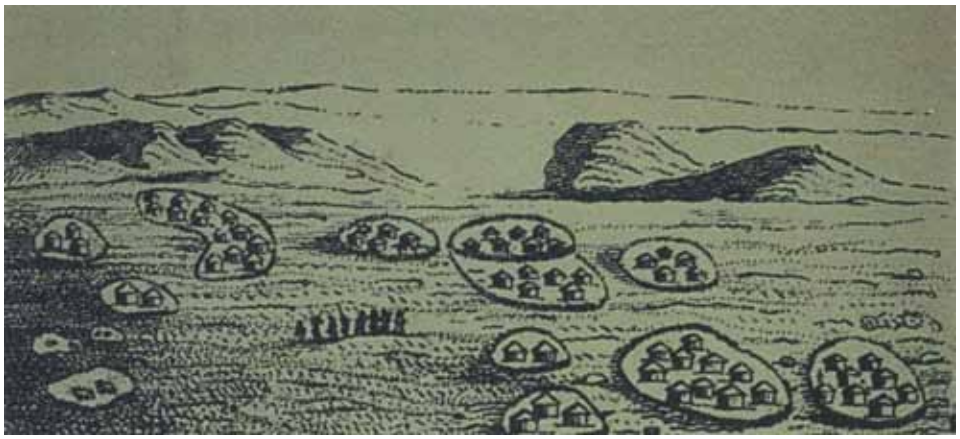

Figure 2
Sketch of Dithakong by Campbell 1813 (source: Schomburg Center for Research in Black Culture / Manuscripts, Archives and Rare Books Division).

Figure 3
"A Boosh-wannah Hut" – a *lelapa* by Samuel Daniell, 1801 (source: Smithsonian Institution Libraries).

Kaditshwene

In spite of previous exposure to Tswana towns, the Hurutshe capital of Kaditshwene (called Kurreechane in early writings) situated 40km northeast of Zeerust, surprised Campbell (figure 4). Not only was it bigger than the others, but the Tlhaping and Rolong towns also had wooden fencing, where stone was used at Kaditshwene (Campbell 1822: 224). He estimated the population at 16 000 people (1822: 277).

While Campbell observed a prosperous stable community, the missionary Stephen Kay saw poverty and hunger only a year later. The early visits took place during a time of great hostility and danger to the inhabitants. Kay (1833: 189) reported that the people of Kaditshwene lived in fear. The position of the town, on the highest hill in the region, was clearly a defensive precaution. According to Boeyens (2000: 7) the town was attacked and destroyed by Mzilikazi soon after 1827, and the survivors relocated to another locality, 50km away.

Figure 4
A painting based on one of John Campbell's original sketches of Kaditshwene (source Campbell 1822: opposite 222).

There were a number of large stone-wall towns, including Molokwane and Marothodi (the historical capitals of the Kwena and Tlokwa respectively) in the Pilanesberg-Magaliesberg region. At Kaditshwene, Jan Boeyens (2012) could match 19th century writings with archaeological and anthropological findings. However, Molokwane (studied by Julius Pistorius) and Marothodi (studied by Mark Anderson 2009) had no graphic observations to underpin and corroborate their work. Most of these agro-towns were destroyed during the internal conflicts of the 1820s, known as the *difaqane. B*y the time the Trekboer settlers moved into their territories, most agro-towns had ceased to exist, and the despondent survivors – staunchly resisting white overrule – moved further northwest into what became the British Protectorate of Bechuanaland in 1885 (Botswana since independence in 1966), where they perpetuated their town-building tradition. The Kgatla who lived near Pilanesberg but founded Mochudi in 1871, are typical of this relocation (figure 5).

Mochudi

John and Jean Comaroff, and co-author Deborah James (2007: 61) note that:

> The overall design of Tswana towns remained fairly resilient throughout colonial Bechuanaland, their proportions changing relatively little with the passage of time. Even after the independence of Botswana (1966), the larger chiefdoms retained strong architectural traces of the past; they still do.

Comaroff *et al.* (2007) report on Isaac Schapera's photographs and research on Mochudi, a large village 37km north of Gaborone, and describe the "architecture of village life" and "domestic scenes" in considerable detail (figure 6). Today Mochudi, still the capital of the Kgatla, has a population of approximately 40 000. Significantly Gasebalwe Seretse (2007) regards the Kgatla "as the foremost custodians of the Setswana culture". He notes that, although the Kgatla were the first to build European-style houses, "it is possible that the oldest buildings in Botswana are to be found in Mochudi." Anita and Viera Larsson (1984) produced a copiously illustrated survey entitled *Traditional Tswana housing: A study in four villages in eastern Botswana*. In 1996 they released *Modernisation of Traditional Tswana Housing*. Both are seminal publications.

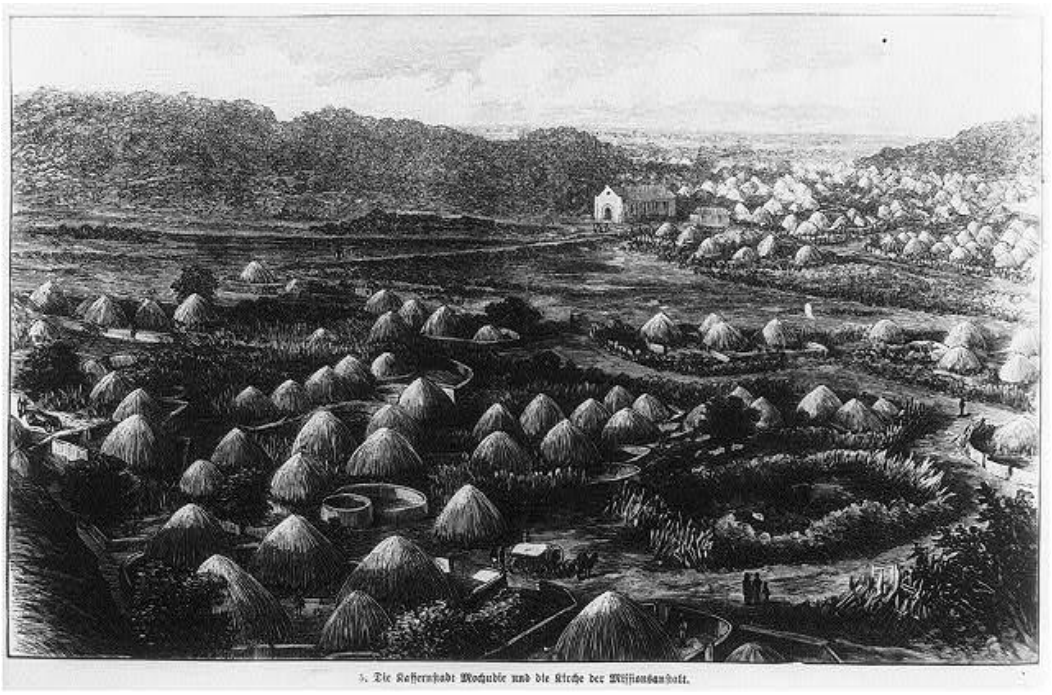

Figure 5
An image from 1899 entitled "The Kaffrarian city Mochudi and the mission church". (source: Library of Congress Prints and Photographs Division, Washington, D.C.).

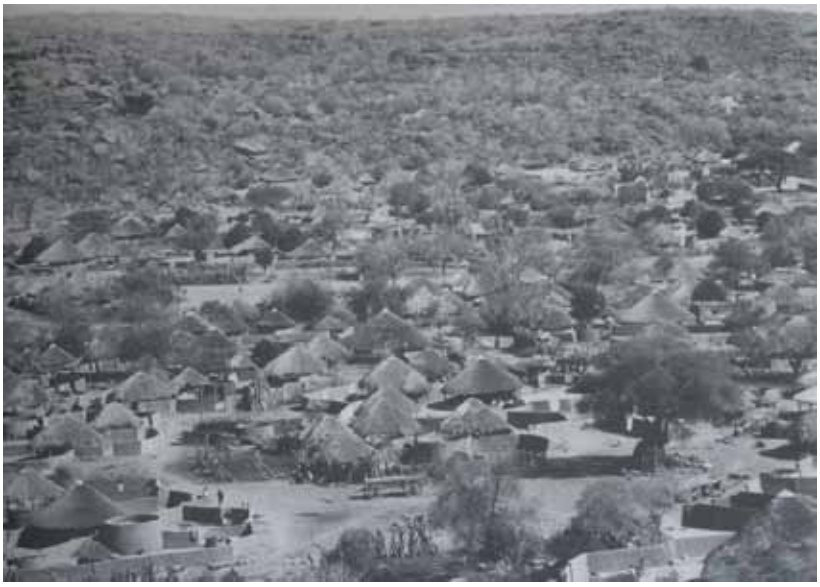

Figure 6
Part of Mochudi photographed by Isaac Schapera in the 1930s (source: Comaroff 2007: 63).

Custom and convention

Burchell (1824: 586) commented that "The Bachapins are a people who, in almost everything they do, adhere to ancient customs." As Graham Clark (1957: 248) succinctly put it in his vintage *Archaeology and Society*: "in primitive societies custom was king". Customs are, as Basil Davidson (1967: 169) explains, the essence of Africa's "guardian institutions". African communities were conservative, simply because change could threaten their survival (Reader 1997: 263).

At Dithakong, Burchell (1824: 364) observes that the houses are "without a single exception, of the same general form and outward appearance". He emphasises the difference between the front and rear courtyards (the bilobial typology), but also notes variations in section and plan. Each dwelling occupies an area of 12m to 18m in diameter and each is enclosed with a circular fence, some shaped like two joined elliptical areas (Burchell 1824: 515-516). These formed a semi-private front lobe (he calls it the "public section") and private rear lobe. The wall inside the doorway that obstructed view to the interior of the hut is also significant as it is not a standard configuration. The diameter of the rondavel-type (also called cone-on-cylinder) huts ranged from 2,4m to 4,0m (Burchell 1824: 517). From Dithakong, Campbell moved north and at the Rolong town of Mashow he observed that the huts were very similar to those of the Tlhaping, but with deeper verandas (Campbell 1822: 184). Campbell's drawings of Kaditshwene confirm the wide distribution of the type. Kay (1833: 199) visited Kaditshwene the following year and drew a plan of a very similar type of house as the one pictured by Burchell. He also noted that it is built in the same way as the ones he saw at Litakun. This type is described by Frescura (1981: 53) as "possibly the most universal of southern Africa's house forms". In fact, the cone-on-cylinder type dwelling is found in an area occupying about 60% of sub-Saharan Africa (Walton 1956: 128).

In spite of some variation, the Tswana houses seem to share two characteristics: one, a bilobial lapa arrangement, and two, a veranda supporting the roof (figure 7). In the Tswana settlements of the 19th century "the bilobial pattern is generally predominant. The dwellings

form a fringe around the central group" (Maggs 1976: 40). Frescura (1981: 109-111) regards the veranda house as a "definite and separate genre of house form" which emerged in Zimbabwe by about AD 1100. The veranda was the only way to provide open but protected outdoor residential living space. It protects against sun and rain, creates a transition between inside and outside, and expands the area of an enclosed space.

Amos Rapoport (1969: 4-5) explains that buildings are identical in primitive societies, but that the "vernacular design process is one of models and adjustments or variations", exactly as the early visitors recorded. However, amongst the Tswana the process of entrenching a model seems to be quicker than usually assumed; the encountered patterns only emerged in the 1700s, with many Tswana communities living in beehive shelters, and corbelled shelters before them.

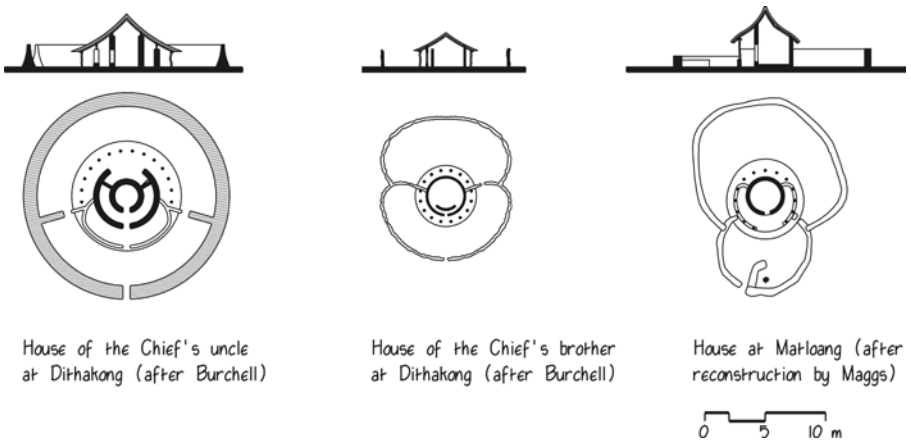

Figure 7
Bilobial types (drawings by the author).

According to Maggs (1972: 59) Dithakong is a Tlhaping settlement to this day, and despite the vastly changed economic and political context, and the attendant changes in material culture, the bilobial pattern is still the basis of many dwellings. But many huts have become rectangular and larger than before. They have doors and windows with wooden frames but retain their conical, thatched roofs supported by posts.

The drawings by Franco Frescura have become iconic in the field of Tswana settlement study (figure 8). He drew these after (a) Burchell's engraving at Dithakong, (b) a reconstruction by Michael Taylor at Buffelshoek, 20km north of Parys, (c) a reconstruction by Tim Maggs at Matloang, 50km south of Kroonstad, and (d) a photograph by Maggs at Dithakong in 1976.

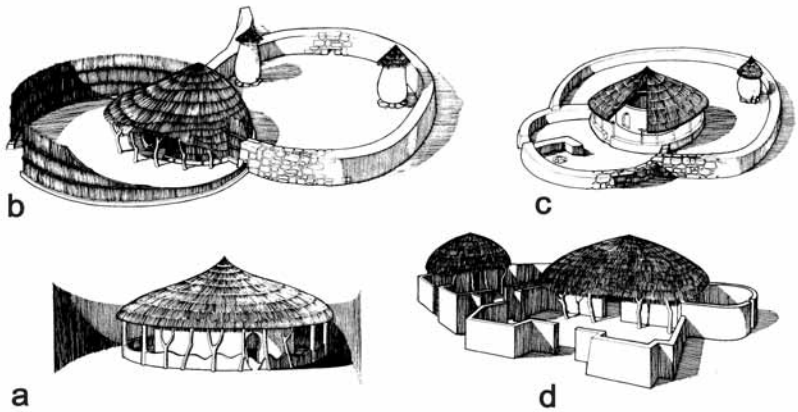

Figure 8
Bilobial homesteads types
(source: Frescura 1981: 156).

The various Tswana tribes (*morafe*) were never a federation. In fact they competed, sometimes violently, over cattle and resources. It is therefore so much more remarkable that, in spite of (perhaps because of) considerable "fission and dispersal" (Hall, Anderson, Boeyens & Coetzee 2008: 64), they have been sharing a cultural superstructure that has remained resilient, but responsive and dynamic at the same time (Tlou & Campbell 1997: 95). In the villages of Botswana there are still considerable manifestations of traditional cultural practices, but even there the customs seem to be disappearing (Tlou & Campbell 1997: 371).

Materials and finishes

Burchell (1824: 517) describes all the houses at Dithakong as thatched round huts (rondavels) constructed of earth walls, of between 100mm and 150mm thick. The thatched roofs, most at about 8m in diameter, are usually supported on a separate circle of posts, forming a veranda. Whereas Frescura depicts a monolithic earth wall (figure 9), Burchell (1824: 519) describes a wattle-and-daub technique: "Walls [are] formed of sticks neatly plastered over with a composition of sandy clay and the fresh manure from the cattle-pounds", or grass "cut into small pieces". Travelling beyond that area, Moffat encountered many ruined and deserted towns, and commented that the standing walls "were generally composed of clay with a small mixture of cow-dung, and so well plastered and polished with the former that they had the appearance of being varnished" (Wallis 1945: 8).

Beehives in particular are associated with nomads, and rondavels are accepted as the dwelling of a settled community. The veranda rondavel, constructed of thatch over earth walls, was the reported type of dwelling throughout the region in the early 19th century, without exception. Walling material, however, varied from woven branches and wooden stakes at Dithakong, to stone rear lobes and wooden or reed front lobes at Kaditshwene, to exclusively stone enclosures at Buffelshoek. Maggs (1976: 285) writes that while the walling material forming the bilobial *lapas* may be made of stone or brushwood, the spaces remain the same.

This phenomenon is significant because neither stone nor wood were necessarily the most abundant materials where they were respectively used as walling. At Dithakong there were two types of fences (Burchell 1824: 515-516). The first, usually about 1,8m high, consisted of densely interwoven and neatly trimmed twigs and small branches, to the extent that the texture was "as even as that of a basket". The second type was constructed of acacia stakes and branches by "poorer inhabitants", and had a much rougher appearance. Campbell (1822: 224) remarked that every house in Kaditshwene was surrounded by a stone wall. Kay (1833: 227) also describes stone-walled cattle kraals.

Choosing timber and stone at Dithakong and Kaditshwene respectively is puzzling. Dithakong is rocky and has few trees, whereas Kaditshwene has an abundance of trees. Burchell (1824: 356-451) writes:

> As we approached the hills which partly enclose the valley in which Litakun stands, the ground became uneven and rocky […] a few [trees] were here and there to be seen standing amidst the dwellings; but excepting these, no other tree was visible in any quarter […]. On this hill, between the rocks and stones, grow a few shrubby plants.

Burchell (1824: 513) also notes, as evident by the "stumps and stems" that all trees have been cut down for building and for fuel. Finally, Burchell (1824: 526) states that "[t]he mountains

about Litakun are of moderate height and of rounded or flattened forms; and everywhere bare of wood, excepting a few scattered bushes."

It is puzzling that the Tlhaping did not build in stone, which was plentiful at Dithakong. Dithakong means 'place of ruins' in Setswana. There were ruins of a long-abandoned stone-wall settlement nearby, that all visitors were aware of. However, Campbell (1822: 126) specifically ascribed the ruins to the Hurutshe. But, the Tswana had no idea who built these stone ruins, and were completely unfamiliar with stone-wall techniques. Kaditshwene is situated in a Bushveld vegetation zone (Hall *et al*. 2008: 75) where plenty of timber, used for roof rafters and posts, and fencing stakes, is found. Clearing a space strewn with rocks and building walls with them, such as at nearby Molokwane, was certainly expedient where a large number of cattle and people have to move about. A large number of agro-towns in the Rustenburg region were stone-walled. Robert Moffat (in Wallis 1945: 8) notes: "The ruined towns exhibited signs of immense labour and perseverance, every fence being composed of stones, averaging five or six feet high, raised apparently without mortar, lime, or hammer." Why the Hurutshe and other Tswana tribes used stone while timber was plentiful is not known; perhaps as a defensive measure? After all, this was the era and place of the Difaqane and all the stress and dangers that accompanied that bloody epoch.

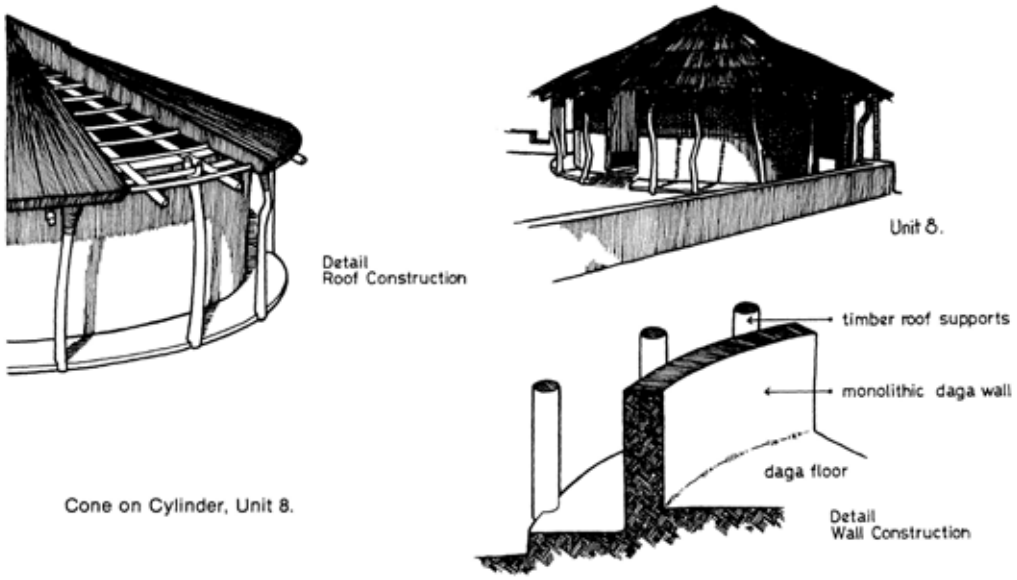

Figure 9
Tswana construction
(source: Frescura 1981: 59).

Decoration

Wall decorations were scarce at Dithakong. Burchell (1824: 458) only recounts the clumsy paintings of animals, painted with white clay, by the younger wife of the chief. At Kaditshwene there was extensive and careful decoration, in spite of external threats. Campbell (1822: 224) comments that some of the houses in Kaditshwene were painted yellow on the outside. He remarks significantly that one hut was painted red and yellow "with some taste", which may indicate decorative patterns. Campbell (1822: 228) also notes: "In some houses there were figures, pillars, etc. carved or moulded in hard clay". His painting of the interior of Chief Senosi's private hut is unique (figure 10).

Kay (1833: 193-200) comments on the "superior cleanliness, taste, and genius of the people", and speaks of "whimsically ornamented" interior walls. He also writes significantly on individual taste (1833: 201):

> In the way of embellishment, however, each has his own taste to direct him; and the walls are usually decorated with pictorial and moulded representations of the native animals, and human inhabitants, in a style that shows a germ of genius […].

Decoration and symbolism are interrelated of course. This is confirmed by Simon Hall (1998: 250), who describes Sotho-Tswana decoration as symbolic markers of territory. Ron Eglash (2005: 200) agrees in his well-known book entitled African Fractals. He notes that Sotho-Tswana women use the geometric structure of flowers – intrinsically associated with the "regenerative power of women" – to affirm identity, territory and boundaries.

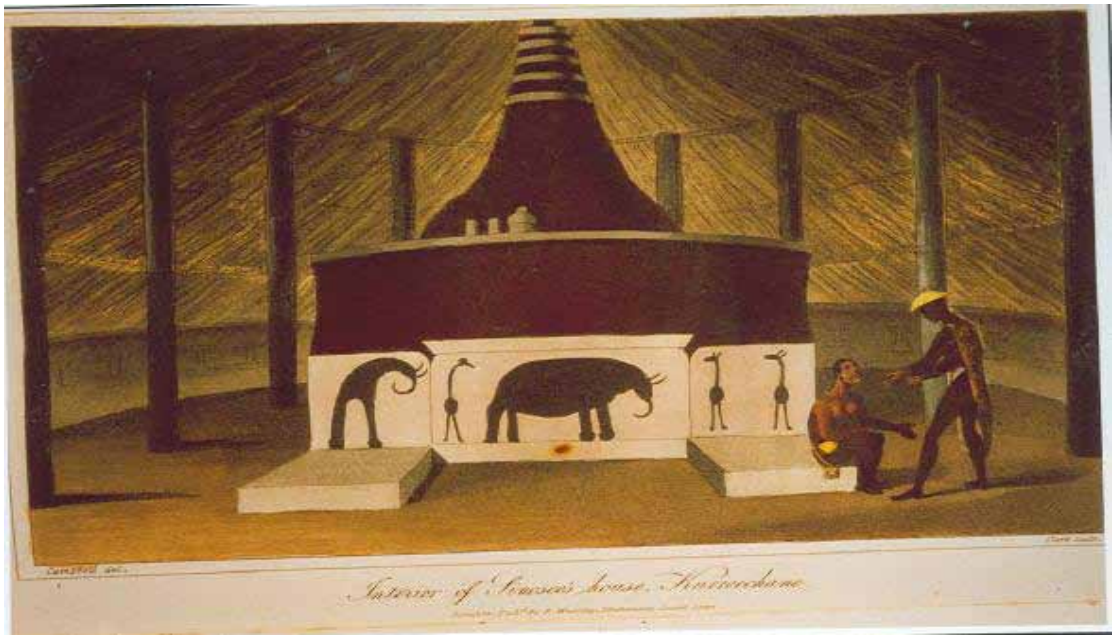

Figure 10
Interior of Chief Senosi's house, documented by John Campbell
(source: Campbell 1822: 268 opposite).

Defense and privacy

Dithakong, far removed from the marauding Mzilikazi but not without threats, was situated on a flat, low-lying terrain partly bordered by low hills. Campbell (1822: 220, 232) noted that the Hurutshe capital of Kaditshwene stood on top of one of the largest hills in the region: "[B]ecause of enemies, and that several other towns for the same reason were built on eminences, but they found it very inconvenient, being so far from wood and water."

The high stone walls at Kaditshwene could have been a defensive measure, but at Dithakong the stone walls seem unnecessary. There could be another reason for the high walls and screens: privacy. The Tswana used to live a polygamous lifestyle. A polygamous society, combined with an entrenched practice of marrying cousins (Tlou & Campbell 1997: 94) could have resulted in very involved familial relationships. Lane (1998: 201) also comments on the intertwined wife-to-wife relationships, which could have created the need for territoriality, and for visual privacy. This would have been achieved with high walls. In fact, Frescura (1981: 26) recognised that the Tswana bilobial dwelling sets out to outline a territorial statement. Since Tswana society is now

monogamous, *lapa* walls are now very low, and it has been said that high walls would now be considered "antisocial".

Gender

Burchell (1824: 515) notes that "the business of building the houses, as well as that of keeping them in order, is a duty which, in this nation, custom has allotted to the women only; and I was always assured, that every part was the work of their hands". Burchell (1824: 590) is hugely impressed by the bilobial dwellings: "I have given them due praise for their architecture, with regard to the neatness of their dwellings and the plan on which they are constructed." Many visitors commented on the quality of housekeeping. Burchell (1824: 521) in particular observed:

> There is one quality for which the Bachapins, and probably the other tribes of Bichuanas, are greatly to be admired, and in which they excel all the southern inhabitants of this part of Africa; the neatness, good order and cleanliness of their dwellings.

The bilobial dwelling is not a family dwelling, it is the territory of a married woman. The front courtyard is a semi-public outdoor space, used for cooking, eating and socialising. The rear courtyard is used for storage, fowl roosts and what Maggs (1976: 281) calls "rough housework". The hut itself is used for sleeping and cooking (in inclement weather), while the veranda provides shade during the day.

Burchell (1824: 521) describes the hut of one of the chiefs as much more modest than many of the other huts at Dithakong, perhaps because the chief conducted his business in the kgotla and did not receive visitors in his hut (figure 11a). Significantly, Burchell (1824: 521-522) notes that the house belonging to the Chief's uncle was also one of the largest: "[A] circumstance to be ascribed perhaps more to the architectural talents of his wife, than to his own rank or situation in society." It is clear, therefore, that women, as part of the process of building also decided the dimensions and spatial organisation (Burchell 1824: 455).

Although, as Walton (1956: 52) stresses, the *lelapa* was the real home, with all the domestic activities taking place there. The *lelapa* was not a male space. Men ate in the *kgotla*, where they also worked leather, repaired tools and weapons, and tended to the livestock. However, women did more than build houses, raise children, prepare food and clean the house. They also worked the fields. At Dithakong, Robert Moffat (1842: 251-252) observed the women working hard in the scorching sun and their husbands "lounging in the shade". Burchell (1824: 586-587) writes: "Bachapin agriculture is ... performed entirely by women." The Tlhaping cultivated sorghum, kidney-beans, pumpkin and calabash gourd (the shell of the latter used extensively as a domestic utensil and container). It is significant that Burchell (1824: 588-589) noted a general scarcity of food, and in order to "escape starvation, or at least to mitigate the daily hunger", the women also search the plains for wild roots and berries.

Denbow and Thebe (2006: 96-98) remind us that women built the "traditional earth and cow dung houses ... with few tools other than their own hands". Today, new houses (or extensions) in cement blocks and plaster, are built by men using mixers and trowels. Since the majority of houses in Botswana now have masonry walls and corrugated iron or cement tile roofs, the responsibility for building has shifted from the women to the men.

Paul Lane (1998: 187) explains that the CCP dictates that the court byre, the male domain, is the core of the homestead (*kgoro*). As such it is surrounded by houses that constitute both

"a protective barrier between the settlement and the outside world and the settlement element that is in most immediate contact with the outside world." Both the houses and the homesteads demonstrate what Lane (1998: 189) calls "gynecomorphic forms", which is an interesting theme that needs more research.

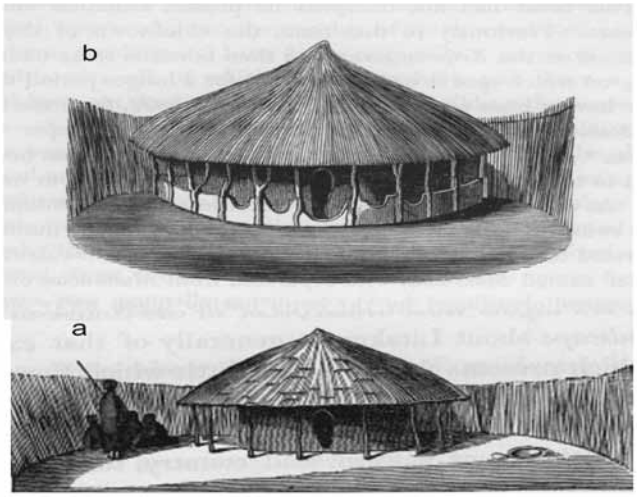

Figure 11
Engravings by Burchell: (a) a chief's hut; (b) a typical house (source: Burchell 1824: 511, 528).

Nature and the earth

Burchell (1824: 517) writes about Dithakong: "I never saw among them a building, or enclosure, with straight or right lined sides". Moffat (in Wallis 1945: 8) observed a similar phenomenon further north: "Everything is circular, from the inner fences which surround each house to the walls which sometimes encompass the town". Rapoport (1969: 25, 77) points out that circular huts are easier to roof than rectangular ones, but emphasises that the choice might ultimately depend on the symbolic nature of the forms, adding in a footnote that some traditional cultures do not have a word for "straight".

The circles and curves probably symbolise harmony between the earth and sky. The earthy colours, texturing and small scale could be evidence of a process of merging the built artefact, with the landscape. The low scalloped wall, forming the veranda of the hut in figure 11b, is certainly reminiscent of the low, flat hills surrounding Dithakong. The *lelapa* connects the living space with the sky, especially at night under the stars. Andrew Smith (in Lye 1975: 110) explains:

> It is impossible in the distance to judge the character of a Bichuana [Tswana] town or to conjure the number of its inhabitants. At first the lowness of the houses and their similarity to each other give it the appearance of a confused mass and, until the smoke from the huts or some other indication of the abode of man is discerned, it may be mistaken for a dark patch of soil.

Burchell (1824: 527) noticed, very astutely in my opinion:

> The landscape about Litakun is generally of that extensive and open kind which presents for the pencil, little which European artists are accustomed to consider as picturesque. It possesses, however, some beauties of its own, which depend more on the effects of aerial tints and the coloring [sic] of a warm arid country, than on richness of subject or romantic outline.

This open landscape could have had special meaning for the Tswana; a meaning which seems relevant even at present to humankind as a whole. Mallgrave and Goodman (2011: 227-228) suggest that we "have a particular fondness for environmental conditions that in an evolutionary sense have favored [sic] our biological survival."

Cosmology and ritual

Rapoport (1969: 49) writes that in traditional societies in particular, the house served as a "social control mechanism". That is certainly relevant when the *ntlo* is seen in the context of the CCP, and its intrinsic allocation of gender-based responsibilities and spaces. In addition, the CCP allowed Tswana women to create what Rapoport (1969: 49) called "the ideal environment". The circularity of settlement has some practical implications, but could be interpreted as a representation of the metaphysical cosmic image, a concept that has been pervasive in sub-Saharan Africa (Rapoport 1969: 50). The bilobial dwellings, which form a fringe around the central group, alludes to symbolic and practical protection not only of the male domain as a whole, but also of the community's greatest asset and measure of wealth – its cattle.

In 1947, the City Council of Pretoria built a so-called *lapa* scheme in Mamelodi West, consisting of rondavels around a centralised space, emulating traditional Tswana dwelling form. Perhaps this was appreciative of the popularity of the indigenous rondavel-dwelling in rural areas. But residents considered them "patronising, demeaning and controlling" and refused to move into them (Bakker, De Jong & Matlou 2003: 17-18). It can therefore be reasonably concluded that the act of building a house, and specifically a rondavel it seems, is more than the mere construction of shelter.

Conclusion

The traditional Tswana dwelling is the tangible manifestation of a complex value system that combines custom, kinship, climate, resources and settlement geography, cosmology, and ritual. Creating the *ntlo* is a female activity above all, and inherently associated with the mother's role to provide sustenance and protection at all scales.

Materiality was influenced by the various exigencies of the day, including political, ideological and ecological considerations. It is abundantly clear that materiality dictated social behaviour, and vice versa. And in the process it was the aesthetic appreciation and spatial sensibilities of women that constantly mediated between materiality and purpose. With increasing globalisation, it is often assumed that materiality has lost its relevance as a means of signifying the cultural boundaries and symbolic meaning of domestic space. This study hopes to sensitise readers to the fact that materiality, in Tswana society, remains relevant. This awareness could improve our understanding of the nature of aesthetic appreciation of black households.

At international housing conferences, female participants from especially Africa and the Middle East, continually complain that social housing in particular is insensitive to traditional gender-orientated needs for privacy and functionality. Perhaps the lesson to be learned from this study is that women should be prioritised when architects are commissioned to design social housing.[1]

Note

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