

INDIGENOUS TSWANA ARCHITECTURE
with specific reference to the Tshidi Rolong village
at Mafikeng

An extended essay submitted in partial fulfilment
of the requirements for the degree of
Master of Fine Art
by
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November 1986

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Acknowledgements

I wish to express my gratitude to the H.S.R.C. for their generous grant without which this research would not have been possible.

The bulk of this research was done in the Tshidi-Rolong village at Mafikeng and it was by means of interviews with houseowners that I was given first-hand information regarding the construction of their houses. I would like to acknowledge the following for their contributions to my research: Mesdames Betty Pitsi, Emily Morule, Barbara Dirapelo, Ruth Baliki, Lydia Moatlhodi, Violet Chanza, Edith Nko and Mr Izikile Medupe.

I would also like to thank the following for their assistance: Mrs Connie Minchin, Mrs Audrey Renew, Mr Alec Campbell, Mrs Musa Shongwe, Mr Credo Mutwa, Mrs Margaret McLean and the staff of the Cory Library. I also appreciate the interest and encouragement of Mr Tim Huisamen and Professor Wesley Kotzé. My grateful thanks also to Mrs Ann Hayward for doing the typing.

I am particularly grateful to Professor Estelle Marais, without whose hospitality and invaluable practical and theoretical assistance this essay would never have gone beyond the idea stage.

Foreword

This essay is divided roughly into two main sections; in the first I have discussed the Tswana as a whole, their environment, their origins and their more recent history. In addition to this, I have tried to give a clear picture of their tribal political structure and economic activities, as well as their domestic activities, all of which are integrally linked to the kind of house form adopted by the Tswana. The last, and most important, part of the first section is a presentation of some of the earliest written descriptions of Tswana dwellings made by the first white travellers to enter Tswana territory.

The second section takes the form of a presentation of findings observed during the course of personal field research undertaken in the Tshidi-Rolong village outside Mafikeng. This research was done by means of a number of questionnaires drawn up by myself and filled in on the spot with information supplied by house owners and sometimes the builders themselves. This survey was carried out largely at random, with several of the houses chosen arbitrarily because of an interesting feature which set them apart from other dwellings. This written information is backed up by a large bulk of visual information in the form of photographs taken personally, both of the dwellings in general, and of details of the houses.

Although this essay may appear to be rather fragmented, my aim is to give a graphic account of changes in Tswana dwellings by comparing features of contemporary dwellings with those observed in the early

nineteenth century. The fact that among the Tswana, the building style of one sub-tribe may vary slightly from that of another sub-tribe, has not affected my study to any large extent, since I was fortunate enough to have done my field research among a branch of one of the original groups, namely the Rolong, whose houses, along with those of the Tlhaping, were the first to be documented. Therefore, most of the differences which have occurred between the dwellings of the contemporary Tshidi-Rolong and those from the early nineteenth century are a direct result of the process of westernisation.



MAP OF TSWANA TERRITORY SHOWING MAIN TRIBES, THEIR CAPITALS, AND OTHER HISTORICALLY IMPORTANT TOWNS.

The Tswana

The Tswana are one of three subgroups of the Sotho peoples of central Southern Africa. They are sometimes termed "Western Sotho", and share a common origin with the other Bantu-speaking peoples of this region, but have over the course of several centuries formed their own language and culture which differentiates them from the Southern Sotho and Northern Sotho.¹

According to Hoyt Alverson,² there are over two million people today who call themselves Tswana, and one-third of these live in Botswana, while the other two-thirds are found in South Africa. The parts of South Africa inhabited by the Tswana are mainly the western Transvaal, the northern Cape Province and the Republic of Bophuthatswana. Small enclaves are also found in southwestern Zimbabwe, Namibia, and the northwestern Orange Free State.

Physical Environment

The country that the Tswana inhabit is generally flat, with huge expanses of grasslands and an abundance of thorn trees, commonly known as the "kameeldoring". In Botswana, small hills are fairly common, although these do not interfere with the general impression of flatness. Surface rocks are also a feature of this landscape.

The differences between the seasons are very distinct, with summer

1. Schapera, I. The Tswana. p.9.

2. Alverson, H. Mind in the Heart of Darkness. Value and Self-Identity among the Tswana of Southern Africa. p.9.

temperatures averaging around 25°C to 30°C, in stark contrast to the winter temperatures of approximately 10°C to 15°C, occasionally sinking below zero at night. Most of the rains in this area fall in the form of thunderstorms in summer, which is between October and April. Long, soaking rains are not very common here. Winter is very dry, dusty and windy, with rains seldom occurring at this time of year.

Having described briefly the nature of the Tswana's physical environment, it is also necessary to discuss their origins and the structure of their society in order to come to a fuller understanding of the form that their settlements and dwellings take.

Political Structure

The Tswana are divided into more than fifty separate tribes, of which the Rolong, Kgatla, Ngwaketse, Kwena, Nqwato, Tawana, Tlhaping and Hurutse are probably the most important.¹ Apart from these tribal divisions, they are divided into about twenty five groups known as clusters.² A tribe is a politically independent unit, with its own chief and territory, while a cluster is made up of several tribes which were at one time united under the rule of a single chief and still to this day share a common totem.³ The divisions into clusters often cut across the tribal boundaries; this explains why it happens that some members of the same tribe often have different totems.⁴

1. Benbo, Bophuthatswana at Independence. p.20.

2. Schapera, The Tswana. p.10.

3. Ibid. p.35.

4. Ibid.

In the course of history these main tribes have divided into several sub-tribes; the Rolong have split into at least eleven tribes, the Tlhaping into nine, the Hurutse into ten, the Kgatla into nine, and the Kwena, Ngwato, Ngwaketse and Tawana divided into eight tribes each.¹

The early settlements of some of these tribes, namely the Hurutse, Tlhaping, Rolong, Ngwaketse, and Ngwato share several cultural characteristics, such as circular mud-walled huts with a conical thatched roof and an encircling veranda. A second similarity is a surrounding area smeared with mud and enclosed by a palisade, and thirdly, they all had large clay vessels for storing grain.²

The Tswana are unique among most Southern Bantu-speaking peoples in that they have a social grouping system in which there is a well-organised link between the household and the tribe as a whole.⁵ The keystone in this organisation is the ward.

The smallest productive unit in Tswana society is the household.⁴ It usually consists of three generations of people; a man, his wife or wives,⁵ their children, elderly grandparents, and other dependant

1. Benbo, op. cit. p.17.

2. Walton, J. African Village. p.59.

3. Maggs, T. Iron Age Communities of the Southern Highveld. p.277.

4. Shillington, K. The Colonisation of the Southern Tswana. 1870-1900. p.8.

5. Although polygamy was practised in former times, it is virtually nonexistent now.

relatives. Unmarried daughters with children more often than not live with their parents until they get married and move into their own houses.¹ The household lives in a homestead, a number of huts in an enclosure. Several households make up a family group, and a number of family groups in turn make up a ward.²

The ward is the minimal political community and the most important unit in Tswana society.³ It consists of a collection of families under the authority of a hereditary headman who holds specific local administrative and judicial powers.⁴ He was responsible for, and had to represent, his ward on a council of headmen of which the chief was head.⁵ In addition to heading this council, the chief was also head of his own royal ward.⁶ The number of wards in a tribe varies from one tribe to the next.⁷

A crescent-shaped windbreak called the kgotla,⁸ situated in the open area onto which the houses face, was where all the council meetings took place, with only men being permitted to attend. The Tswana, like

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1. Lye, W. and Murray, C. Transformations on the Highveld: The Tswana and Southern Sotho. p.108.
 2. Shillington, op. cit. p.8.
 3. Ibid. p.9.
 4. Ibid.
 5. Ibid.
 6. Ibid.
 7. Schapera, Native Land Tenure in the Bechuanaland Protectorate. p.29. Henceforth mentioned as Native Land Tenure.
 8. Kgotla in Setswana means council-place.

most African peoples, operate under a patriarchal system.¹

1. Hilary Falkow Public Relations. Five Years of Independence. Republic of Bophuthatswana. p.6.

Origins and History

The origins of the Tswana are shrouded in myth and mystery. According to their legends, the Tswana peoples originated from the "Cave of Lowe", while another version claims that man sprang up from a marsh where reeds were growing.¹

Z.K. Matthews tells of a traditional belief that the forefathers of the Rolong had recollections of a land in which rain was plentiful, where there were many rivers and lakes, and fertile soil.² This description seems to point to a region of the Great Lakes of Central Africa as the original home of the Rolong. Another legend which strengthens this theory is that the Sotho-Tswana peoples originated at a place where "the sun shone on the opposite shoulder to what it does in the present day,"³ which also seems to describe a place north of the equator. There is no information as to why the Rolong and other Bantu tribes left this area.

The popular theory among many South African historians⁴ is that the Sotho-Tswana peoples reached Southern Africa in a series of migrations which started in the vicinity of the Great Lakes at the end of the tenth century. Basing their assumptions on the approximate length of each chief's reign, it has been calculated by

1. Lye et al. op. cit. p.24.

2. Matthews, Z.K. A Short History of the Tshidi Barolong. p.10.

3. Benbo, op. cit. p.17.

4. See for example Walton, Schapera, Breutz and Sillery.

these historians that the first Bantu actually arrived in the region which is now South Africa sometime between the fourteenth and sixteenth centuries.

These migrations were believed to have occurred in three waves, the first consisting of the ancestors of the modern Kgalagadi.¹ The second wave is thought to have been the ancestors of the Rolong and their offshoots, an example of which is the Tlhaping. The third wave of migration was believed to have been the people who developed into all the other Tswana tribes that exist today.

However, contrary to this documented history which claimed that the arrival of the Tswana in Southern Africa coincided more or less with that of the whites, recent research has proved otherwise. Archeological excavations conducted by Revil Mason and Norbert Rosendal have established that by 450 AD, Tswana were already settled in the areas they presently occupy, as well as some other areas from which they were displaced.²

Therefore it is equally plausible to believe that the settlement of the territory occupied by the Sotho-Tswana was a slow process, involving the migration of relatively few people, with the bulk of the population increase occurring "in situ".³

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1. The Kgalagadi settled in the eastern part of Botswana and have since mingled with the original San ("Bushmen").
 2. Hilary Falkow Public Relations. op. cit. p.8.
 3. Legassick, M.C. The Griqua, the Sotho-Tswana, and the Missionaries, 1780-1840: The Politics of a Frontier Zone. p.36.

Modern Sotho-Tswana societies are a product of these Iron Age communities. Roughly between 1000 AD and 1500 AD was the crucial period in the emergence of the large Sotho-Tswana states which later became the modern kingdoms of this group.¹ It also appears from their oral traditions that this was the time when their political power structures began to develop into what they are today.²

The Rolong, judging by their oral traditions and list of rulers, probably have one of the longest-lived Tswana chiefdoms of which there is record. The name of their earliest chief was Morolong, which in Setswana means "kudu man". It was probably after him that the tribe was named.³ His son was Noto, which means "hammer".⁴ Their original totem was the kudu, which is also the totem of the Tlhaping, who are believed to have descended from the Rolong.⁵ The Rolong also have another totem, namely the hammer which beats out iron ore.⁶ Legend has it that they were skilful ironworkers, and it is from this that they earned their name, "the sons of the dancers of iron".⁷

The Rolong, according to Stow, were probably always more numerous and

1. Hitchcock, R.R. and Smith, M.R. (ed.) Settlement in Botswana. p.23.

2. Ibid.

3. Breutz, P.-L. The Tribes of Mafeking District. p.25.

4. Sillery, A. The Bechuanaland Protectorate. p.170.

5. Breutz, loc. cit.

6. Brown, J.T. Among the Bantu Nomads. p.216.

7. Walton, op. cit.

and powerful than any other Tswana group preceding them.¹ They deny relationship to all other Tswana tribes except the Hurutse and the Tlhaping.

The Hurutse they recognise as being senior among Tswana tribes, although they are not apparently connected in origin.² In the late sixteenth century, several clans seceded from the Rolong and founded a new state at Dikgatlhong.³ This state became known as the kingdom of the Tlhaping. This kind of fragmentation has been a recurring feature of Tswana history, when one group would move away from a settlement because of internal tribal feuding and take up residence in a new place under a new chief, by whose name the new group was often known.⁴ They would either choose a new totem or retain the original one.⁵

A prime example of this is what happened among the Rolong in the eighteenth century after the death of Tau,⁶ a powerful and ruthless chief who temporarily established his headquarters at Taung,⁷ and after whom the place was named. At his death the tribe divided into four branches, each under one of Tau's four sons, namely, Rratlou,

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1. Stow, G.W. The Native Races of South Africa. p.490.
 2. Schapera, The Ethnic Composition of Tswana Tribes. p.10.
 3. Hitchcock et al. op. cit. p.25.
 4. Schapera, The Tswana. p.15.
 5. Hilary Falkow Public Relations. op. cit. p.6.
 6. Tau in Setswana means "lion".
 7. The Place of the Lion.

Tshidi, Seleka and Rapulana.¹

The Tlhaping were constantly forced southwards by the Rolong and Hurutse as well as other Tswana tribes. Because they were the most southerly of the Bantu at this time, the Tlhaping were visited by many European travellers at their settlement, Dithakong, and this has helped to make theirs the best-recorded culture from such an early period.

Coinciding with the arrival of the whites was the rise in power of Shaka, the militant leader of the Zulus.² In the 1820s Shaka caused a series of indigenous upheavals known in Zulu as mfecane and in Sotho as difaqane, which means "the time of great troubles".³ His wars of aggression caused great turmoil amongst other tribes, and in 1823 the region occupied by the Sotho and Tswana was invaded by the Ndebele⁴ under Mzilikazi. This led to immense population movements, the Sotho migrating to the hills of modern Lesotho and the Tswana into the western Transvaal, northern Cape Province and modern Botswana.⁵ The Ndebele have to a large extent assimilated the cultural characteristics of the Tswana.⁶

1. Stow, G.W. The Native Races of South Africa. p.491.

2. Hilary Falkow Public Relations. op. cit. p.8.

3. Alverson, op. cit. p.18.

4. Also known as Matabele.

5. Alverson, loc. cit.

6. Lye et al. op. cit. p.12.

Along with the events of the difaqane, the first whites began to arrive in Tswana territory with the aim of acquiring land.¹ The Great Trek in the 1830s and the influx of British Settlers in the 1820s led to the splitting of Tswana territory and the fragmentation that exists today.² The large towns of former decades no longer existed, and only small settlements remained.³ However, in the 1850s and 1860s people began to regroup and the Tswana were back in roughly their old homes,⁴ albeit in a more fragmented state.

In 1885 Britain made the area north of the Molopo River a Protectorate.⁵ In the same year the area south of the Molopo became the Crown Colony of British Bechuanaland, and in 1895 it was incorporated into the Cape Colony.⁶

This process of colonisation caused the split of both territory and peoples which resulted in the present-day separate Republics of Botswana and Bophuthatswana.⁷

The advent of western influences and colonisation had a profound effect on traditional Tswana laws and customs which had, up until

1. Hilary Falkow Public Relations. op. cit. p.8.

2. Ibid.

3. Hitchcock et al. op. cit. p.20.

4. Sillery, Botswana: A Short-political History. p.32.

5. Today known as Botswana.

6. Hammond-Tooke, W.D. (ed.) The Bantu-Speaking Peoples of Southern Africa. p.382.

7. Hilary Falkow Public Relations. loc. cit.

this time, dominated their society. Their political groupings in particular underwent vast changes due to the application of the European concept of nation states,¹ but this is given fuller treatment in the next chapter.

1. Alverson, op. cit. p.14.

Economic activities and land tenure

Before the arrival of the whites who brought with them totally new methods of subsistence, the Tswana were largely hunters and agriculturalists, with their villages situated close to the arable lands. When the lands became exhausted, the settlement was simply moved to a more suitable place. More recently, as a result of the enforced permanence of residence that European influences brought, those Tswana who still make a living from agriculture and cattle-rearing are characterised as having three homes.¹

Because they could not simply abandon their homes in the village, a second, more temporary one had to be established in the fields for use only during the rainy season.² The third "home" was a makeshift shelter at the cattle posts used throughout the year by herdboys.³

There were several advantages to living in the fields; for instance, they had access to milk and wild fruits, wood for fires and for building which fast became depleted in the vicinity of the permanent village, and there was also a possibility of deriving income from selling these items.⁴

During the dry season, from about June to November, the families stay

1. Hitchcock et al. op. cit. p.220.

2. Ibid.

3. Ibid.

4. Larsson, A. and Larsson, V. Traditional Tswana Housing. p.33.

in the village and apply themselves to building new huts and renovating and replastering the existing ones.¹ It was also a time of rest after the ploughing and harvesting of the summer, and this is when the various tribal ceremonies and festivities like weddings took place.²

The dwelling in the village is considered the main one of the household, and is usually much better built than the one at the fields.³ This was the place that was referred to as legae, the home.⁴ It was expected that the people should stay in their main home in the village when they were not at the agricultural lands.⁵ Before they could leave for the lands at the start of the agricultural season, they had to wait for the chief's signal.⁶ The chief's authority and rank was judged on his ability to keep the members of his tribe in the central village and to keep control of the tribe's arable and grazing resources.⁷

This control was exercised through the head men of the various wards under the chief. The traditional system of Tswana land tenure gives the control of the land to the chief, although it does not belong to

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1. Larsson et al. op. cit. p.33.
 2. Ibid.
 3. Ibid.
 4. Ibid.
 5. Hitchcock et al. op. cit. p.22.
 6. Ibid.
 7. Ibid.

him personally.¹ He holds it in trust for the tribe and he chooses the sites for towns and villages, and the areas for cultivation and grazing, and distributes it among the wards, represented by their headmen.² These headmen then subdivide the land at their discretion according to the needs of the different families in the ward, each household being entitled to as much land as it needed and was able to cultivate.³

Schapera noted in 1943 that traditional Tswana law emphasised, "no man may build a home wherever he pleases. All members of the same ward or family-group are expected to live together in one settlement".⁴ Even in the agricultural lands, where the settlements were far more widely spread than those in the village, members of the same families and wards usually have their lands in the same area.⁵

In addition to this, the chief's permission had to be sought before a man could change his residence. The law which enforced living in the village was a strict one, with law-breakers being severely punished by having their huts, and sometimes even their entire property, burnt down.⁶

1. Sillery. Founding a Protectorate. p.29.

2. Ibid.

3. Shillington, op. cit. p.9

4. Schapera, Native Land Tenure. p.59.

5. Larsson et al. op. cit. p.33.

6. Hitchcock et al. op. cit. p.220.

Another observation made by Schapera in 1943 was that every married man was entitled to land on which to build his home as well as lands for cultivation and grazing lands for his cattle. This he received automatically as a member of the tribe and he did not have to pay anything for it. This was not so for unmarried men, however, since they were expected to live with their parents until they married. Women never possessed any land whatsoever since they either had to live with their parents or with their husbands. When a man married it was usual for him to make his home in the ward of his parents or close relatives, and when a woman married, she had to move to the ward of her husband's family.¹

As long as this residential and arable land was being used it belonged to the man to whom it had been given.² After his death it passed on to his family, but if the land was abandoned by the owner, it reverted to the tribe and the chief then redistributed it.³

According to Schapera,⁴ the ward headman first chooses the site for his own home, then allots stands to the rest of the ward members. The people then clear their spot of ground and proceed to build their house with the assistance of close relatives. Schapera has also noted, "when a new ward settlement is founded, the headman's heir must

1. Schapera, Native Land Tenure. p.80.

2. Sillery, Founding a Protectorate. p.30.

3. Ibid.

4. Schapera, Native Land Tenure. p.79.

cut the first branch, the headman (or his heir¹) must initiate sexual life, and the headman's hut should be built first. In every family-group and in every family the same actions should be carried out first by the man senior to the rest in line of descent. Should he be away from home when the move is made, his juniors may refuse to build until he returns".² It was believed that a man would die if he settled in a place his juniors had built before him. He may refuse to make his home among them if they did not wait for him, and this disturbs the correct arrangement of the settlement.³ This arrangement of the settlement will be dealt with in more detail in the next chapter.

Because of the relatively self-contained nature of a ward, it was possible for it to detach itself from the rest of the settlement and move elsewhere, which, as has been mentioned before, was a fairly frequent occurrence in Tswana society.⁴ This process of secession took place mainly due to factors like war, drought, depletion of various resources and political dissention.⁵ In cases of internal tribal disputes, one section of the settlement would usually move away to avoid bloodshed; the other reasons would cause the entire settlement to move.

Another reason for this lack of permanence in Tswana settlements in

1. This was only applicable if the headman's heir was married.

2. Schapera, Native Land Tenure. p.79.

3. Ibid.

4. Ibid. p.68.

5. Sillery, Founding a Protectorate. p.23.

former times, before the influence of the Western more settled style of living, is given by Dominique Zahan; he claims that when a Tswana settlement has completed a circle, it is then thought to have come to the end of its existence and must be rebuilt elsewhere.¹ He verifies this claim by relating what a Tswana informant told J. Roumequere-Eberhardt, "the kgotla is solidly constructed in the form of a crescent, like the moon when it begins to wax. Similarly, the family must grow and a man's sons increase so that the village can become a circle like the full moon. When the circle is closed, it is time to create a new village. This is discussed by the assembled members of the village, then the affair is brought before the kgotla of the regional chief, who adopts one of two solutions: either the people split up to form two new villages, or the whole population moves and rebuilds the village in another place where there is more room."²

However, because of the changes brought about by contact with and the influence of European settlers and their forms of government, the traditional lifestyle of the Tswana has altered considerably. There has been a shift in emphasis from tribal consciousness to national consciousness,³ bringing with it a decrease in tribal dissent and as a result, fewer secessions. In addition to this, the gradual extension of European control made it increasingly difficult for seceding groups to find unclaimed territory where they could start a

1. Zahan, D. The Religion, Spirituality and Thought of Traditional Africa. p.77.

2. Ibid.

3. Benbo, op. cit. p.20.

separate settlement.¹

There are a number of other reasons why Tswana settlements have been more stable in the last approximately hundred years. In the past, migrations entailed relatively little effort or cost because the houses were simple, and required no materials that could not be obtained at the new site.² Nowadays many Tswana use more permanent building materials like bricks, cement, galvanised iron and manufactured doors and windows, all of which involve a fairly substantial capital outlay on the part of the owner.

Although a large part of the population still do build their houses using the traditional materials like poles, clay and grass, the areas around the larger towns have become denuded of these resources to a great extent. As the distances between the settlements and the places where the materials are exploited have increased, so the cost of transporting the materials has risen.³

In the past people had relatively few household possessions and little furniture, and what they did have was light and easily transportable.⁴ Nowadays most families possess several articles of European furniture which are not as easily portable.

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1. Schapera, The Tswana. p.15.
 2. Schapera, Native Land Tenure. p.61.
 3. Hitchcock et al. op. cit. p.225.
 4. Schapera, Native Land Tenure. p.61.

It can be seen from this that virtually all the dwellings built recently involve some capital outlay, in contrast to the dwellings built in the time of the frequent migrations. This makes the owner reluctant to move his dwelling.

Another factor in the permanence of Tswana settlements is the introduction by the whites of permanent institutions which serve the community such as churches, schools, hospitals and administrative buildings.¹ Probably the most important factor was the establishment of better water facilities which meant that the settlement did not have to move every time the water supply dwindled, as had happened so often in the past.²

Recently the hierarchy of the ward system in Tswana society seems to have decreased radically in importance. This can be ascribed to several factors, the most prominent of which are the growth of the towns, and the abolition of many ancient customs.³ The obligation of settling within a specific ward has lost importance since the settlements have begun expanding more rapidly with each passing year. Now single families settle wherever they can find space, usually on the outskirts of a town. This is also due to a recent tendency for people to want more space for their homesteads.⁴

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1. Sillery, Botswana. A Short Political History. p.12.
 2. Ibid.
 3. Sillery, Founding a Protectorate. p.23.
 4. Schapera, Native Land Tenure. p.83.

Layout of traditional Tswana settlements

The structure of a Tswana settlement was, and in many instances still is, a material reflection of the structure of the society which inhabits it, an idea also expressed by Susan Denyer who applies it to African villages in general.¹

The Tswana differ from most other Bantu tribes of Southern Africa in that they do not live in homesteads scattered over the countryside and in small villages, but in large compact settlements.² These settlements are made up of a collection of wards. The physical appearance of a ward is a circle of dwellings built close together and sometimes linked on the outside by some sort of fence. These dwellings all face onto an open area which contains a kgotla and a cattle kraal.

The appearance of a traditional Tswana village is a number of these clusters of homesteads, or wards, separated from one another by roads and lanes of varying widths. A Tswana village also has plenty of trees in the open areas onto which the houses face, since shade is a necessity in the hot dry climate.

The size of Tswana settlements varies markedly from place to place, and usually depends on the number of wards contained in the village. In the northern part of Botswana, the smaller villages sometimes

1. Denyer, S. African Traditional Architecture. p.19.

2. Sillery, Founding a Protectorate. p.23.

consist only of a single ward or cluster of houses.¹ Bigger villages are made up of a number of these, for instance Serowe, the capital of the Ngwato tribe, contains as many as a hundred and twenty wards.²

The size of the settlement also very often depends on the actual space taken up by each ward. The Rolong, for instance, build their dwellings further from one another than most other Tswana tribes in the western Transvaal.³

As a result of the differing sizes of the wards, the interconnecting paths and alleyways wind and twist around the houses and courtyards in a seemingly directionless complexity of eroded sand tracks.

Bessie Head seemed confused by her first impression of Serowe in the 1970's; "at first glance, it might seem nearly impossible to give travel directions in the haphazard maze of pathways and car tracks. Everything goes in circles; the circular mud huts are enclosed by circular yards and circular pathways weave in and out between each yard".⁴

Over a century and a half earlier, William Burchell, one of the earliest explorers into Tswana territory, had been struck by the same appearance of confusion, but this was at Dithakong, the Tlhaping

1. Maggs, T. op. cit. p.277.

2. Ibid.

3. Breutz, The Tribes of Mafeking District. p.84.

4. Head, B. Serowe. Village of the Rain Wind. p.xii.

capital, "the town had been built without the least attempt at regularity of arrangement; and the houses were placed with as little appearance of order or any particular plan, as the trees of the grove which stood before them."¹ It seems obvious that initially he was nonplussed by the absence of the regularity and geometrical design that a European expected in a town layout, but on closer inspection he discovered the town's inherent design. He continues, "such a town may be considered as a collection of little villages, each under the superintendence of its own chieftain."² He thus became the first outsider to recognise and describe the well-established tradition of the Tswana ward system.

The first time the word "ward" was used to describe this particularly Tswana phenomenon of a group of households under its own headman, was when John Campbell visited Dithakong for the second time in 1820.³

In most of the larger towns, particularly the tribal capitals,⁴ the general layout of the town is done in strict accordance with the tribal hierarchy. The chief's homestead is usually in the centre,⁵ surrounded by the homes of other members of the royal ward, and the rest of the dwellings radiate outward in diminishing degrees of importance and seniority. This characteristic is not exclusive to the

1. Burchell, W. Travels in the Interior of Southern Africa. p.361.

2. Ibid. p.362.

3. Maggs, op. cit. p.276.

4. A tribal capital is the seat of the chief of the tribe.

5. Sillery, Founding a Protectorate. p.23.

Tswana, however; most African peoples place their chief's homestead in the centre of a settlement.¹

Rev. John Mackenzie observed in 1871, "in laying out a Bechuana town, the first thing is to ascertain where the chief's courtyard with the public cattle-pen is to be placed. As soon as this is settled the remainder is simple...as soon as the chief's position is ascertained, one says, 'My place is always next to the chief on this side', another adds, 'And mine is always next on that side', and so on till the whole town is laid out."²

Every time the settlement moved, the general layout of the town would remain more or less the same, with all the wards remaining in the same position and direction relative to one another and to the chief's kgotla,³ which was the dominant feature of the village. This arrangement seemed to have served the purpose of causing the minimum social disruption when a settlement moved to another site, since people were assured of the same immediate neighbours as they had had in the previous locality.

Zahan claims that Tswana villages⁴ are constructed in such a way that their entrance is oriented on the East-West axis.⁵ He goes on to say

1. Denyer, op. cit. p.21.

2. Maggs, op. cit. p.277.

3. Hitchcock et al. op. cit. p.205.

4. He is probably referring here to the cluster of houses which make up a ward settlement.

5. Zahan, op. cit. p.73.

that the family patriarch builds his hut at the eastern extremity of this axis, and as the settlement expands, so the huts of his children are built on either side of his hut, with the offspring of the first and other "uneven" marriages to the left, and those from "even" marriages to the right.¹ Instead of carrying on in a straight line, these two lines of houses are built in such a way that they curve inwards with the purpose of forming a circle. In other words, the two arcs eventually meet at the western extremity of the circle. This is the point referred to earlier when the settlement was believed to have completed its existence, and that the time had come for it to be rebuilt elsewhere.²

Layout of a ward settlement

To elaborate on the earlier brief description of a ward, its general plan is circular, with a number of homesteads built close together around the circumference, occasionally linked by some kind of fence on the outside, and facing on to the central open space which contains the kgotla and the cattle kraal.³

The number of people in a ward varies considerably, but the average estimated by Schapera is between a hundred and fifty and three hundred.⁴ Likewise the number of dwellings in each ward varies markedly, but if a ward is unusually large its members live in several

1. Zahan, op. cit. p.73.

2. Ibid. p.77.

3. Maggs, op. cit. p.277.

4. Schapera, Native Land Tenure. p.28.

adjoining hamlets, one for each sub-ward or family group.¹

The open space onto which the houses face is a public space reserved for activities like meetings, work, dances and games.² There are several trees in this open space to give necessary protection from the sun. The kgotla is usually built around a fairly large tree, sometimes two or three trees, which gives shelter to the people attending a meeting. The house nearest to the kgotla is usually that of the local headman.³

The kgotla is the centre of village political and ceremonial life.⁴ It is a semi-circular windbreak of stout poles, although to the south the Rolong seem to favour dry-stone walling for the kgotla. At one end, close to the kgotla, is an open hearth around which the people sat. It used to be the duty of the chief's servants to keep a fire burning there,⁵ but that custom is not always upheld anymore. Sometimes the kgotla was merely an extension of the wall of the cattle kraal,⁶ but more often the two were separate structures.

Breutz claims that most tribes since 1955 have favoured the kgotla hut. Most kgotla huts are open on one side, with the result that

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1. Schapera, Native Land Tenure. p.68.
 2. Ibid.
 3. Ibid.
 4. Ibid.
 5. Ibid. p.69.
 6. Curtis, S. Mainane. Tswana Tales. p.48.

windows and doors are not necessary, while they serve the purpose of protecting the councillors from the weather.¹

The chief and the headmen were usually buried in the adjoining cattle-kraal. According to Susheela Curtis, this was a safety measure, as after the burial the cattle were let in to trample the grave which made it indistinguishable from the rest of the ground, and harder for enemies to find the body and use it for evil purposes.²

1. Breutz, The Tribes of Vryburg District. p.52.

2. Curtis, op. cit. p.48.

Traditional Tswana dwellings as described by early travellers

Travellers who visited Tswana territory in the early nineteenth century left valuable descriptions of the Tswana settlements and homesteads which they discovered. These accounts enable us to evaluate Tswana house construction in its purest form before the white man brought about any influence on Tswana society and its material forms.

As early as 1661 the Dutch settlers at the Cape received reports which probably refer to the Tlhaping,¹ but it was over a century later, in 1801, that the first whites arrived at Dithakong, the capital of the Tlhaping, with the object of establishing trade relations.²

At this time the Tlhaping were sharing their settlement with a dissident group of Rolong constituting about half of the population,³ which had been estimated at between ten thousand and fifteen thousand inhabitants.⁴ No specific mention of Rolong dwellings is made in any of the descriptions from this time, from which one can assume that no particular difference existed between the dwellings of the Tlhaping and those of the Rolong. However, the members of the first expedition to Dithakong were told by an inhabitant of the town that the Rolong "houses were of the same kind as, but much better built than" those

1. Maggs, op. cit. p.276.

2. Walton, op. cit. p.52.

3. Maggs, op. cit. p.280.

4. Walton, loc. cit.

they had already seen.¹

At this time the major portion of the Rolong nation lived not far to the north east of Dithakong, but the Tlhaping prevented travellers from visiting the Rolong settlements for fear of losing the trading monopoly which they held.² As a result of this, much less information exists on the Rolong of the pre-Difaqane period than what has been written about the Tlhaping.³

Judging from the descriptions and drawings of the early travellers, it can be assumed that there was a wide variety in the plans of the houses at Dithakong. Hardie suggests that the differences in their descriptions could also be due to inaccuracies on the part of the travellers.⁴ Most of the houses were similar in appearance from the outside, but the internal layout often varied due to individual preferences.⁵

Burchell, who visited Dithakong in 1812, estimated that the town contained nearly eight hundred dwellings, each consisting of an enclosure with two or three houses, including a clay granary,⁶ standing on a circular spot of ground about forty to sixty feet in

1. Barrow, J. A Voyage to Cochinchina. p.404.

2. Maggs, op. cit. p.280.

3. Ibid.

4. Hardie, G. Tswana Design of House and Settlement - Continuity and Change in Expressive Space. p.93.

5. Burchell, op. cit. p.364.

6. Ibid. p.362.

diameter which was invariably enclosed by a strong fence.¹

The houses were always circular and were on average about eight to thirteen feet in diameter.² The roof was conical in shape, covered with thatch and supported on an outer circle of poles. Most houses had a veranda which was defined on the outside by this circle of poles.³

Burchell was the first to illustrate a dwelling layout which has become known as the bilobial plan,⁴ and described by him as "two elliptical or circular areas conjoined".⁵ This arrangement effectively divided the area around the house into a front-court and a back-yard, termed lolwapa and segotlo respectively in Setswana,⁶ with the house in the centre and two crescent-shaped lobes at the front and the back meeting on either side of the house. (See illus.1) A variation on this plan was a simple circular plot which was divided in two by a transverse wall on either side of the house.⁷ The backyard was entered through an opening in the wall to the right of the house.⁸ (See illus.3)

1. Burchell, op. cit. p.363.

2. Ibid. p.365.

3. Maggs, op. cit. p.279.

4. Ibid.

5. Burchell, op. cit. p.363.

6. Maggs, op. cit. p.281.

7. Ibid. p.279.

8. Ibid.

The posts on which the roof rested stood about three to four feet apart and were in many cases connected by a wall made of sticks woven together and plastered with a clay and cowdung mixture,¹ generally known as wattle and daub. This wall was about half the height of the posts, usually level at the top, but occasionally some decoration crept in, with the top of the wall "fancifully indented or waved from one post to the other".² (See illus.4)

In some instances the wall was built separate from the posts, and stood about six inches to the outside.³ It was about four to six inches thick and extended only around the front part of the house, or the part that was inside the front-court.⁴

About three and a half feet inside the posts was the main wall of the building which reached up to the roof and was made in the same way as the half wall.⁵ The space between these walls formed a veranda which was used as a sitting place during the day, since the eaves gave a cool shade.⁶ It has been noted that this space was wide enough to allow someone to sit with his back against the wall and his legs stretched out.⁷ During rainy weather, fires were made here in a

1. Burchell, op. cit. p.364.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid. p.365.

7. Maggs, op. cit. p.279.

hollow in the floor, but normally this was done in a similar hollow in the floor of the lolwapa.¹ Cooking was also done in the open, so the inside of the dwelling was free from smoke and soot.²

The Tswana are unique from other African societies in that the wall of the house does not serve any structural purpose in terms of roof support, since this is the function of the outer circle of poles. Maggs has termed this wall a "curtain wall"³ which is merely there to enclose the inner core of the dwelling for reasons of privacy and protection. According to Lichtenstein who visited Dithakong between 1803 and 1806, the wall sometimes stopped short of the roof for the sake of light and ventilation.⁴

The houses had no windows, the only opening in the wall being a door which was wider at the top than the bottom, and only big enough to admit one person at a time.⁵ The doorway was placed about a foot above the ground,⁶ probably to prevent water from entering when it rained, and was at times covered with a roughly-woven cane door.⁷ Windows were considered unnecessary because the interior of the house was seldom used for any other purpose than for sleeping in and for the

1. Burchell, op. cit. p.365.

2. Barrow, op. cit. p.364.

3. Maggs, op. cit. p.282.

4. Lichtenstein, H. Travels in Southern Africa. p.373.

5. Burchell, loc. cit.

6. Ibid.

7. Walton, J. op. cit. p.57.

storage of valuables.¹

Burchell noted that some houses had a small inner apartment in the centre which sometimes reached right up to the roof and helped support it.² It was either semi-circular, or completely circular.³ (See illus.3) It was constructed of the same materials as were used in the main wall of the house.⁴ Burchell was told that this inner apartment was used as a winter sleeping-place, or as a bedroom for the parents, while the children slept in the outer apartment.⁵ As already mentioned, it was here that valuables such as weapons and clothing were stored, the darkness helping to keep these possessions safe from passers-by.⁶

However, as Burchell observed, some houses had no internal subdivisions, but instead the entrance was shielded by a free-standing wall or screen of wattle and daub just inside the opening, which also made the inner area "either darker, or more secure".⁷ (See illus.1)

Burchell also stated that occasionally the back part of the house was divided from the front part by transverse walls which extended from

1. Burchell, op. cit. p.365.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid.

7. Ibid.

either side of the inner apartment to the main wall in the same way that the outer space was divided into a front and a rear area.¹ (See illus.1)

Sometimes the curtain wall did not extend around the back part of the house. Instead this rear area was left open, with the space under the eaves used as a storeroom for grain and dry provisions.² (See illus.3)

A member of the first expedition to Dithakong, John Barrow, gives a different impression of the ground plan of the house and the materials used in the wall construction. The houses which he described were not made of wattle and daub, but of walls made of "clay and stones".³ The circular outer wall of the house was only three-quarters complete, with the remaining quarter left entirely open in the front, which was usually facing east.⁴ Inside, a curved wall passed through the centre of the house, forming a private inner apartment which was, like Burchell's circular apartment, where the more senior family members slept and where valuables were stored, while the children slept in the outer half-closed veranda which was the front part of the house.⁵ (See illus.2)

Lichtenstein described a house consisting of two concentric circles of

1. Burchell, op. cit. p.366.

2. Ibid.

3. Barrow, op. cit. p.391.

4. Ibid.

5. Ibid.

posts, the inner circle being slightly higher than the outer in order to accommodate the slope of the roof.¹ The outer circle of posts was joined by a wattle and daub wall the height of a man.² The inner circle was similarly joined, but this wall was higher, enclosing the main dwelling of the family.³ According to Lichtenstein, the outer area was allotted to the servants.⁴ The entrance was an opening between two of the posts, both inside and outside.⁵

This description seems to coincide roughly with the drawing of a Rolong hut by Eugene Casalis. Here too, one sees a passage formed by two clay walls completely encircling the inner area of the house. (See illus.8) However, as Maggs points out, Casalis does not state from which settlement nor from which branch of the Rolong the information was taken.⁶

Another feature of this same drawing is the centre pole or phiri which is not referred to in the drawings and descriptions of the other early travellers.

However, Lichtenstein also made a description of a house with two concentric circles of posts, with one post in the inner circle longer

1. Lichtenstein, op. cit. p.378.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Maggs, op. cit. p.280.

than the rest, and supporting the pitch of the roof.¹ In other words, the highest point was not necessarily in the centre of the roof, giving it a lopsided appearance.

Burchell described in detail the shape, as well as the method of thatching, of the roof of a typical Tlhaping dwelling. The roof was the shape of a "depressed cone", with the sides forming an angle always more than 90°, and usually 120°. ² It was constructed of rough poles bound together mostly with acacia-bark and meeting at the top. ³ Across these, sticks and twigs are tied, and on top of this again the thatch is laid. ⁴ To prevent the thatch from being blown off in a strong wind, several thin twigs are stuck into it by both their ends in alternate rows, and this proved a successful method of securing the thatch. ⁵

Burchell also noted that the roof of a large house was about twenty six feet in diameter, with the highest point at about nine or ten feet, and the eaves about four to five feet above the ground. ⁶ The edges of the thatch were not trimmed in order to make the overhang as wide as possible so that the house was protected from the sun by a large circle of shade.

1. Lichtenstein. op. cit. p.378.

2. Burchell. op. cit. p.366.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid. p.364 and p.365.

Lichtenstein pointed out that the inner structure of the roof was used for hanging clothes and skins.¹ In addition to this, a reed mat was often stretched between the beams, on which food was spread to be dried and stored.²

All the dwellings in Dithakong had at least one large clay grain storage bin, called a matluli in Setswana,³ which usually stood somewhere in the rear courtyard.⁴ In some households these containers stood on the rear veranda under the eaves,⁵ while Casalis' drawing of a Rolong hut shows one standing in the inner part of the house itself. (See illus.8)

If a household had a number of these containers, a special corn house was built in the rear courtyard to contain them.⁶ The cornhouse was usually a smaller version of the dwelling house, but according to Burchell's drawing it had only a single wall which had a large opening facing in the direction of the house. (See illus.3)

A matluli which stood outside was generally larger than one that stood under the roof of the house. A free-standing matluli was about

1. Lichtenstein, op. cit. p.378.

2. Ibid.

3. Walton, op. cit. p.57.

4. Maggs, op. cit. p.280.

5. Burchell, op. cit. p.366.

6. Ibid.

six to nine feet high,¹ egg-shaped and constructed, like the walls of the house, of wattle and daub.² It was raised about six inches above the ground to allow for air circulation which kept the grain dry and also free from termites. The methods used to raise the containers seem to have varied. Burchell describes a series of stakes in the ground⁴ while the drawing by Daniell shows a matluli standing on large stones. (See illus.7) Barrow refers to "three legs",⁵ which must be assumed to be of the same material as the rest of the container.

When a matluli stood in the open, it was covered by a pointed roof of thatch which fitted over the opening in the top of the container.⁶

Burchell observed that the chieftain's enclosure often had an additional small hut in the rear courtyard which was used by his immediate servant.⁷ (See illus.3)

The outer fence enclosing the dwelling was made of closely woven twigs and branches which Burchell regarded as a wall rather than a hedge because of its solidity.⁸ He remarked that the branches were so

1. Barrow, op. cit. p.392.

2. Burchell, op. cit. p.366.

3. Ibid.

4. Ibid.

5. Barrow, loc. cit.

6. Maggs, op. cit. p.280.

7. Burchell, loc. cit.

8. Ibid. p.363.

closely interwoven that they were "impenetrable to a hassagay and, at their lower part, even to a musket-ball".¹

Most fences were about six feet high, and at the bottom they were about two and a half feet thick and tapered towards the top.² However, the fences of the poorer inhabitants were often not more than five feet high nor as solid.³

The outer fence never had more than one entrance, and it was made as small as possible for reasons of security and for shelter from wind.⁴ The opening was just large enough to admit one person, and like the doorways in some of the houses, was narrower at the bottom than at the top.⁵ At night the opening was closed by a rough woven door which protected the dwelling from "both enemies and wild animals".⁶

The floors of huts and verandahs were raised on mud platforms made of a mud and cowdung composition.⁷ A kerb a few centimetres high followed the line of posts around the hut and Daniell observed that in some instances this edge was scalloped from post to post, giving a

1. Burchell, op. cit. p.363.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid. p.364.

6. Ibid. p.363.

7. Maggs, op. cit. p.285.

decorative effect.¹ In his drawing of a "Booshuana Village", the matluli also stands upon a raised platform a few centimetres higher than the level of the rest of the enclosure. (See illus.7)

The floor of the front court and the backyard was also made of mud and cowdung which had been levelled and beaten until the surface was perfectly smooth.² In addition, Barrow noted that the surface of the enclosure was prepared in such a way that water could run off through the gateway.³

Finally, the neatness of the lolwapa must be pointed out, since this was the main living area of the household during the day. Burchell observed, "Nothing can exceed their (the Tlhaping's) neatness; and by cleanness I mean to say, the great carefulness they show to remove all rubbish and everything unsightly: not a twig, nor a loose pebble, nor dust, nor even a straw, is to be seen on the floor within the fence; nothing lies out of its place, and it is evident that in the better houses they are continually attending to these circumstances".⁴

Burchell stated that it was the women who were responsible for the building, maintenance and for the tidiness of the dwelling.⁵

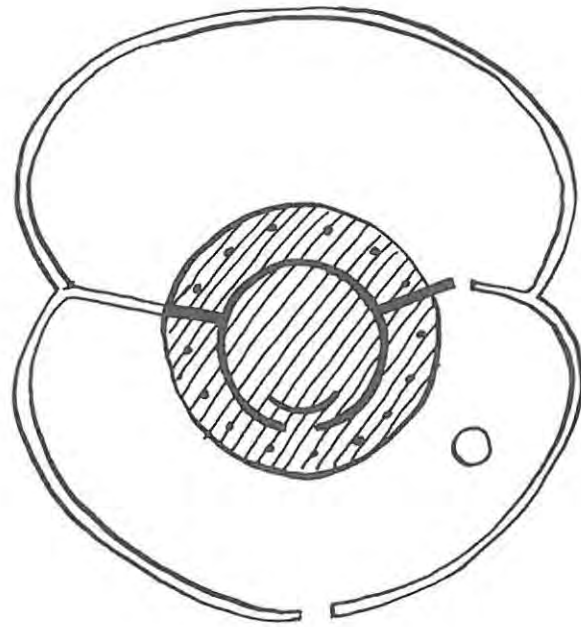
1. Maggs, op. cit. p.285.

2. Burchell, op. cit. p.364.

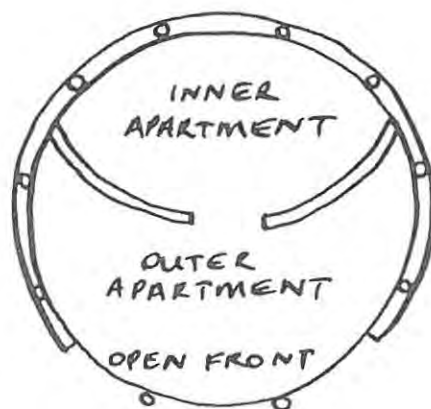
3. Barrow, op. cit. p.393.

4. Burchell, op. cit. p.376.

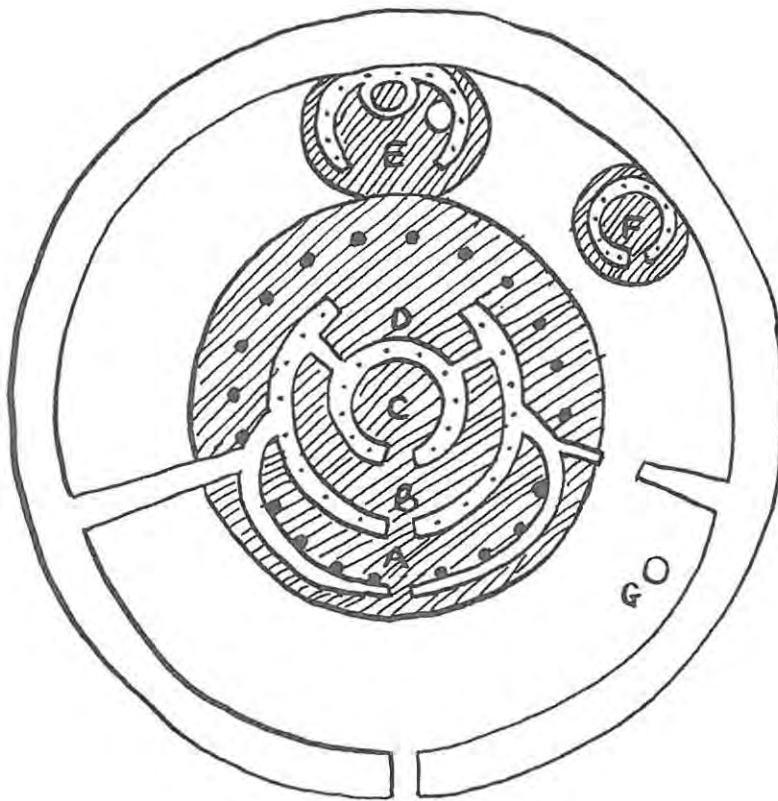
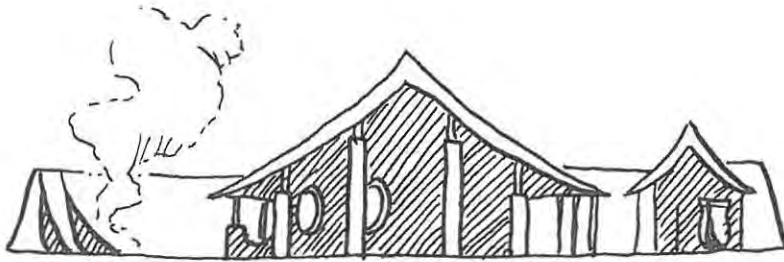
5. Ibid. p.362.



ILLUS. 1. GROUND PLAN OF BILOBIAL DWELLING
(AFTER WILLIAM BURCHELL)



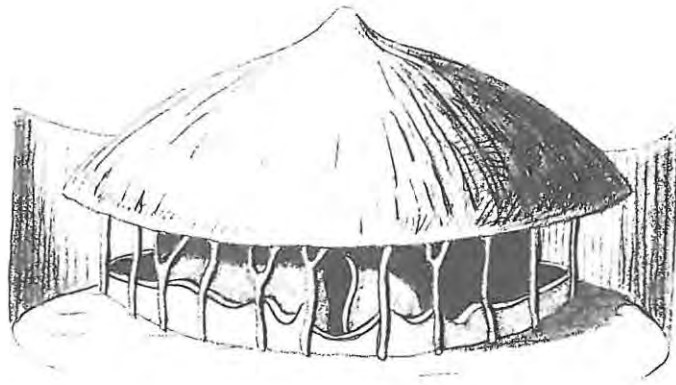
ILLUS. 2. GROUND PLAN OF THAPING HOUSE
(AFTER WILLIAM BURCHELL)



ILLUS. 3.

"SECTION AND PLAN OF A BACHAPIN HOUSE"
 (AFTER WILLIAM BURCHELL)

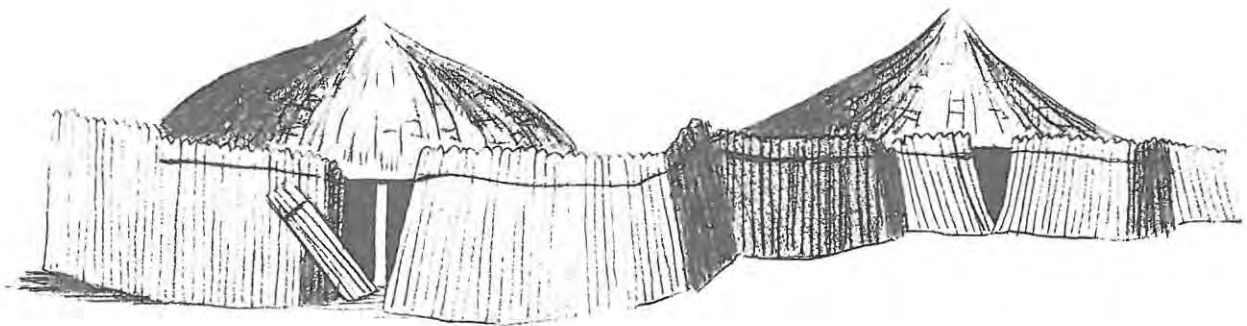
- A. FRONT VERANDA
- B. OUTER ROOM
- C. INNER APARTMENT
- D. REAR STOREROOM
- E. CORN HOUSE
- F. SERVANT'S HOUSE
- G. FIRE PLACE



ILLUS. 4.

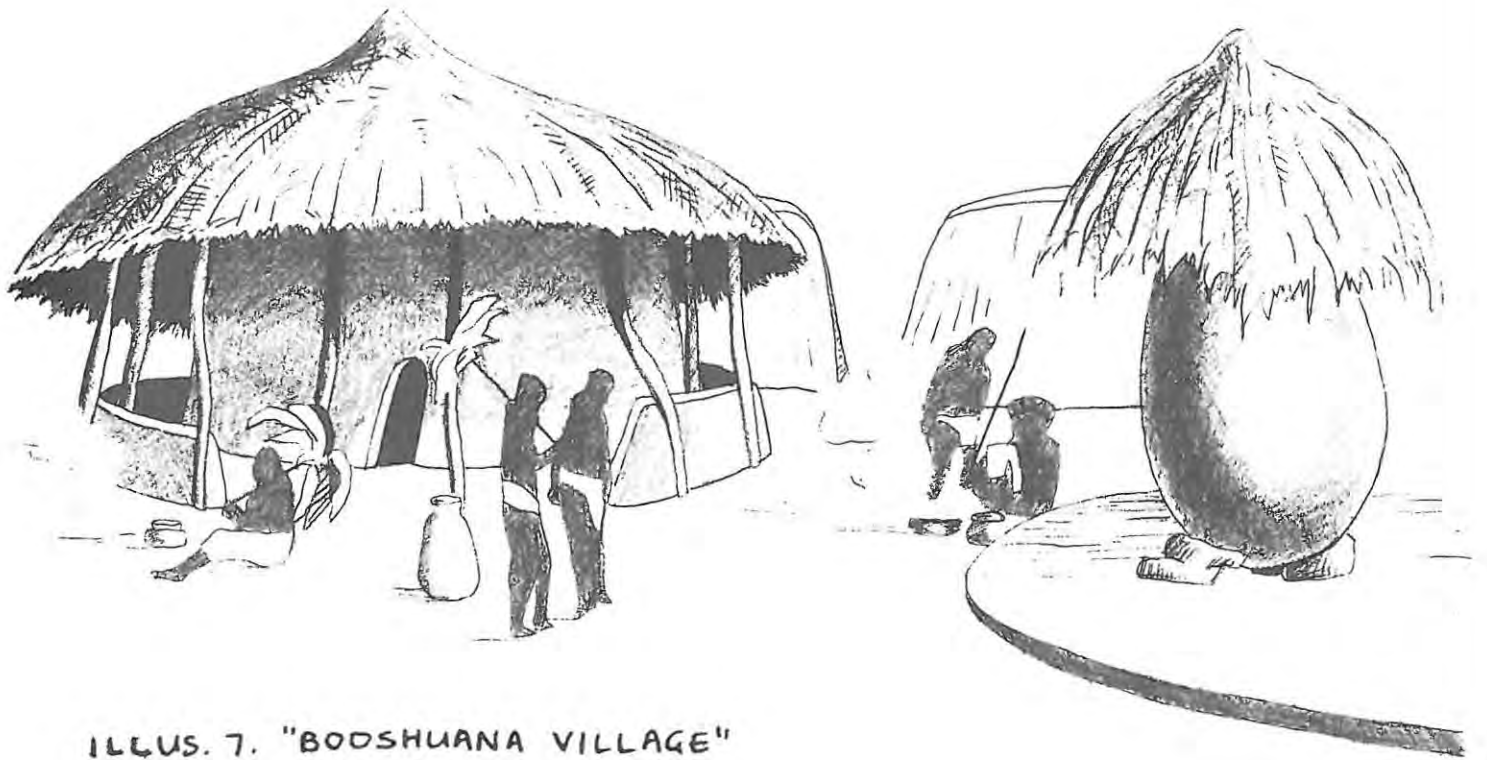


ILLUS. 5.

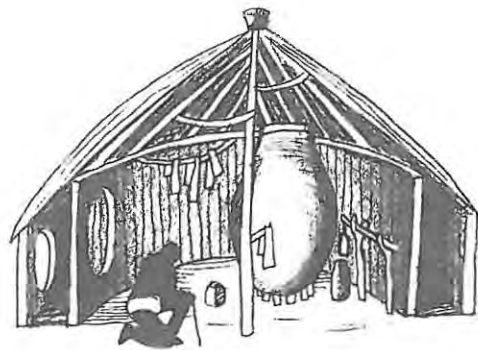


ILLUS. 6.

TLHAPING HOUSES AT DITHAKONG
(AFTER WILLIAM BURCHELL)



ILLUS. 7. "BOOSHUANA VILLAGE"
(AFTER DANIELL)



ILLUS. 8. SECTION OF A BAROLONG HUT
(AFTER EUGENE CASALIS)

The Effects of Westernisation on Tswana Architectural Forms

As a result of their extensive contact with whites which stretches back to the beginnings of the nineteenth century, the Rolong, along with the Tlhaping, have been under the influence of western culture for a longer period of time than most other Tswana tribes. This influence is particularly evident in the rapid and remarkable changes which have taken place in their architectural forms, examples of which can be clearly seen in the Tshidi-Rolong village at Mafikeng.

A comparison between more contemporary houses and those encountered by the earliest travellers to Tswana territory show that several major changes have taken place due to the influence of westernisation despite the fact that a number of aspects of the dwelling have remained basically unchanged throughout the years.

The most striking difference between the house forms of the past and contemporary dwellings is a change in the basic shape of the house, namely a change from circular to rectangular. The arrival of whites in Tswana territory with their strange new methods of house construction had a great impact on Tswana architecture, since until this time, rectangular houses were completely unheard of in Tswana society. The consequent introduction of foreign materials like corrugated iron, windows, doors and westernised furniture and their subsequent popularity among the local people led to the gradual abandonment of the traditional circular house form in favour of the westernised house form for which these modern materials were more suitable.

Soon after the introduction of corrugated iron, it began to replace thatch as a roofing material, since its main advantage over the traditional roof is that it does not require maintenance. It is also a known fact that corrugated iron is not entirely suitable for roofing a circular plan house, since because of its flatness it cannot easily be manipulated into a cone shape. Therefore the desire for a corrugated iron roof brought about a change in the plan of the house from circular to rectangular, thereby enabling the house to be covered by a simple flat roof which is easier to construct than the circular thatched roof. However, the drawbacks of the more modern roof are that it is considerably more expensive than a thatched roof and it does not have the same properties of insulation. Thatched roofs are high and thick and have wide eaves which give a large measure of protection to the walls, making the house cool in summer and warm in winter. A corrugated iron roof by contrast is relatively low and flat, and offers no resistance to either the heat or the cold. Yet, despite the fact that corrugated iron roofed houses are much less comfortable than thatched roof houses, most people feel that the advantages of the modern roof far outweigh its disadvantages.

The appearance of industrially manufactured windows also contributed to the development of the house form. At first, windows in the form of square holes or simple slits began to appear in the walls of circular houses, which previously had no windows at all. Gradually, windows began to increase in size and sophistication according to the financial position of the household. This resulted in the preference for rectangular houses with straight walls which could accommodate large glazed windows. Graham Hardie states that large windows have

become a status symbol in Tswana society, since a large window gives a house a "modern" appearance like the houses in the city.¹ Large windows, however, are not ideally suited to the climatic conditions, since they allow harsh sunlight and heat to enter the house. Although most houses in the Tshidi-Rolong village at Mafikeng are now built on a rectangular plan, a large number of these still have simple square openings or slits, with the idea that when enough money is available, westernised windows will replace them.

The introduction of westernised furniture such as beds, sideboards, tables and chairs into the Tswana lifestyle also played an important part in the preference for the rectangular house form, since the traditional circular houses are not entirely suited to the accommodation of angular pieces of furniture. In the past, Tswana beds took the form of skin mats which were rolled up and stored during the day,² while the only available seating was either low mud benches against the lolwapa walls, or occasionally low wooden stools. Instead of cupboards, stored articles were hung from the rafters. Modern furniture caused the interior of a circular house to be cluttered and cramped, so it is logical that this led to a preference for larger rectangular houses with straight walls against which furniture could stand.

A feature of Tswana houses which has altered little over the past century and a half is the actual construction of the walls. It is not

1. Hardie, op. cit. p.124.

2. Hammond-Tooke, op. cit. p.89.

known exactly when the Tswana began to favour solid lobata¹ over walls built of wattle and daub, for while the descriptions of the early travellers refer to the latter method, Hardie claims that the Tswana have a long tradition of building walls using bricks made from the boloko² mixture. The arrival of industrially manufactured bricks did not have a profound effect on the process of wall construction, since the fundamental technique employed in building a wall of this material is no different from the method of building a wall using bricks made of the boloko mixture.

Industrially manufactured bricks are generally about half the size of the boloko type, with the result that a wall of bought bricks is considerably thinner than a lobata wall, and therefore less effective as a form of insulation. The thicker walls absorb the sun's rays, keeping the interior of the house cool for as long as possible during the day, and at night this absorbed heat is slowly released, making the house slightly warmer than the outside air.

Another similarity between the dwellings of the past and contemporary houses is that most houses today are still raised on a slight mud platform similar to those described by Barrow and illustrated by Daniell.³ In addition, the presence of a front courtyard (lolwapa) and a back yard (segotlo) is an important aspect of Tswana housing which has changed very little. The lolwapa today is also kept as

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1. Lobata are walls made of traditional earth bricks.
 2. Boloko is a mixture of earth and cowdung used in the construction of walls.
 3. See p.39 and p. 40.

beautifully clean and neat as it was in the time of Burchell's visit.¹

The walls of the lolwapa have, however, become much lower over the years. In the past, the lolwapa walls were high, giving total privacy to the people inside, as well as shelter from the wind. Hardie claims that this high lolwapa wall also existed for reasons of security against enemies or marauding animals.² Security is no longer a major factor when building a lolwapa enclosure; it now merely differentiates a space in which outdoor living can take place with a reasonable measure of privacy and shelter. Houses today also tend to be much further apart than in the past, which has resulted in the fact that contemporary dwellings are automatically more private now than when they were close together.

Apart from its practical advantages and drawbacks, a house built with modern materials implies that the owner can afford a "modern" house. Therefore the house has become an expression of wealth.³ In the past, however, this was not the case; all houses were built on the same basic pattern and with the same materials, giving them a uniform outward appearance. Occasionally the chief's house was slightly bigger than those of ordinary people, but otherwise it was identical in every way. The only real outward expression of wealth with regard to the dwelling, was in the number of malwapa, since each wife was entitled to her own lolwapa, and this indicated the number of wives

1. See p.40.

2. Hardie, op. cit. p.101.

3. Ibid. p.103.

the head of a household could afford to marry.¹ Cattle used to be a major form of wealth in Tswana Society, but today, particularly in urban conditions, westernised possessions and the modernity of a dwelling have become the recognised symbols of affluence.

A detailed description of the various aspects of a number of dwellings in the Tshidi-Rolong village at Mafikeng will possibly give a clearer picture of the trends which Tswana house forms in an urban environment are following today.

1. Ibid.

Layout of the dwelling

A typical dwelling in Mafikeng traditional village consists of about three or four separate buildings, one of which is regarded as the main house. The cluster of buildings which makes up the dwelling is situated roughly in the centre of the property. The main house is usually enclosed in front by a low-walled lolwapa, with the out-buildings behind the house and encircling the segotlo. However, it is also common for the lolwapa to be centrally placed and surrounded by the different buildings of the dwelling.

The dwelling is built in stages, and the first part to be completed is the main house. As a result of the fact that it is the oldest part of the dwelling, the main house is in some cases still the traditional ntlo.¹ (See illus.13) However, most dintlo have since been replaced by the western-style rectangular zinc-roofed house. The ntlo generally does not have internal divisions, whereas a typical rectangular house is divided into four rooms roughly equal in size, about three metres long by four metres wide. Both the number and the size of the rooms may vary according to the needs of the household, however. One of these rooms is a kitchen, two are bedrooms, and one is a general living and dining area. The front door of the house usually opens onto this living room, and it is here, apart from the lolwapa, that visitors are usually received. The head of the family, who is usually the person responsible for building the dwelling, lives in the main house.

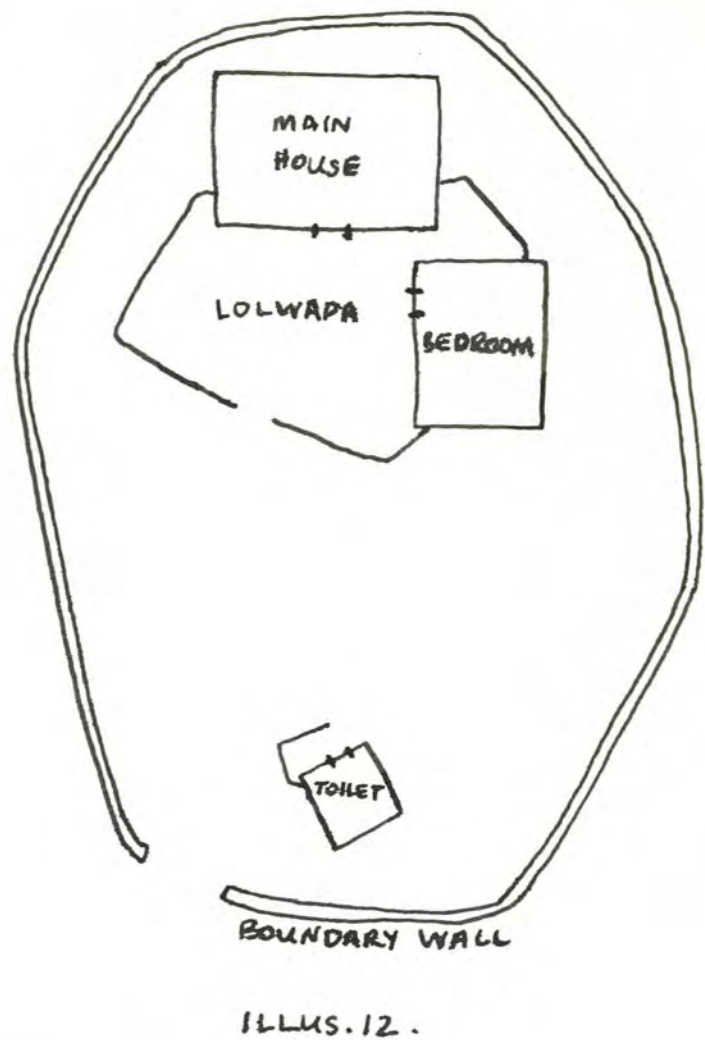
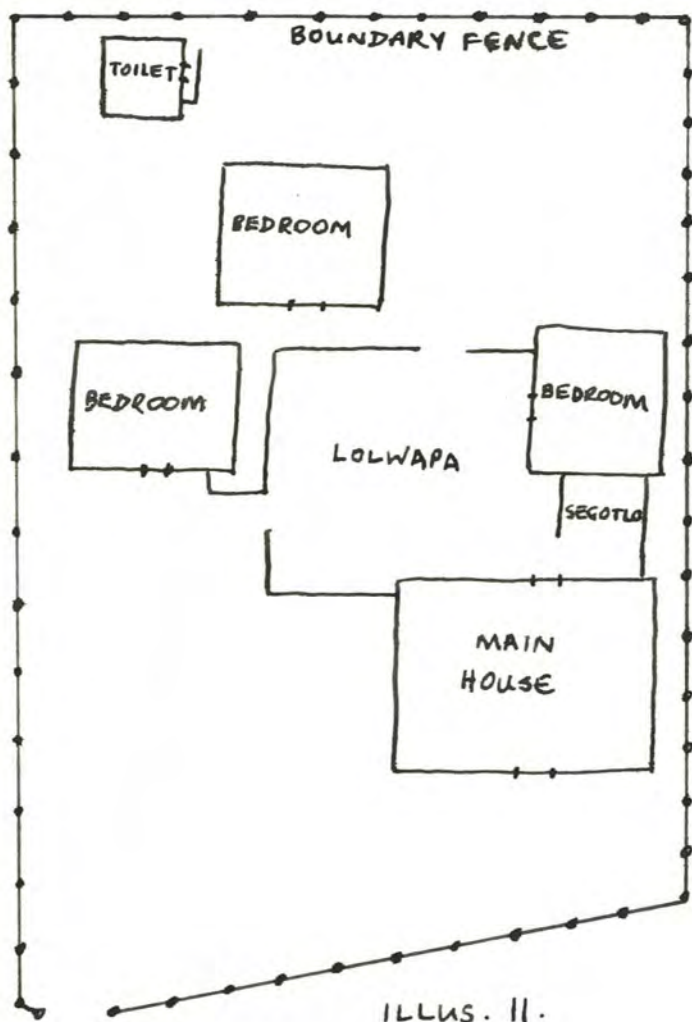
1. A ntlo is a circular house built of earth bricks with a thatched roof.



Illus.9. Layout of a dwelling, Mafikeng



Illus.10. Layout of a dwelling, Mafikeng



Groundplan of illustrations 9 and 10 respectively



Illus.13. A traditional ntlo which is surrounded by newer rectangular houses

A variation on the plan of the simple rectangular four-roomed house is the more complex L-shaped house. A house of this shape contains more rooms, but is less popular than the simpler structure because of the more complicated roofing system which is required.

As the family increases in size, so additional rooms are built. Instead of adding these rooms onto the existing dwelling, they are built apart from the main house. In this way, the house plan remains flexible; additions can be made without having to alter any existing structures. Also, an addition can be made when more space is needed and when there is enough money to finance it. If funds run out midway through the construction of an outside room, it can be left half completed without the routine of the household being affected.

Apart from the corrugated iron roof, less expensive materials generally are used on these outer rooms, mainly because they are positioned to the rear or the sides of the main house and are not as open to public view. For instance, the windows are often of the shutter type, in contrast to the glazed windows of the main house. These structures are also considerably smaller than the main house, being either a single room or divided into two small rooms. They are used as bedrooms by the older children of the household. More often than not a divorced or unmarried daughter with children lives in the household of her parents in a fairly large room of her own. These rooms all have outside access, with the door usually opening onto a central lolwapa. Another advantage of this arrangement of separate sleeping areas is that the different members of the family have privacy, which is especially important in view of the fact that most

Tswana households are extensive and contain people of a great variety of ages.

Construction of walls

The majority of houses in Mafikeng traditional village are built with bricks. Those who can afford to, use factory-made bricks to build their homes, but by far the most common type of brick is the self-made type. Another material favoured by builders for its availability and cheapness is stone, especially for smaller huts, boundary walls and malwapa. All constructions of mud are traditionally the responsibility of the women of the household, but recently it has become fairly common for a skilled worker to be hired to make the bricks and erect the walls.

The foundations of all houses are the same regardless of whether bricks or stones are used to construct the walls. The dimensions of the house are roughly measured in paces and lines are scratched in the ground to indicate where the trench is to be dug. The foundation trench, about half a metre wide and the same depth, is filled in to just above ground level with rows of stones and bound with a thin mixture of mud and water. (See illus.14)

The composition of self-made bricks varies from house to house depending on the preference of the builder and on the availability of particular kinds of soil. The two most common types of soil used for building are a reddish brown kind which is taken from around the building site, and a white claylike soil found in the vicinity of the



Illus.14.



Illus.15.

river. The reddish brown soil is the most widely used, probably because of its direct availability, although the general opinion is that the white soil is stronger and longer-lasting due to its higher clay content. Occasionally a mixture of the two is used, which also seems to be a satisfactory combination.

Both types of soil, especially the darker kind which tends to contain more stones, are normally sifted (See illus.15) and then mixed with water until a fairly stiff consistency is reached. Cowdung, which works as a binding agent, is usually added to this, making the boloko mixture. It also makes the brick harder and more resilient once it is dry. However, some builders do not use cowdung in the making of bricks, and according to Larsson, this is because cowdung is believed to attract termites.¹ In one instance ash, which also acts as a binding agent, was added to the mixture of soil and water. Self-made bricks can also be made more permanent by adding a little cement to the soil and water mixture.

The sizes and shapes of bricks depend on the kind of mould used. The most popular type of mould is rectangular and made of wood. The most common self-made bricks are twice the size of the ordinary industrially manufactured type. (See illus.16) However, one occasionally finds bricks in the shape of large square blocks, and in one case cylindrical bricks were used in the construction of a dwelling. These cylindrical bricks were moulded in an open-ended large jam tin, and were used both upright and on their sides. (See

1. Larsson et al. op. cit. p.100.



Illus.16.



Illus.17.

illus.17)

The boloko mixture is pressed firmly into the mould, and once the compacted boloko has been turned out of the mould, it is left to dry in the sun for anything from three days to two weeks before being used. These are known as dry bricks.

Some builders however, construct walls using wet bricks, which means that instead of standing out in the sun to dry before being laid in place in the wall, they are used as soon as they come out of the mould. In one particular dwelling the walls were constructed by placing an open-based mould on the wall, pressing the boloko into it, and slipping the mould off, thereby leaving the wet brick in its position in the wall.

The advantage of wet bricks is that mortar is not strictly necessary, since the wetness of the bricks bonds them together. A consequence of this, though, is that the wall cannot be taken apart without damaging the bricks. Dry bricks, in contrast, can be re-used with relatively little damage done to them. Another advantage of dry bricks is that a whole supply can be built up before the actual construction of the wall is undertaken. With a wet brick wall, however, any previous layers have to dry before the next few rows can be added, which means that this type of wall takes longer to construct than a dry brick wall.

Occasionally both industrially manufactured bricks and boloko bricks are used in conjunction with one another. (See illus.18) The bought





Illus.18.



Illus.19. Several rows of stones strengthen the lower part of the wall

ones are used in positions in the wall which are subject to the most stress. For instance, the first four or five rows of the wall are often built with bought bricks, and similarly a few rows are also put directly under the roof. The areas around doors and windows are often also reinforced with factory-made bricks. The rest of the house is then built with boloko bricks. The reason for not using bought bricks throughout the entire structure, is usually a lack of funds.

Occasionally stones are used in the construction of house walls. In some cases, approximately the first metre of the wall is built using rows of stones, with the rest of the wall made up of earth bricks. (See illus.19) In one unusual instance, an outside room had been partially built with earth bricks, and the remainder of the wall had been completed using stones. (See illus.20)

The most widely used mortar is a mixture of coarse red soil and water. Again cowdung is added according to the preference of the builder. The soil in the mortar is usually coarser in texture than that used for making bricks, since it is not sifted before being mixed with the water. Consequently it is not a very strong type of mortar, and although it fulfils its function of holding the bricks in place, when necessary the wall can be taken apart again with the minimum of damage to the bricks. Both factory-made and boloko bricks from older houses are often re-used when building a new home. This accounts for the odd shapes and colours of bricks which often occur in the same wall. (See illus.21)

Most houses are covered with a layer of plaster made from mud and



Illus.20.



Illus.21.

cowdung mixed with water. This mixture is usually thinner than that used in the making of bricks, and also contains more cowdung than mud, which gives a stronger surface. The type of mud used for the plaster depends on the colour which is desired for the outside of the house. As with the bricks, the two most common types of soil are the white and the reddish-brown types (See illus.22), with the latter more frequently used due to its easy accessibility. Cement is occasionally used to plaster the walls on the outside, but often it is used only around doors and windows, while the rest of the wall is plastered with the more traditional mixture of mud and cowdung.

The advantage of cement plaster is that it does not require constant maintenance, unlike mud plaster. A supply of cowdung mixed with mud is usually kept in store to repair any cracks which may appear in the mud plaster because of damage by rain. These damaged areas of plaster are often repaired by pressing small stones into the wet plaster, thereby reinforcing the surface. (See illus.23)

Generally the walls of a mud-plastered house are replastered once a year. The entire existing layer of plaster has to be removed before the new layer is applied. (See illus.24) Round handfuls are applied to the whole wall surface, covering the underlying bricks and stones completely. These lumps of plaster are smoothed by hand, the sweep of the arm forming large arc-shaped ridges on the plaster surface. (See illus.25) The application and maintenance of the plaster is the duty of the women.



Illus.22.



Illus.23.



Illus.24.



Illus.25.

The layer of plaster gives additional protection to the underlying bricks and mortar, but it is also a common occurrence for the wall to be left unplastered if the owner prefers the appearance of the house that way. Plaster does not seem to affect the insulation of the house in any way.

The thickness of the wall, however, does seem to be a factor which influences the insulation of a house. Most lobata walls are about forty centimetres thick (see illus.26), while the walls built of industrially-manufactured brick are considerably thinner and do not insulate the house as effectively. Lobata walls generally increase slightly in thickness towards the ground, and often have the tendency to slope marginally inwards, making them more sturdy. Walls which may require additional support occasionally have an inbuilt buttress made of stones which forms a protruberance under the plaster. Of the two buttresses which I have encountered, one was on the inside of a lolwapa wall (see illus.27), while the other was on the side wall of an outside room. (See illus.25) It is not known exactly to what extent a buttress adds to the strength of the wall, but it is also regarded as a decorative element.

Roofs

The most expensive part of building this type of house is the roof, since it requires the work of a specialised roof builder, and the materials involved are usually fairly costly. The majority of houses in Mafikeng traditional village are roofed with corrugated iron, referred to locally as zinc roofs, although a few houses, usually



Illus.26.



Illus.27.

round, still have thatched roofs. Only very few of these are supported by the traditional outer circle of posts (see illus.28). Walls now play the major part in supporting the roof structure (see illus.29).

Some dintlo still make use of the centre pole to support the roof, but the more modern method of roof trusses seems to be preferred. In a typical ntlo, the roof structure consists of about twenty-eight rafters which merge in the centre with a roof truss for additional support. Rectangular houses with thatched roofs generally have about three roof trusses to support the rafters, but this may vary according to the size of the house. The rafters rest in shallow niches in the wall which have been hollowed out of the mud specifically for the purpose of preventing the rafters from shifting their positions. (See illus.30)

There are two ways of thatching a roof in Tswana society. The first is the traditional method which is very seldom seen in Mafikeng traditional village today. The second, and more popular, method is called Afrikaner thatching, since it was introduced by the Afrikaner settlers during the previous century.

Traditional thatching is usually done by the women of the household, whereas for Afrikaner thatching a professional thatcher is normally hired to do this work, since more sophisticated techniques are used than in the traditional thatching process. The grass used for traditional thatching is generally weaker than that used for Afrikaner thatching, and is placed seed ends downwards and roots upwards, while in the latter method, the root ends are trimmed off and the grass is



Illus.28.



Illus.29.

placed on the roof with the seed ends upwards and the cut ends downwards. Different types of grass are used for thatching; coarse grass is obtained from the vicinity of the river, while finer grass is found in the surrounding veld. The traditional thatched roof always is supported by an outer circle of posts, and this, in addition to the fact that the ends of the grass are not trimmed, gives a much wider overhang than the eaves of an Afrikaner thatched roof.

The reasons for the popularity of the Afrikaner method is that the thatch is more securely bound to the roof structure and lasts much longer than the traditional thatching. It is also more watertight; whereas the traditional thatching has a cap made of woven grass, an Afrikaner thatch roof is sealed by an industrially manufactured metal cap. The cap of an Afrikaner thatched roof is either cone shaped to fit onto a circular roof, or long and narrow in shape to fit onto a rectangular roof. (See illus.31) It is usually fixed and sealed with mud or cement.

Most rectangular houses have zinc roofs, the majority of which are flat. The flat roof is the simplest to construct and requires less timber than a pitched roof. The sheets of corrugated iron in a flat roof rest on flat beams or round poles placed parallel to one another and spanning the space between the front and rear walls. Across them, at right angles, run one or two beams which span the space between the two side walls. The beams are anchored in the walls a few centimetres below roof level, and sometimes they protrude completely through the wall to jut out on the other side. (See illus.32)



Illus.30.



Illus.31.



Illus.32.



Illus.33.

The roof is generally fastened to the rafters by weighing down the sheets of iron with stones. (See illus.33) The roof is seldom nailed down because the house owner prefers not to puncture the sheets of iron in case he decides to build a new house at a later stage, and as often happens, expensive materials from the old house are then removed and re-used. So instead the roof is held down by strategically-placed stones around the edges and in the centre of the roof, following the pattern of the rafters. Care has to be taken when doing this because should the roof be overloaded, the iron will buckle and bend.

Not only stones are used to hold the roof down, however; anything from motor car bumpers and tyres to rows of bricks can be found on roofs. Occasionally a roof is strapped down by lengths of wire with the ends anchored in the walls. (See illus.34) It is also common for each end of the wire to be tied around a large boulder. The wire is then slung over the roof, with the boulder on each end dangling a few centimetres above the ground on both sides of the house. (See illus.35)

Less common than the flat roof is the more complex pitched corrugated iron roof which is supported by a system of trusses and rafters similar to the framework used for a rectangular thatched roof.

Occasionally a combination of roof styles can be found in one dwelling complex. The main house of the dwelling often has a thatched roof, while more recently constructed outside rooms are given zinc roofs. (See illus.36)



Illus.34.



Illus.35.



Illus.36.



Illus.37.

Doors and windows

In general the facade of a rectangular house in Mafikeng traditional village has a door in the centre with a window on either side. Doors in both this type of house and in the more traditional ntlo are usually factory made and bought from a shop, but occasionally one comes across a self-made door which is made up of found materials like sheets of metal and planks. (See illus.37)

Toilet doors are particularly interesting since a great variety of materials is used. Doors on toilets tend to be more makeshift than those on the dwelling itself, probably due to the presence of the shielding half-wall which stands in front of the entrance, giving it some measure of privacy already. An example of a typical self-made toilet door is one which was made from a framework of planks onto which a sheet of hessian had been tacked. (See illus.38) In another case a wardrobe door had been removed from its original purpose and was being used as a door to the toilet. (See illus.39)

Self-made doors are usually roughly wired to a crude wooden frame, whereas if an industrially-manufactured door has been used, then it usually has a similar frame to go with it, along with sophisticated hinges and handles.

The variety of windows is very wide, but one of the most common kinds is the square opening covered by a wooden shutter. Its construction is very simple; when building the wall, a square opening approximately fifty centimetres long and forty centimetres wide is



Illus.38.



Illus.39.

made which is then spanned by a strip of wood which acts as a lintel. (See illus.40) A crude wooden frame is then inserted into this opening, to which the shutter is attached. (See illus.41) The shutter is a sheet of metal, or more commonly, wood, which is hinged to the frame by means of wire on both sides and pivots on a horizontal axis. (See illus.42) This type of shutter often is kept open by propping an object on the windowsill which stops the shutter from tilting downwards. Other shutters are hinged only on one side and open and close like a door. Whether they open inwards or outwards seems arbitrary. Most shutter-type windows are kept open during the day and closed at night.

Although the previous type of window is favoured for its cheapness, possibly the most popular kind of window is the four or six-paned wooden window. They vary greatly in size and are either bought in the shops or obtained second-hand from old European houses. Broken panes are seldom replaced, but covered with pieces of wood, cardboard, paper or tin. (See illus.43) The window is fixed into the wall by merely inserting the frame into an opening and plastering around it firmly with mud. Sometimes the window is on the same plane as the wall, but mostly it is slightly recessed, with a narrow sloping windowsill to the outside which prevents rain from entering under the window.

Another kind of window, a mere slit in the wall, is also frequently seen. Its Setswana name is sokomelabagwe, which, I was told by several Tswana informants, means "you can first see the in-laws before you talk to them". From this one must gather that it is mainly used to view the outside world, but it is more than likely that it serves



Illus.40.



Illus.41.



Illus.42.



Illus.43.

an equally important purpose as an air vent. It is constructed by making a long narrow horizontal hole in the wall which is reinforced with a wooden lintel at the top of the opening. (See illus.44) Slightly bigger openings can be made by putting wooden strips on all four sides of the opening.

More affluent households have modern steel windows which are usually newer than the rest of the house. If this is the case, then the steel window often has taken the place of the old shutter-type of window, and requires a more solid cement border to fix it into the wall even though the rest of the house is mud-plastered. (See illus.45) A builder is generally hired to do the more technical task of fitting a steel window.

Generally if a house has industrially-manufactured glazed windows, they are used on the parts of the house which are most exposed to public view, since large glazed windows are a status symbol, indicating that the owner of the house has the financial means to afford such an expensive item. The self-made windows like the wooden shutter are to be seen to the back of the house, whereas the side walls of the house very rarely have any windows.

Floors

The most favoured material for floors, especially in the more recently-built houses, is cement, since a cement floor can be covered with polish and made to look neat and smooth (see illus.47), as well as the fact that it does not require constant maintenance, unlike the



Illus.44.



Illus.45.



Illus.46. A viewing-hole made by inserting a small piece of glass into an opening in the wall during the construction process

traditional mud and dung floor. Despite the general preference for cement floors, the more traditional type of floor is still in wide use, mainly due to the fact that there is no cost involved in obtaining the materials for laying a mud floor.

The methods used to apply a mud and cowdung floor vary according to preference. A mixture of the two substances can be applied thickly all over the floor, or a thick layer of mud can be applied to the floor and then smeared by hand with a thin layer of cowdung. The floor is then compressed and smoothed by rubbing all over the surface with a flat stone while the floor is still partially wet. (See illus.48) This kind of floor needs regular attention; dung has to be reapplied every two to four weeks to keep the surface smooth and firm.

It is not uncommon for different areas of a dwelling to have different types of floors. For instance, one particular dwelling consists of a ntlo and more recently-built rectangular houses. While the ntlo has a traditional mud and dung floor, the newer areas have cement floors. Another dwelling which was unusual in its mixture of floor surfaces had a living room with a cement floor and the bedrooms with mud and dung floors, which had to be regularly maintained.

More often than not the main house in the dwelling has a cement floor, while the other rooms, usually sleeping quarters, have the older type of mud floor. The main house is the area which is seen by visitors, so it is natural that this would be the area chosen to have the more consistently presentable and hardwearing floor.



Illus.47.



Illus.48.

The lolwapa

The lolwapa is a courtyard with a flat mud floor surrounded by low mud walls. The lolwapa may be in front of just one house, or it may be placed between two or more houses, linking them together.

Most parts of the dwelling open onto the lolwapa, which is the main living area of the household. This arrangement is perfectly suited to the climate, since rains are not very frequent and are of short duration, so this is where fires are made, guests received, and other family activities take place. (See illus.49)

A house built with modern materials like industrially manufactured bricks and cement usually has a lolwapa still made of the traditional materials. Any deep indentations in the surface are filled in with coarse earth to level the surface before being covered with several layers of mud and cowdung plaster and smoothed over in a similar way to the floors inside the house. The floor is swept daily and kept entirely cleared of any clutter.

The walls of the lolwapa are between half a metre and a metre in height. The wall generally has one opening in it near the main house, but there may be more openings depending on the number and the position of outside rooms. The entrance to the lolwapa has a gate only if the lolwapa wall is part of the boundary of the property.

The shape as well as the size of the lolwapa varies from dwelling to dwelling. In one case, the lolwapa is roughly triangular in shape,



Illus.49.



Illus.50.

with one side of the triangle entirely open and forming the entrance to the lolwapa. (See illus.50) The square area formed by an L-shaped house is usually given low walls on the two open sides, making a lolwapa which is enclosed on two sides by the house itself. Occasionally the space inside the lolwapa is divided up by small walls which roughly demarcate the areas around the different outside rooms, giving each part of the family a measure of privacy in the lolwapa. (See illus.51)

Occasionally the lolwapa has a low mud bench known as a mokatako running along the base of the inside of the wall, which is used when people sit in the sun. In one case the inside of the lolwapa had a low mud-walled flower box running along the base of the wall on the inside, but this is a fairly unusual occurrence. (See illus.52)

One particularly remarkable lolwapa, built by an elderly woman, Betty Pitsi, stands away from the dwelling, and is filled with a variety of mud furniture which she has built herself. This furniture consists of low mud benches and seats (see illus.53), long ledges used for reclining in the afternoon sun (see illus.54), mud shelves and tables. In the centre of the lolwapa is a home-made sink in which she washes her dishes. In the area between the dwelling and the lolwapa is a large tree, at the base of which is a small mud refuse bin. Near the tree is a sitting area consisting of two mud "couches" facing one another with a low mud table between them. These couches, according to their builder, are abstract representations of fish, since this is where she sits when cleaning fish. (See illus.55) Each area of this unusual lolwapa has been created with a specific function in mind and,



Illus.51.



Illus.52.



Illus.53.



Illus.54.



Illus.55.



Illus.56. Lolwapa walls vary considerably in height, depending upon how much privacy is required

weather permitting, is used throughout the day. It must be borne in mind, however, that this type of lolwapa containing mud furniture is a very rare occurrence, a traditional practice which is fast disappearing.

The segotlo

The segotlo is the backyard, the enclosed area behind the house onto which the back door faces. It is here that items of household use like firewood, bathtubs and drums are kept. (See illus.58)

The segotlo is also the place where the washing of clothes is done, and the clothes are hung out to dry here on a roughly-made washing line. If the household owns chickens, this is where the chicken coop is usually found. (See illus.59) The chicken coop is made of a variety of found materials and generally resembles a heap of scrap metal. (See illus.60) The segotlo is a less presentable area than the lolwapa, and it is seldom that visitors enter this part of the dwelling. The walls of the segotlo are also not as carefully decorated as the lolwapa walls, and they are also not as well maintained, and in many households the segotlo walls are in a state of disrepair. (See illus.61)

Cooking areas

In most houses a room has been set aside specifically for the purpose of preparing food, since most people today prefer to cook indoors. This is generally referred to as the kitchen, despite the fact that it



Illus.57. Chairs are often taken out into the lolwapa for guests



Illus.58.



Illus.59.



Illus.60.



Illus.61.



Illus.62. A segotlo which has been partitioned off by a crude fence

lacks the modern equipment associated with the kitchens in western houses. However, most households make use of some kind of stove on which food is cooked.

Some households have wood stoves which require some kind of ventilation, usually taking the form of a chimney pipe jutting out of the kitchen wall at a right angle above the stove or straight upwards out of the roof. (See illus.63) Occasionally just a hole in the wall serves as an outlet for smoke. (See illus.100)

Primus stoves are also fairly commonly used, but these do not require any particular form of ventilation. When the supply of paraffin has run out, then wood is used as fuel and the cooking is done outside.

When a fire is made using wood in a household without a wood stove, then this is usually done outside in the lolwapa or more commonly in the segotlo, often close to a wall which provides a little shelter for the fire. (See illus.64) I have also come across one case where the fire is made in a drum in the lolwapa, and when it is ready, the drum of coals is taken inside and used for cooking.

In the more unusual case of Betty Pitsi she has built her own "oven" in the lolwapa. It is an open-front stone and mud-walled structure, covered with a small roof of corrugated iron. (See illus.65) A wood fire is made on the ground inside the oven, and on this she places her cooking vessels like a kettle and a three-legged pot. This structure protects the fire to a large extent from both wind and rain and more heat is generated because of its enclosed nature.



Illus.63. Note the makeshift gutter



Illus.64.



Illus.65.



Illus.66. A disused stove is kept in the segotlo

Ablution areas and toilets

Due to the absence of laid-on water facilities for individual dwellings in the Mafikeng traditional village, it is most unusual for a house to have a room which is set aside exclusively for washing and bathing. Washing of the body is done indoors, usually in a bedroom, using a metal tub of water which has been warmed over a fire outside in the lolwapa, and then carried inside. Children, however, are not always bathed indoors, but often outside in the backyard when the weather is not too cold. There are, however, isolated cases where a bathroom has been included in the plan of the house. Because the water facilities in these houses are no different from those of dwellings without bathrooms, the same procedure is followed when preparing a bath of water.

Most dwellings have their own toilet which is set apart from the house, usually at the rear of the property. It is equally common for toilets to be free-standing, and not attached to any other structure, or for the toilet to be attached to the boundary wall of the property. In the latter case the boundary wall forms the rear wall of the toilet. (See illus.67) The toilets are invariably of the pit type with the seat built out of stones covered with a solid layer of mud which is tightly compressed and smoothed with a stone. The seat may also be covered with cement, in which case it is usually given a coat of paint or red polish. (See illus.68) The materials needed to construct the walls of the toilet are generally the same as those used for the walls of the dwelling, unless, as is fairly common, the toilet has been built of stones while the house has been built with bricks.



Illus.67.



Illus.68.

The stone walls of a toilet are cemented with a mortar of mud and cowdung, and are either plastered with the same mixture or left completely unplastered. There are also odd examples of the toilet being a structure made entirely from sheets of corrugated iron, but this is very infrequent since this is an expensive material when compared to the low cost of stone and mud walls.

All toilets have corrugated iron roofs which are held down by stones or strapped down by wire. The zinc rests in the centre on a simple rafter framework of a single beam spanning the width from one side wall to the other, while the edges of the roof rest upon the walls themselves.

The large majority of toilets have a low wall jutting out towards the front which forms a right angle about one metre from the entrance, thereby shielding the opening and giving added privacy from the outside. (See illus.69) If this wall is high enough, a door is not regarded as necessary, but most toilets do have a door. Toilet doors tend to be more makeshift than those found in the dwelling itself, but these have been discussed in more detail in their own category. A simple drape, in one case a sack, tied to the doorframe with wire, can also suffice to cover the entrance instead of a door. (See illus.70)

Ventilation is supplied in the form of small openings, sometimes square, sometimes round, in the rear and side walls about half a metre from the top of the wall. (See illus.71) Occasionally these openings are covered by an industrially-manufactured grid type of air vent. (See illus.72)



Illus.69.



Illus.70.



Illus.71.



Illus.72.

It is very unusual for the walls of a toilet to be decorated, since the structure is at the rear of the property and is not seen as part of the dwelling, but as something separate and isolated and is kept as inconspicuous as possible.

Water facilities and laundry areas

Water for household use and for drinking and cooking is obtained in a number of ways. Some households have their own well in the backyard which is dug manually, and often someone is hired specifically for this purpose. The well is a deep hole in the ground which is surrounded on the surface by a cement slab. Water is usually reached by lowering a tin on a piece of wire or rope and bringing it back up by hand, but more sophisticated methods of bringing water to the surface are to be seen. For example, one well has a small drum attached to a long chain which is lowered and raised again by a winch. (See illus.73) The winch consists of a horizontal metal pipe with a handle on one end which is supported about one metre above the hole by two stout posts on either side. Each post is kept upright by two metal struts which stand out at 45° and anchor the posts to the ground.

Most wells, however, are of the simpler kind and when not in use are covered with a lid made of planks, a sheet of metal or a board which is roughly the same shape as the opening, but overlapping on all sides. (See illus.74)

Households without a well of their own rent the use of a neighbour's well at a monthly rate; alternatively if this is not possible then



Illus.73.



Illus.74.

water can be obtained free of charge from a state pump provided the distance from the house to the pump is not too great. Water is collected in a large drum which is carried in a wheelbarrow.

Most clothes washing is done in a metal tub in the segotlo, close to the washing line. The washing of clothes of some households is done in the river if the house is at a convenient distance from the river.

Most households collect their own little supply of water in a drum which stands under a gutter or a downpipe, but this is seldom used for anything other than for washing.

Yards, boundaries and gates

A Tswana dwelling stands on a large piece of ground, locally referred to as a "yard", which is a flat, ungrassed area with a few shady trees with the occasional succulent plant and a rockery or two. (See illus.76 and 77) A yard is distinct from a lolwapa in that the latter is an open living area surrounded by low walls which can be regarded as an extension of the house, while the yard is where domestic animals and chickens are kept during the day, as well as being used in some households for growing vegetables and maize.

The yard, therefore, is enclosed by some sort of boundary which is sealed by a gate. Decoration is not of great importance in a boundary wall, since its main function is to enclose the property effectively and to separate it from the neighbouring yards.



Illus.75. Washing is often hung over the walls of the segotlo to dry



Illus.76.

The simplest and most common method of demarcating a property is with an ordinary wire fence, but the more traditional and still widely-used stone walls are still very much in evidence, especially since stones are so easy to come by in the Mafikeng area.¹ (See illus.78) In many instances the existing rocks in the landscape have been used without moving them from their original positions, and are merely incorporated into the structure of the wall. (See illus.79)

Two principal methods of building stone walls can be observed in the Mafikeng area, namely dry-stone walls and walls built with stones and mud mortar. Stones for dry-stone walls are chosen for their size and shape, since it is important for them to fit together firmly and neatly, forming a close, even surface which is generally more attractive than the stone and mortar type of wall. (See illus.80) When the latter type of wall is built, however, the shapes of the stones are not so extremely important, since any gaps can be filled in with the mortar, which is usually the traditional mixture of coarse earth with cowdung and water. Larger stones are usually used at the base of the wall, with the size of the stones decreasing with the height of the wall.

It is not very common for a boundary wall to be plastered, since if the stonework and mortar has been neatly and carefully done, plaster is not necessary either for aesthetic or functional reasons. If a boundary wall is plastered, it is more often than not a lolwapa wall which is doubling as a boundary wall for the property. If this is the

1. Mafikeng in Setswana means literally "the place of stones".



Illus.77.



Illus.78.



Illus.79.



Illus.80.

case, then it is usually the wall of the lolwapa in front of the house which forms the border for the front part of the property.

In addition to these more traditional types of walls, several examples of unusual and innovative ways of putting to use "found" materials can be seen in the way properties are enclosed. These materials are usually cast-off industrially manufactured articles which have been salvaged from a rubbish dump or scrap heap and re-used in an inventive and unexpected way. For instance, one particular dwelling is enclosed by a wall entirely made up of old car bodies standing on their sides and bumper-to-bumper. (See illus.81)

In another case, a damaged stone wall had been sealed up using old metal beds standing upright, with the spaces in between filled in with flattened metal water tanks, old metal bathtubs and other pieces of scrap metal. (See illus.82 and 83)

Similarly, the materials used for gates are equally innovative, except where a conventional industrially manufactured metal and wire gate has been used. One household had closed their entrance with a small gate made from the top end or headboard of an old metal bedstead. The legs on which it had stood had been removed. The headboard then was attached by means of metal rings to a wooden pole, thereby taking on an entirely new function than that for which it was originally intended. In another similar case, the inner metal framework of a car door had been removed and re-used most effectively as a gate.

The most common type of gate, however, is the self-made gate, which is



Illus.81.



Illus.82.

made from materials like wood, wire, hardboard and sheets of scrap metal. Some gates are merely a piece of corrugated iron mounted on hinges and attached to a wooden post. Virtually without exception, all gates, self-made or otherwise, are hinged to some kind of post, usually a wooden pole, which stands against the wall or fence. (See illus.84)

Drainage and prevention of leakage

Drainage is always a problem which has to be dealt with in the construction of houses, and those that are built with mud are particularly prone to damage by water. Despite the fact that rains are not very frequent in this area, some precautions have to be taken to ensure that mud walls do not suffer excessive damage.

The corrugated iron roofs on rectangular houses always slope downwards slightly towards the rear of the house where there is an overhang of about thirty centimetres in width. The water runs along the grooves of the roof and off the overhang at the back of the house. Not all houses have gutters, and those that do very seldom have one running along the entire length of the rear of the house, but rather a small piece of guttering attached to a section of the eave. Attached to the gutter is often a makeshift downpipe under which stands a large drum to catch the water. (See illus.85)

Houses with thatched roofs do not have any gutters. Instead the water runs off on all sides of the house, with the overhang of the eaves to a large extent preventing water from seeping in at the walls. The



Illus.83.



Illus.84.

pitch of the roof is sealed with a metal cap, and if the thatching has been carefully and correctly done, the roof is completely watertight.

Because the walls of most Tswana houses are made of mud, they require additional protection at the bottom where the wall meets the ground. Most dintlo have a low built-up ledge, called a mokatako in Setswana, all around the base of the wall. Rectangular houses have a mokatako occasionally around the entire base of the house, but most often it is found only at the base of the front wall, although it is not clear why only the front is favoured.

The mokatako, which can also be referred to as a skirting, serves a dual purpose. Its most important function is that it protects the base of the wall from being eroded by water, as well as keeping the inside of the house dry during the occasional heavy rainstorms of summer, since water cannot penetrate its thickness. It also serves as a low bench on which people sit, using the wall as a backrest. (See illus.86)

A mokatako is made of several layers of stones covered with a thick layer of mud and cowdung plaster or cement. Its size varies from house to house, but generally a mokatako is about twenty centimetres high and thirty centimetres wide. Its design also varies from house to house; while most houses have a single mokatako, others have a double mokatako which gives a stepped appearance. In one case the mokatako was about three metres wide and about ten centimetres higher than the level of the rest of the yard, and it surrounded the house on all sides. It sloped slightly so that water ran off and did not form



Illus.85.



Illus.86.

puddles directly around the house. It is very likely that the mokatoko has developed from the raised platform, described by the early travellers to Dithakong.¹

Very often the level of the lolwapa is slightly inclined towards the outside so that puddles are prevented from forming within the lolwapa itself, also in a manner reminiscent of Barrow's observation.² Most lolwapa walls also have drainage holes at their bases through which water can escape. (See illus.87) These holes are sometimes reinforced by little pebbles pressed into the plaster. (See illus.88) Other more ingenious methods of leading water away from the lolwapa exist, like for example, a pipe which runs under a slightly raised centre path. Water is channelled into the pipe by means of a groove on either side of the path which runs along the length of the front of the house. The pipe then leads the water under the path and out of the lolwapa gate. (See illus.86)

Most front doors are protected by a low mud step which stops water from seeping underneath the door and entering the house. However, this step is only necessary if the level of the floor inside the house is not higher than the level of the ground outside.

Decoration

Unlike the Ndebele, whose architecture also features the lolwapa, the

1. See p.39.

2. See p.49.



Illus.87.



Illus.88.

Tswana very seldom make use of industrially-manufactured paint to decorate their houses. Instead, they rely mainly on different types of mud for contrasts in colour and also to a large extent on the plastic qualities of mud to create textures and engraved or moulded surfaces for decorative effect.

In general it is mostly the facades of mud-plastered rectangular houses and lolwapa walls which are given the full decorative treatment. Simple bold borders are given to the top of the facade, around windows and doors, to the pillars at the lolwapa entrance, and along the top of the lolwapa walls in most dwellings. (See illus.89 and 90) These borders usually contrast strongly with the main colour of the house, for instance a red-plastered house will have white borders, or vice versa. Touches of contrasting colour may also be used as part of a repetitive pattern to complement engraved decoration. (See illus.91)

Raised modelled areas of mud plaster are fairly common; for example several houses have a small simple rectangular gable above the front door or at both ends of the facade which also serve the purpose of holding the zinc roof in place. (See illus.90) As already mentioned, some walls may have buttresses which exist for decorative as well as structural reasons. However, most raised designs are purely decorative, like a lolwapa entrance which is flanked on both sides by a scalloped design in white which contrasts with the plain red expanse of wall. (See illus.92) Occasionally the top of the lolwapa wall is scalloped in a manner reminiscent of the low walls described by Burchell in the early nineteenth century. (See illus.93) Some malwapa



Illus.89.



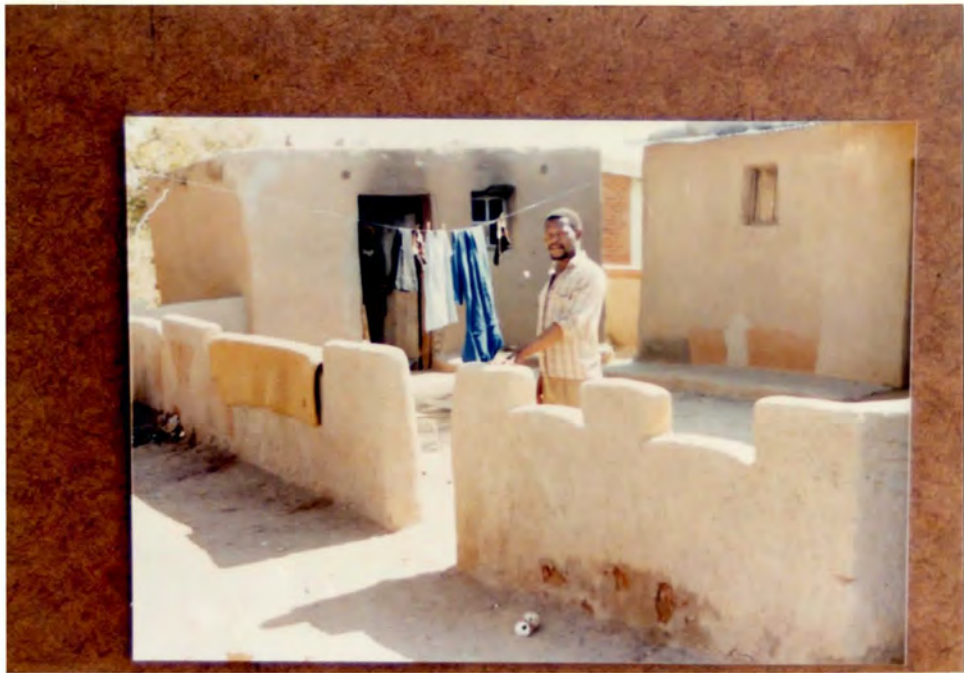
Illus.90.



Illus.91.



Illus.92.



Illus.93.



Illus.94.

have a low relief modelled design on the inner and outer corners of the walls, which are either of a contrasting colour or the same colour as the rest of the wall. (See illus.94)

Finer patterns and textures are created by engraving into wet plaster using instruments of varying thickness. For example, thin lines are scratched into the mud using a thin twig or the prongs of a fork, while thicker lines are made by using the back of a fork. Another way of making linear patterns in plaster is by using the back of the small grass handbroom which is used for sweeping the lolwapa. (See illus.95) A dotted effect is achieved by pressing the tips of the fingers, or any other rounded object, such as a bottle top or the end of a stick, into the wet mud. (See illus.96) In one case a spiral-shaped piece of wrought iron taken from the burglar guard of a window was pressed several times into wet cement to make a repeated pattern on the lolwapa walls and floor. (See illus.97, 98 and 99) In the harsh sunlight in this part of the world, these various engraved patterns are shown up to their fullest effect, since the slightest indentation or protuberance in the plaster casts a strong shadow.

Geometric designs such as diamond shapes, chevrons, circles, triangles and squares are common, as are organic forms like simplified leaf and flower motifs. (See illus. 100, 101, 102 and 103)

Unusual forms of decoration are found on some houses, where cement has been imaginatively used; for instance the facade of one particular house has been partially covered with a layer of cement plaster, leaving three irregularly-shaped areas of exposed brick wall which



Illus.95.



Illus.96.



Illus.97.



Illus.98.



Illus.99.



Illus.100.



Illus.101.



Illus.102.

form a bold abstract design. (See illus.104) In another case, the walls of an entire dwelling had been covered with a textured pattern created by flinging a thin cement mixture onto the mud-plastered walls, and smoothing it over with a trowel. The raised areas of grey cement alternate with the open areas of red mud, creating an interesting texture as well as an abstract pattern. (See illus.105)

Dintlo in general do not have much in the form of decoration, with the exception of the occasional border around doors and windows. The rectangular format of the western-style house seems to lend itself to bold decoration. In some houses, great pains have been taken to make the design fit satisfactorily into its format, very often with a generous border, but in many cases the design is applied to the wall without any concern for composition or symmetry.

The women of the household are responsible for the decoration of the dwelling, which is generally renewed every year just before Christmas.



Illus.103.



Illus.104.



Illus.105.



Illus.106. Compare with illus.35: the same house seen after a year has new decorations on the walls



Illus.107. Side wall of house with strongly-contrasting border



Illus.108. Lolwapa walls are favoured for modelled as well as incised decoration

Conclusion

Since roughly the beginning of this century, Tswana dwellings, particularly those in an urban environment like Mafikeng, have generally assumed a westernised appearance mainly as a result of the introduction of the rectangular house plan and industrially manufactured materials such as corrugated iron and glazed windows. This has not resulted, however, in the complete exclusion of traditional elements; most houses in the Tshidi Rolong village at Mafikeng still have mud walls and a lolwapa.

The term "traditional" has been used in this essay to describe the Tshidi Rolong village; although the house types themselves can no longer be called traditional, the general layout of the village is still the same as it was over a century ago. Montshiwa, chief of the Tshidi Rolong, made his settlement on the banks of the Molopo River about a decade before the actual town of Mafikeng was established.¹ Some of the original ward settlements have kept their basic form, despite the fact that the original buildings have since been replaced by more modern house types. Montshiwa's original kgotla, built of stone, still remains absolutely intact at the heart of the village. (See illus 109) The Tshidi Rolong village differs from other Tswana settlements in that dwellings here tend to be much closer together than is the custom with other Tswana tribes.

A few isolated examples are to be seen where entire dwellings have

1. Sillery, Botswana. A Short Political History. p.36.



Illus.109.



Illus.110. Montshiwa's kgotla as it looks today

been constructed making exclusive use of western materials and a modern western-designed house plan. However, these house types have not been considered in this study, since no aspects of these dwellings could be described as being purely Tswana in concept. These house types are limited to only the wealthiest of families and stand in stark contrast to the majority of houses in the Tshidi Rolong village.

Similarly, only very few examples of traditional dintlo are to be seen in this particular settlement, and even then none of these can be referred to as being truly traditional, since all thatched roofs are now done using the Afrikaner method. In addition to this is the fact that the traditional outer circle of poles which supports the thatched roof, is very seldom found in this type of settlement.

From this can be seen that rectangular houses with flat corrugated iron roofs far outnumber the two previously-mentioned house types. The traditional ntlo has declined in popularity because of the general opinion amongst most of the people in the Tshidi Rolong village today is that the round plan house is "old fashioned".

A change has occurred in the allocation of labour due to the use of new materials. Whereas women were, and still are, responsible for building earth walls, the adoption of new materials like industrially manufactured bricks and cement requires skilled labour. A similar thing occurs with roof construction; the predominance of zinc roofs and Afrikaner thatching has meant the exclusion of the owner in the construction of his or her own roof. Instead of women being responsible for thatching the roof as in the past, this task is now

given to a professional, a skilled thatcher who has the appropriate equipment and knowledge of the more complex Afrikaner thatching technique.

The preference for glazed windows, and especially steel-framed windows, has meant also that specialised help must be obtained when dealing with this aspect of the dwelling.

This shift in emphasis from the entirely owner-built dwelling to a house which requires some part of its construction to be done by hired skilled workers, has meant that a much larger capital outlay has to be made than in the past when the techniques of traditional house-building were known to all. In addition to this, the use of industrially-manufactured materials has also added considerably to the cost of a dwelling. As a result of all the expense attached to building the more modern type of house, it has become necessary for the owners of these particular dwellings to have a regular source of income, which has resulted in a radical change in the lifestyle of the Tswana.

Corresponding with this, is the change in the concept of the dwelling, which Hardie has described as "a change from house-as-fortress to house as symbol of self".¹ The use of modern materials implies that the owner has a steady source of income; the house is therefore a symbol of wealth. Even though traditional materials are best suited to the climatic conditions, this has taken second place to the fact

1. Hardie, op. cit. p.128.

that modern materials do not require constant maintenance and that their presence in a house projects an image of affluence.

Despite the recent presence of several "foreign" elements in contemporary Tswana house forms, the imaginative use of westernised materials along with the continuing tradition of building earth walls, has retained to a large extent the organic quality of the original Tswana dwellings.

Glossary

- boloko: a mixture of cowdung and earth used in the making of bricks.
- difaqane: the indigenous upheavals caused by Shaka's military expansionism in the 1820s.
- kgotla: a semi-circular windbreak of poles or dry-stone walling where meetings are held to discuss tribal affairs.
- legae: the home.
- lobata: a wall built with earth bricks.
- lolwapa (sing.), malwapa (pl.): courtyard enclosed by low earth walls.
- matluli: the traditional clay grain container. (a word used by the early travellers; it is no longer in use).
- mfecane (Zulu): See difaqane.
- mokatako: a skirting at the base of a wall which is used as a bench and at the same time strengthens the wall.
- ntlo (sing.), dintlo (pl.): a circular house with earth walls and a thatched roof.
- phiri: the centre pole of a ntlo which supports the conical thatched roof.
- segotlo: a rear courtyard enclosed by low earth walls.
- sokomelabagwe: a slit-like opening in a wall serving the purpose of a window.

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