

Architecture in South Africa: Domestic Architecture

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South Africa is a large country with myriad cultures, ethnic groups both immigrant and aboriginal, and vastly differing climatic zones which in turn inform the natural landscape, and, by definition, the indigenous built environment. Furthermore, the more recent effects of modernism and modernization have had effect, removing the buildings from a static construct and situating them in an environment of innovation and change. This means that discussing the non-Western domestic architecture cannot be addressed simply or concisely due to its vastness and complexity. This broadcast exercise has been competently carried out in the past, by different authors such as James Walton (1956), Biermann (1971) and Franco Frescura (1981).

It is important to address the mercurial nature of this move from stasis to change, realizing that a rapidly changing world allows for new forms of domestic architectures such as informal dwellings, which house millions in contemporary South Africa. Thus, it is pertinent to focus more on a single region and a thread of architectures that are bound within a cultural and geographical framework.

The Zulu are southern Nguni people occupying the coastal littoral of the province of KwaZulu-Natal, on the eastern seaboard (see Krige (1962 [1936]) for a full, but dated, explanation as to the ethnography). Traditionally, they are polygamous pastoralists, relying on cattle keeping as a central focus of their lifeway, leading to authors such as Evers (1988) describing their settlement approach as the “Central Cattle Pattern.” They have legendary status, having opposed colonial forces during the nineteenth-century British expansionism into the Colony of Natal.

Zulu architecture, and “architecture” that can be deemed in its potential complexity, is broad in its distribution stylistically as well as being open constantly to reinterpretation, change, and symbolic expression. The term “indigenous vernacular architecture” (see Oliver, 1997) would apply more fully, as the buildings that are produced act as products of a changing and mobile culture and are agglomerates of found and gathered materials. No static, representational “style” exists in the contemporary landscape, although an adherence to traditional planning can apply if economic stability and space allow.

It is important to describe the historically established norms comprising buildings to be able to understand how they formed part of the both large- and small-scale cultural and physical landscapes, as this not only provides a backdrop for the discussion but in many cases informs the cognitive foundations of contemporary architectures. This next section will describe the homesteads as planned units and then speak more fully about the individual units, the *iQhugwane* (grass dome) and the *rondawel* (thatched cone-on-cylinder).

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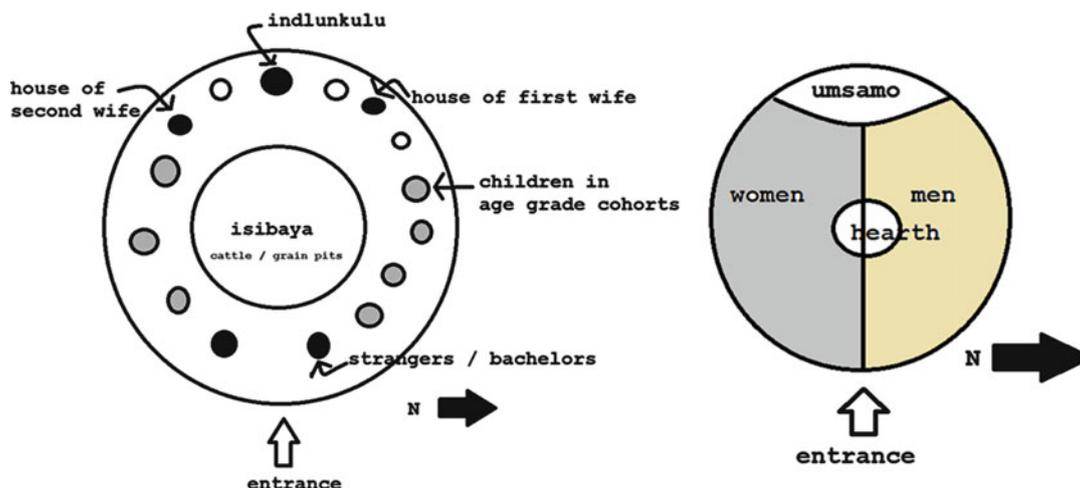


Fig. 1 Generic layout of traditional uMuzi (left) and typical spatial layout of iQhugwane (right) (Author: 2014) derived from Kuper (1980) and Argyle and Buthelezi (1992)

Homestead Planning

Well documented in both historical and contemporary literature, the Zulu homestead, or *uMuzi*, is located on a hill distant from other homesteads. The site is awarded to the homestead head by the King, meaning that the land is neither bought nor sold, and remains the property of the King.

The essential large-scale planning principles of the homestead in many rural examples are constant. A hierarchy of individual units with different functions is situated around a central cattle byre, the whole enclosed with a fence. Access to the complex is usually from the bottom of the slope. At the apex is the dwelling belonging to the head of the family, the *indluNkulu*, with the paternal mother's dwelling, or *Gogo's* house. Each of the wives has a separate sleeping and kitchen unit. The young unmarried men usually live next to the entrance, and guests stay in a unit opposite. Internally the circular buildings are carefully demarcated, with specific places occupied by specific people with specific relationships, under the broad premise of men on the right and women on the left. A single building may be dedicated to consulting *amaDlozi*, the ancestors, and in such cases the offerings are placed in the *uMsamo* at the rear of the space.

The only constant that can be ascribed to Zulu building forms is that in a traditional society they follow a circular format. Only in more recent vernacular examples does the rectangle emerge as a dominant form (Fig. 1).

Today, change occurs through pressure from a variety of sources. In addition, dwindling natural resources used for housing, the vulnerability of the grass dome to fire, scarcity of thatching grass, and the rapid urbanization and migration of many hundreds of thousands of people in the last four decades have resulted in contemporary hybrid architectures that represent a variety of approaches to life, demonstrating origins and aspirations.

Individual Units

Two broad types of building forms exist: the domed beehive and the rondawel. These are not necessarily related and do not necessarily mutate from one to the other. Establishing their origins is a matter of debate.



Fig. 2 Typical (traditional) domed iQhugwane, part of reconstruction of the umGungundlovu homestead, emaKhosini, KwaZulu-Natal (Photo: Author 1997)

- ***The Beehive Dwelling (iQhugwane)***

The *iQhugwane* is the archetypal Zulu building, perpetuated partly by contemporary tourism initiatives as iconographic of “The Zulu Kingdom.” The grassland environment of the southern littoral ensured the availability of grass for thatch.

In simple terms, the *iQhugwane* is constructed of a series of concentric half circles of laths, cut by men, and set into the ground to the required diameter to form a dome. These are tied with grass, and then the whole framework is thatched by the women, starting at the bottom and leaving space for a doorway low enough to force one to bend down. The size of the structure is dependent on the number of central posts or *umGodi* that support it. The thatch is usually held down by plaited grass ropes, the floor plastered or *‘usinda’*d on a weekly basis with a cow dung and water mixture. The original floor bed usually contains some measure of termite mound which acts as a binder. Inside is located a central hearth ringed with stones: the smoke from these fires acts as protection against insect activity. A grass topknot known as *inQhongwane* protects the most vulnerable part of the structure from rain. The door, *omnyango*, is built by specialists and consists of a mat of interwoven withies. It neither locks nor is it hinged; a brace consisting of a stick and a plaited rope holds it in place (Fig. 2).

The “properly constructed” beehive dwelling, as documented by Knuffel (1975) amongst the amaNgwane people, consists of up to 11 different types of grass, each with a different function and integrity. However, this is not the sole solution, as the building form is also represented by a number of other approaches, in which some are decorated with a looped rope system, others with lozenge patterns, and some are merely thatched with little regard for the more permanent fixing of the grass with rope. In addition, an extremely rare example today is that in which a number of mats cover the frame and are tied down (Biermann in Denyer, 1973).

Importantly, there is little in the historic record that documents buildings as being decorated. Other aspects of Zulu material culture such as ceramics and beadwork are internationally renowned for their decorative merits, but little in terms of house decoration exists.



Fig. 3 Rondawel structure (Photo: Author ca 1999)

- ***The Rondawel***

This is a building form that characterizes much of the contemporary rural landscape of KwaZulu-Natal, comprising a conical roof that is thatched or under corrugated sheeting, on a cylindrical base comprised of a variety of materials. The rondawel has, in most rural communities, taken over from the beehive dwelling in which the latter was deemed unsuccessful or impractical (Fig. 3).

The adherence to these basic principles of homestead construction as practiced in recent times has had to face many challenges, many due to the legislations and pressures placed through apartheid, but also dwindling resources, whether land or material. In addition, a recent rapidly rising middle class has accelerated the transitions of space and tradition, adding to the manner in which the hybrid architectures are produced. Only with these factors in mind is it appropriate to discuss new hybrids and the factors underpinning their development.

Pressures Creating New Building Forms and Spatial Planning

In the past, political initiatives by the erstwhile Colonial (1843–1910) and Nationalist Governments (1910–1994) have been influential in pressuring people living in traditional and vernacular homesteads to alter the form of the spaces and the buildings that they inhabit in order to conform to a European-imposed paradigm. Such pressure to build rectangular dwellings came from legislation such as that of Hut Tax (1849–1906) which encouraged people living in circular buildings to build orthogonal structures, or else pay tax to the Colonial Government. Other prompts were less demanding: the gradual acceptance of Western furniture into rural homesteads, and, importantly, the stove (Frescura, 1989) is considered to be motivators for change of form (see also Harber (2000) for a discussion on mutated forms of building).

Although anomalies exist, aggregation of a number of homesteads into villages is not part of Zulu spatial planning framework. Forced resettlement prompted this in the case of the baTlokwa people around the Nqutu area, while at Msinga, aggregation into village groups is perhaps as a result of densification due to population explosion, leading to dwindling resources. An oral source suggested

that aggregation was also due to the high incidence of faction fighting in which the proximity of other homesteads increased personal security.

Another manifestation of homestead clusters is the creation of villages through implementation of the Tomlinson Commission (UG61/1955), which intended to create settlement areas or “Land Betterment Schemes.” These aimed to release agricultural land creating community allotments, rather than itinerant subsistence farming centered around isolated homesteads. While a village culture certainly forms part of the social and spatial organizations of some of Southern Africa’s peoples, this was not true of the Zulu, and this initiative had limited success in KwaZulu-Natal.

- ***Urbanization and Its Effect on Innovation***

As unpalatable as including the informal (shack) house (*imiNjondolo*) within the scope of non-Western domestic architecture is concerned, it should be addressed.

Rapid urbanization in the decades since the collapse of apartheid, together with the population explosion due in part to immigration from neighboring countries, has meant that the palette for choice of style and material has increased markedly. In KwaZulu-Natal, the 1980s were particularly disruptive, with internecine warfare increasing the flood of refugees moving to the cities. In addition, a major drought and subsequent flooding in 1983–1984 meant that people that had lived in subsistence fashion in rural areas moved to the cities to find work having lost two harvests. This swelled the then small informal settlements based on the peripheries of Durban, located largely close to officially declared townships. In addition, after the deregulation of the Group Areas Act, people previously not allowed residence in the city moved in, again swelling the informal settlements.

The rise of the urban poor was an unfamiliar challenge, and even more for those who had made the move, with the materials that were traditionally used in vernacular housing being unavailable for cultivation, barter or free procurement. This meant that where thatch, stone, and timber had been used in the past, a monied economy denied the luxury of these items, and more urbane solutions had to be sought. This resulted in a largely orthogonal building form, comprised of



Fig. 4 Orthogonal building development – wattle lath and packed stone (Photo: Author 2002)

found materials, some recycled, with a monopitch roof of corrugated sheeting or other recycled metal (Fig. 4).

The innovation in style, form, material, and accommodation has boundless variation, in which the manifestation of the interface of society, culture, economy, and belief has resulted in new buildings representative of a plethora of different influences. They are not necessarily site specific, and sometimes they deny cultural affiliation, sometimes embrace it to the fullest, and sometimes only convey the smallest of hints as to the ethnic makeup of the owners.

These pressures have stimulated a series of smaller-scale conceptual and practical decisions which contribute to the variety of approaches and their implementation.

- ***Assimilation of Different Ideas***

Alterations in perceptions relating to the manifestation of the spatial envelope may occur, such as the move by communities, for a variety of reasons, to different vertical interpretations, yet retaining the same intrinsic plan. This is particularly evident in the recently remembered beehive dome-strewn landscape of Msinga.

This district is probably one of the last areas in KwaZulu-Natal that closely follows a strong Zulu tradition, evident in all forms of material culture. While the beehive *iQhugwane* existed until relatively recently, a variety of factors combined with strong traditional and religious convictions allowed for compromise, precipitating the preference for the cone-on-cylinder rondawel. Few move from the circular format. An extreme example is the progressive rondawel, constructed from face brick, updated accommodating orthogonal furnishings, and resolved with an octagonal plan. This “octa-davel,” has a porte cochere, thus transcending the language of architecture, but also those of status and hierarchy.

- ***Innovation: New Manifestations of an Existing Form***

In Msinga too, a further innovation, wall decoration, developed with the adoption of the rondawel. The hardened wall surface of the building, as opposed to the grassed dome, enabled this. How and why this happened is not clear, but this does stand out as a phenomenon in the vernacular architecture of KwaZulu-Natal. Initially, it would seem that the Hlubi and Pondo influence, in which painted bands to each side of the doorway, and sometimes the dado area, was adopted. This developed into now rare, painted chevrons (Frescura, 1981) and appears to have formed the beginning of an evolutionary path of embellishment. Moreover, the rapid decay of these structures in the natural environment allows for a speedy development of building decoration (Fig. 5).

A second innovation is the incremental “American flat,” a term coined by Harber (2000) that refers to the articulated form of the two-room dwelling that has been added to in a variety of ways, with conflicting and cascading roofscapes. The buildings are usually owner-built, sometimes over a long period of time in which parts are added as finances determine. This incremental building practice is common; thus, the banal factor of irregular income may determine the building form.

A particular idiosyncrasy of rural housing forms, and their officially constructed “Reconstruction and Development Programme” (RDP) counterparts, is the extension of identity in which the house is given a specific stamp that identifies it above its neighbors, through the vertical extension of the parapet in a molded form. The correlation of this feature, I would suggest, is linked to Harber’s “American Flat.” These modifications strongly suggest a vested interest in property and commitment to the inhabited space. Time, money, and effort would not be spent in the manufacture of these elaborations, and this is common of both rural and urban and peri-urban houses. In this case, the parapet of a “flat-roof” or monopitch is raised beyond the roofline, stepped, or Dutch-gabled, to create some discerning feature on the landscape.



Fig. 5 Lady standing in doorway of decorated home in Msinga (Photo: Author 1999)

- ***Adaptation of Material***

Another means of staying within the boundaries of culture, while still embracing the traditional forms of the vernacular environment, has been the adaptation and adoption of materials in a creative and sometimes very effective manner.

This phenomenon is not new. Early documented beehive domes were often described as “badly made structures,” usually made out of flexible segments of *Dichrostachys* (sickle) bush, which had to be joined. Structurally, their pliability affected the shape of the building, as early photographs show a distinctive curve at the base, partly due to people squatting against the walls for support and partly in response to the weight of the building. The arrival of wattle (*Acacia mearnsii*) from Tasmania meant that a new timber with straighter and stronger lengths could replace the somewhat unwieldy sickle bush, producing a more rigid dome. Once its efficacy had been discovered, its subsequent popularity meant that it was adopted with alacrity by the Zulu, resulting in an altered form in which the shorter, straighter lengths of wattle produced a more upright building, with less of the characteristic bulge at the base. This innovation within the strictures of the beehive form provides for discourse surrounding the assimilative natures of the Zulu people and sets the tone for the development of vernacular architectures, not only varying the types of materials that can comprise such a structure, but also notionally in the adoption of different types of structure, whether the rondawel popular amongst the southern Sotho and Xhosa/Mpondo people, or the rapid adoption of the rectangular “cottage” in later years (Fig. 6).

Such translation of materials is emphasized in a particular structure from Richards Bay, in which an ancestral building was constructed in a homestead consisting largely of rectangular and



Fig. 6 iQhugwane constructed of alternative materials, Richards Bay (Photo: Author 1998)

orthogonal buildings. Its materials mutated. Rather than the anticipated grass covering common to such structures, the wattle laths of the *iQhugwane* were covered with white building plastic membrane usually used in waterproofing roofs. The base of this structure consisted of courses of concrete brick laid in a dry-stone manner, and the inside of this space was paved with similar bricks. The light inside was no less than ecclesiastical, an unexpected irony in the considered resolution of spaces.

- ***Cultural Compromise***

Travelling around KwaZulu-Natal, one often sees rondawels under corrugated sheeting, with a topnotch of thatch, often extending part of the way down the roof slope. This was, some say, to appease the ancestors who recognize thatch, for the use of modern corrugated sheeting, and to guide them to their “home.” This signal to the ancestors is thus a cultural compromise between living under a material with less maintenance than thatch and at the same time allowing for a cultural continuum of religious belief.

Conclusion

Rapid immigration into urban areas, intermarriage, rapidly erected shelter, and immigration from surrounding countries all act as factors that force compromise in some of the dwelling solutions. Being able to embrace the African and the Western tradition, whether medicine, architecture, music, art, or drama, creates new and exciting and controversial fusions, and this is also manifest in the vernacular architecture tradition. It demonstrates the unexpected, yet totally justifiable, given that the architecture embodies the very nature of the cultural traditions and expresses, to a large extent, religious conviction.

The traditional and vernacular architectures in KwaZulu-Natal in many ways mirror the culture of assimilation and adaptation that exists in other areas. The open-mindedness of the Zulu people to novelty, as well as the impetus of poverty being a motivator, mean that the new architectures that are being created have a special quality that places them in a specific time and place. In addition, as mentioned, the short lived nature of much of the materials that are used means that these buildings form a particularly fragile part of the architectural and material cultural record, and as such say much for our current society and its value systems. Documenting the works is not easy, and much of the charm of the vernacular built environment lies in its ephemeral nature (see Healy-Clancy and Hickel (2014) for contemporary interpretations of ‘home’ in Zulu culture).

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