

The indigenous rondavel – a case for conservation

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Open living areas and cattle pens surrounded by thatched round huts, commonly referred to as rondavels, is the form generally associated with traditional South African architecture. The number of rondavels is, however, dwindling, due to external pressures, but since they are such a tangible manifestation of a very resilient indigenous knowledge system, this paper argues that a coordinated and comprehensive initiative is now needed to protect representative examples.

Oop woonareas en beeskrale omring deur ronde hutte met grasdakke, waarna algemeen verwys word as rondawels, is die vorm wat meestal met tradisionele Suid Afrikaanse argitektuur vereenselwig word. Die aantal rondawels word eger vinnig minder as gevolg van eksterne druk, maar aangesien hulle so 'n tasbare verwesenliking van 'n baie buigsame inheemse kennis-stelsel, redeneer hierdie artikel dat 'n gekoördineerde en omvattende inisiatief nou nodig is om verteenwoordigende voorbeelde te beskerm.

Depictions by early 19th century travellers into South Africa's interior, and subsequent archaeological evidence, showed that most indigenous communities lived in compounds consisting of cattle kraals, open living spaces and a number of one-roomed thatched round huts with mud walls (Figure 1). These huts are described in literature as *cone on cylinder* or *cone on drum*, but they are popularly referred to simply as **rondavels**. The rondavel not only dominated the pre-colonial landscape, but it also remains the popular perception of indigenous settlement (Figure 2). Its image is often used as a theme to brand South African products (Figure 3). This type is indeed still found in rural areas, not only in southern Africa, but also in large parts of sub-Saharan Africa (Figure 4). In fact, Schoenauer describes the "typical African round-hut compound dwelling" as "a cluster of round huts facing an enclosed central courtyard" (2000: 62). In more recent times it has often existed side by side with thatched and flat-roofed rectangular buildings in rural areas (Figure 5) and, in rare instances, even in informal settlements near urban areas (Figure 6). It currently often informs architectural concepts for chalets and lodges in tourist resorts, albeit in a mutated mode, in an attempt to capture the atmosphere of Africa (Figure 7).



Figure 1

**A Tswana homestead in Kurrreechane by Rev. John Cambell, published in 1822
(Willcox 1988: 101)**

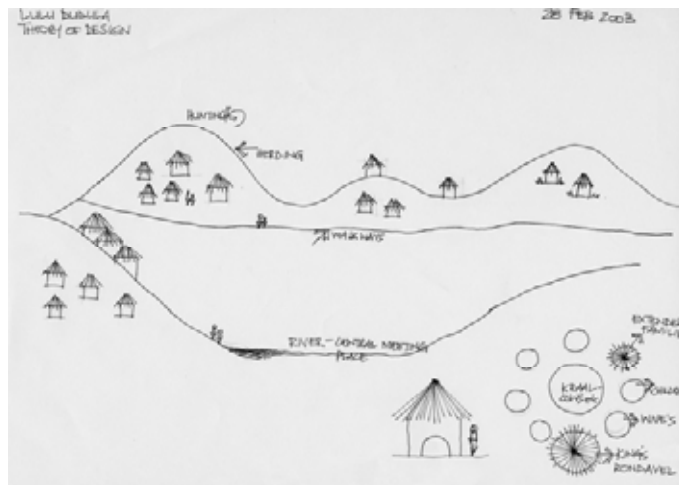


Figure 2
A second-year black architectural student's interpretation of traditional African settlement
(Drawing: Lulu Dudula)



Figure 3
Fragment of a greetings card by Marietta Vorster



Figure 4
A traditional rondavel and granary outside Nairobi, Kenya
(Photo: Gerald Steyn)



Figure 5
A Banoka homestead near Khwai in the Okavango Delta, Botswana
(Photo and drawing: André Roodt)



Figure 6
A traditional rondavel in an informal settlement
in Hammanskraal, near Pretoria
(Photo: Konrad Steyn)

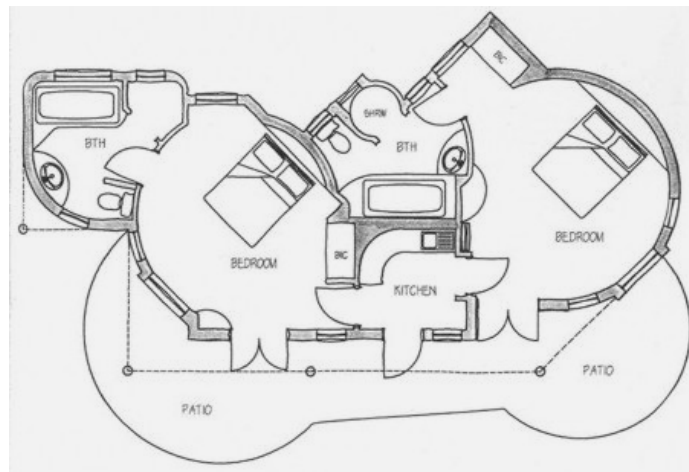


Figure 7
Floor plan of a contemporary lodge
(Alexander 2003: 185)

Considering the prevalence and resilience of the indigenous rondavel-dwelling, it is perhaps not surprising that the City Council of Pretoria built a so-called *lapa* scheme in Mamelodi West in 1947, consisting of rondavels around a centralised space, emulating traditional Tswana dwelling form (Figure 8). But residents considered them “patronising, demeaning and controlling” and refused to move into them (Bakker *et al* 2003: 17-18). It is significant that Bakker *et al* suggest that this negative reaction forced the Council to adopt the model 51/9 “matchbox” house and township policy, which has contributed greatly to the existing sprawling, fragmented residential fabric (Poulsen & Silverman 2005).

From this, one has to conclude that the problem was not political, but cultural – the rondavel is the tangible manifestation of a complex value system that combines custom, kinship, climate, resources and settlement geography, rather than the mere construction of shelter. In addition, Eurocentric thinkers often suffer from a fundamental misconception: A hut is not a home. It is an element of a homestead pattern found in rural areas over much of southern Africa – that of several huts, each a room built for a particular function, facing a central courtyard, the *lapa*, also called *lolwapa* or *lelapa* (Oliver 2003: 158). As Walton writes (1956: 52): “The *lelapa*, enclosed by the reed screen, was actually the real home, the hut itself serving only as sleeping quarters and store room.”



Figure 8
A surviving rondavel in Mamelodi, built in 1947
(Photo: G Steyn)

Although there are no statistics, the number of rondavels is certainly declining. Paul Oliver suggests that it is, "under urban influence", being replaced by a rectangular unit (Oliver 1987: 185). "Urban influence" has a number of facets. One: Urbanisation, as people abandon their rural existence for one in towns and cities. There are few regular jobs and often these rural-urban immigrants have to live in makeshift shacks as squatters. At this stage, the proportion of shacks is already slightly higher than traditional dwellings in South Africa (20,2% versus 18,5%, respectively, according to Brown & Fölscher 2004: 80). Two: The adoption of industrial technologies in rural areas, particularly corrugated iron, which has led to the development of the flat-roofed Highveld dwelling with its mud or masonry walls, which is often replacing rondavels in rural and fringe settlements (Figure 9), as well as the ubiquitous

timber-framed shack, found in squatter settlements. Three: The vast majority of South Africa's citizens, rich and poor, aspire to the Western-style freestanding suburban house.



Figure 9
Rondavels flanking a highveld structure in an Ndebele village
(Photo: Gerald Steyn)

Aim and objectives

The indigenous rondavel is unquestionably a remarkably robust type and has been a major presence in the landscape – and, by implication, in the indigenous knowledge system that has been shaping the South African built environment – since early times, justifying comprehensive and coordinated conservation. Museums and historic sites have become major tourist attractions, offering both commercial and academic benefits (Naudé 2003: 1-27). And while some authors, notably Frescura (1986: 75), advise caution and great sensitivity, open-air museums could be feasible and attractive tourist destinations from which whole communities could benefit (Figure 10). This paper focuses on the **justification** for conservation, rather than on actual ways of doing that. Four questions serve as a framework:

1. What are the **origins** of the traditional South African rondavel?
2. Why is the rondavel such a **resilient** type of indigenous dwelling?
3. Why does southern Africa have so **few other types** of indigenous dwellings, compared to western and eastern Africa?
4. How has the rondavel been **evolving**?

Methodology

Rapoport (1969) set an early theoretical framework for the study of vernacular architecture, arguing that socio-cultural factors determine the form of vernacular buildings, and that climate, materials, construction and technology are modifying factors. Although his proposition is not universally accepted, it nevertheless hints at the complex factors that determine form. Although it is overlaid on a very broad historical background, this paper focuses exclusively on typology – a comparison of spatial organisations of homesteads and settlements in plan and section. The methodology could, therefore, be considered in the realm

of iconographic analyses. Morphology, as a description of style and decoration, is outside its scope.

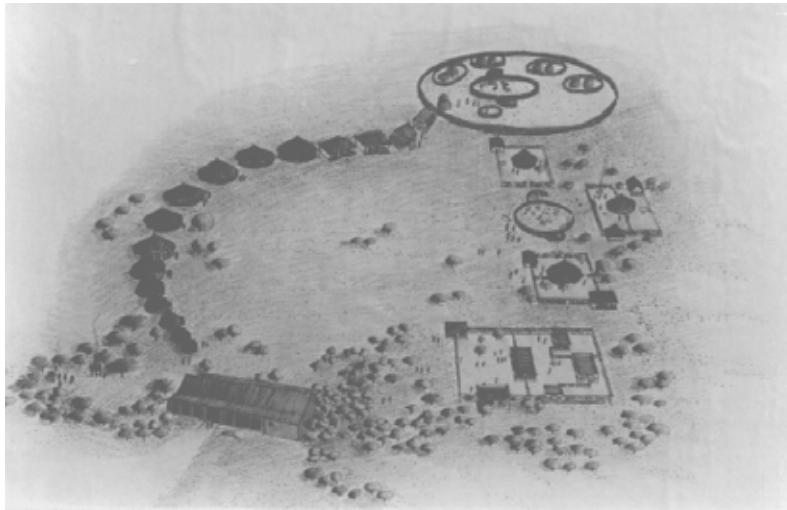


Figure 10
An open-air museum depicting the evolution of the Ndebele dwelling
(Design: Gerald Steyn; Drawing: David Kahts)

Sources of information

Information for the historical background was obtained from a number of sources, notably Samuel Kasule (1998), John Reader (1997) and Colin McEvedy (1995). An in-depth study would need to consult more scholarly sources, such as the eight volumes that make up *The UNESCO general history of Africa*, first published in 1989. Since Susan Denyer's *African traditional architecture* (1978) still seems to be the most comprehensive publication, it was extensively sourced for the typological analysis (1978), augmented by Nnamdi Elleh's *African architecture: evolution and transformation* (1997), Paul Oliver's *Dwellings: The house across the world* (1987), Enrico Guidoni's *Primitive architecture* (1975), Peter Garlake's *The kingdoms of Africa* (1978) and other material as cited. Information on the indigenous South African rondavel came mostly from James Walton's *African village* (1956), Alex Willcox's *Footprints on a southern land* (1988) and the works of Franco Frescura, including *Rural shelter in Southern Africa* (1981) and his unpublished doctoral thesis (1985). Field trips to sites in Kenya, Tanzania, Malawi, Zambia and South Africa hopefully enhanced our understanding of traditional architecture, and also made us aware of the complexities determining form.

Origins of the rondavel

It is universally accepted that East Africa, around the Great Rift Valley, is the cradle of humankind. The predecessors to anatomically modern man developed bipedalism between 6 million and 4 million years ago, and started making stone implements "perhaps" 2,5 million years ago. *Homo erectus* was the first hominid to emigrate from Africa, at least 1,8 million years ago, evolving by about 100 000 years ago into modern man; *Homo sapiens*. Early people lived in caves and makeshift shelters and were nomadic hunter-gatherers, following the natural migration of wild herds.

By 5000 BC, agriculture and herding were emerging in the valley of the Nile. From the Nile valley farming techniques spread slowly along the Mediterranean coast to the Maghreb (Tunisia, Algeria, and

Morocco) by 3000 BC. A similar transmission up the Nile to the Sudan was followed by a relatively quick expansion of Nilo-Saharan pastoralists from the Sudan as far west as Lake Chad. Communities involved in herding (pastoralism) moved between different pastures according to the season. Between Lake Chad and the Middle Niger were the Chadic peoples, and south-west of them – in the West African bush country – were the Bantu, who, by 1000 BC, practised agriculture (rather than pastoralism), the sowing and reaping of edible plants, and the domestication of animals. Communities practising this early mixed farming became sedentary and built permanent villages.

By about the 7th century BC, at the start of the Early African Iron Age, these West African, Bantu-speaking agriculturalists were establishing villages and built huts with circular floor plans, wattle-and-daub walls and conically thatched roofs – rondavels – a type that was derived from the domed hut (Garlake 1978: 61; Oliver 1999: 84), repeating a similar transition from domed hut to thatched-roofed, plastered mud houses that occurred along the Nile roundabout 5000 BC.

Sub-Saharan Africa had no Bronze Ages like Egypt (from 3000 BC) and Nubia (from 1500 BC). Its Iron Age emerged with the iron-working Nok culture (in present day central Nigeria) about 700 BC. At that stage there were still no trans-Saharan communications, and the technology could have spread from Egypt via Nubia (present-day Republic of Sudan) and the Sahel corridor (belt of steppe country immediately south of the Sahara), or it could have been indigenous. When the Bantu-speakers discovered iron smelting, the use of iron tools for clearing land accelerated agriculture and the establishment of large settlements. This caused two phenomena. First, population growth and settlement development in the area, and second, the associated need for farmers to continuously occupy new land (due to the practice of shifting agriculture), primed a migration from their cradle land that started about three thousand years ago.

Although there is no consensus in the literature regarding the exact chronology of these migrations, most authors agree on broad timelines. It is accepted that the Bantu reached the northern shore of Lake Victoria by about 500 BC, the Indian Ocean by AD 200, and moved down the Zaire and through East Africa, reaching the northern parts of Mpumalanga and northern KwaZulu-Natal by AD 500 (McEvedy 1995: 32-40). They then moved out of the savannah into the highveld grasslands of the Free State by AD 1400 and reached the most southern limit of their expansion by about 1700, confining settlement to areas with a summer rainfall of at least 200 mm to allow crop cultivation (Willcox 1988: 95-103).

While Bantu-speakers migrated east and south, speakers of other related languages such as those of the West Atlantic group (Wolof, Fulani) and the southern Nigerian languages (Yoruba, Igbo) remained in West Africa and started to establish what would subsequently become sub-Saharan Africa's densest political and urban conglomerations, with trade links across the Sahara by AD 700. Cities such as Timbuktu, Ngazargamo and Zaria (in present-day Mali, Chad and Nigeria, respectively) were commercial centres from where Islam spread to subsequently become established among all the people of the Sahel from west to east. The first European contact with sub-Saharan Africa was when the Portuguese reached Sierra Leone in 1460.

Merchants from the Arabian Peninsula and the Persian Gulf – travelling with the seasonal monsoons – have been visiting the East African coast since the early centuries AD. In the course of the 10th century they started to build up a chain of settlements and eventually, from contact and intermarriage with the indigenous population, emerged the Swahili culture, which probably originated in the Lamu region and was predominantly African, Islamic and urban. Other Swahili settlements included Pate, Mombasa, Malindi, Pemba, Zanzibar and Mafia Islands.

By 1498, Vasco da Gama reached the East African coast and before AD 1600 the Portuguese controlled the Swahili city-states. Their supremacy was finally ended by the Omani Arabs in 1698 and in 1840 the sultan of Oman moved his court to Zanzibar (McEvedy 1995: 98).

In both Mapungubwe (Limpopo Valley, ca. AD 900-1400, Figure 11) and Zimbabwe (Zambezi Valley, ca. AD 1100-1500), cattle herding became driven by ideology and culture, with settlements surrounding cattle enclosures (Oliver 1999: 125). The principal huts in the main villages often had verandas and walls of pounded anthill construction, rather than the more usual mud and wattle. While the southern African settlement pattern is obviously an evolutionary derivative of the West African archetype, it seems as if it developed into a mature tradition in this setting. Some villages of the empires of Mapungubwe and Zimbabwe were continuously occupied for nearly four hundred years each, housing about 5 000 and 18 000 people respectively (Connah 2001: 224, 247). In both regions, village organisation shows a socio-political hierarchy, with a clear separation between the ruling elite and large subservient populations. The people of both Mapungubwe and Zimbabwe marketed gold at Sofala (near present-day Beira), from where intermediaries traded with Kilwa, the southernmost Swahili city-state (Oliver 1999: 117-125).



Figure 11
An artist's impression of part of Mapungubwe
(Huffman 2005)

In southern Africa, as late as 1500, the Xhosa, Zulu and Swazi – Nguni-speakers who lived mainly to the east of the Drakensberg range – were practically isolated, while the Tswana, Venda and Sotho, who lived in the centre, had “sporadic and marginal” trading links with the Bantu-speakers to the north, although the Late Iron Age was well established among both the Nguni and Sotho by then (Ogot 1999: 336-338).

This situation partly explains settlement forms. Early 19th century explorers found that the Tswana lived in large compact settlements and built wattle-and-daub rondavel veranda houses (Frescura 1981: 35). It seems reasonable to assume that the technology was transferred from the Shona of Zimbabwe via Botswana, where this type remains popular to this day. The Nguni-speakers were at that stage still building beehive domes (Frescura 1981: 43), which could have been influenced by memories of the domed forms of eastern Africa, encountered in ancient times, or more recently by the nomadic-orientated huts of the Khoikhoi, who practised pastoralism before the arrival of the Bantu speakers.

In 1652 the Dutch established a supply station for their merchant ships at the Cape of Good Hope, and in the 1800s migration inland by white settlers from the Cape, now occupied by the British, combined with the *mfecane* (disruptions caused by Zulu expansion), scattered the Bantu tribes of southern Africa and a substantial number of them moved back into eastern Africa, where smaller and defenceless village communities were scattered by the disruptive slave trade. At village level, fear and uncertainty shaped the landscape, with building technology certainly regressing. In southern Africa the British transformed the African landscape with a number of Bastide-type towns and frontier wars, while the Great Trek cleared the landscape by force for Trekboer settlement.

The region was extremely vulnerable and by 1880 colonisation relegated the African to a secondary role in the continent's history. The “scramble for Africa” now commenced and for

the next 70 odd years the Europeans dominated this part of the world. Their towns and cities were mostly conceived to exploit the region in support of European-based industrialism (Ward 1976: 27).

Resilience of the rondavel

The prevalence of the rondavel has been widely commented on. Schoenauer (2000: 58) states: “The basic dwelling forms of a sedentary society are the cylindrical hut with conical thatched roof, the oval house and the rectangular dwelling with rounded corners and a saddle-type roof”. Rondavels are found as far away as China. A map by Walton shows that the rondavel was dominant in about 66% of sub-Saharan Africa (Figure 12). He writes that this diffusion and migration largely explain this distribution, but adds that climate, ecology and geography were also “controlling” influences. Finally, the rondavel is described by Frescura as “possibly the most universal of southern Africa’s house forms” (1981: 53). It is proposed that the reason is a combination of (1) resistance to change and (2) the suitability of the rondavel type to prevailing conditions.

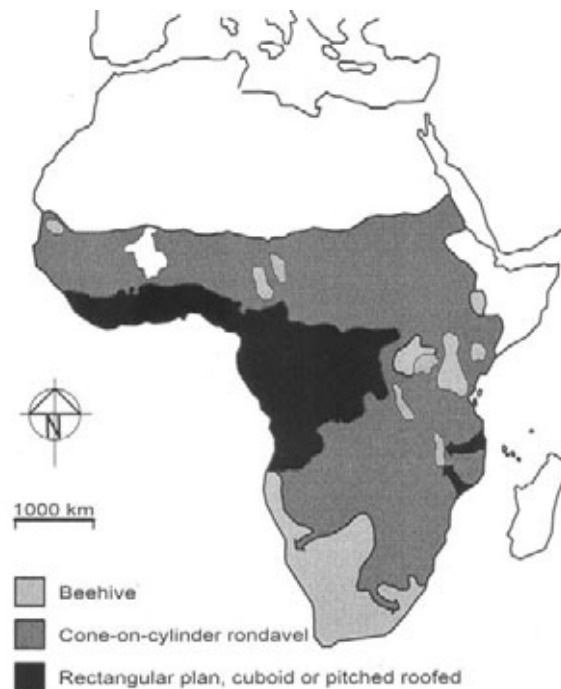


Figure 12
Distribution of hut types in sub-Saharan Africa
(Drawing: G Steyn, after Walton (1956: 128))

The Bantu-speakers of southern Africa possessed a mature body of cultural-technological customs, consisting of their language, their knowledge of farming, herding, pottery and metallurgy, their belief system, music and clay figurines and ... their architecture. No vernacular society encourages change (Rapoport 1969: 8-11) and, as Reader writes, for sub-Saharan communities “... innovation and change were unacceptable risks” (1997: 263). Building forms develop slowly and incrementally over very long periods, and become culturally embedded once an appropriate solution for a certain set of circumstances has been found. The resilience of this package is best demonstrated by the concomitant spread of the Bantu language.

This is the language family of the Iron Age builders of the architecture under study; languages that originated in their cradle land – the eastern Nigeria-Cameroon region – and is dominant in Africa south of the equator (Oliver 1999: 52). These languages share certain roots: for example, the word-stem *ntu* (humanness) and the prefix *ba*, denoting plural, are common to all (Reader 1999: 182; Kasule 1998: 22). Such affinity between languages, spread over the whole of sub-Saharan Africa, is linguistically unique. Ki-Zerbo warns, however, that “a common language structure, consisting in this case of a noun class system based on a similar phonetic pattern and a single verb system, should not be mistaken for a common biological or cultural identity” (1990:112). This is certainly true. Swahili is a Bantu language, originating from Muslim people of ancient Afro-Arab descent, whose patriarchs also built houses and towns adapted from Middle-Eastern patterns.

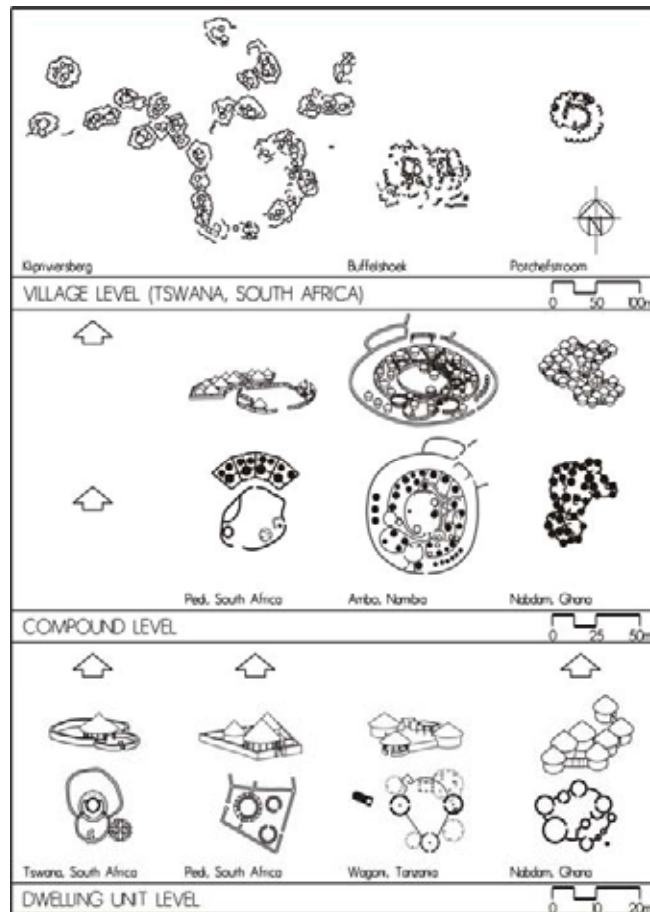


Figure 13
Some ways of aggregating traditional rondavels at different settlement levels
(Drawing: G Steyn)

Rapoport points out that circular huts are easier to roof than rectangular ones, but emphasises that the choice might ultimately depend on the symbolic nature of the forms, adding in a footnote that some traditional cultures do not have a word for “straight” (1969: 25, 77). The fact remains that the round plan must have been the result of a fundamental choice, with the rondavel simply the most appropriate solution for conditions at that time. The rondavel offers nearly unlimited flexibility to respond to different social structures (monogamous households are more compact than polygamous ones), economic activities (spatial relationships to crops, granaries, cattle kraals and livestock pens) and external threats such as predatory animals and human raiders (integration of protective fencing and

enclosures). Not only homesteads, but also the villages and clusters of villages, can be contracted or expanded to form either molecular or carpet typologies (Figure 13).

Predominance of the rondavel in southern Africa

Why does southern Africa have so few distinct types of pre-colonial dwellings, compared to western and eastern Africa (Figure 14)? In southern Africa, the rondavel is the dominant indigenous building type, and the dome, its chronological precursor, is associated only with the Koisan, Zulu and Swazi. In sub-Saharan Africa, the modification of the rondavel into more complex forms and the adoption and adaptation of other forms of pre-colonial dwellings could probably be attributed to events in three geographical zones.

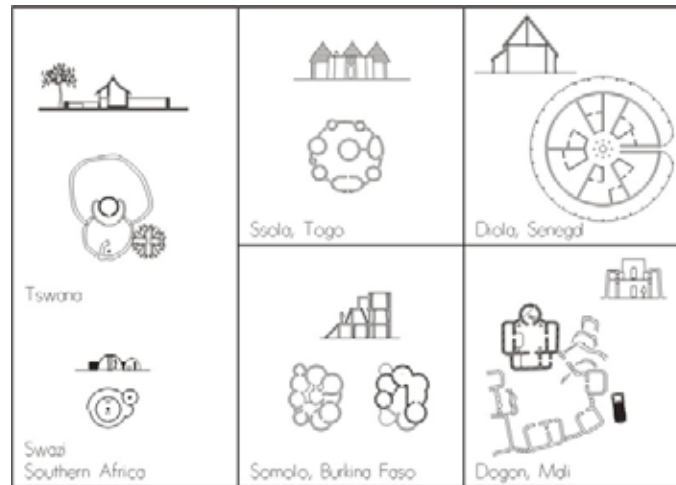


Figure 14

Plans and sections of a typical southern African dome and a rondavel compared with more complex West African forms that apparently evolved from round huts (Drawing: G Steyn)

First: In western Africa – with the stimuli of urbanisation, state building and maturing belief-systems – and certainly with some North African influences – a large number of new architectural types developed. Many of these are, however, intrinsically linked to either climate and geography (desert fringe), the vegetation available for building (palm fronds in forest regions) or customs (anthropomorphic and cosmological, Islam). It is not at all certain that, given time, some of these types might not have been spread to other regions and peoples.

Second: Eastern Africa was the setting for two major developments. In the northern parts of eastern Africa (Kenya) the Bantu encountered the domed hut – the shelter of preference of certain Nilo-Saharan pastoralists, like the Maasai. This technology accompanied some cattle-breeding Bantu to southern Africa. And along the eastern African coast (Kenya and Tanzania) the Swahili introduced their distinctive Afro-Arab stone courtyard houses and labyrinthine walled towns.

Third: In the Limpopo (present-day Mpumalanga) and Zambezi Valleys (Zimbabwe), prosperity based on cattle and gold allowed the improvement of not only ceramic, metallurgical and stock-keeping techniques, but – about a thousand years ago – apparently also the refinement of the traditional rondavel into the tradition that survives to this day, characterised particularly by the veranda.

So, the basic rondavel seems to have been the preferred shelter during the great migration, and was modified, and complemented or replaced by other types only after centuries of settlement. Such changes could be triggered by **external** influences, as evident in West

African (cross-Sahara trade) and East Africa (Indian Ocean trade) and/or by influences **internal** to the specific society, such as the switchover from subsistence herding to a dominant cattle culture at Mapungubwe and Great Zimbabwe. With the exception of an increased number of building types in eastern Africa, due mainly to the introduction of Arab, Swahili and Nilotic architecture, the number of different types declines from the heartland to the end of the great migration (Figure 15). The taxonomy of types considered for this analysis is shown as an annexure.

By the beginning of the 19th century, the Bantu-speaking communities were living in a state of equilibrium, most of them in dwellings with rondavels. At that time, the Tswana areas were showing a nascent urbanism with Latakoo, its principal town, housing 5 000 to 15 000 people (Anderson & Rathbone 2000: 6). This could have resulted in the eventual emergence of forms more suited to dense urban conditions, but in the 1920s the *mfecane* and Trekboer incursions interrupted any possible indigenous-based evolution and from then on Western influences started to impact on the built environment.

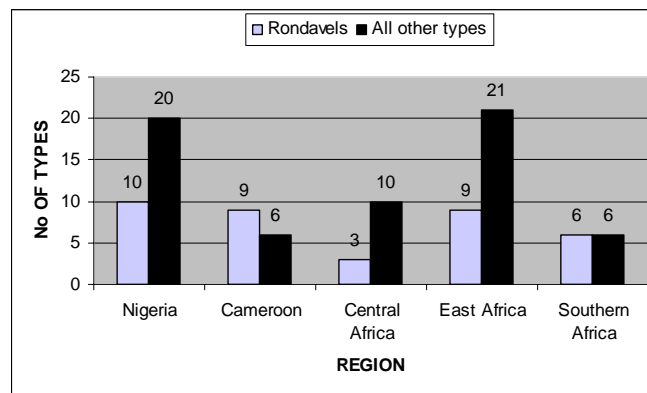


Figure 15
A comparison between rondavels and other building types found per region along the Bantu migration route (Calculations: Steyn)

Evolution of the rondavel

Shelter in the Near East also originated from round, windowless, one-room mud-brick huts around 7000 BC, but it seems as if the room evolved into the form adopted in the Middle East by 3000 BC – a rectangular space with a horizontal floor and ceiling and vertical walls. But whereas houses in the Middle East became complex with many rooms aggregated around courtyards, most of rural sub-Saharan Africa retained the pattern of a number of separate single-room units around an open living space. Middle Eastern houses were aggregated on narrow, winding streets that provided shade and protection against dust storms in arid climates, while rural African homesteads were loosely clustered around open spaces, which allowed for ventilation and breezes needed to provide comfort in the tropics. Both types of settlements grow organically and incrementally, but, significantly, they developed over centuries and are particularly responsive to the extreme climates in which they exist. Rectangular rooms and dwellings are more appropriate geometries for dense mosaic-like aggregating around courtyards, while it is much easier to cluster round plan forms in an open-ended molecular topology.

South Africa experienced a similar evolution of the rondavel (Figure 16): While the rondavel in its purest form evolved from the domed hut nearly 3 000 years ago in West Africa, in the Limpopo and Zambezi valleys it developed into the veranda rondavel about 1 000 years ago. In South Africa, rectangular units have been built since the 1870s, probably

partly inspired by settler houses, to which many rural dwellers seemingly aspired (Frescura 1981: 81). Since both forms are commonly found in the same homestead and both configurations also occur as veranda houses, it is clear that the rondavel has not been **abandoned**, but that the architecture – of which it was the major manifestation – was subject to the tentative assimilation of Western ideas and the subsequent **leapfrogging** of technology, as well as to the constraints of urbanisation.

Frescura points out that the development of the flat-roofed Highveld style, called *bafokana*, (also *iflat* and *iplata*), is a "material, technological, social and economic transition in the southern African hinterland" (1989), which responds to contemporary pressures, realities and resources. The key element here was lightweight corrugated metal sheeting, which was introduced during the period of British colonisation.

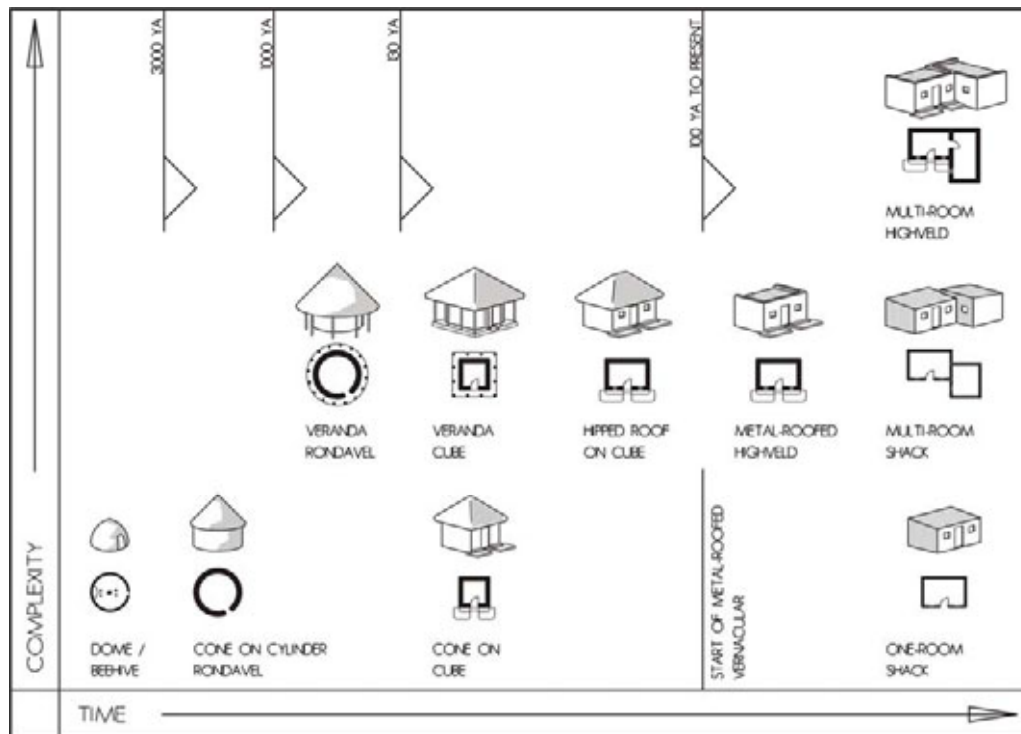


Figure 16
A simplified evolutionary matrix for indigenous South African dwellings
(Drawing: G Steyn)

Urbanisation is a more complex issue. Denyer points out that in parts of Africa, for example, the Chad Basin, rural houses were traditional thatched round huts, while urban housing was cuboid (1978: 165). Apart from the fact that many rural people undeniably admired the rectangular Western forms, which they regarded as progressive, the rondavel form is simply geometrically more suited to rural situations (Figure 17). It is much easier to cluster round forms organically without awkward corners protruding into open living spaces or footpaths. Rectangular plan forms, specifically square cells, on the other hand, are – as the work of Hillier and Hanson on what they call *The social logic of space* convincingly demonstrates – logically more suited to dense aggregation (the connection of units) with open-to-air courtyards defined by the walls of such cells (Broadbent 1990: 21). There are, in fact, many examples of clustered rondavels gradually being replaced by rectangular units, often fully aggregated, in urbanising situations (Figure 18). In addition, urbanisation and changing economic circumstances have influenced settlement form: Figure 19 illustrates a South Amandebele village that abandoned the traditional clustered form and was laid out in a linear

configuration along a road to benefit from the passing trade, while homesteads consist of a combination of rondavels, rectangular buildings and a hierarchy of semi-private and private courtyards.

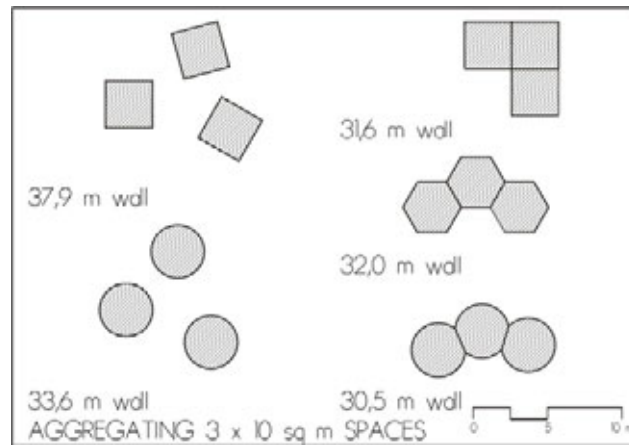


Figure 17

A comparison of wall lengths between round and square plan forms in clustered and aggregated configurations, demonstrating the logic of the latter in urban situations (Drawing: G Steyn)

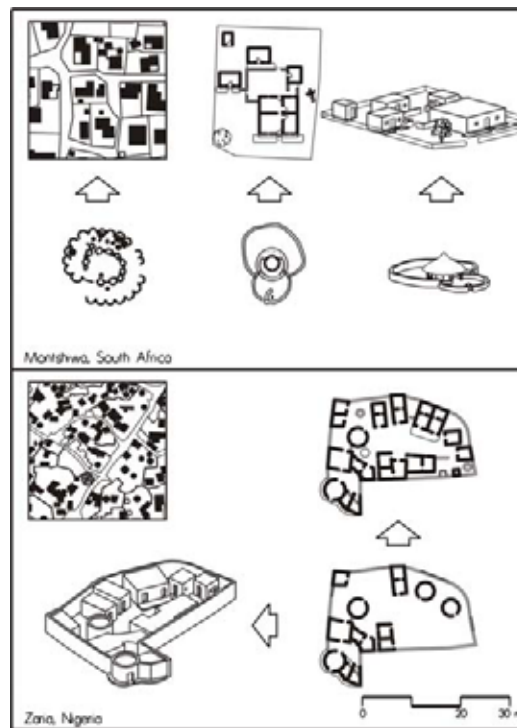


Figure 18:

The gradual replacement of round huts with rectangular rooms in Zaria, Nigeria (Plans: Gerald Steyn, after Schwerdtfeger 1971: 72, 73. Urban fragment: Mel Stander from an aerial photograph. Isometric view: interpretation by Gerald Steyn). Top: Transformation of traditional Tswana architecture (Drawing of early Tswana hut: G Steyn, after Frescura 1981: 156. Survey and drawing of contemporary dwelling: G Steyn assisted by Kahts)

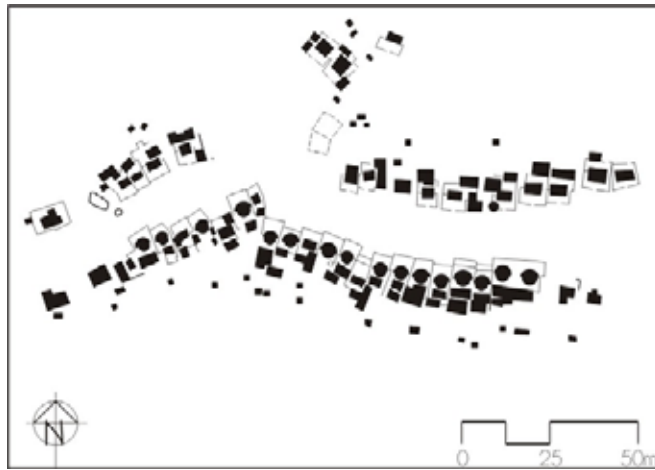


Figure 19:
An Amandebele village near Odi
(Drawing: G Steyn, after Frescura 1985: 331)

Conclusions

Bantu languages, as well as the thatched rondavel with its mud walls, accompanied the Iron Age migrations over a distance of about 6 000 km and a time span of nearly 3 000 years. The resistance to change associated with vernacular architecture, and the suitability of the rondavel type to prevailing cultural and climatic conditions, ensured that this homestead model remained prototypical.

Industrial-era technologies, Western influences and urbanisation are all contributing to the transformation of the pure archetype, which could in due course, disappear totally. But the rondavel is such a remarkable type that there seems to be a need to audit the existing body of theoretical knowledge, identify areas for further research and preserve some representative examples, as well as the skills to construct and maintain them.

The intention of this paper was to create a framework for such further research by identifying trends through the simplistic analysis of icons. In-depth analyses of places and prototypes would inevitably have to be more site-specific – whereas information on climate and historical events can be acquired in literature, socio-cultural data would require much more involved methods. Also, drawings in literary sources have been recycled for such a long time that information on many forms of indigenous architecture has become distorted. There is, therefore, unquestionably a need for fieldwork and accurate surveys. The rondavel is part of our indigenous knowledge and deserves conservation just as much as our historic monumental buildings and precincts.

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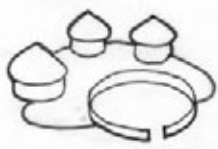


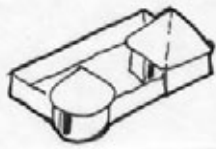



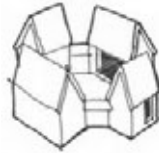


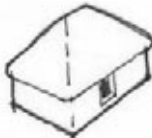
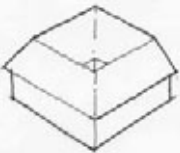



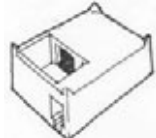







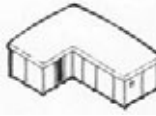
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N°	TAXONOMY ACCORDING TO COMPLEXITY			
	a	b	c	d
1				
	Huts outside optional enclosure	Huts inside enclosure	Huts integrated with enclosure	Round and square huts combined
2				
	Rondavel with veranda (Pedi)	Oval plan, saddle roof, coned ends (Tanzania)	Oblong plan, saddle roof (Nyakusa)	Oblong plan, saddle roof, court (Ibo, Asante)
3				
	Rondavel (Tonga, Venda)	Oval plan, asymmetrical roof (Kagora)	Oblong plan, hipped roof (Kenya coast)	Square & oblong plan, saddle roof, court
4				
	Narrow Rondavel (Matakam)	Square plan, hipped roof (Lozi)	Cuboid, flat or domed roof (Hausa, Kanuri)	Oblong plan, flat roof, court (Swahili)
5				
	Mud shell (Mousgoum)	Cone on cube (Bamileke)	Flat dome (Maasai)	Oblong plan, flat roof, court (Wahehe)
6				
	Beehive (Fulani)	Flat dome (Zulu, Swazi)	Corbelled dome (Sotho-Tswana)	Oblong & L plan, flat roof (Wagogo)