

**THE INDIGENOUS ARCHITECTURE OF
KWAZULU-NATAL**

In the Late 20th Century

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DECLARATION

Submitted in fulfilment of the requirements for the degree
of Master of Architecture (Research), in the Post-Graduate Programme
in Architecture, University of KwaZulu-Natal,
South Africa..

I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. I confirm that an external editor was not used. It is being submitted for the degree of Master of Architecture (Research) in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, South Africa. None of the present work has been submitted previously for any degree or examination in any other University

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ABSTRACT

Studies on a variety of facets of the subject of indigenous African architecture have increasingly received the interest of many post-colonial researchers, in search for indigenous African identity in the international world of architecture.

One of the challenges that provoked this project is that not many, if any, of those studies in this subject have attempted to find out where the indigenous traditional architecture of the African people can place itself in modern architecture today and what role it could play in the development of our contemporary modern built environment. This study seeks to identify the primary problem and attempt to find answers to certain key questions.

One of the problem areas identified in general observations and literature review is the perception that the architecture of the indigenous people of KwaZulu-Natal belongs to itself only, and is not fit to participate in the development of the contemporary urban physical environment other than as a facility for tourism. What makes up the traditional architecture of amaZulu has been understood to be underdeveloped primitive construction materials only. For this reason, studies on the indigenous architecture of KwaZulu-Natal have been done primarily for historical records. A generally acknowledged factor in the development of some prevailing unfortunate perceptions in this subject is the ideology of European supremacy over every sector of life of the indigenes of the African continent. It is such ideological perception that questioned international wisdom in African indigenous architecture and suppressed it from global participation so far.

This study investigates the rich cultural forces that directed the history of the indigenous architecture of this region. It also investigates historical socio-economic factors that have influenced the direction of evolution of the traditional architecture of the indigenes of KwaZulu-Natal. From the latter, one would question the gap between the sophisticated indigenous artwork found in the informal trade of the province and the struggling state of architecture found in the rural built environments of the same people.

Given that the indigenous people of KwaZulu-Natal today include several groups of abeNguni that merged into a nation over the history of the province, this study acknowledges the diversity of those various groups, and further searches for its global worth.

To

All those people and families who welcomed me into their homes, gave their time and shared many of their values during the making of this project.

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INTRODUCTION

Background

In the recorded history of Southern African architecture, various writers have emerged with various definitions and interpretations of what could be regarded as 'indigenous', or African architecture. Rudolfski (1977) has defined it as self-built architecture, whereas Bourgeois (1983) has preferred to focus on its more spectacular and visual components. On the other hand, Laugier (1977) believed that all the important lessons of architecture were inherently present in 'the humble hut', while Frescura (1986) has identified rural architecture as governed by a series of codes and visual rules which reflect the cultural values of its builders. These contrast starkly with the structural Darwinism of the 1940s and 50s which limited the architecture of the rural people to a product of environmental and economic factors (Forde 1934). In more recent times the interdisciplinary works of Rapoport (1969), Papanek (1985) and Huffmann (1982) have pointed, through an analysis of indigenous architecture, to a wider interpretation of the built environment which is multi dimensional, and which is embedded in spiritual and cultural values.

Whichever the approach, this study acknowledges that the architecture of the indigenous African people of KwaZulu-Natal has, so far not played any role in the development of the contemporary built environment, other than that of a catalyst for tourist trade and a showcase of economic and racial class.

Despite the presence of this sizeable body of internationally based literature, the number of studies done since the 1980s on the indigenous architecture of southern Africa is relatively small. These include Derborah Whelan (2001), Peter Rich (1995), Jeff Guy (1982), Omer-Cooper (1978), Martin Hall (1981,1984), Huffman (1982) and Frescura (1981,1984,1985).

This project is primarily concerned with the architectural practices of a people and a region. There has, thus, been a temptation to adopt a structuralist approach to its explanation. However, the data provided by the people

themselves during the course of the field work has presented a strong case for viewing the built environment in a strong cultural sense. Since the nineteenth century the political affairs of the region have been dominated by a strong Zulu presence which, despite many surviving clan loyalties, has become synonymous with abeNguni of the region. In many ways, therefore, the broad identity of the indigenous people of KwaZulu-Natal has been identified by many observers as being interchangeable with that of amaZulu. Although this is plainly incorrect, the resultant stereotype that has emerged has tended to identify the people of KwaZulu-Natal as being amaZulu.

This research project does not seek to define these differing political identities but will, wherever possible, define the differing clan loyalties expressed by the people themselves in individual case studies.

Because the survey has also tended to focus upon one particular region, it has been found difficult to arrive at a wider definition of what constitutes 'indigenous' in architecture. For the purpose of this study, a more comprehensive title of this dissertation could very well have been the self-built architecture and settlements of abeNguni living in the rural areas of KwaZulu-Natal.

I believe that indigenous architecture contains all the essential elements of building culture as to constitute, in a microcosm, the social, cultural, technical and gender values of its builders. As such, the indigenous architecture represents a series of texts that are open to be read by whosoever is privy to its codes and meanings. As such, then, all indigenous architecture, and indeed, all architecture is open to different cultural reading dependent upon the context from which these are taken. The indigenous architecture of KwaZulu-Natal is one such text and is constituted of a number of subtext, each of which contributes to its larger meaning. Through this research I have set out to document, analyse and, ultimately, interpret the indigenous architecture of the KwaZulu-Natal region. Through this, I hope to demonstrate that architecture is not merely a text that will find equal reading in a number of cultures, but that its readings are strictly bound to the values, beliefs and

cultural practices of its builders. I also hope that this work will succeed in unlocking the indigenous architecture of this region from the 'museum' framework, particularly for this current generation of African people who are actively seeking to rediscover themselves.

My interest in this project is deeply embedded in my own family and cultural background as a Nguni-speaking resident of KwaZulu-Natal. Even as a child living my formative years through an era when apartheid was beginning to impose itself upon the people of South Africa, I was aware of the manner in which white totalitarian ideology was seeking to deny the value inherent in a traditional black society. For many black families such as mine the maintenance of such values became a form of resistance to racial oppression. Like many of my contemporaries, the words of Steve Biko and Black Consciousness movement gave my generation a sense of pride in things black and things African. Thus, when the veil of apartheid began to be lifted after 1990 we began to use the new found freedom to question many of the foundations of our educational systems and the premises upon which our brave new democracy was going to be based. When I began my architectural studies at university in 1992 I found that most, if not all, of my education was deeply embedded in liberal British systems whose values often unconsciously reflected the opinions of a long gone colonial system. Despite the influence of such teachers, Denis Claude, Brian Kearney and Rodney Harber, in the courses they taught, they made efforts to integrate western European and African traditions, but were seldom based entirely upon African values. One exception was Ambrose Adebayo's African experience which shed completely new light on what was possible.

I quickly also discovered that, despite their works, such authors as Walton, Frescura, Huffman and Hall expressed an Africanist viewpoint, though translated through western European perceptions. As such, the information was correct, but the nuances were lacking. In many ways, therefore, this research project represents my own personal attempt to tackle the subject, primarily from an African viewpoint.

This does not mean to say that western thought and ideology has not played a part in my own thinking. Although time has exposed some serious shortcomings in the work of Walton, he was, nonetheless, a pioneer in the standards and values of subsequent generations. His clear and incisive drawings of South African indigenous architecture made an enormous impact on the mind of a young architectural student and allowed me to perceive the architecture of my people as worthy of study. Frescura took this process further and I found his revisionist approach towards the origins of indigenous architecture (1986), the nature of their decorations and the cosmology of rural settlements exploded many of the 'white' myths surrounding the architecture of my people. Huffman brought the archaeological legitimacy and a creative interpretation of spatial planning which reinterpreted the history and nature of the kingdom of Mapungubwe.

Internationally, design philosophers such as Papanek and Rapoport reinforced many of the teachings, locally, of the Black Consciousness movement and made us see that the solutions to many local problems could be found in our own value structures free of the bounds of neo-colonialism.

Most importantly, though, their work was also indicative of a wider cross-disciplinary approach to the interpretation of architecture, which was no longer limited to western Europe or even Africa, but started to include researchers from a wide range of national backgrounds. The papers which arose from a number of "House Form and Culture" conferences held in Lawrence, Phoenix, Albuquerque and Seattle which introduced North American and European scholars to research being done in China, Indonesia, the Middle East, the Pacific Islands and, of course, Africa. The resultant understanding of indigenous architecture was not only a cause of pride among African scholars, but also gave Africa an awareness of her status and standing in the larger context of world scholarship.

Despite the presence of a growing cultural and economic boycott against apartheid during the 1980s, this richness of influence available through books and international publications gave added impetus to the "House Form and

Culture” movement in South Africa, predominantly the liberal English-speaking universities such as Wits, Cape Town and, of course, Natal where I studied. What was lacking, however, was the strength of a good theoretical grounding which, traditionally, South African architectural schools have failed to offer. One, of course, has to differentiate between architectural theory offered by design schools which tends to emphasize the work of practising architects, and social theory, which is the product of wider thinking on the part of economists, social scientists and political theorists. In more recent times the role played by architects in the support of undemocratic political movements has come under increasing focus, and the realization has grown that there can be no architecture and, indeed, no creative work in isolation of its social context.

Initially, it is probably true to state that much of my thinking as a young architectural student was influenced by structuralist theory. Structuralism was, probably, the major single philosophy that dominated architecture during the immediate post-war years, although, in architectural terms, its roots can be traced back to the German analysis of art which developed during the 19th century. A typical example is Banister Fletcher, whose tome on architectural history in all the seventeen editions dominated the teaching of architectural history during my formative years. Structuralism seeks to give sense to cultural origins and, thus, tends to reduce architecture to a series of basic forms and typologies which are intellectually satisfying but do little to explain basic social conditions. In the context of African architecture one such author was Susan Denyer (1978) and, although Frescura (1981) also included a morphology of his work, it had an implied historical continuity which took it beyond the field of a simple typology. Nonetheless, few architectural studies done by students during the 1980s and 90s were considered to be complete without a structuralist chart.

Another theoretical base which was popular during my student days, which I found difficult to overcome, was that of modernism. Although modernism, as a theory, has little substance that can be credited the status of philosophy, it has, nonetheless, come to represent a mode of thought that sees objects,

ideas and action possible independent of any context, whether this be historical, cultural or social. Modernism holds that creative ideas are possible without reference to origin. The importance of such thinking in the South African context was self-evident to those like me who lived through the height of apartheid repression, when modernist intellectuals sought to create a national revisionist history independent of the reality of racist policy.

Fortunately, this was balanced by the work of Marxist revisionist historians such as Charles van Onselen (1982), Luli Kalinikos (1987) and, most important in the context of KwaZulu-Natal, Jeff Guy (1982), who sought to place the actions of imperialists, colonialists and capitalists as part of a wider struggle between classes.

In terms of my own thinking, I began to see the traditional architecture of KwaZulu-Natal in the context of a wider social struggle against the forces of colonialism and apartheid. Its repercussions were evident in such areas as rural settlements, where poverty stifled the technological advancement of the indigenous architecture and curtailed cultural practices such as lobola and polygamy, all of which had deep implications for rural indigenous architecture. Most importantly, though, the creation of apartheid 'Bantustans' promoted rural poverty, brought about rural overgrazing, impoverishment of formerly productive agricultural lands and brought about reduction in cattle holding.

This last point is important because, as an architect, I have found it difficult to ignore those examples of human misery which I encountered, without these overcoming the sense of this research. Ultimately I had to, deliberately, forefront the objectives of an architectural research project, in the belief that architecture was but one aspect of the larger picture, and that those aspects of rural poverty which I encountered would be handled by researchers better equipped to examine this problem.

Another aspect of modernism which was not consistent with its practice lay in the claims of its practitioners, that their buildings took into account local cultural practices and climatic conditions. Despite the claims of propagandists

such as Kultermann (1969), it is my experience that modernism reduces cultural differences to the level of decorative motifs and ignores the more important symbolism of space and structure. Through my own work, in time, I began to gain an understanding of the principles of post structuralism and post modernism. Contrary to modernist philosophy, architectural form, space and decoration are not the result of original thought, but are largely influenced by historical processes and cosmological beliefs, which go back hundreds and perhaps thousands of years. It has become evident through this research that in indigenous architecture no object, space, or action is value free. Indeed, all of these are the result of value structures which guide the establishment of a settlement, its forms and orientation, and the location of its constituent parts according to a value system which identifies its builders as surely as any fingerprint.

Research Methodology

Field research was conducted between 2004 and 2008. Though about 80% of the fieldwork was done in 2004, the sites were revisited between 2007 and 2008 to confirm the validity of the data and to deepen my understanding of those case studies.

Unfortunately, the scope of such research extends beyond the needs of a masters research programme and, although I believe that my research has sensitized me to many of these issues, regrettably few have found expression in this manuscript. Readers will find that much of the data gathered during the course of the fieldwork has been grouped in a way which can best be described as structuralist. This has been done in the cause of expediency. Wherever possible, though, explanations of a cultural and cosmological nature have been included in my text.

This research has been conducted amongst people who live in rural areas formerly known under Apartheid as homelands, whose income is predominantly drawn from employment in nearby farms, supplemented by family members working in urban areas. Despite the presence of notable

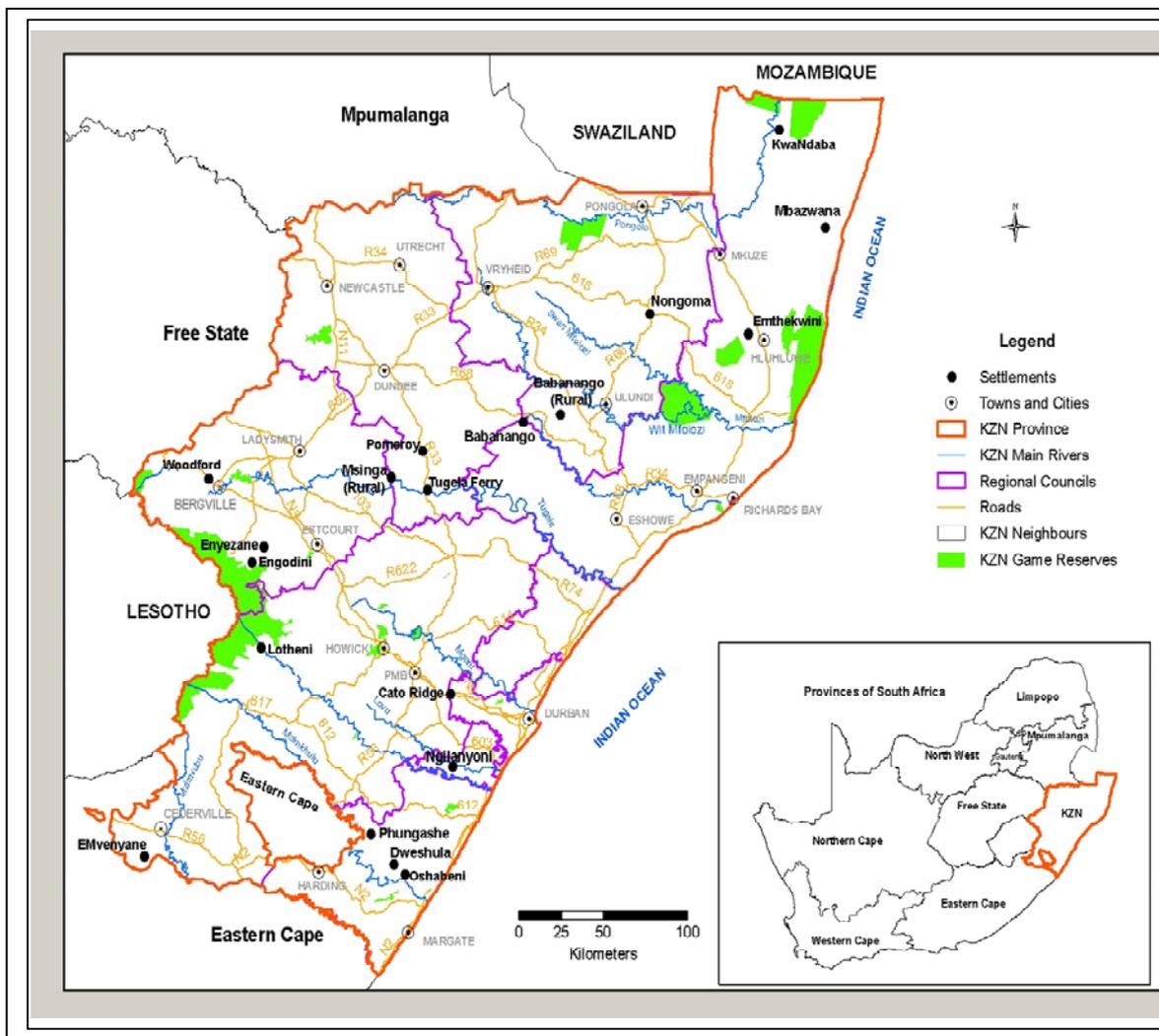
industrial elements in the architecture of the homesteads, most people interviewed followed traditionalist values such as ancestral worship, keeping of small herds of animals and the practice of 'lobola'.

For the purpose of the study, sampling was limited to the rural settlements of KwaZulu-Natal, given that those are the current geographical locations of the indigenous abeNguni. The province was divided into four main regions of fieldwork (Map1) with their sub regions as shown in a table form on Appendix A.



Map1: KwaZulu-Natal Fieldwork Map showing subdivision of the province into sub regions for the survey

Fieldwork followed a preliminary survey which, with the assistance of experts in the field and others conversant with the local conditions, enabled identification of key areas for my initial field research.



Map 2: KwaZulu-Natal Fieldwork Map (Produced by GIS Division, School of Environmental Sciences, University of KZN)

The selection of sub-regions was done according to predominance of indigenous rural settlements in the region. A random selection of samples was carried out in those settlements. This was done by, firstly, making a brief general observation of the settlement and, then, picking a typical sample that represented the settlement in terms of size and traditional expression of the architecture of the particular region. However, some of the surveys were limited to general observations of certain settlements.

A total of thirty samples were studied. The analysis of these samples led itself to classifications with regard to their cultural types, and physical complexity. This process has reduced the case studies presented, in detail, in this document to sixteen, as representative of the following classification:

- Large polygamous households
- Large monogamous households
- Medium sized households
- Small single parented households
- Small fully parented households
- Settlements in general

Various data collection methods were used for specific information relevant to the objective of the study. Those included general observations, structured but informal interviews, photography, measuring, sketching and recording of notes. Any form of formal data collection like questionnaires and structured interviews were avoided. Geographical locations of some samples were recorded with the aid of a Global Positioning System (GPS). The information sought to be obtained included cultural traditions that influence the local built environment, socio economic status of the sample and its environs, and construction materials and methods. Appendix B is a table that shows all the sites visited and the data collection method applied to each.

My social background played a significant role in the fieldwork with regard to language of communication and cultural awareness. For instance, entering a home openly carrying recorders and cameras would have opened a large credibility gap, enough perhaps to block their hospitality and openness. All those facilities would come out one by one along the process of the case study. I had to make sure that I was part of the local society in my approach. At no stage in my recorded fieldwork would I attempt to call the householders or any elder by their first names. Culturally, a surname is enough and, throughout the rest of an interview, I normally used their clan names such as Mapholoba (for Ngcobo). Expressions and gestures are some of those

buttons that would naturally unlock their trust and hospitality. Though informal, care was taken to ensure that conversations lead to the target information. With all, and more of these tools I was never faced with any need to consult any *Induna* (local chief) for permission in my entire field work throughout the province.

The above research approach has advantaged me with ongoing relationships with some of the households such as kwaNgcobo in Ngilanyoni, kwaMbhele in Nyezane and a few more. The cooperative responses were largely influenced by meeting a young fellow from a university who genuinely seeks to learn the wisdom of his people in cultures and architecture. Most parents would make sure that I have something to say to their youth for inspiration.

This research also advantaged me with experiences my generation needs desperately. One of the informative mistakes I made was in the homestead of kwaTembe, where I and my assistant simply walked into the premises of the most respected homestead of the village and were turned back to use another entrance way which was for visitors. We were led to a tree, with seats, specially dedicated to guests. Fortunately, the householder was available and fascinated to talk to these young men whose innocent naivety was plain to read. Maybe we would not have dared to enter those premises had we been aware of his status in the community. On the other hand, kwaNgcobo in Ngilanyoni had allowed us to use the informal entrance, but explained the different entrance ways along our conversations.

Presentation of the fieldwork, in this document, does not represent any cultural order. Neither does it represent the route of the fieldwork. Instead it is arranged according to geographical regions and sub regions, from the furthest end of the south coast to the north end of the province.

South Africa has, for many generations, been in a state of transition. As a result, the terms of reference of one generation or one group of people have shown the capability of becoming an insult to the other. Being black and a child of the eighties places me in the privileged position of being able to ignore

some of the historical debates and contextualize my research firmly within the political ambit of a post apartheid South Africa. Nonetheless, the changing nature of language and terminology has made it difficult for me to ignore some issues.

During the course of writing up this report, a number of challenges arose relating to linguistic interpretation. Zulu speakers are fully cognisant of the fact that when one refers to the Zulu people one uses the term amaZulu. Their place of residence is known as KwaZulu and their language is known as isiZulu. For the sake of linguistic correctness, I have chosen to use these terms over those prevalent in English. This also means that I did not use the Anglism of “the amaZulu” as this represents a duplication of words and only make reference to “amaZulu”.

The absence of a dedicated section for definition of terminology is covered by a definition or translation of each isiZulu word or expression used along the text in the document. However, the definition are not repeated in subsequent use of such word or expression.

Resume

This document is made up of five primary sections. The first part is a chapter that contains the theoretical framework of this dissertation, which sets various authors in a dialogue with their diversity of theoretical approaches to interpretations of the indigenous architecture of KwaZulu-Natal and the rest of the continent, including applied terminology therein. This section also highlights prevailing perceptions as manifested in the applications of what is understood by designers as the traditional or indigenous architecture of KwaZulu-Natal.

The second part is in two chapters that provide a concise historical background of the indigenous people of KwaZulu-Natal and cultural determinants of their architecture

The third part is a chapter that contains a detailed analysis of the data collected in the fieldwork. The analysis of each sample acknowledges its physical, social and cultural context. The analysis includes the spatial planning of the homestead and the architectural expression and construction of the buildings. This section also provides a further selection of samples which are analyzed in terms of their establishment and growth patterns and stages.

The fourth part of this document is in six chapters which provide an interpretation of the research findings. This is where differences and similarities are identified from the data analysis done in the previous chapter, and draws contours that link the entire province of KwaZulu-Natal. This has been done in order to establish the existence of typical traditional architecture that represents the indigenes of the province of KwaZulu-Natal. This part also acknowledges internal and external influences on the people of this region and, hence, their built environment.

The last chapter draws from the theoretical framework, historical background, fieldwork analysis and the interpretation of the research findings to establish conclusions and recommendations.

Sketches and picture illustrations are numbered according to chapter numbers for ease of referencing. A detailed list of case studies is included as appendices A and B at the end of the document in a form of tables.

CHAPTER 1

SETTING THE FRAMEWORK

INTRODUCTION

Indigenous architecture of KwaZulu-Natal falls within the broader subject of African architecture, one that has been acknowledged but with several reservations by many, both in academia and practice. It will be useful, in this discussion, to begin with a dissection of the subject, with particular regard to prevailing perceptions, interpretations and the terminology that composes it.

This chapter draws in various analyses from previous studies by others to this discussion to contribute with arguments that inform this study.

A DEFINITION OF INDIGENOUS ARCHITECTURE IN THE AFRICAN CONTEXT

One of the arguments, which even this particular study was met with by some academics and practitioners, is that one cannot speak of 'architecture' as African. It is only European. Appropriate terms would be 'dwellings', 'huts', 'beehives', etc. Often not even the word 'building'. Such perceptions are a reflection of the ideological interpretations of whatever is African.

Whelan echoes: "*For years, academic establishments have perpetuated the cliché that Zulu architecture is the grass dome: the beehive hut, indlu, or iqhugwana... From recent perambulations around the province of KwaZulu-Natal, I would argue that this is not necessarily so...*"(Whelan,2001). The New Oxford Dictionary of English defines architecture as "*the art or practice of designing and construction of buildings...*"(Pearsall, 1998). This definition acknowledges that no matter how much or less sophisticated a building, it certainly came through conception by some person and was taken further to construction and realization. In his comprehensive definition of the term, Oliver draws attention to the historical Greek and Latin meanings of the word 'architecture' which emphasizes on a 'chief or master builder' (Oliver,1997).

Such a definition does not limit the chief builder's art to a profession. The latter only makes it successful to limit architecture to a Eurocentric definition.

Denyer acknowledges this challenge: *"The myth of darkest Africa is persistent and there are still many people who find it hard to accept that the traditional buildings of the continent merit more than passing consideration. One only has to consider for a moment the vocabulary used to refer to them to realize that even for those who know and respect other aspects of African culture it is hard to avoid being drawn into a web of selective and distorted perception. ..."* (Denyer, 1978).

As pointed out earlier, the focus of this study is on the indigenous architecture of the province. The New Oxford Dictionary of English defines indigenous as *"originating or occurring naturally in a particular place; native..."* (Pearsall, 1998). This, therefore, suggests that the indigenous architecture of KwaZulu-Natal referred to in this study has to do with the architectural concepts and construction techniques that germinate locally, and evolve as a response to environmental factors, social circumstances and external influences, more to what Oliver defines as vernacular architecture (Oliver, 1997). Such architecture reflects the unique social and cultural identity of the indigenes of the environment.

The socio-political history of South Africa and the rest of the continent has developed a nomenclature and perceptions that are exclusive to the African context. For example, 'indigenous', on the one hand, tends to be limited to rural built environments while, on the other, the economic state of rural indigenous communities across the continent historically associates their vernacular architecture with poverty. That has led to a general understanding of 'rural' as referring to an underdeveloped poor African community, with the exception of the rich white farmer's house away from town.

Giving various definitions of a homestead, The New Oxford Dictionary of English acknowledges an exclusively South African definition, that is *"... a hut or cluster of huts occupied by one family or clan, standing alone or as part of a*

traditional African village” (Pearsall, 1998). This, in other social contexts, is generally considered as a house.

Whelan reinforces the argument: “... *the beehive dome (iqhugwana) was once rather the architecture of a particular clan, and a regional vernacular of an area...*” (Whelan,2001).

Hall claims that archaeological studies have produced evidence that the ethnographic model of a Zulu homestead did exist but in specific regions and in a particular period. He points out that archaeology discovered that there were sites in other regions with different architecture in terms of spatial organization, form, technology and orientation in certain periods in history, which are not acknowledged by ethnographers, such as the clusters of sites in the upper White uMfolozi River in prehistoric Iron Age (Hall, 1984).

Hall concludes his argument by suggesting that “... *If archaeology and anthropology are to contribute to the new perspective of African history, the ethnographic stereotypes, such as the model of the Zulu homestead, must be accepted as myths*” (Hall, 1984).

PERCEPTIONS ON THE STATE OF INDIGENOUS ARCHITECTURE TODAY

This part of the discussion is approached from two perspectives. That is, where, on the one hand, one finds indigenous African architecture viewed without evolution while, on the other, some authors promote a contrary approach.

Whelan’s academic conservative concern warns: “*The threat of indigenous vernacular traditions disappearing at the expense of development is visible on the horizon. Regional planning initiatives are pressured to deliver houses and services on a large scale, which would be severely detrimental to the continuance of a vernacular architectural tradition. The architectural culture,*

although currently dynamic, is at risk, and thus begs for documentation.”
(Whelan, 2001).

It is true that evolution is unavoidable. The challenge is how the indigenous African architectural heritage can be conserved, beyond documentation, without tempering with its natural trends of evolution. Designers have often responded by introducing to their buildings elements that express underdevelopment and poverty in the name of African indigenous or traditional elements, such as primitive crude timber, mud, grass, etc. Those elements are drawn in without any consideration of



Pic.1.1. Attempts to Africanize Modern Architecture in KwaZulu-Natal

evolution as indicated by Hall: “... *Perhaps the most significant problem with the static ethnographic analogy, however, is that it makes the identification of change impossible...*” (Hall,1984) This is a challenge that goes back to one’s understanding of the terms ‘indigenous’, ‘traditional’, ‘rural’, ‘vernacular’, etc.

Hall continues to directly criticize Kuper’s rigid approach to his examination of ‘Southern Bantu’ architecture (1980, 1982), which shows little interest in the problem of change through time. Kuper focuses on structural principles of social organization and generalizes those as standard determinants of spatial organization for all Nguni homesteads. Hall criticizes that such was done with no reference to time frames. “... *Kuper would seem to share with earlier ethnographers a belief in the ethnographic present, and implies in this and other statements that the oppositions discerned apply irrespective of time. ...It is not in fact surprising that Kuper can find a timeless set of oppositions as,*

certainly in the case of the Zulu, he makes use of a body of ethnography that assumed time to be irrelevant and did not therefore look for change.” (Hall,1984).

Hall argues about the role of colonial ideology on ethnohistorical and archaeological researches in Southern Africa. His argument, in several ways, acknowledges the persisting existence of the European supremacy ideology that has affected the ethnohistorical and archaeological studies, particularly in colonized countries. *“...In those countries where the archaeology of the colonized is mostly practiced by descendants of the colonizers, the study of the past must have a political dimension”* (Hall,1984). Hall identifies one of the shortcomings in research where the ‘ethnographic present’ is used to shape the past, instead of the opposite.

Hall further raises a strong argument against the popular ethnographic study of the architecture of a Zulu homestead. He kindles an argument between ethnography and archaeology. According to Hall, the ethnographic model of a Zulu homestead is weakened by lack of history, time changes and geographic position. *“...It follows that the concept of the ‘ethnographic present’ not only has little value, but can be actively misleading. Any characterization of a standard form involves the suppression of variation. When such a model is presented without reference to its time of existence or area of distribution, the situation is particularly dangerous. ...”* (Hall,1984).

DETERMINISM

Rapoport raises a critical argument in his discussion about determinants of house form. His primary argument is that house form is determined neither by shelter (climate), technology (materials and construction methods), site (landscape and orientation), defense nor economics. Though he does acknowledge the existence of these factors, he emphasizes culture and religion as the primary determinant of house form. *“...Because building a house is a cultural phenomenon, its form and organization are greatly*

influenced by the cultural milieu to which it belongs” (Rapoport,1969). Rapoport’s theory seems to be so globally standardized that it tends to dismiss the contextual reality of the full spectrum of determining factors that are sought to be identified in this study, particularly in this part of world. His emphasis begins to loose coherence when he substantiates his argument by focusing on spatial organization, which is a complete deviation from the subject of house form.

Frescura’s statement: *“The generating force behind rural architecture is the need for cheap durable shelter”* (Frescura,1981) acknowledges this relationship between ‘rural’ and economy in the South African context, as pointed out earlier in this chapter. Contrary to Rapoport’s theory, Frescura introduces an economic factor as a primary determinant for rural architecture, which fits well in the general perception of what Indigenous African architecture is.

Frescura further identifies a second determinant of form, which appears to be influenced by the ‘form-follows-function’ modernist theory. His argument, though, does not dismiss Rapoport’s limited emphasis on architectural determinism. Frescura’s emphasized functional approach to form, however, gets narrowed to the modern rectangular and square furnishing, where one could argue that such furnishing is an intervention of imported functional concepts on indigenous concept of building form, hence the mismatch. *“...Thus we find that though the rural dwelling begins to make concessions to the demands of modern furnishing, it is unwilling to make radical departures from the basic traditional house form”* (Frescura,1981).

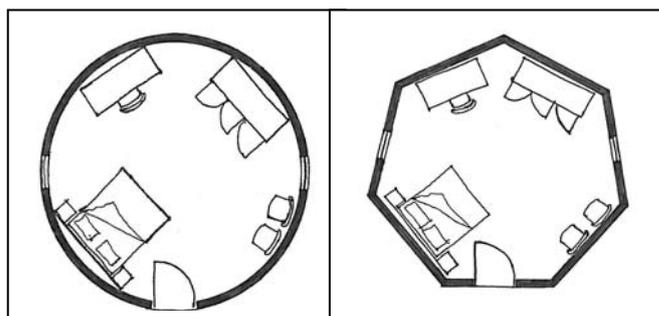


Fig.1.1. Modern furniture in a traditional circular plan and adaptation with a polygonal plan

The Italian renaissance architects of the 15th and 16th centuries, like Alberti and Vitruvius, among others, introduced a religious dimension of planning and form. It was a paradigm that criticized classical architecture whose apparatus of formal expression was equally used for ‘*sacred, profane and domestic buildings*’ (Wittkower, 1962). Modern buildings of the late 20th century have adopted the classical attitude criticized by those renaissance architects.

In his analysis of Alberti’s principles of sacred architecture, Wittkower (1962) points out: “*Alberti’s survey of desirable shapes for temples- his synonym for churches- begins with a eulogy of the circle. Nature herself, he declares, enjoys the round form above all others as is proved by her own creations such as the globe, the stars, the trees, animals and their nests, and many other things*”. According to Alberti “*...the circle and its centre are here regarded as symbols of God*” (Wittkower, 1962).

According to Vitruvius, the proportions of the human figure, which should be reflected in the proportions of temples, are proof of the harmony and perfection of a human body; how an ideal man perfectly fits in a circle with extended hands and feet (Wittkower, 1962).

The Italian renaissance religious or cultural attachment to humanism laid its emphasis on control of proportions in the design of the architectural

expression of, particularly, their worship buildings. On the other hand, without any traceable cross pollination of design philosophies, the functional

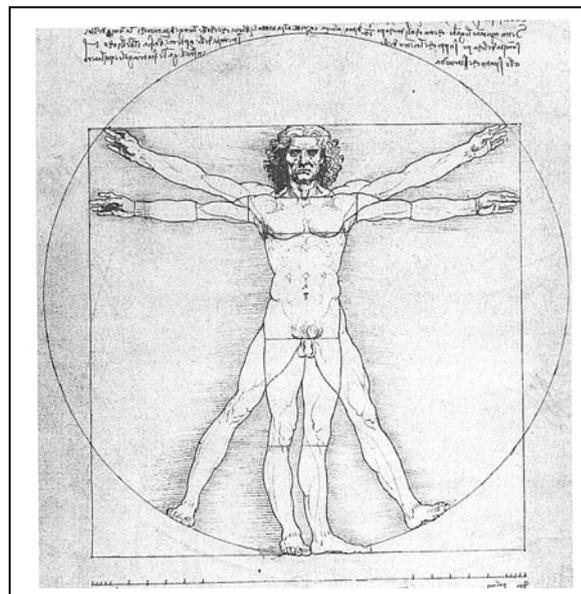


Fig.1.2. Ideal man in circle and square by Da Vinci (Hersey, GL, 1976)

concept of indigenous worship buildings of KwaZulu-Natal is based on a similar human figure, but with a strong emphasis on spatial planning only, and no pronounced influence on form and expression. This concept is extensively detailed and displays a convincing degree of cultural originality.

CHAPTER 2

A BRIEF HISTORICAL BACKGROUND OF AMAZULU

INTRODUCTION

The architecture of a built environment is a physical expression of its social environment. It is the narration of the evolution of its people in terms of their political and socio-economic history. The interpretation of the built environment of this region is, therefore, an interpretation of the people themselves.

For better contextual clarity of focus on the study of the indigenous architecture of KwaZulu-Natal, an understanding of the name 'Zulu/amaZulu', which is geographically and socially key to the subject, is fundamental. This section provides a concise socio-political background of amaZulu as a nation.

SOUTHBOUND SPREAD AND SETTLEMENT ON THE EAST COAST

Reggie Khumalo (1995) provides a detailed outline of the historical southbound spread of the various groups of abeNguni along the east coast of Southern Africa and their relationships among one another and with other neighbouring nations. The major groups included amaThonga, amaLala, amaMbo, amaNtungwa and amaDebe (fig.2.1). Each of these groups would proliferate in the form of family expansions to large clans for imperial reasons.

It was in the same process where, in the late 16th century, Malandela of the amaNtungwa group established himself a sizeable territory between eMthonjaneni, where there is Melmoth today, and Babanango, north of uMhlathuze river (Khumalo,1995).

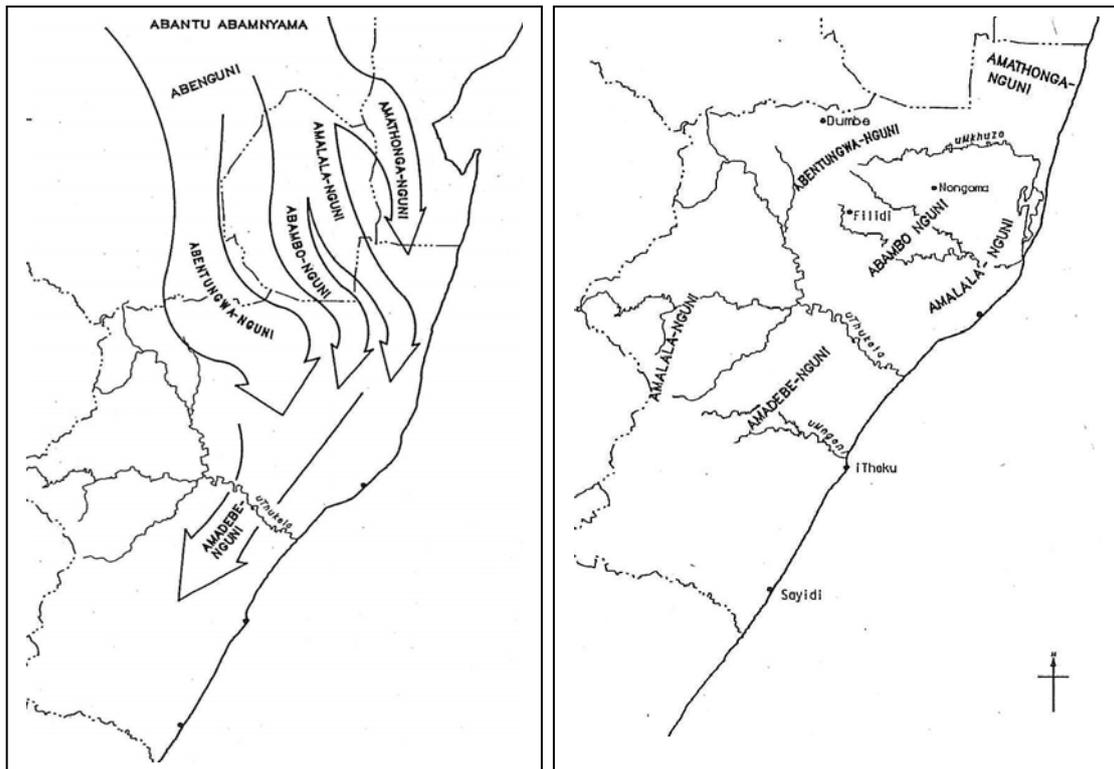


Fig.2.1. Early southward spread of AbeNguni along the East Coast (RS Khumalo,1995)

The nomadic spread of AbeNguni is traceable through the belt of indigenous Nguni settlements along the east coast of southern Africa from the southern parts of today's Mpumalanga province through to the Eastern and Western Cape. A person who is familiar with the languages of isiSwati, isiNdebele, isiZulu and isiXhosa, will easily learn that they are almost one language, that is, isiNguni. IsiSwati, in Swaziland, is the oldest language that represents more of the original version of isiNguni. As AbeNguni spread further south the language evolved with the influences of the Khoi and San people that already existed in those parts of the sub continent.

The original Nguni language is said to be characterized by a softer tongue as notable in isiSwati which is the oldest in the group. Geographically, the amaNdebele remained in what the colonist named Southern Transvaal. With their proximity to the baPedi (Northern Sotho) their language has incorporated some Northern seSotho words to almost half of the language and some elements of isiZulu. The language of isiZulu developed a relatively heavy accent with the Khoi and San clicks ie 'c', 'q', 'x'. AmaXhosa, further down

south and south-west, have an even heavier accent but with similar Khoi and San clicks adopted by amaZulu. Each of the above languages developed a name after the leader that shaped its group into a kingdom, like isiSwati after king Mswati and isiZulu after king Zulu.

THE GERMINATION OF THE ZULU KINGDOM

AmaZulu fall under the amaNtungwa branch of abeNguni. The genealogy of amaZulu traces its history back to the 13th century where Mnguni, a son of Gumede, assumed strong leadership to his father's fast growing family that grew into the five clans mentioned earlier in this chapter, and named it after himself. At that point of southward migration abeNguni had already taken shape as a nation in the former Southern Transvaal.

It was at the turn of the 17th century when Zulu, the younger son of Malandela, further consolidated his father's group and engulfed surrounding small territories of his immediate ancestors to a defined kingdom under his name. All subsequent kings' missions were focused on sustaining the already defined small nation called amaZulu. The development of this empire reached its peak in the late 18th and 19th century, particularly under the rulership of King Shaka, son of King Senzangakhona, where most surrounding abeNguni empires were drawn in, some peacefully while some through conquest, to what eventually became the world known kingdom of KwaZulu, which bears the identity of the current province of KwaZulu-Natal. A much detailed history of the Zulu kingdom is covered by Khumalo in his book 'Umqulu' (1995).

Worth highlighting in this summary is that King Shaka's primary mission went beyond just sustaining the kingdom of kwaZulu. His mission was to expand the kingdom to the entire southern Africa. He had realized that national power was, by far, insufficient within the limited territory of the existing kwaZulu kingdom. Therefore his priority, at that stage, was the building and capacitation of a nation to be one of the imperial nations of the world. Unfortunately his nation building approach, marked with responses like Mfecane (Frescura, 1985) was impatiently too tough to be understood at that

time, until at his assassination, where his last words were: "... you will never rule this nation, it will be ruled by the birds of the sky (foreigners)... " (Msimang,1982).

Nevertheless, that element of imperialism planted by King Shaka is prevalent to a noticeable degree in the self esteem and social behavior of amaZulu even to this day. As indicated earlier, the imperial power of the kwaZulu kingdom has represented all the various abeNguni who live in the geographical environment and speaking the same language of amaZulu, including amaMbo, amaLala and amaDebe. Though there is a degree of integration of these groups today, a person who is familiar with their various dialects is able to identify them with their tongue. Similarly, in their various historical geographical settlements one may be able to identify certain architectural languages that mark their identities.

Given the above background, when one talks of Zulu architecture it needs to be clear as to whether one refers to the architecture of the historical clan of amaZulu, north of uThukela, which still bears its unique identity to date, or the architecture of the indigenes of the overall resultant colony of KwaZulu in the current KwaZulu-Natal with its diversity of regional identities.

Frescura (1985) provides an extensive history of the region in the context of the Southern African subcontinent, though this historical record tends to leave an ignorant reader with a picture of unprecedented chaos on the planet; ignorant in the sense of the historical depth of the nation itself. This is so until the intervention of the historical records of, among others, Msimang (1982) and Khumalo (1995), whose materials tend to reveal the spirit behind the unchangeable identity and self worth of the Zulu speaking people throughout the world, even as victims of Mfecane (Difaqane).

CHAPTER 3

CULTURE AND THE INDIGENOUS ARCHITECTURE OF KWAZULU-NATAL

INTRODUCTION

There are various definitions of 'culture' that exists in the society. While some of the interpretations of this aspect are based on specific disciplines, some are merely based on perceptions.

According to the Conceptual Dictionary, "...a culture refers to a group of people who live similar lives; people who have similar common sense 'recipe' for living" (Craig,Griesel,Witz, 1994). An anthropological definition of culture, according to the Conceptual Dictionary, refers to "...shared practices, meanings or ideas and beliefs of a group of people" (Craig,Griesel,Witz, 1994). These are practices and belief systems that organize and define the particular group of people.

In the context of South Africa, cultures of amaZulu, today, have become a cocktail of genuine cultures and circumstantial behavior. Social behavior, in this context, involves to a great extent, historical factors like response to poverty on the one hand and social effects of European supremacy on the other. This is opposed to the limited ideological belief that the social organization and the architecture of African people is only shaped by some set of myths and religious beliefs and nothing beyond. This argument does not ignore the fact that culture is a living phenomenon that evolves with time.

This chapter pays attention to the anthropological cultures of amaZulu that are still manifest in the social organization and, hence, the architecture of this particular group.

INDIGENOUS SOCIAL ORGANIZATION IN THE CULTURES OF AMAZULU

Social organization in the indigenous communities of KwaZulu-Natal has been founded on acknowledgement of the elements of nature as the anchor for human existence. That is a typical African attitude to social organization.

For instance, naming of times of the day, weeks and months of the year is directed by the behavior of the sun, the moon and the earth; not as worshiped gods but as drivers of nature. This has, to a great extent influenced naming of places and even persons. Social behavior and, hence, traditions and customs are a reflection of this attitude.

Generally, cultures of abeNguni are developed within the framework of holistic existence of humans and their natural environs. It is believed that nature exists in a circular relationship. That is, every element of nature exists for the other to complete the phenomenon called life. Ngubane points out: *“For centuries Africans have had this vision of a spiritual continuum within which the dead and the living, natural objects, spirits, divinities, the individual, clan and tribe, animals, plants, minerals and humans form an unbroken hierarchical unit of spiritual forces”* (Ngubane, 2004).

SOCIAL ORGANIZATION OF A HOUSEHOLD

The acknowledgement of the circularity of life manifests in the recognition of the different stages growth and genders of individual members of a household, particularly in terms of hierarchy, including those that have passed on to eternal ancestral status which is the most spiritually revered part of the household.

Each member of the family, traditionally male, carries an independent status assumed in the hierarchy of the household. That is the status on which he develops the identity of his future generations. The initial householder remains the core of the identity of all generations under his genealogy. Praises of a person are not only about attributes, but one always has to mention names of

the entire chain of ancestors, and their attributes, to the head of the clan no matter how long the list.

The first born is second in charge in the hierarchy of the household after the head. Responsibilities are distributed according to genders. The eldest son takes charge of assets and security issues of the household. The eldest daughter assumes organizational and welfare responsibilities, second to the queen of the household. When the parents pass on, the eldest son assumes the position of the householder, often even from outside the home premises. He also takes care of cultural affairs that keep the identity of the household. The rule over households of all sons remains under their father as long as he lives, no matter how far from home.

CULTURE IN THE PHYSICAL PLANNING OF BUILDINGS AND HOMESTEADS

Planning of all functional spaces is less directed by their functions, relative to the modern movement, but more by the cultures that make the identity of the people. The historical organization of spaces in the use of the traditional cone-on-cylinder has kept the building form indispensable. A detailed analysis of cultural organization of internal spaces will be discussed later in this document.

Traditionally, the kraal is circular. The sacredness of *umsamo*, found in a building, is also seen in *isibaya* (byre) of the householder. A detailed analysis of *isibaya* is also discussed later in this document.

The positioning of each member of the household in the planning of the homestead, and genders in the functioning of certain individual buildings, is influenced by the attitude outlined earlier in this chapter.

CHAPTER 4

FIELD RESEARCH

INTRODUCTION

The following fieldwork analysis focuses, primarily, on aspects that address the main research question. That is, aspects that have a potential to lead to some clearly definable indigenous architecture that typifies, particularly in the rural built environment of the province of KwaZulu-Natal.

While acknowledging that the detail and scope of field work for this purpose can stretch even much farther, the focus of this particular exercise is consciously limited to the geographical, socio-cultural and physical (built environment) context of each selected sample. Each of these aspects is taken further into the individual samples as a factor that influences the placement of the homestead and its layout in the site, social sustainability of the life in the nature of the homestead and responses to technical challenges in terms of contemporary demands in building construction.

Though the format of this chapter is constant through all samples, the layout of the analysis is specific to the size and amount of information each sample offers.

A family name is used for a sample name. Each sample name is further crowned with its clan name and a short praise where possible, which is traditional in all abeNguni tribes.

KWAKHAMBULE, EMVENYANE SETTLEMENT

Lat: S30 32 45.8 Long: E29 04 14.6 Elev: 1 493m



Pic. 4.1. Khambule homestead. UMvenyane settlement in the background

Physical Context

UMvenyane is a rural underdeveloped settlement south of Cedarville, a small town to the west end of the south coast of KwaZulu-Natal. UMvenyane is situated to the south of uMzimvubu river, by the border between the Eastern Cape and KwaZulu-Natal. UMvenyane was formerly part of the Eastern Cape province (previously known as the Transkei) but with recent changes of political boundaries, it is within the province of KwaZulu-Natal.

Most parts of uMvenyane settlement are generally on gentle slopes, while some are on almost flat land and some on very steep slopes. The Khambule house sits on a steep sloped part of the settlement. The placement of the house on the site required major earthworks to create a platform for the buildings.

UMvenyane has extreme climatic conditions. Average maximum daily temperature is 40°C in summer and winter average minimum temperature is -8°C, with frequent mists. Average annual rain is 7.5mm, attributed for the thick shrubs and grasslands that characterize the sub region.

Social and Cultural Factors

Owing to the geographical location of the settlement, as indicated earlier, the social identity of the community of uMvenyane has been under stress, in that most of the people are making positive efforts to adjust to the Zulu identity they were politically shifted into, while some resist it by all means. According to Mrs Khambule, the community of uMvenyane is pleased with the shift since KwaZulu-Natal seems to be relatively ahead with health, education and other infrastructural facilities development.

The spoken language in the family, much as in the rest of the community, is a mixture of isiXhosa/ isiMpondo and isiZulu.

The Khambule homestead houses a small young family of four members, that is, a single mother and her three young children aged between seven and thirteen. No details were discussed about the husband. From the general conversation, it appeared that Mrs Khambule's formal education was not beyond primary school level. She does not have a stable source of income. Her primary means for survival is cultivation of various crops in the different seasons, for family consumption and selling. This is the predominant means for survival in the area. Throughout uMvenyane settlement there is a sparse scattering of small livestock byres. Those houses with byres supply the rest with manure for their fields.

The religious lifestyle of the Khambule family is of Christian faith. One of the rooms was dedicated to Christian worship meetings. Their Christian religion does not appear to have had any unique influence on the physical planning and appearance of the homestead.

The historical culture maintains territorial separation of spaces for certain activities and family members; though there are relatively less complexities in the cultural features of the house.

General Layout of the Homestead

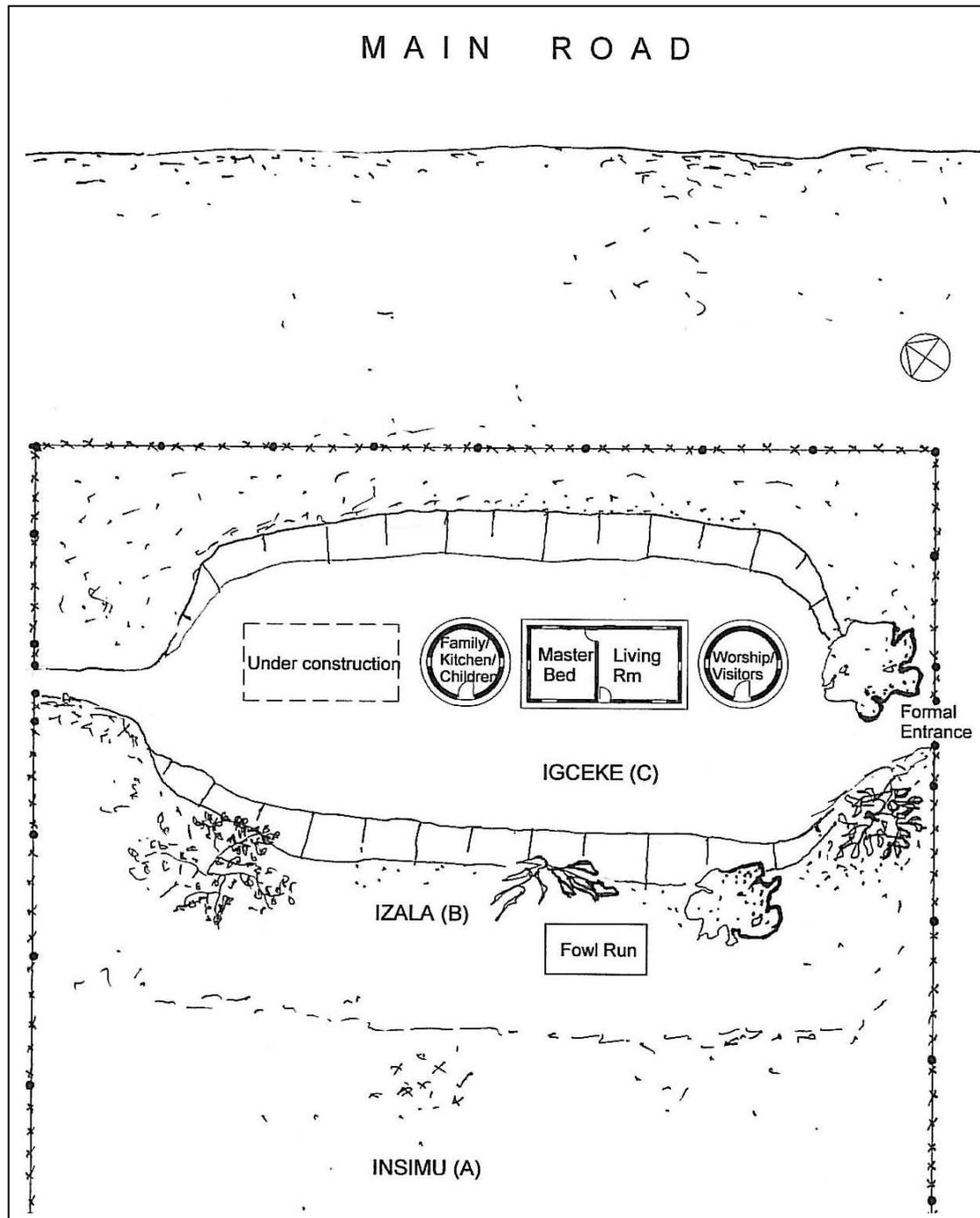


Fig.4.1. Khambule homestead layout

On the day of the survey the homestead of kwaKhambule consisted of three freestanding buildings, that is, two thatched cone-on-cylinders and one corrugated iron roof sheeted (hipped roof) rectangular buildings. A fourth freestanding building of cubic form was at its early stage of construction. The

buildings are arranged in a rectilinear circle-cube-circle style. Asked about the layout of the buildings, Mrs Khambule explained: "*The rectangular block serves as fire breaker between the thatched huts, in case of fire.*" "...*this is our traditional way of building, as you can see all around*".

Every building and external space has dedicated primary function. As a Christian family, the first building, to the right of the house, is used for worship and as a visitors sitting room. This is the side of the homestead where the formal entrance is positioned (fig.4.1). The two roomed rectangular building is the householder's territory. The second cone-on-cylinder building is *idladla* (kitchen), used as the family communal place where they socialize around the fire. This is also where the children remain to sleep after socializing with their mother in the evening. However, as a single parent, the mother sometimes sleeps with the children in her two-roomed main building. Directly in front of the main building in the zone of *izala* (fruits and vegetable area) is a fowl run where, in homesteads with cattle, *isibaya* (byre) would be positioned. It was not clear what the second rectangular building under construction would be used for. However, of utmost interest in this particular case study was the physical layout of buildings in the site.

The general layout of the entire house maintains the traditional hierarchy of primary zones A, B and C (fig.4.1) ie, *insimu* (crop field), *izala*, *igceke*, respectively.

Though this rectilinear layout appears to be traditional in the uMvenyane settlement, it appears to be the only best site planning solution on this particular landscape, as one long platform was easily cut along the contour of the steep landscape. Frontage of all the buildings is downslope, all adopting a similar technical response to surface rainwater flow.

Architecture

The homestead consists of a combination of two building types. That is, two traditional cone-on-cylinder building forms flanking a hipped roofed rectangular building in a rectilinear arrangement as discussed above. Those are the only building forms that make up the entire settlement.

In the entire settlement there was no trace of *iqhugwana* (grass dome) construction historically linked to the amaZulu. The architecture, generally, has an ordered combination of freestanding thatched cone-on-cylinder with metal roof sheeted cubic buildings. The colour order of buildings in this settlement is similar to that of neighbouring settlements in the rural Eastern Cape. Primary colours of walls noted in uMvenyane are, predominantly, light blue and cream white *umcako* (limewash) with a black band at the base. The older the roof thatch, the more pronounced the expression of a black base with black cap. It was also noted that commercial and public buildings in the area have roof tiles and sheets painted to match the ambient colour tradition. Roof sheeting to domestic buildings are, generally, left unpainted.

All the buildings in kwaKhambule are built with plastered and light blue lime-washed mud blocks, made on site out of the subsoil from the cutting and levelling of platforms on the sloping site, all trimmed with the traditional black band at the base (pic.4.1) , “...to protect the light colour of the walls from unsightly mud splashes caused by rain”, Mrs Khambule explained. A cement apron is cast around the base of the building which, in addition to prevention of mud splashes, prevents direct penetration of rain water to the base of the building leading to structural failure. For roof construction, treated timber is bought from local factories. All the cone-on- cylinder buildings are roofed with thatch on the traditional ‘spider web’ cone roof timber structure. Thatching grass is readily available locally.

OSHABENI SETTLEMENT (unnamed homestead)

Lat:S30 37 51.0 Long:E30 21 37.9 Elev: 417m



Pic.4.2. Unnamed homestead, oShabeni

This is one of two neighbouring settlements, oShabeni and kwaPhungashe, that were observed from the streets. The objective was to identify any notable architectural character of identity, in relation to surrounding settlements already studied and any traceable influence they may have on subsequent settlements still to be studied. This particular homestead was observed relatively closer from outside its premises.

Physical Context

OShabeni and kwaPhungashe are two neighbouring settlements along uMzimkhulu river to the north-west just outside Port Shepstone on the far south coast of KwaZulu-Natal.

The environment has evergreen medium thick indigenous forests. It has typical humid coastal weathers, with an average annual rain of 8mm. Average lowest daily temperature is 5°C and average highest daily temperature is 28°C.

Homesteads are located in varied topographic conditions. The selected homestead is a small cluster that sits on a gentle slope. Most of the homesteads, however, are positioned on low hillocks.

Social and Cultural Factors

Households in these settlements are generally small scale and relatively less complex. Observing the general appearance of the buildings, infrastructure and other community facilities, it is notable that the community is underdeveloped and poor. Means for daily living is sourced from domestic scale livestock and, predominantly, crop farming.

The medium size unnamed homestead that was more closely observed, showed horns of a beast fixed above the door of one of the thatch roofed huts (pic.4.2) which is commonly a sign of ancestral worship. Though it was a feature seen in most of the houses, it may not be a full representation of the whole community in the area. The typical spreading of freestanding individual buildings in this homestead reflects the culture of territorial dedication of spaces to members of the household and certain activities within a homestead.

General Layout of the Homestead

The selected homestead shown in (pic.4.2. & fig.4.2. sits on a gentle sloped hillock, which required only minor levelling for placement of all the buildings on the site, accommodating any possible future growth. A bull horn on the roof edge above the door of one of the thatched cone-on-cylinder buildings identifies it as the oldest in the homestead, dedicated to the household ancestor. This suggests that the two thatched huts were the earliest in the development of the homestead.

Two types of homestead layouts were observed in this sub region, that is, rectilinear and organic planning. All rooms are free standing. Though the layout of this homestead is organic, each building appears to be carefully placed in relation to others; the metal roof sheeted ones acting as fire breakers to the thatched ones. *Igceke* is traditionally the open social space at the front of the house, that is, interface between the house and *izala*, then *insimu*. In this homestead all doors are facing the road, away from *igceke*,

shielding it away from the public. This open social space has an outdoor fireplace at the centre and a fowl run at the far end.

A freestanding pit toilet of rusty corrugated iron sheets, with some sheets falling off, is situated between *izala* and *insimu*, on the side of the cluster of buildings. There is, however, a legible hierarchy of the traditional connection of external spaces, ie *insimu*, *izala*, *igceke* (A, B and C, respectively) and the cluster of buildings (fig.4.2).

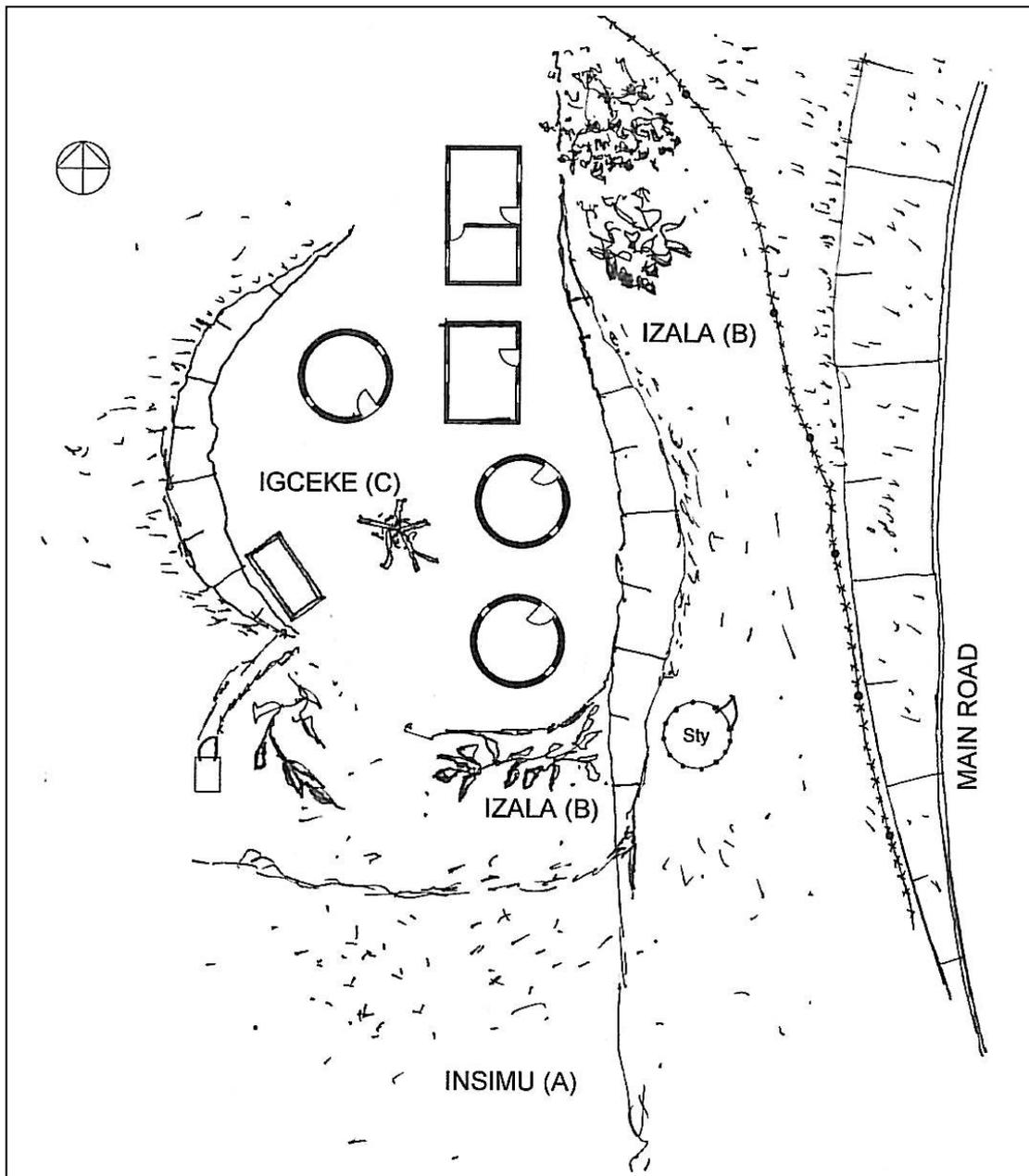


Fig.4.2. Homestead layout – Unnamed, oShabeni

ARCHITECTURE

This is one built environment in the southern part of the province that displays a wider range of architectural explorations, ranging from late historical to modern. It appears to be an adopted tradition in this sub region that the architectural composition of almost every homestead is a combination of a number of influences. KwaPhungashe displays an evolution to an even more developed, semi urban level. This homestead is a combination of two building types. That is, two cubic forms with corrugated iron flat roofs and three of the traditional cone-on-cylinder type. One of the cone-on-cylinder buildings appears to be relatively recent, roofed with flat metal sheets.

The introduction of metal roof sheeting is attributed to, partly, the scarcity and maintenance problems of the traditional thatch material, while, on the other hand, there appears to be an interest in exploring an alternative roofing material. It is interesting to note that, while the rectangular buildings easily used the conventional roof sheets, the curvature and tapering shape of the roof cone of the huts responded to the corrugations of the material with difficulties; particularly at junctions between two sheets. Flat sheets are used as the only solution, to this problem. Success in the technical manipulation of the material could not be closely studied in this particular house. A major setback apparent is the lifespan of the metal sheets given that the settlements are coastal. Rust has uncontrollably attacked every roof of this nature in the area.

Another development observed in some homesteads in the area is a composite roof with thatch on the upper part and metal sheeting on the lower part of the hut roof. No technical reason was found, in the survey, for such a combination. It appears to be just a regional style. Notable common elements to all these roof styles are the 'spiderweb' timber roof structure and the design of the apex cap.

Some in the neighbourhood are beginning to stretch the cone-on-cylinder further to a polygonal shaped drum roofed with galvanized corrugated iron or

concrete tiles, on a concrete block circular wall, making the typology modern. In this development roof junctions are successfully handled.

The colour coding of buildings recorded in the South-Western sub region is noticeable, though relatively less vibrant.

KWAMSOMI, KWADWESHULA SETTLEMENT

Lat:S30 34 17.0 Long:E30 17 36.9 Elev:474m



Pic.4.3. KwaMsomi homestead: kwaDweshula settlement

Physical Context

KwaDweshula is a settlement outside Port Shepstone on the far south coast of KwaZulu-Natal, just after kwaPhungashe to the west, away from Port Shepstone.

The geographical environment is characterized by the coastal evergreen medium thick indigenous forests, high hills, river valleys and humid weather. Houses sit on steep hillsides and, predominantly, on spurs.

The particular sample selected, Msomi House, sits on an open spur overlooking the main road across a deep valley. There are some houses, though, that are still located in the comfort of scary thick bushes.

Social and Cultural Factors

The land of kwaDeshula is occupied by uMvozana clan under the current King Zwengu. The community of kwaDweshula and surroundings still has fresh memories of the 1981 feudes among some local clans and their kings both north and south along the uMzimkhulu river.

The householder (*usokhaya*) of the selected homestead, Mr Msomi, leads a monogamous household with four children, ranging between early teen age and mid twenties. Mr Msomi's highest formal education was at primary school level. He has a history of casual employment, predominantly in building construction, where he picked up basic construction skills. Struggling to make living due to unemployment, he started a chicken selling business on his premises about a year ago. Otherwise they have no livestock, and this is a socio economic state that prevails predominantly in the area.

Though the Msomi family believes in ancestors, they also have some degree of Christian faith. The culture of their lifestyle is, therefore, not grounded on a strong religious belief.

General Layout of the Homestead

The layout of all the buildings appears to be a successful response to the topography of the site, without major earthworks for platforms. The back of the house is relatively very steep and unusable, except for a small footpath that negotiates access to and from other houses at the bottom of the hill. It appears that the landscape influenced the progression of the development of the homestead to assume the rectilinear layout recorded as predominant in uMvenyane.

The main approach to the house is at the west, top end of the ridge where the main gate (*isango*) is. Relative to all other homesteads observed and recorded in this study, the first born son is placed at the rear most end of the homestead while his parents remain at the approach end facing *isango*.

Fig.4.3, 4.4, 4.5, 4.7, 4.8 show the traditional spatial relationships of *insimu*, *izala*, *igceke* and the buildings (*izindlu*), indicated as A, B and C respectively. The fowl run appears to be positioned in a strategic commercial point, while it also fulfils its traditional relationship with the new master bed room.

It is also worth noting the traditional independence of room spaces in the new composite building, in that it does not have interconnections among the rooms that compose it. All doors open to the outside into the veranda.

The Establishment and Development of the Homestead

On arrival as a young family in the area in 1975, the Msomis erected their first freestanding thatched mud block cone-on-cylinder shown on fig.4.3, serving a

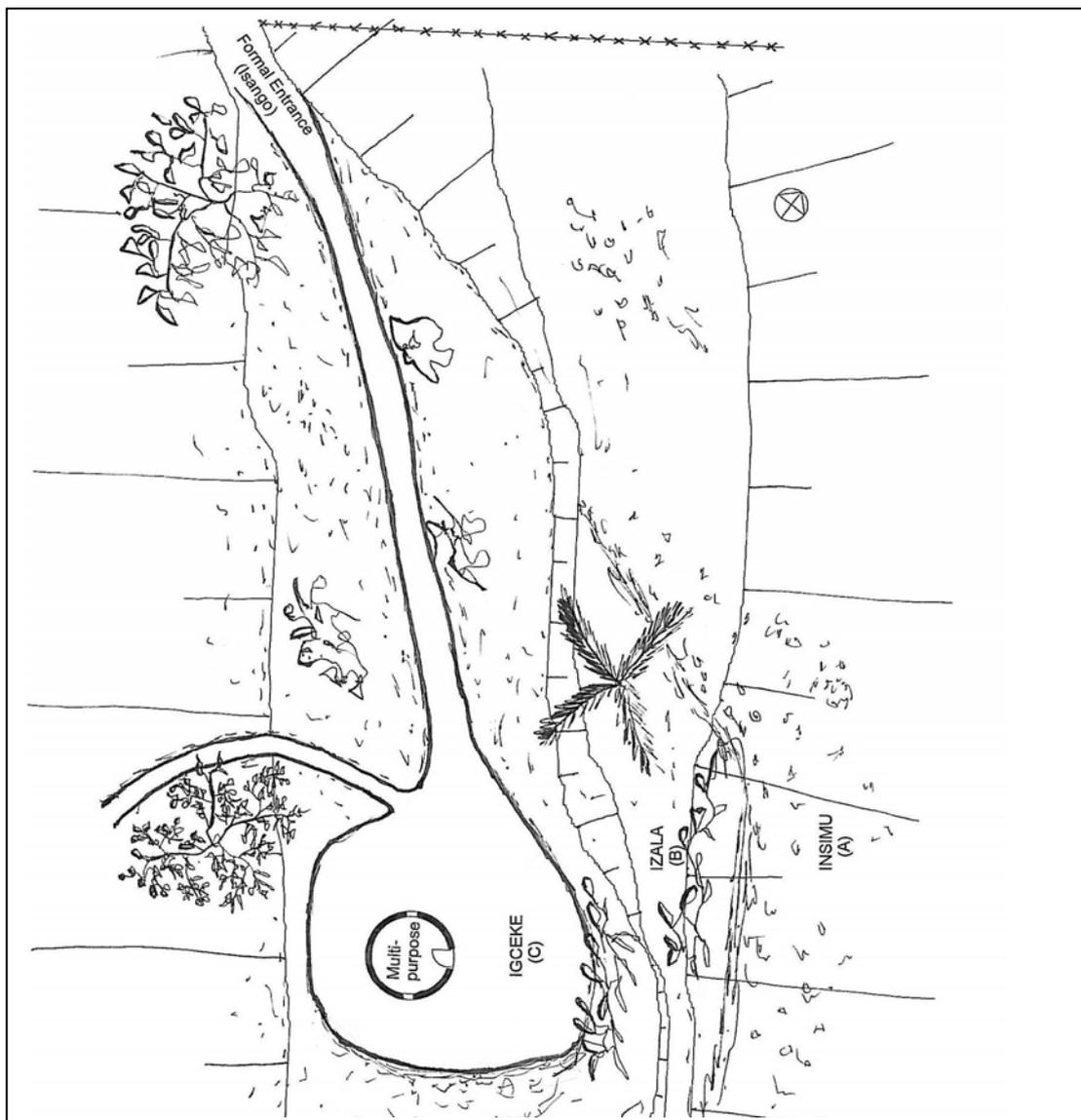


Fig. 4.3. The first building in the Msomi homestead

multi-purpose function, but mainly as a bed room for the couple. That stage of establishment did not include *isibaya* which, traditionally, would form part of the core of a homestead establishment in the province.

The second building (fig.4.4) was another freestanding room but bigger and cubic in form, serving as a multi-purpose room. It functioned as a bed room for the first two children and a family communal room which, traditionally, included a kitchen. Both buildings, together, are the first phase of the growth of the homestead.

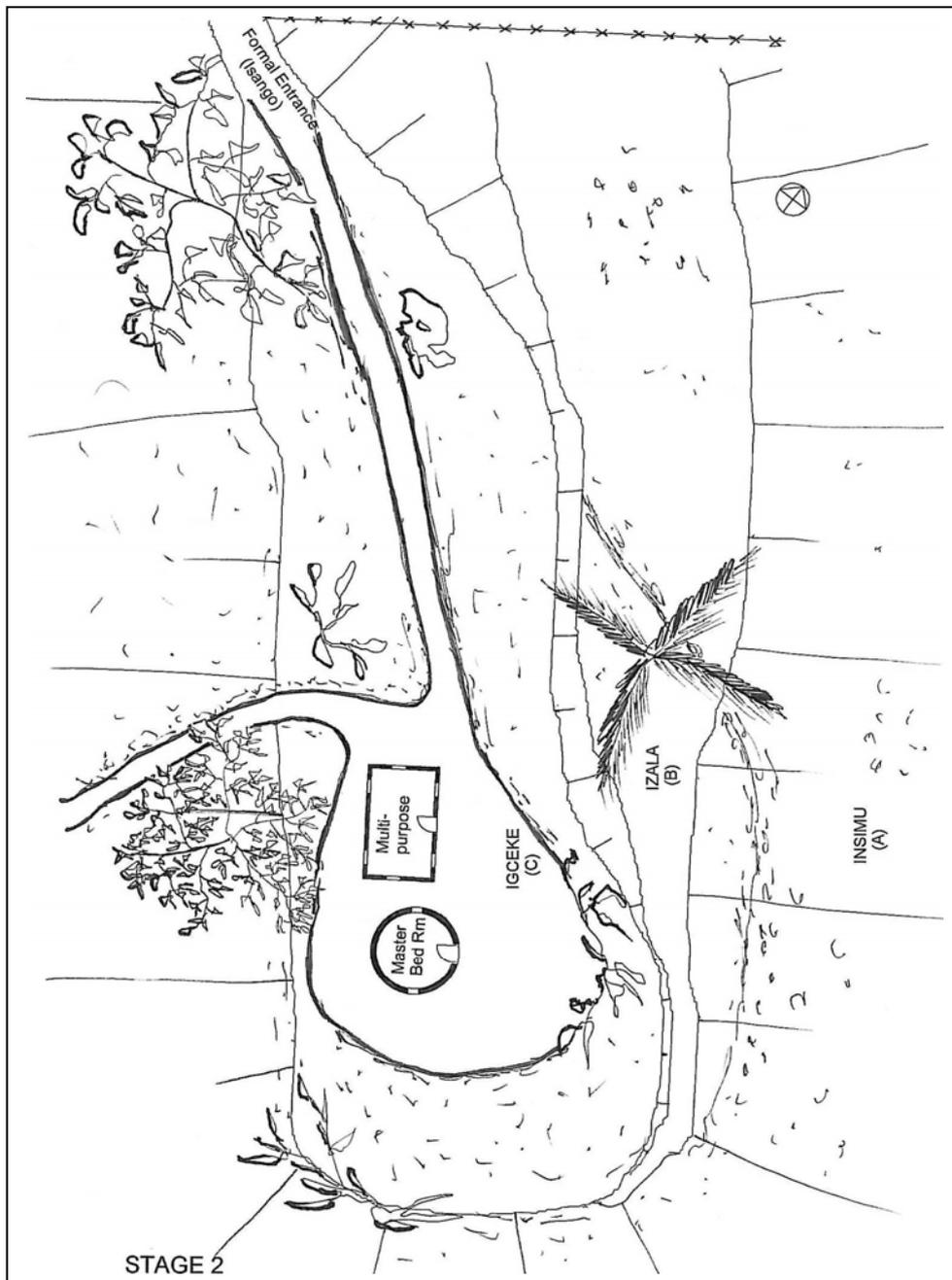


Fig.4.4. First extension as the family begins to grow

As a popular style in small scale homesteads observed in most parts of the province, the first two buildings suggest another freestanding cone-on-cylinder to follow, assuming the traditional rectilinear 'circle-cube-circle' style that prevails in the region (fig.4.6).

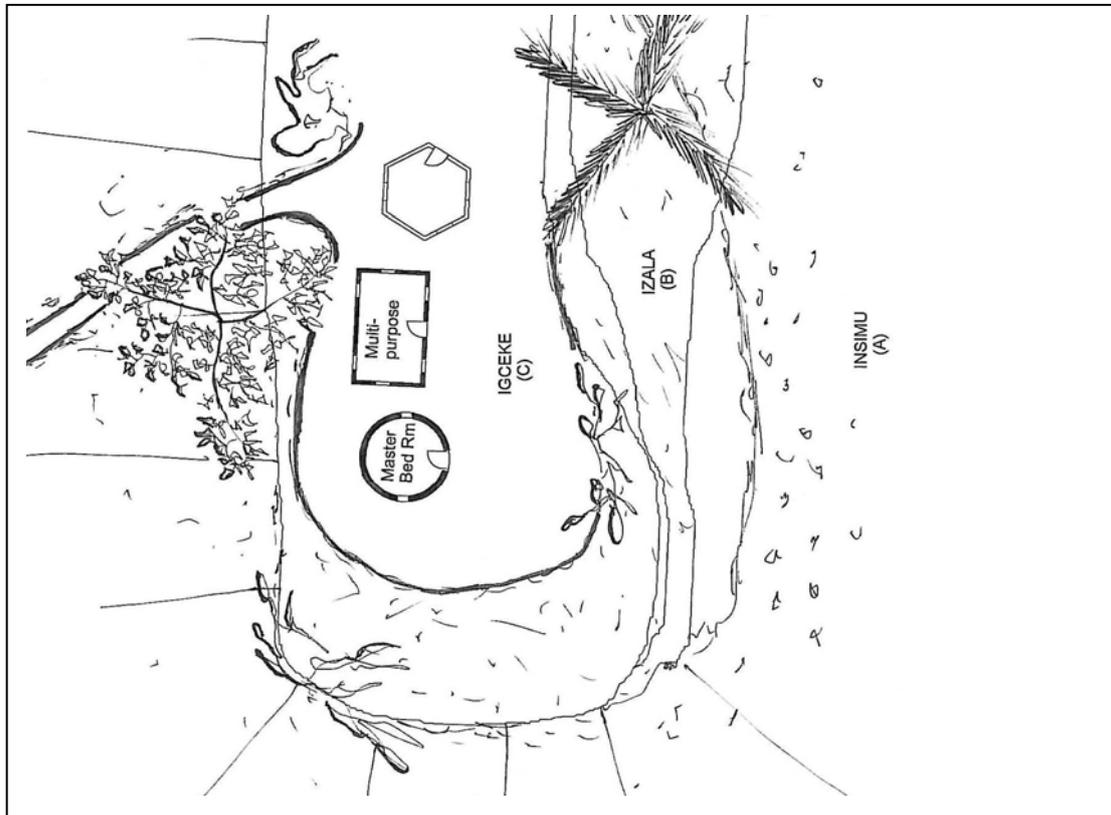


Fig.4.5. Projection for possible further extension

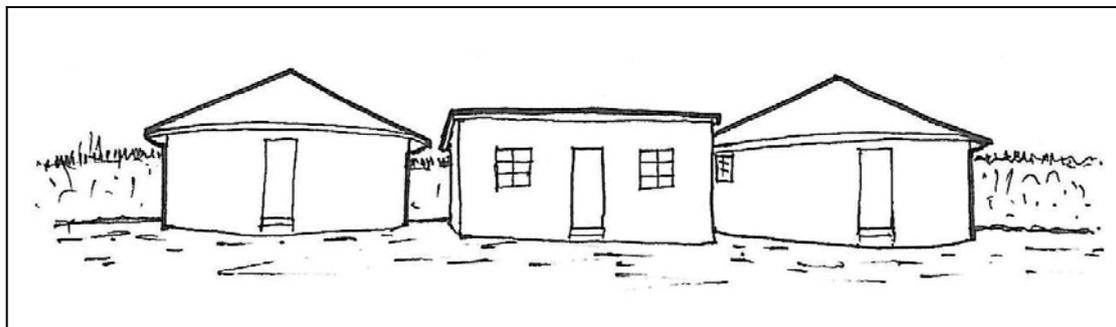


Fig.4.6. Traditional 'circle-cube-circle' concept

One that followed, instead, was hexagonal in form, forming part of a composite modern building that housed an additional bed room for children, a bed room for visitors, a formal lounge and a master bed room (fig.4.7 &

pic.4.3). As the master bed room moved into the new building, the former master bed room was allocated to their firstborn son.

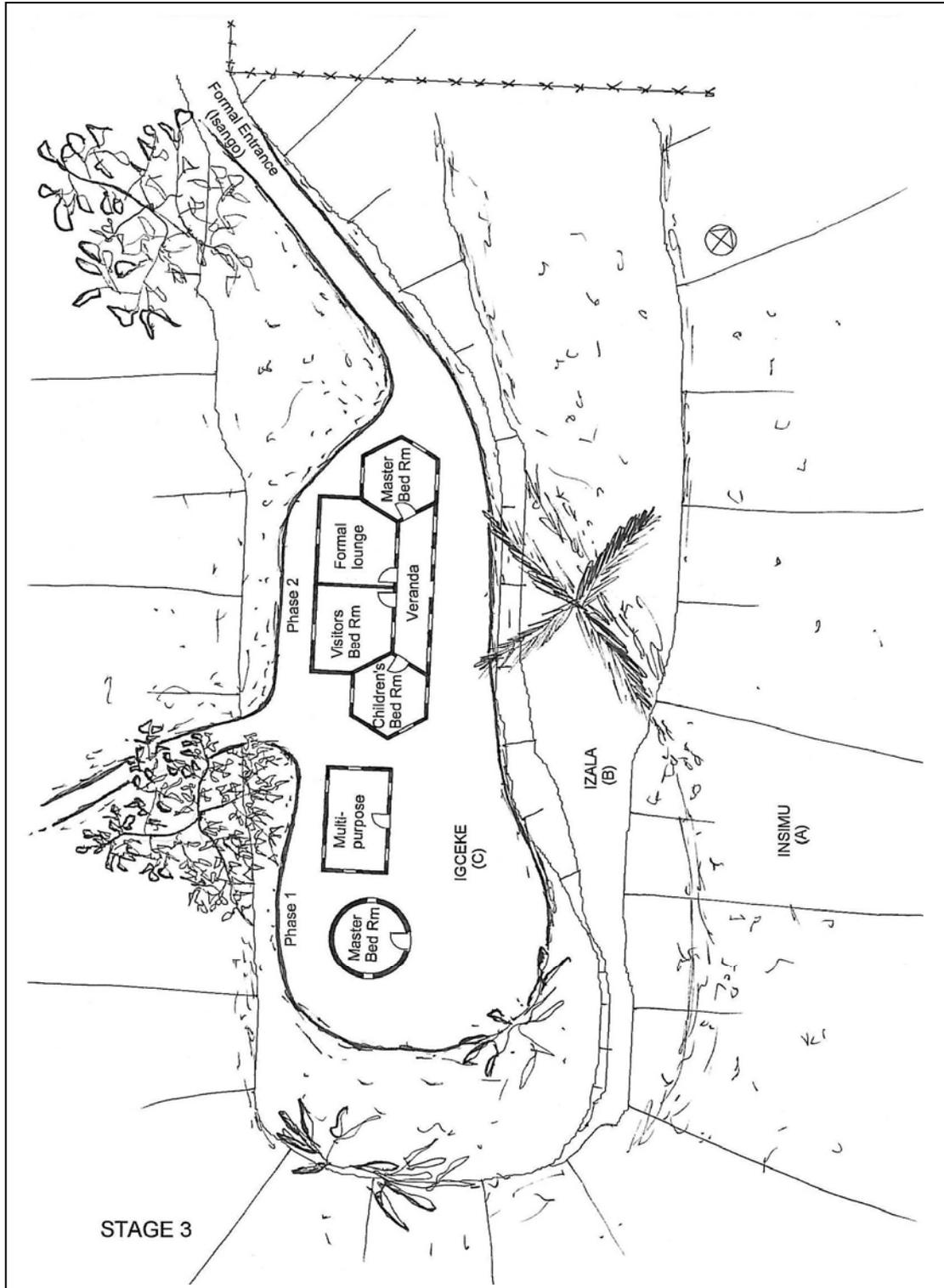


Fig.4.7. Addition of a composite modern building that maintains the traditional concept shown in fig.4.6.

When Mr Msomi began to struggle finding employment for income, he placed a fowl run down the slope at the north front end of the homestead (fig.4.8). On the visit a new cone-on-cylinder kitchen had just been completed at the front central position of the homestead. It was not made clear what the new use of the former kitchen would be.



Fig.4.8. Addition of kitchen and fowl run as the final phase of the development

It was noted that from the establishment of the homestead the allocation of spaces have been evolving along with its physical growth. Due to the site constraints noted earlier on, it did not seem likely that the homestead would develop any further.

Architecture

The character of the settlement of kwaDweshula appears to be similar, to some degree, to oShadeni in terms of density relative to kwaPhungashe which appears to assume a modern character. However, kwaDweshula has a few houses that stretch their architectural exploration with a similar attitude to kwaPhungashe.

With the experience he gained from his involvements with building contractors, the entire development was designed and built by Mr Msomi himself. All the buildings face north, primarily because of the uncomfortable south winds that prevail in the area.

Well placed on the ridge of the spur, the Msomi house uniquely showcases the hybridized composition of the architecture noted in oShadeni and kwaPhungashe settlements. The layout of buildings in the site reflects the progression of development of the house as, outlined earlier, from historical to modern buildings.

The religious mediocrity of this selected, Msomi, family is also suggested by the flexibility of their architectural expressions of the buildings, in that, there are no expressed elements or physical symbols of religion in the architecture of the house, like the typical beast horns recorded in some of the homesteads in oShadeni settlement.

The Msomi homestead is a marriage of two traditions of architecture, that is, the initial freestanding individual buildings, followed by a modernized composite type and concluded with another freestanding hut, as the last phase, all tied together with the style of colour coding recorded throughout the

Southern part of the province. As outlined earlier, the entire composition maintains the 'circle-cube-circle' tradition, a concept that has become popular to small scale homesteads in the entire south and some other parts of the province.

All walls are constructed with textured concrete blocks except for the initial building, which was built with mud, reinforced with local timber laths. Since the 1981 local clan wars, where many thatch roofed buildings in the area were burned down, metal sheeting has become traditional. That change was also, to some extent, influenced by the growing scarcity of thatching grass, resulting in commercialization of the material. Parts of the sheeting have been replaced with time as rust persistently attacks the roof, particularly on the cone-on-cylinder buildings. The new roofing concept maintained the traditional 'spiderweb' timber structure. The freestanding cubic building was flat roofed with corrugated iron sheets. The new composite building is roofed with conventional modern concrete tiles.

EMBO SETTLEMENTS, SOUTH COAST

A. Physical Context

EMbo is one of the environments in KwaZulu-Natal with underdeveloped rural settlements. It consists of various settlements that flank uLovu river in the south coast of KwaZulu-Natal. Settlements along the southern flank of the river stretch further south to as far as uMkhomazi river. The general topography of the environment ranges between vast gentle slopes and dramatic hills, cliffs and valleys. Settlements in EMbo include eMbuthweni, eGulube, eMpofana and eNgilanyoni. Of these, only two representative samples were selected for the purpose of the study. That is, kwaNgcobo homestead in eNgilanyoni which is the oldest settlement in eMbo, and one small homestead of the Mabhida family in eMbuthweni the most recent of the eMbo settlements.

EMbo is characterized by evergreen short and medium tall forests, with the typical humid climate of the south coast. It has an average annual rain of 10mm, average lowest daily temperature of 11°C and an average highest daily temperature of 26°C.

B. Social Background of Embo

EMbo is one part of the south coast with a complex historical background and heritage that has thrived to this day. It has, since post King Shaka's death, been the land of the Mkhizes, a clan known as the Khabazelas of Gcwabe. After Gwcabe died in Swaziland, his son, Zihlandlo, continued serving under King Shaka. After the assassination of the king by his brothers, Dingane and Mhlangana with the help of his right hand man, Mbopha; a project directed by the king's aunt, Mkabayi, Zihlandlo fled with fear and settled in eNkandla. That is where the clan began to take shape. After the death of his father, Zihlandlo, Singela took the clan down south to a vast unoccupied land which he named eMbo, where he established an empire. A detailed history, to date, and cultures of the Khabazelas cannot be covered in this document.

The clan grew, with time, to a maturing nation with successions of few further kings, as they got more settled in the land. IMbo is currently divided into three political sub territories, with their kings, along uLovu river. Those are, respectively, kings LangalaseMbo, Kusakusa and Moyeni. All the three kings still consider themselves as joint leaders of the one nation of Mkhize.

The empire of amaMbo further expanded to the north, across uMlazi river where another sizeable settlement, also called eMbo, exists today in Cato Ridge. The latter shares similar characteristics in cultures and architecture

KWANGCOBO, ENGILANYONI SETTLEMENT, EMBO

Lat:S30 04 27.5 Long:E30 34 03.6 Elev: 650m



Pic. 4.4. Ngcobo homestead: eNgilanyoni settlement

Physical Context

ENgilanyoni is on the south eastern part of eMbo. It is located between uLovu and uMkhomazi rivers. ENgilanyoni is the oldest settlement in eMbo, where king Singela of the Mkhizes first settled. Homesteads sit on, predominantly, vast gentle slope landscapes. This is an area with relatively more matured and large homesteads.

Social and Cultural Factors

The Ngcobo (Mapholoba) family has settled in this site since late nineteenth century during the reign of king Singela of the Khabazela (Mkhize) clan.

This household has the strong typical culture of interdependent individuality of household members and territorial zoning of spaces for certain activities. Conversations with the informants revealed also a strong belief in ancestral worship in the family.

The structure of the Ngcobo family is predominantly monogamous, except for the second of the three sons, who married a second wife. There is a strong

hierarchical order in the family such that even the position of each sub family cluster in the premises is strongly influenced by the cultural hierarchy of the household structure. A sub family cluster is named after the maiden name of the wife.

The current eldership of the Ngcobo homestead is constituted by, mainly, three brothers in the family and one of their three sisters, who never got married. All these sub families live happily on the same premises. *“The culture developed and maintained by elders of this clan is the constitution that guides our discipline and relations within and without these premises”*, the second wife of the second brother stated. Currently, the homestead has 49 family members living in it, excluding those female members who got married and left the homestead. The current structure of the household is as follows: The elder brother has one wife with two sons and three daughters, all of whom have a further total of four children. The second brother has two wives. His first wife has two sons and four daughters, all of whom have a total of four children. His second wife has one son and three daughters, all of whom have a total of five children. The third brother has one wife with five sons and three daughters, who gave birth to a total of two children. Their sister, mentioned earlier, has become a permanent member of the homestead.

The Ngcobo family’s history of contemporary education has never gone beyond primary school level. The family attributes that, mainly, to affordability of high school levels and beyond, though indirectly confessing some degree of lack of awareness and orientation to education. Married women in this homestead are housewives, while husbands are workers in farms around the area.

There is a strong belief in ancestral worship in the Ngcobo family, though there is no physical symbol of the religion in the architectural expression of the buildings.

General Layout of The Homestead

Though not the largest, the Ngcobo family was selected as one of the typical large homesteads of eNgilanyoni. The Ngcobo homestead sits on a wide open, gentle sloping site. The cluster is surrounded by crop fields and grazing lands, for domestic consumption.

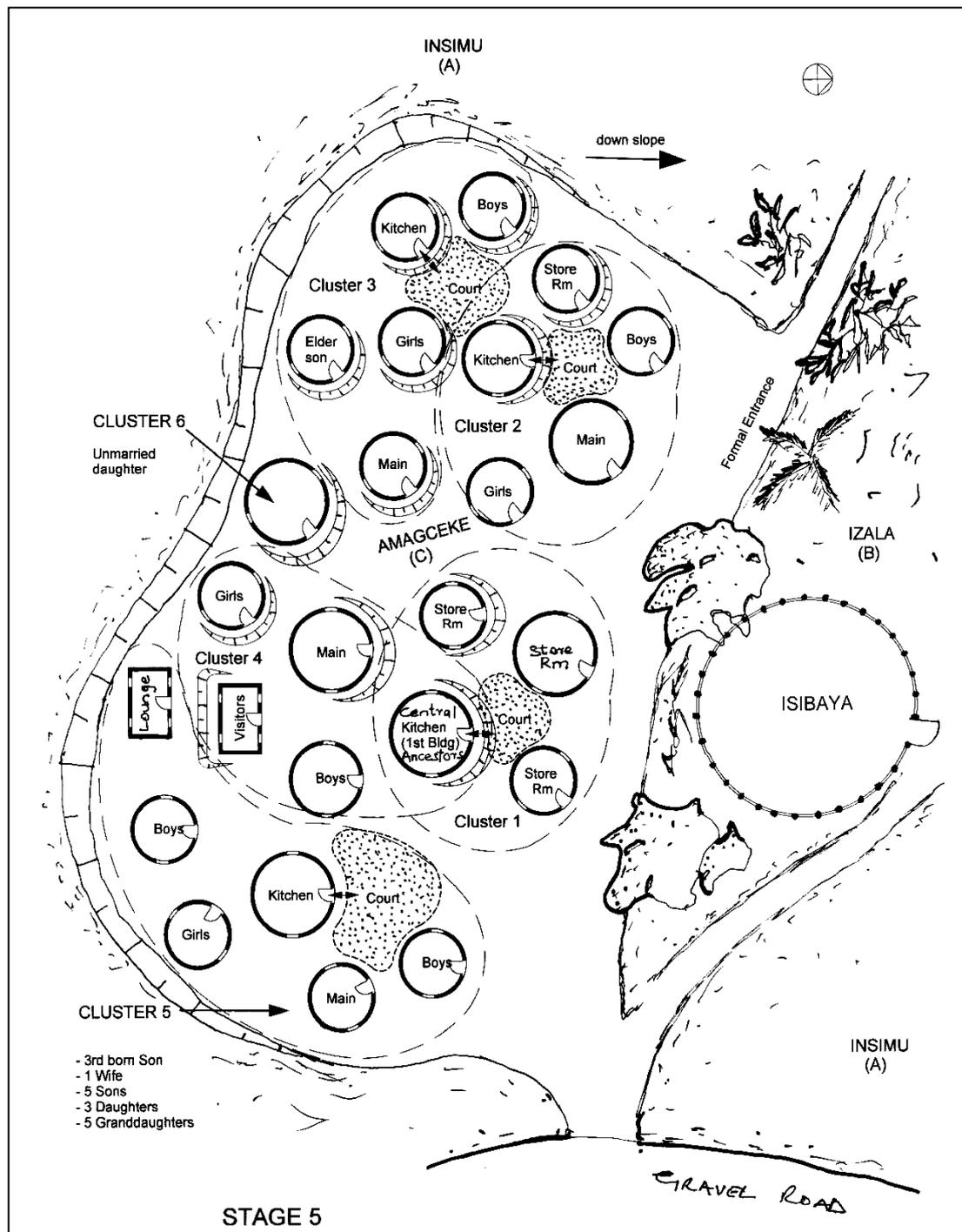


Fig. 4.9. Ngcobo homestead layout

The Ngcobo family is currently housed in a total of twenty four buildings (fig.4.9). The layout of the homestead is organic, unlike those in Gulube settlement across and to the north of uLovu river and some parts of eMbuthweni, south of the river, which have linear layouts. This is a typical layout in the entire Ngilanyoni, which, in addition to the typical sizes of homesteads, marks it as the oldest settlement in eMbo. The layout does not seem to be influenced by the 'fire breaker' concept noted in most parts of the south coast and uKhahlamba, due to the metal roof sheeting on almost all the buildings.

The Ngcobo homestead has a more complex *igceke* (C) than other smaller homesteads of similar type and those that are linear, where there is one defined open space in front of a cluster. Though each cluster has a dedicated *igceke*, each forms an integral part of whole *igceke* of the entire complex, referred to as *amagceke/amabala* (in plural). The *izala* belt (B), in front of initial *usokhaya's* cluster, has *isibaya* which is administered by the eldest brother for the whole family, with a fruit garden directly in front of his cluster. The outskirts of the homestead are crop fields (A), apportioned for each sub family. A cross section of the homestead maintains the typical hierarchy of spatial zones, that is, *insimu*, *izala*, *igceke* and *izindlu*.

Pic.4.5 shows how this typical homestead layouts influence settlement pattern in the neighbouring Mpofana, though with relatively small homesteads.



Pic.4.5. EMpofana part settlement

Establishment and Development Of The Homestead

When the Ngcobo homestead was initially established, the public gravel road on the east as shown in fig.4.9 had not existed. The entrance way from the road into the homestead is, therefore, not used as a formal entrance (*isango*). It is the entrance way from the west end of the homestead that is considered formal. When there are formal/ cultural events, only the west entrance is used.

The development of the Ngcobo homestead radiated from the central initial cluster of five free standing buildings (cluster 1) which were occupied by the parents. As sons and daughters grew up they were placed in their own freestanding huts (*amalawu*), properly positioned to allow for a radial expansion to what the homestead looks like today and even further.

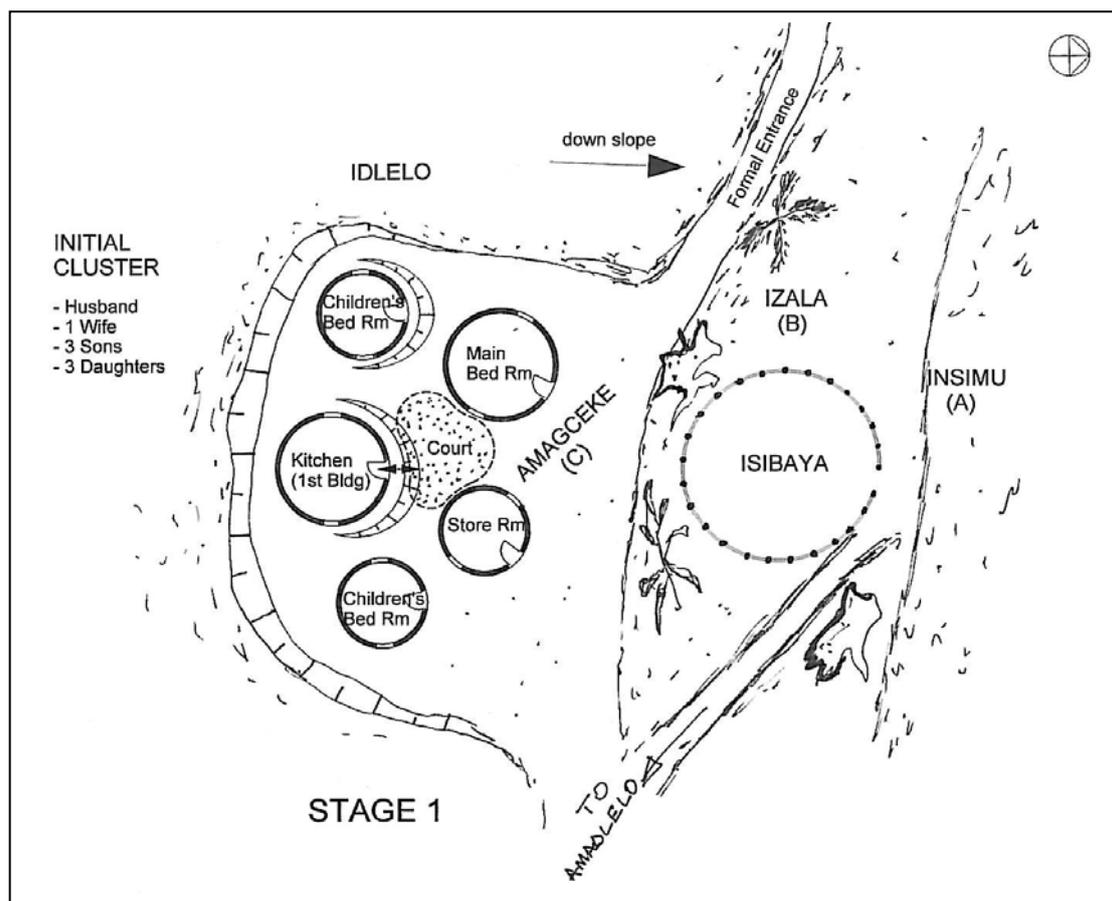


Fig.4.10. Initial homestead layout

The oldest hut in the initial cluster still remains the main central communal building for the homestead, also used as the main *idladla/ixhiba*. It was dedicated and kept as a sacred place where the ancestor's spirit still exists.

The first born son was positioned by the main entrance way (cluster 2), thereby assuming the role of taking charge of every visitor entering the premises.

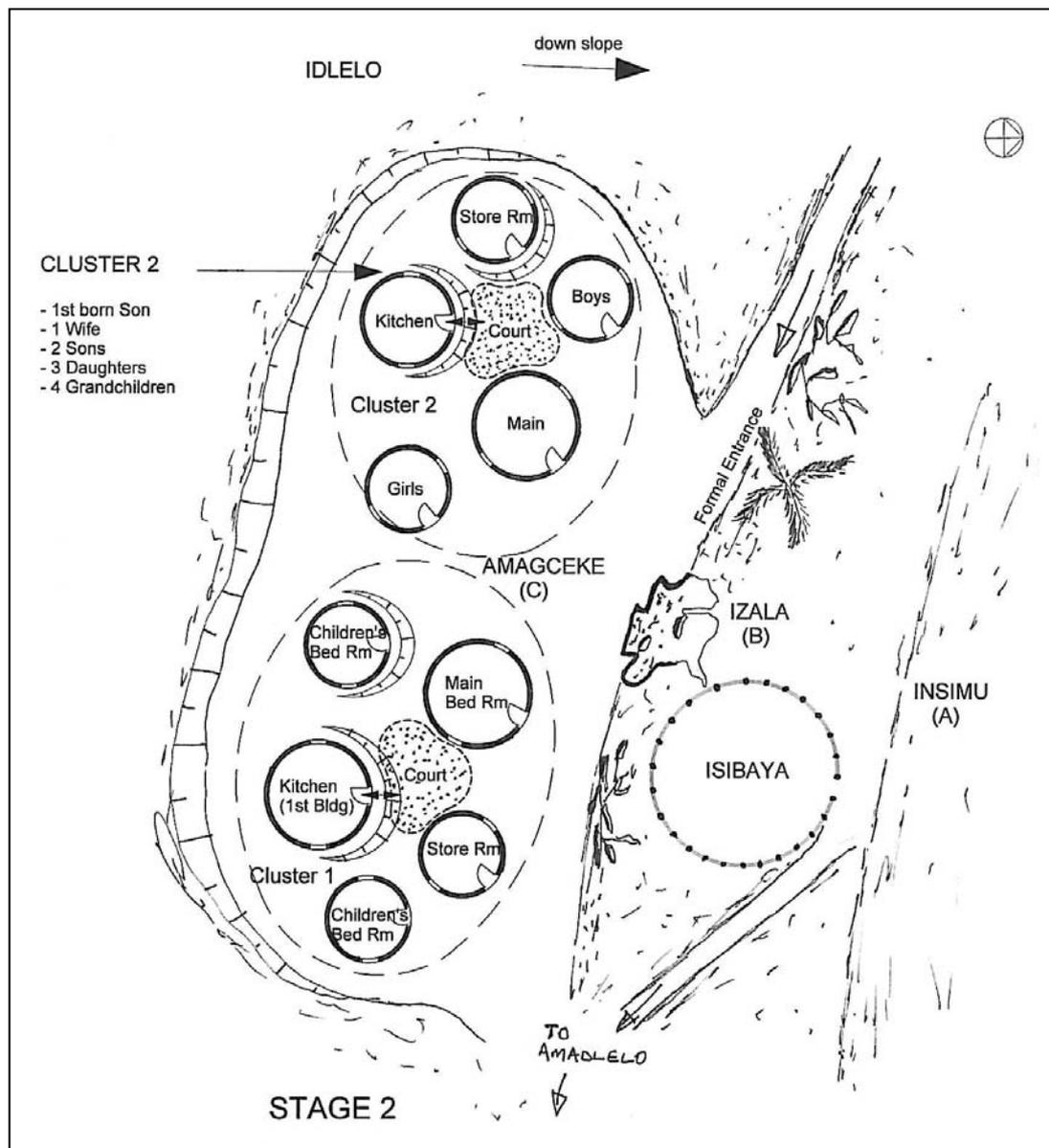


Fig.4.11. First expansion with first born son's cluster established

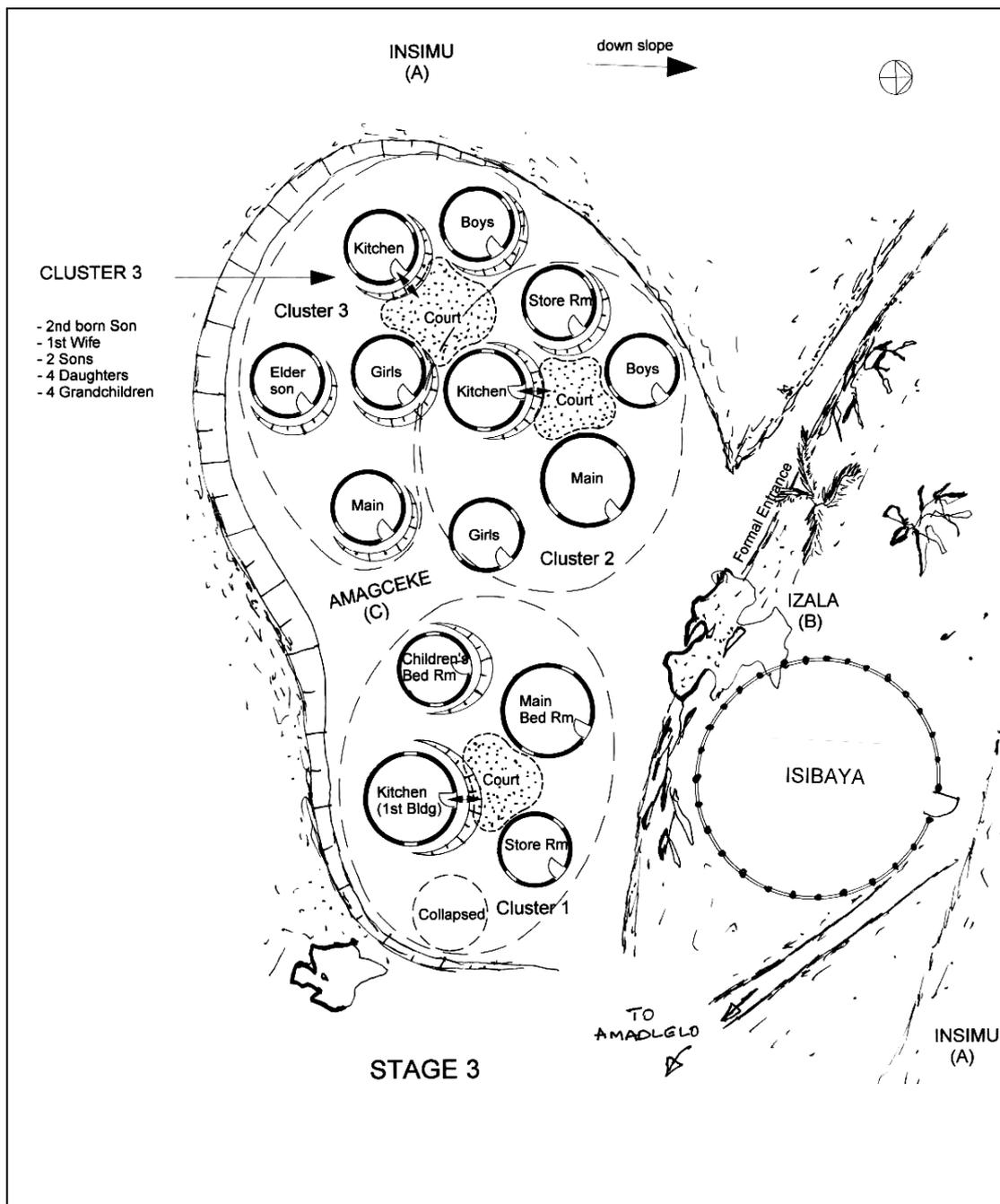


Fig.4.12. A third cluster develops for the first born's first wife

The second born son was placed just behind the eldest, where his first wife's (*uNdlunkulu's*) cluster was developed (cluster 3). That was the only member of the family who introduced a polygamous character in the homestead. His second wife was also allocated with a cluster (4).

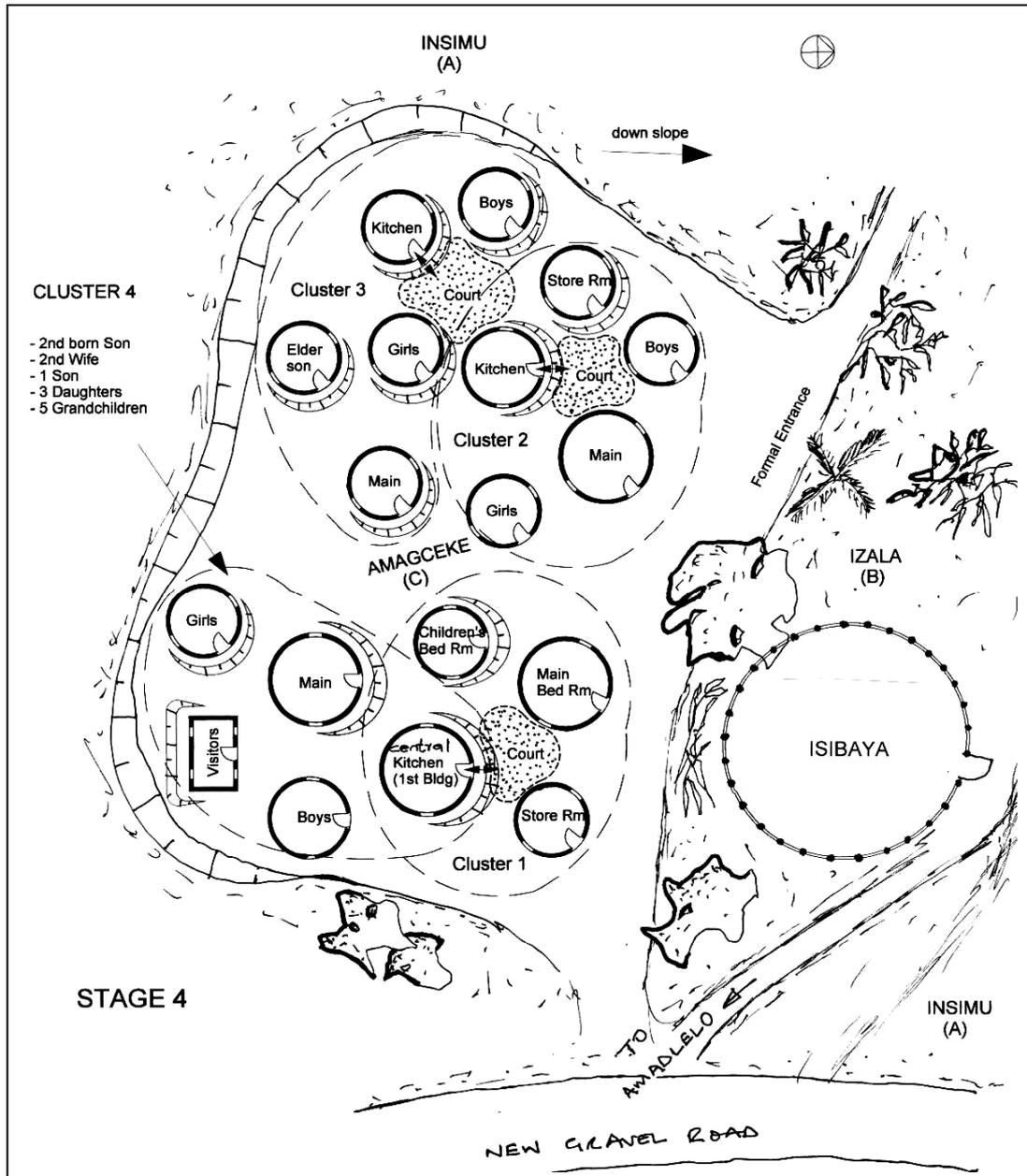


Fig.4.13 A fourth cluster develops for the first born's second wife

The last born son was placed at the rear end of the homestead (cluster 4). One of their sisters who was unmarried was placed almost at the centre of the homestead as cluster 6 (fig.4.14), as a delicate part of the family, between the two younger brothers and behind the parents (cluster 1). This position also allowed her privacy when visited by her lover as he, by culture, would approach her room through the back of the homestead. Her position became intermediate between the two wives (clusters 3 & 4) of the middle brother. This is a typical social role of a sister in such a setting, where all *omakoti*

(brides) take advantage of her as their mediator in the family. They would do all they could to win her favour.

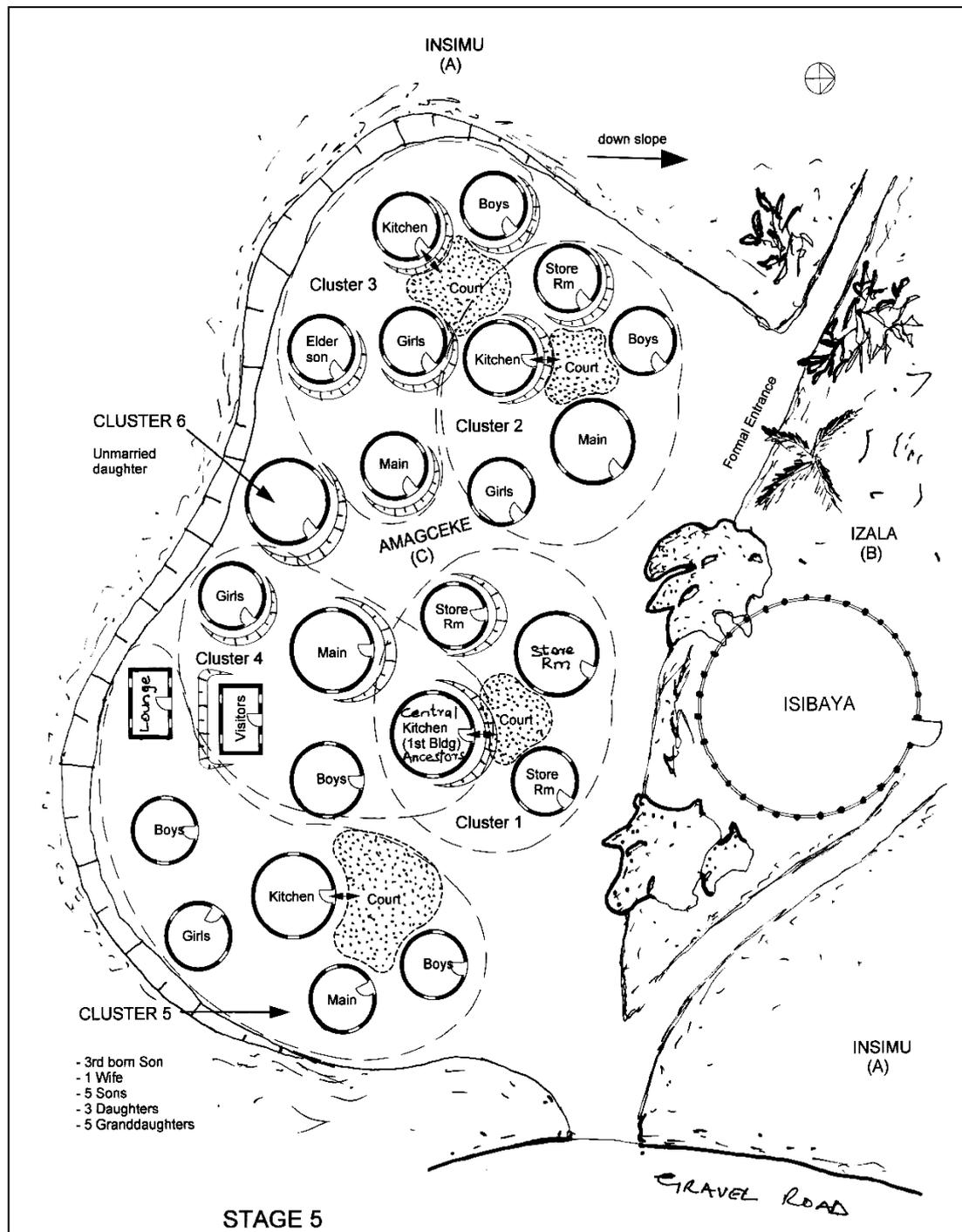


Fig.4.14. A fifth cluster develops for the last born son and a hut for their unmarried sister

After the passing away of the parents the family gave cluster 4 the privileged responsibility for part of the initial cluster. The rest of cluster 1 is now used as central stores.

As highlighted in the above developments, the establishment of each cluster is marked with a kitchen and a courtyard in its front, which contributes to the complexity of *amagceke*.

Architecture

The Ngcobo homestead, much as the rest of eNgilanyoni settlement, has a pronounced character of the typical architecture recorded throughout the south coast. That is, architecture characterized by freestanding individual rooms of, predominantly, the cone-on-cylinder type.

In this homestead only two of the twenty four buildings are flat roofed rectangular type, recently introduced. The latter also adopted the local traditional colour scheme. In this homestead it was explained that the black band is meant to prevent unsightly mud splashes at the base in case of rain (pic.4.6).



Pic. 4.6. Ngcobo homestead : Typical building

Buildings in this homestead, generally, have no aprons except a few with cement aprons economically done at about 150mm wide which, to some extent, has contributed to the mortality of the buildings.

Walls are built with mud, reinforced with laths (*izintungo*) of *ubhici*, a durable local indigenous wood (fig.4.15). When a building is no longer needed it is left to disintegrate naturally into the ground. In order to maintain the established order in the layout of the Ngcobo homestead, every aged or collapsing building gets rebuilt in

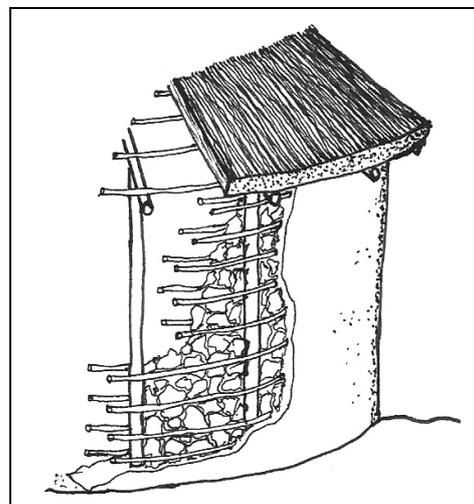


Fig.4.15. Stone infill with internal and external plaster

precisely the same position, while new ones are also erected as need arises.

All buildings in kwaNgcobo were originally thatch roofed cone-on-cylinders. The roofing was changed, with time, to flat metal sheets nailed to the traditional 'spiderweb' timber structure, as an attempt to respond to maintenance and fire problems of thatch.

It was expressed that the flat metal roof sheeting has come with even worse problems, such as leakages at junctions and nail points, rust (pic.4.8) and unbearable thermal performance. For this reason, three recent replacements of collapsed buildings have gone back to thatch roofs.

It was also noted that some of the cone-on-cylinder buildings in the Embo settlements have used a combination of thatch and flat or corrugated iron sheets in their roofing (pic.4.9 & fig.4.16), a style also noted in oShadeni and kwaPhungashe. The upper half of the cone is thatched and the lower has the sheeting tucked under the thatch.



Pic.4.7. Building abandoned to collapse, exposing timber reinforcement in the mud wall



Pic.4.8. Failing flat metal roof sheeting



Pic.4.9. Typical hybrid roof with thatch and corrugated metal sheeting

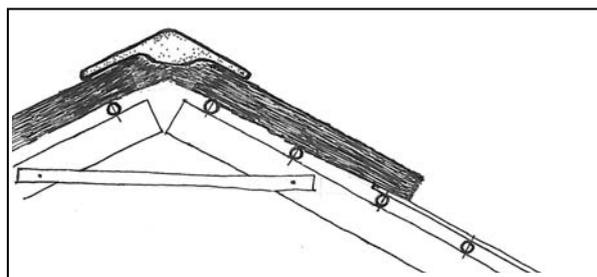
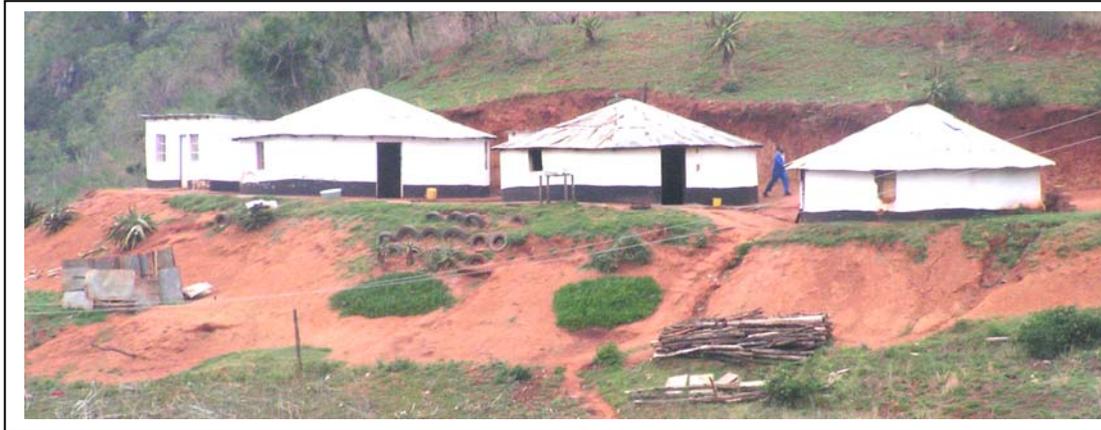


Fig.4.16. Detail of typical hybrid roof with thatch and metal sheeting

KWAMABHIDA, EMBUTHWENI SETTLEMENT

Lat:S30 03 10.4 Long:E30 31 21.8 Elev:448m



Pic.4.10. Mabhida homestead: eMbuthweni settlement

Physical Context

eMbuthweni is situated on the southern flank of uLovu river, between iNgilanyoni to the east and eGulube to the west along the river. In this part of the settlement houses are relatively small and sit on steep landscapes.

Social and Cultural Factors

The Mabhida family arrived to settle in eMbuthweni as recently as in 1993, from eMbumbulu, where the rest of the Mabhida clan exists. It is a young monogamous household of five members so far. On the day of the visit Mr Mabhida was sitting with some visiting friends, which necessitated asking for the householder. *“He’s not around, I’m only the son”*, he responded. *“Who is in charge in his absence?”*, the next question followed. *“I am in charge at the moment as the old man is at home in uMbumbulu”*. It was not just a play of words, but his true cultural position, which he innocently expected to be understood by this Zulu speaking fellow, that the house was only an extension of his father’s territory. Mr Mabhida regards the house as a distant cluster of his father’s homestead, in a traditional sense.

Mrs Mabhida is a housewife, while her husband owns and drives a taxi, the only source of income for the family. They do not have any livestock beyond the small pig sty at the bottom end of *izala*. Mrs Mabhida’s formal education

stopped at primary school, while her husband could not complete his high school education.

A general conversation with the family revealed a strong belief in ancestors, as *usokhaya* pointed at the biggest building, *ixhiba/idladla*, about 6m in diameter, used as the main communal building where the family performs their ancestral practices (*imisebenzi yomndeni*). The beast horns on the roof edge above the door of *ixhiba* were a typical mark of the practice.

General Layout of the Homestead

The Mabhida house is a small homestead that sits on a steep hillside that required major earthworks for the development, resulting in a 2m high unretained cliff just behind the buildings.

The homestead consists of four freestanding buildings, that is, three cone-on-cylinder type rooms and one flat roofed cubic building at the rear end. Though linear, the layout of the buildings shows a break off from the 'fire breaker' concept of a circle-cube-circle tradition noted in the south coast and other parts of the province, as all the buildings are roofed with metal sheets (pic.4.10 & fig. 4.17). The layout is only in response to the limitations of the landscape.

There is a legible typical hierarchy of zoning of spaces in the site. That is, *insimu* (A) at the bottom end, *izala* (B), where the pig *isibaya* is also located. However, utilization of *izala* in this house is affected by the landscaping for the platform and to create *igceke* (C), the immediate frontage of the cluster of buildings.

Establishment and Development of the Homestead

On arrival, the young Mabhida family erected their first cone-on-cylinder, used as a multipurpose room. When the homestead began to grow physically, it radiated sideways. The second building, a bed room, followed leaving the first building used as a kitchen (*idladla* or *ixhiba*). The kitchen was dedicated to ancestors as the sacred place where *imisebenzi* (rituals) of the household are held. A general store room also followed to the north of *idladla*, by the main entrance. As their young children began to grow independent they were placed at the rear end of the homestead behind the master bed room. For a reason untold, the front most building is a store room. Along the entrance driveway towards the house is a pit toilet built with corrugated iron sheets, a location different from most including the house recorded in oShadeni. All buildings face down slope, not for solar orientation, but in response to surface rainwater (pic.4.10)

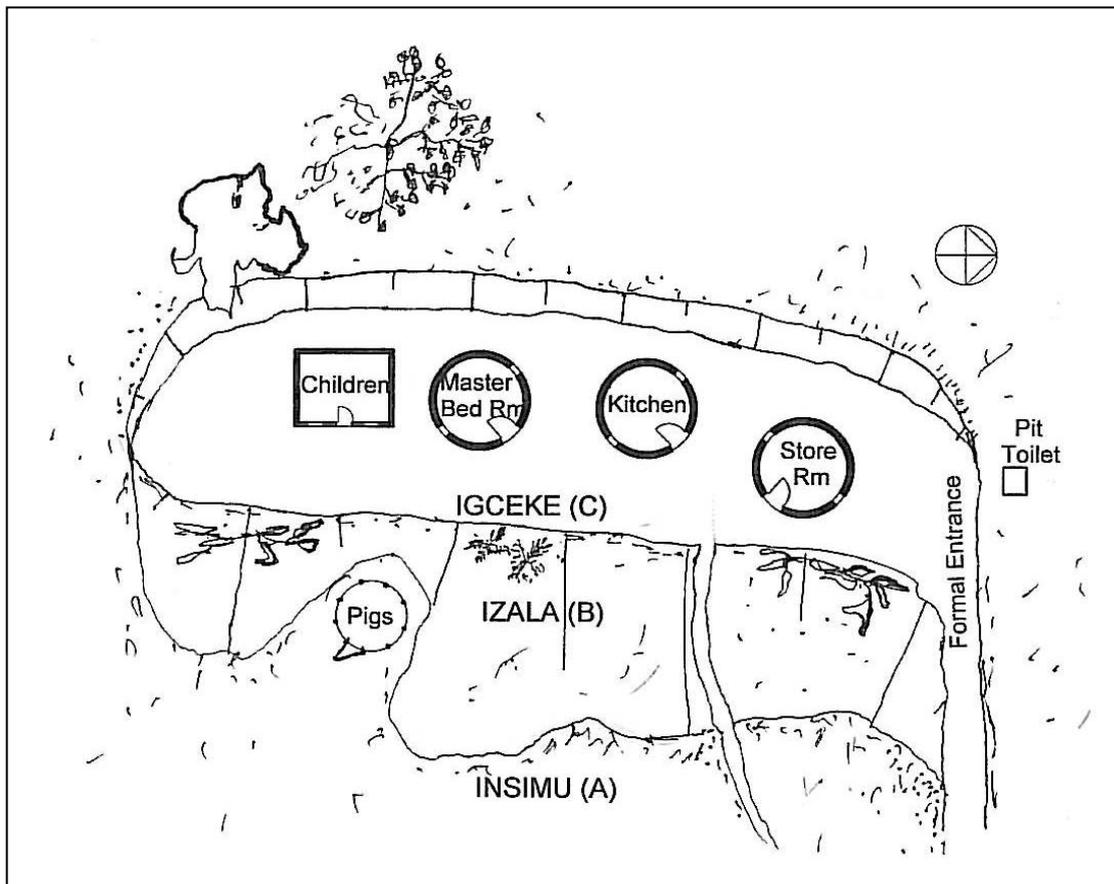


Fig.4.17. Mabhida homestead: Site layout

Given the site limitations and the socio economic status of kwaMabhida household indicated earlier, it appeared unlikely that the homestead would continue with the radial mode of physical development discussed in the next chapter.

Architecture

The architecture of the Mabhida homestead is comprised of an unstructured combination of two forms of free standing buildings. Of the four, three are the traditional cone-on-cylinder type and one is a flat roofed cubic form. All the cone-on-cylinder buildings are roofed with flat metal sheeting nailed to the traditional 'spiderweb' timber roof structure. The kitchen roof, which is the oldest building, begins to rust. Walls of all the buildings in the Mabhida homestead are built with mud reinforced with timber laths. Earth for wall construction was obtained from the earthworks as they were levelling the site.

The cone-on cylinder buildings are planned out of the traditional perfect cross concept in terms of relationship between doors and windows and the spatial organization.

In response to questions about the prevalent colour system on the buildings in this homestead, it was simply said: "*these are colours everyone uses in this area...*". The same question received a similar response, randomly, from people along the road through eMbuthweni. It was generally regarded as a traditional style of colours in the area, beyond the technical reasons mentioned in uMvenyane and eNgilanyoni.

EGULUBE SETTLEMENT

This settlement was observed from the road. Focus was on the general layouts of homesteads and the expression of its architecture on the landscape.

Physical Context

Gulube is a settlement on the north west end of the built environment of eMbo at the upper end of uLovu river. Pic.4.11 shows a view of eGulube from eMbuthweni across the river. It is a relatively recent settlement, with houses sitting on a steep landscape.

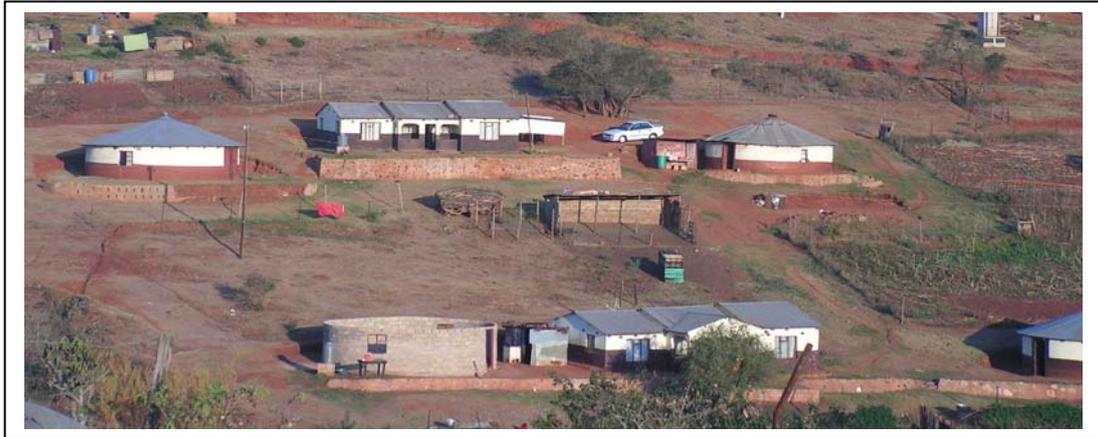
General Homesteads Layouts

Homesteads in this part of eMbo are relatively small. Layouts of these homesteads vary between organic and linear arrangement of the typical freestanding individual rooms along contours of the landscapes.



Pic.4.11. Part of eGulube settlement on the foreground and eMbuthweni further across the uLovu River

EMBO, CATO RIDGE



Pic.4.12. Typical eMbo architecture in Cato Ridge

Physical Context

It was indicated earlier in the social background of eMbo that the empire of amaMbo expanded to the north, across uMlazi river where the small town, Cato Ridge is found. This part of eMbo has a number of settlements spreading between the N3 national highway and uMngeni river on the western outskirts of eThekweni, towards Pietermaritzburg. EMbo is located on a physical landscape that is popular for its splendid hills commonly known as the 'Valley of Thousand Hills'.

Architecture

Pic.4.12 shows a typical built environment that shows a relationship of architectural character between eMbo of the south and eMbo of the north. This architectural expression has had a strong influence on all the rural settlements of Cato Ridge.

LOSKOP SETTLEMENTS, UKHAHLAMBA CENTRAL

A. Physical Environment

Loskop consists of a number of rural settlements, situated on the north end of the central eastern flank of Ukhahlamba mountains, on the western outskirts of Estcourt town. Though the general topography of Loskop is mountainous, it has vast built landscapes with gentle slopes and low hillocks east and west of Injasuthi river, generally requiring very little or no levelling of platforms for buildings.

This region has vegetation with scattered evergreen and deciduous forests. It has an average annual rain of 10mm, average highest daily temperature of 26°C and average lowest daily temperature of 3°C.

B. Socio-political Background

INyezane and iNgodini settlements have many sites with abandoned homesteads, including the hillsides of uKhahlamba (pic.4.12). Clan fights of the late 1960s and early 1970s resulted in a mass exodus to the eastern flatlands of Loskop. Only levelled platforms remain as evidence of pre-existence of homesteads. Abandoned houses that were more established are noticeable as remains of mud walls still exist to date.



Pic.4.13. Some of the abandoned houses in the former western settlements of Loskop, uKhahlamba

premises for personal consumption, while some also keep livestock. Pic.4.17 shows vast graze lands for the community on the background.

C. Architecture

Generally, the architecture of Loskop, particularly, eNyezane and eNgodini consists of a mixture of building types. That is, dome-on cylinder, cone-on-cylinder, flat or low mono pitch roofed cube, low double pitch cube with gable end, hip roofed cubic forms and (fig.4.18). A typical homestead is a combination of some or all these forms.

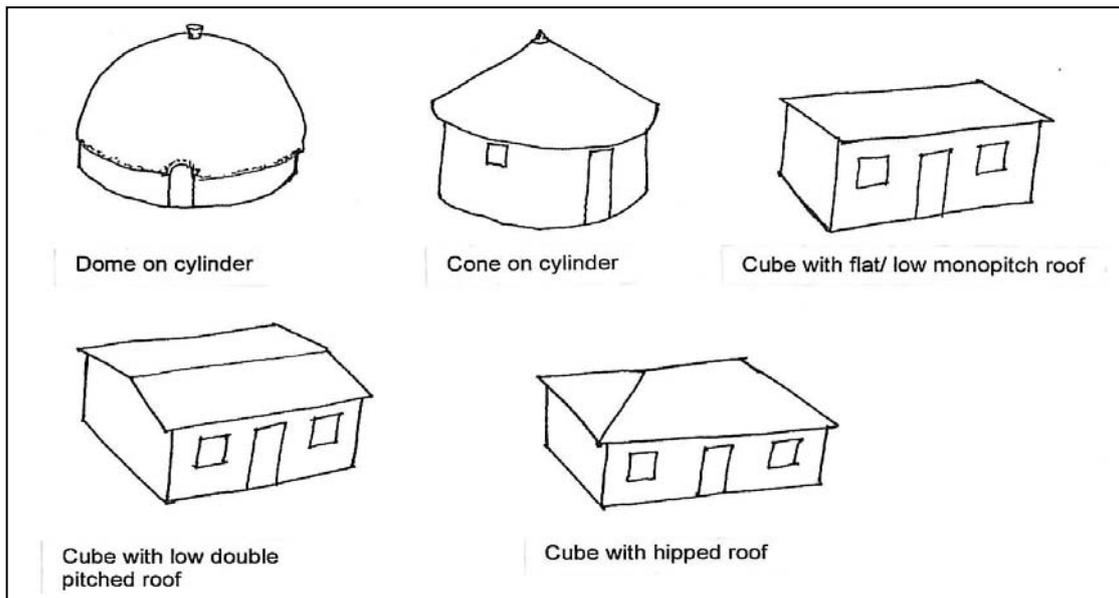
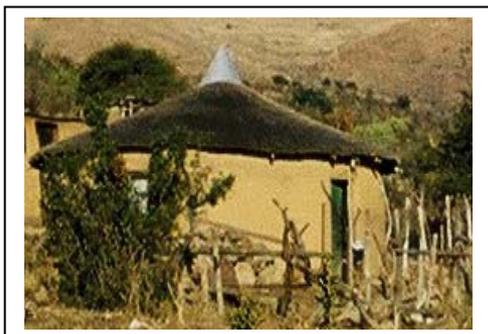


Fig.4.18. Typical building types in eNyezane

The regional identity of the cone-on-cylinder buildings in these settlements is on their apexes. Two types of apexes exist, that is, the metal type predominantly found in Umsinga (pic.4.14) and their unique local one woven with grass (pic.4.15).



Pic.4.14. Umsinga type of Apex



Pic.4.15. Typical Losokp apex, eNyezane

KWANDLOVU, ENYEZANE SETTLEMENT

Lat:S28 58 27.2 Long: E29 34 57.3 Elev: 1 132m



Pic.4.16. Ndlovu house

Physical Context

The Ndlovu homestead is situated at the north end of iNyezane; a part which is a later expansion of the settlement, with relatively small homesteads in a grid pattern. The landscape gets gradually steeper towards the Injasuthi river. The Ndlovu homestead sits on a relatively gentle slope, needing no platforms for buildings.

Social and Cultural Factors

The Ndlovu homestead consists of a small young monogamous family of five members. The immediate history of the family is also monogamous. The household entirely depends on the father who is a low income worker in Estcourt, for living. His income is complemented with summer cultivation of crops within the premises by his wife, for family consumption. General communication in the conversation with Mrs Ndlovu suggested that their level of exposure to contemporary education is low which, apparently, applies to their surrounding community.

There is physical evidence of ancestral worship in the in the household. The late grandparents' building is marked with goat horns on the roof just above the entrance door (pic.4.16), to acknowledge their immortality as great grand parents in the household.

Homestead Layout

The Ndlovu family maintains the historical tradition of territorial separation of spaces for certain activities and family members. This is also reflected in the use of each building and its internal spaces. The cone-on-cylinder building at the east end of the homestead is regarded as the 'great house' as it belongs to the first generation that occupied the homestead (fig.4.19). It is currently used by their great grand children. The building at the west end belongs to the grandparents who also passed on. It is currently used as the family communal room, thereby maintaining the grandparents' spiritual presence in the daily social activities of the family. It is also used as *ixhiba/idladla*, where the cooking fire place is taken advantage of in cold winters. According to Mrs Ndlovu, occupying the building that sits between the two huts gives them, as the current householders, a sense of protection by ancestors from both sides while, on the other hand, makes them feel in charge of both buildings that flank them.

In the kwaNdlovu homestead the children were positioned at the front while the kitchen is at the rear end of the homestead. According to the survey such an arrangement is not traditional. A suspected reason for this arrangement is that the children had to be in the great house which, unfortunately, happened to be at the front.

The development of this part of iNyezane came with a proliferation of a new typology of homesteads, ie a rectilinear arrangement of a 'circle-cube-circle' model of freestanding buildings (pic.4.16), one that was recorded as a predominant layout concept in the southern part of the province.

However, it was stated in this homestead that the layout was adopted as response to the burning of homesteads as indicated earlier. The metal roofed cubic building in the middle serves as fire breaker between the two thatch roofed huts. Relative to most of the same in the south coast, the middle building does not have even a window opening to the sides of the thatched huts, practically serving as fire barrier.

It was indicated that future expansion of the homestead would maintain the same rhythm, which developed to a traditional style of architectural expression. Mud blocks, made on site, are stacked at the edge of *igceke* on the foreground for the intended extension, though progress is slow as the husband spends much of his time away at work. The sequence of developmental stages of the homestead was not recorded in the survey.

The site layout of the homestead maintains the traditional zoning of spatial order marked as A, B and C. That is, *insimu*, *izala* and *igceke* respectively.

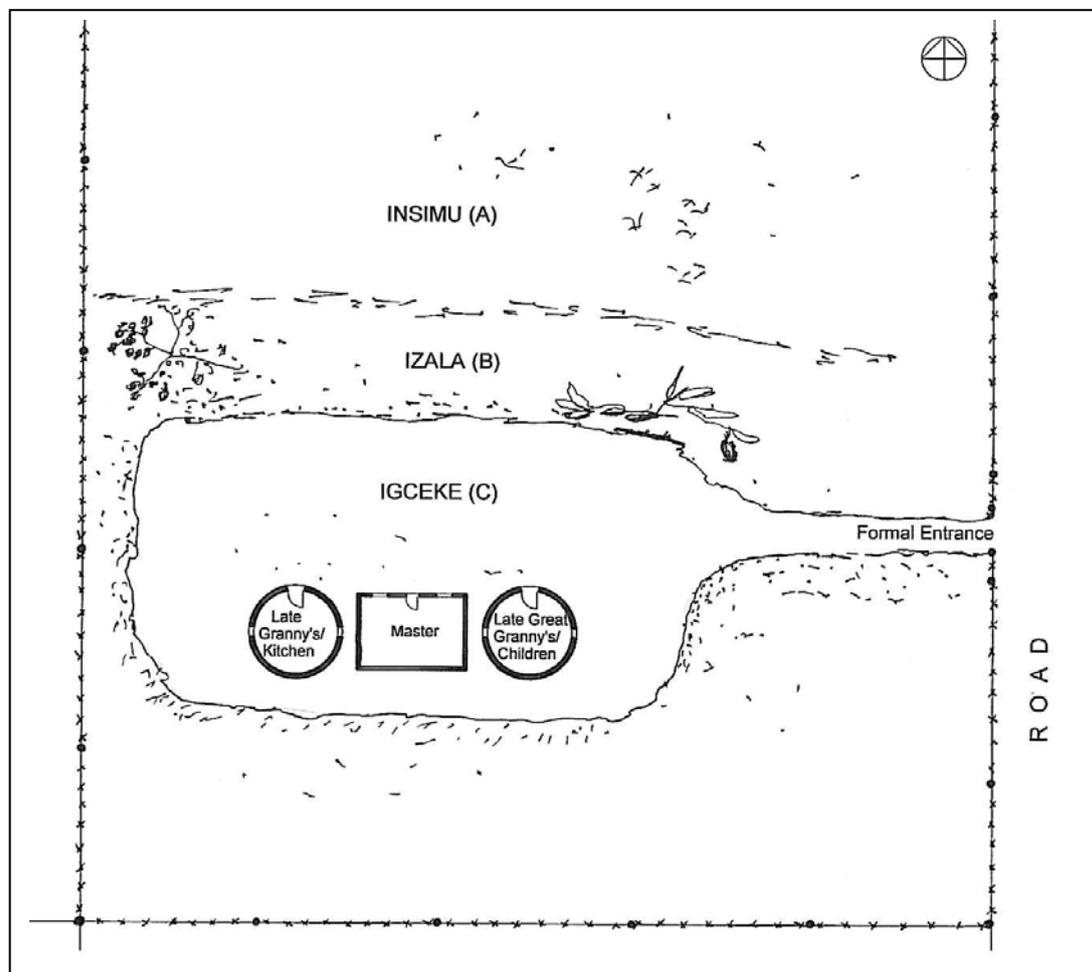


Fig.4.19. Ndlovu homestead layout

Architecture

All the buildings in the Ndlovu homestead face north, down slope, to prevent rain water flowing into the buildings. The planning of the cone-on-cylinder buildings maintain the traditional perfect cross in their internal spatial relationships, and the doors and windows.

All buildings in the homestead are built with mud blocks coded with an earthy coloured finish (*umcako*), a traditional style of finishes in the area (pic.4.16). No technical nor cultural reason was attached to the colour coding. Each building is trimmed with a raised apron at the base, with same finish as the walls. The aprons are both for structural protection against dampness at the base and for sitting around the building. Roofs of the cone-on-cylinder buildings are thatched on the traditional spider-web timber structure, from *umtholo* local tree. These huts have roofs pitched as shallow as about 30°. The rectangular building is flat roofed with corrugated iron sheeting on treated gumpole rafters and purlins. According to Mrs Ndlovu, it was felt that the latter building was relatively costly to construct, given the family's income.

KWAMBHELE, ENYEZANE SETTLEMENT

Lat: S28 59 26.0 Long:E29 34 53.7 Elev:1 170m



Pic.4.17. Mbhele homestead

Physical Context

The Mbhele homestead sits on a fairly gentle slope down to the east. The landscape requires minimum levelling for buildings.

Social and Cultural Factors

The Mbhele house is one of the oldest homesteads in Loskop. It is situated in the older and more matured part of iNyezane, where homesteads have grown large and more established. The Mbheles, in particular, have grown to be the largest, matured and most complex clan ever studied in this survey. Only one third, the nucleus of the entire Mbhele clan village, was selected for the study. The selected homestead has significant basic similarities with the Ngcobo homestead recorded earlier in the south coast, though the complexities are somewhat different.

The entire clan of kwaMbhele radiates from a monogamous household with five sons and one daughter, all of whom head monogamous sub families. The selected homestead houses the initial (parents') cluster, the first and the second born sons' sub families and their sister. It consists of a total of thirteen household members. The last three sons broke off to establish their individual homesteads of almost similar size and complexity in sites adjacent to the main house to create a complex of homesteads.

The Mbheles developed a unique tradition that breaks necessity for perpetual further physical expansion of the complex, in response limitations of land, to avoid possible undesired scattering of the clan. In the selected homestead, when the initial parents passed on, the eldest son of their first born inherited their cluster, thereby restarting the cycle.

The only informants in this survey were the two housewives with their husbands' sister. Husbands spend most of their times at work for basic living. As a result, much of household responsibilities such as ploughing, harvesting, construction, child minding and livestock have shifted to their wives and children. Each of the Mbhele homesteads has a dedicated crop field and shared livestock grazing pastures. Farming activities are small in scale, mainly for household consumption. It was also noted that privileges of contemporary formal education are only enjoyed by their children, some of whom are just about to go to high school.

This household has the strong typical culture of interdependent individuality of household members and territorial zoning of spaces for certain activities. Conversations with the informants revealed also a strong belief in ancestral worship in the family.

Homestead Layout

The homestead of kwaMbhele have layout principles much similar to those of kwaNgcobo of eNgilanyoni in the south, one of the main characteristics being that it, generally, has an organic layout. That is, the freestanding buildings appear to be placed randomly on the site, while each follows specific cultural or traditional principles that guide its placement. The third born son's cluster intervened with a linear character; the 'circle-cube-circle' fire breaker concept recorded at kwaNdlovu nearby. That, as recent layout concept in the province, suggests that the third born son's cluster was one of the recent developments in the complex. All the subfamily clusters were strategically positioned to meet all cultural aspects of the growth of the homestead.

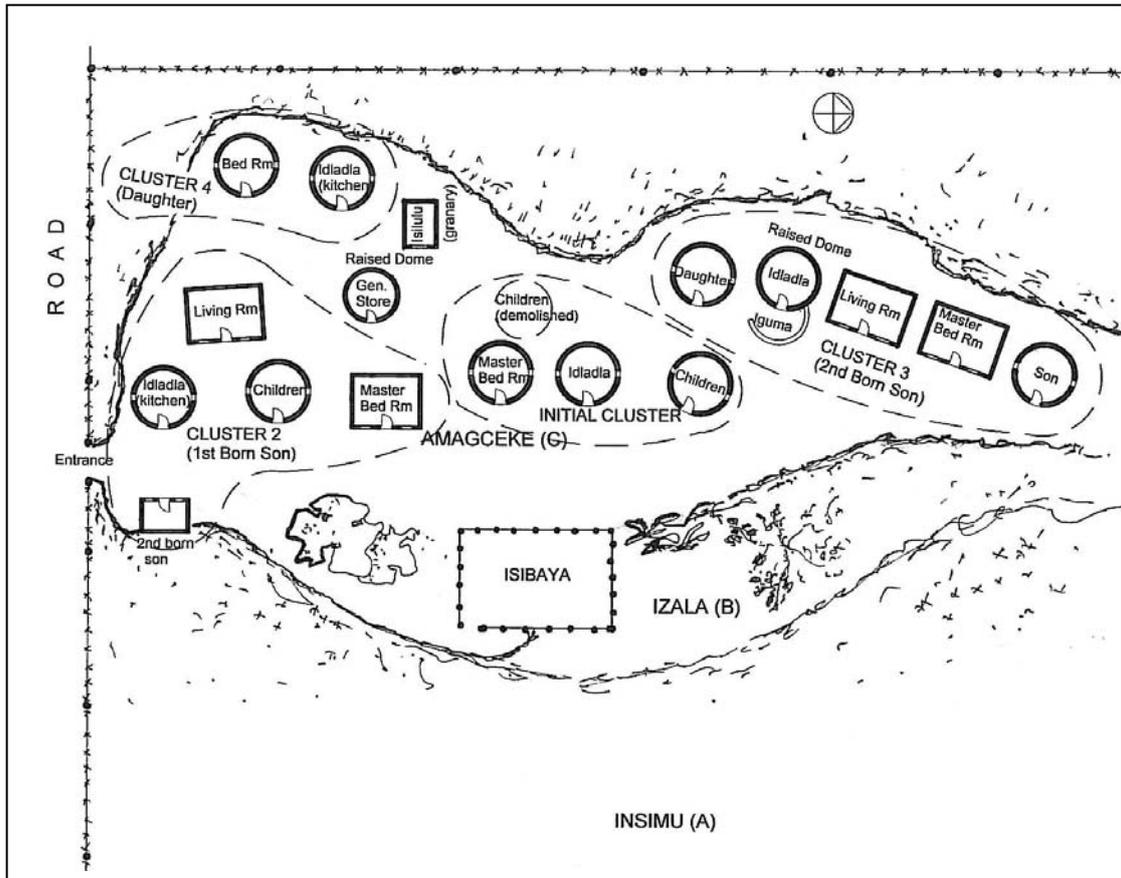


Fig.4.20. KwaMbhele homestead layout

Each established subfamily cluster consists of *ixhiba/idladla* (kitchen) which defines its independence as a territory. The initial *idladla* remains the central communal facility that ties the rest of the homestead. Though not as clearly defined as in the kwaNgcobo homestead, each *idladla* has a cleared outside space for outdoor cooking and subfamily gathering. The second born son's cluster further built a screen to create an enclosed courtyard (*iguma*) for such purpose.

The homestead has maintained the traditional primary zoning noted in all previously recorded homesteads (fig.4.20). *Izala* (B), where a central vegetable garden and fruit trees are traditionally placed, serves as interface between *insimu* (A) and *igceke* (C).

Common to homesteads with organic pattern, the *igceke* of a cluster is an integral part of the network of the negative spaces among all the clusters of the homestead, collectively called *amagceke/amabala* (in plural).

Establishment and Development of the Mbhele Homestead

The establishment of the homestead of kwaMbhele began with a cluster of four free standing thatched cone-on-cylinder buildings (cluster 1) with *isibaya* (cattle byre) directly in front (fig.4.20).

When their first born son grew independent his *ilawu* was erected by the formal entrance gate. When he got married his territory developed to an independent cluster for his subfamily. The independence of his cluster was marked with the erection of a kitchen, which applied to the rest of the homestead.

The second born son's cluster (3) was positioned on the left hand side of the parents cluster. Their unmarried daughter (4) was positioned at the back between her two brothers, a typical traditional position for a daughter. Much similar to kwaNgcobo in the South Coast, the positioning of the daughter allowed her privacy when visited by her lover as he, by culture, would approach her hut through the back of the homestead. As a permanent member of the homestead, the daughter further built a kitchen which, traditionally, marks an independent cluster. Central to the whole homestead are two stores. The rectangular one is a granary (*isilulu/inqolobane*). The grass dome (*iqhugwana*) is used for general storage.

Isibaya is positioned in zone B, in the central front of the homestead, but more towards the first born son. The second born son of cluster 2 has his *ilawu* even much closer to the entrance gate and *isibaya*, assuming a role of both a guard and asset manager. This appears to be a germination of another cluster. It is the second born son's *ilawu* or potential cluster because the first born son had to occupy the late grandparents' cluster.

Architecture

The architecture of the Mbhele homestead is consists of a mixture of building types. That is, two dome-on-cylinders, several cone-on-cylinders, flat and hip roofed cubes and a low pitch cube with gable ends. Though the homestead has, predominantly, cone-on-cylinder buildings, later developments have introduced few cubic forms. The two existing grass domes were initially erected directly on the ground and later, due to attack by termites and aging, raised onto mud walled cylinders.

Of note is the *iqhugwana* used for a kitchen (pic.4.18). Its entrance area (*isithumbanja*) is screened with a 1.8m high wall (*iguma*) to prevent direct wind blowing into the building, which is hazardous when there is indoor cooking fire. The *iguma* space is also used for outdoor cooking.



Pic.4.18. KwaMbhele: *Iqhugwana* showing *iguma*

All buildings face downslope, specifically for rainwater control. Solar orientation gets disregarded by the good thermal performance of the building materials of, particularly the cone-on-cylinder, and the small sizes of

openings. It is significant to note that, much as in the rest of the uKhahlamba sub region, all cone-on-cylinder buildings are still strictly thatch roofed, relative to those recorded in the south coast. The roof structure for the hut is the traditional timber 'spiderweb'. The few new cubic buildings are roofed with corrugated iron sheeting. Most of the cone-on-cylinder buildings have timber reinforced mud walls, while some, including the recent cubic buildings are built with mud blocks.

All buildings in this homestead are finished with earthy coloured *umcako*, a slurry of a selection of coloured soils, quarried locally, mixed with cement for improved waterproofing. That has become a women's task, as they enjoy the art of wall decoration. Decorations do not have sharp colour contrasts, the same attitude as in the general colour coding of buildings.

WOODFORD SETTLEMENT, BERGVILLE, UKHAHLAMBA NORTH

A. Physical Environment

Bergville is situated on the north end of uKhahlamba mountains. The built environment of Bergville is predominantly rural settlements, spreading from the eastern flat lands of Hambrook and Woodford to the hills up uKhahlamba where kwaMiya and eMangwaneni exist. Relative to Loskop, Bergville is mountainous.

The selected samples Hlatshwayo and Miya houses are in Woodford, an underdeveloped rural settlement on a vast flatland just north of Bergville town, across the Little Thukela river. This is the closest settlement to the small town. Woodford is a relatively densely populated settlement with a grid pattern of urban character.

Similar to Loskop, the vegetation of this environment has scattered evergreen, deciduous forests and grasslands. It has an average annual rain of 10mm, average highest daily temperature of 26°C and average lowest daily temperature of 3°C.

B. Social Context

Socializing with young boys and girls from different families on the streets, it was somewhat ironical to notice that almost all those spoken to, had a high level of fluency in English, within such a poor and underdeveloped environment, relative to all other similar environments observed in this study. Ironical in the sense that, in South African terms, it is generally perceived that fluency in English is the yardstick for literacy and middle class socio economic background.

The entire settlement has no sign of any sort and scale of farming, apparently due to sizes of sites. Reasons for the few homesteads in larger sites were not investigated.

C. Architecture

Among all the rural settlements of uKhahlamba, Woodford has the widest range of typologies of building forms recorded in the province of KwaZulu-Natal (fig.4.21). Those include the traditional thatch roofed cone-on-cylinder, grass dome, double pitch thatched cubic form with gabled ends, thatched 't'-plan cottage with a hipped roof small veranda, locally called '*iheyisi*' (borrowed from Dutch 'huis'), corrugated iron flat roofed cubic forms locally called '*uplati*' (plaat dak), a traditional double pitch roofed modern house and a thatch roofed oval form. The latter is a recent intervention from Lesotho, just behind uKhahlamba.

The above hybridized homestead tradition began spread to most new rural surroundings of uMnambithi and Colenso.

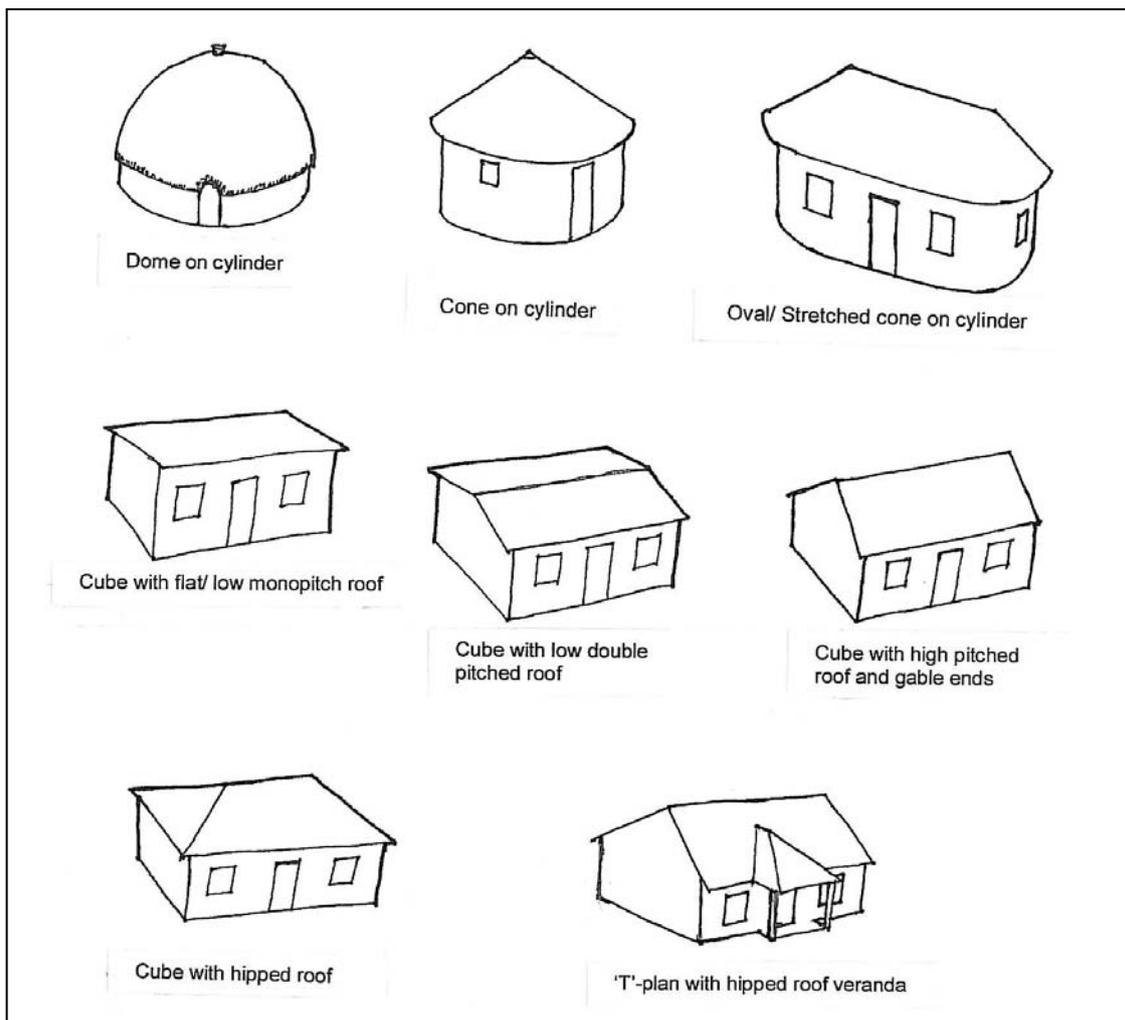


Fig.4.21. Range of building types in Bergville

KWAHLATSHWAYO



Pic.4.19. KwaHlatshwayo homestead



Pic.4.20. Iqhwana in KwaHlatshwayo homestead and a neighboring homestead on the background

Social and Cultural Factors

Elderly people were not in the house during the survey. Only two young boys were playing in the *igceke*, the third and fourth born sons of the family. Those were enough to provide the basic information needed for the purpose of the survey.

The Hlatshwayo homestead is headed by a single mother of five boys aged between 2 and 16, at various school levels. Nothing was said about her source of income as it was indicated that she was unemployed. Her two elder sons do part-time jobs during weekends and school holidays. Within the premises, the family lives with the mother's younger sister with her two daughters, one of whom works in eThekweni.

There is no physical sign of ancestral worship in the Hlatshwayo family.

General Layout of the Homestead

KwaHlatshwayo homestead represents a unique intervention to the traditional grouping of subfamilies into clusters within small premises. It is a type where a family group may occupy one modern type cubic building with internal subdivision of rooms allocated to individual members and other activities.

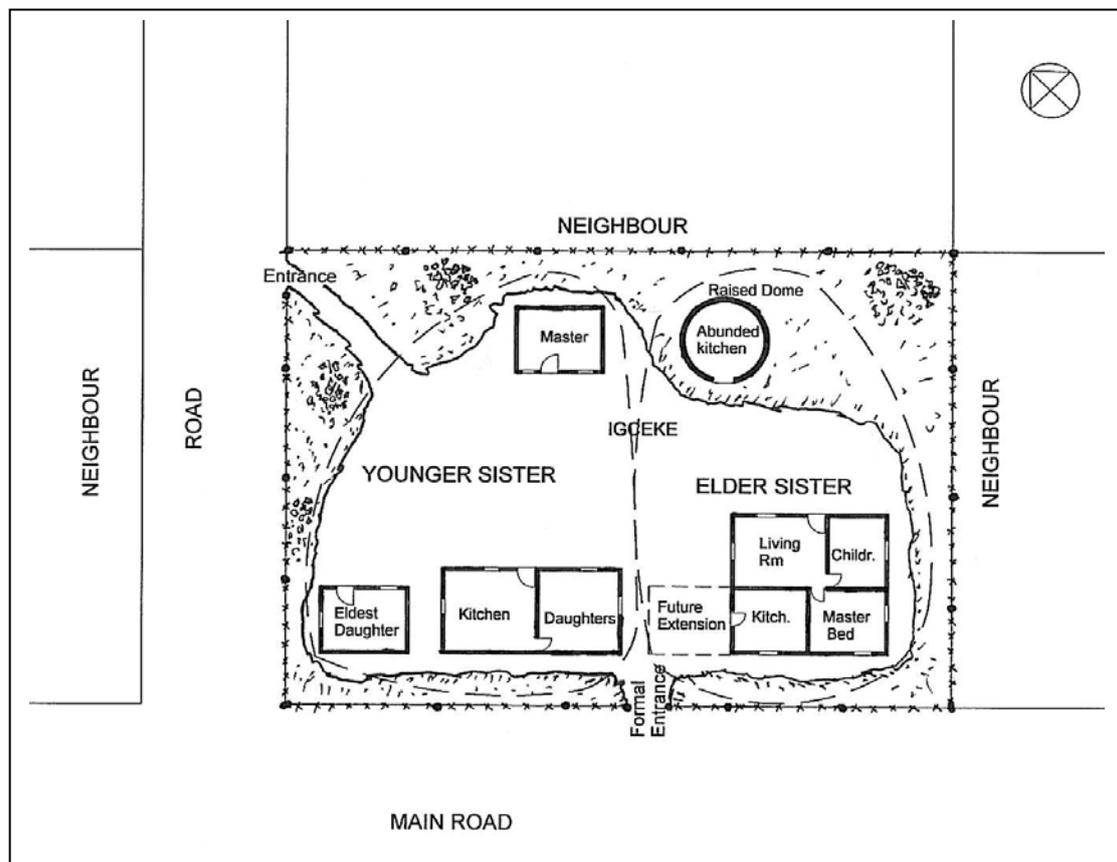


Fig.4.22. KwaHlatshwayo homestead layout

This complex is divided into two major domains (fig.4.22) The main domain is occupied by a single mother with her five sons. It consists of one main building that includes a master bed room, one bed room for her sons, a living room and a kitchen. The main domain also has a freestanding grass dome that was formerly used as a kitchen. As seen on (pic.4.19), the main building shows projections of blockwork for further extension on the east facing wall.

The second domain is occupied by her younger sister with two daughters. This cluster consists of three freestanding cubic buildings, the first being the master bed room and the second including a kitchen and a bed room for the two daughters. A third freestanding cubic building was under construction on the day of the visit, at the north east end of the complex. This new room belongs to the elder daughter who has reached a stage of independence.

The site is fully occupied with buildings such that the complex does not have the traditional zoning of *insimu*, *izala* and *igceke*. Both clusters share a common central *igceke*.

KwaHlatshwayo homestead is situated at the street corner of the urban grid block of sites. Neighbouring sites share boundaries, typical of a traditional urban setting.

Architecture

The Hlatshwayo homestead consists of a combination of three building types. Two modern type flat roofed cubic forms with internal partitions, one low double pitch roofed cubic form and a grass dome raised on a short mud walled cylinder, about 600mm high. The dome (pic.4.20) was initially used as a kitchen, but currently not used at all and was beginning to show signs of disintegration at the time of the visit.

All the three existing rectangular buildings are built with mud blocks made on site. The blocks are laid with cement mortar joints. The new room under construction is built with concrete block, as some can be seen stacked on site

(pic.4.19). It is traditional in the environment to leave walls unpainted. Those few that are painted have the earthy colours of the midlands and the north coast.

All the four cubic buildings in kwaHlatshwayo used the conventional modern steel window frames with glass panes. All the rectangular buildings are roofed with corrugated iron. Stone weights are placed on the roofs to prevent lifting in case of strong winds. This tradition is predominantly found in the highveld.

KWAMIYA

Social and Cultural Factors



Pic.4.21. KwaMiya homestead

On the visit to the Miya family it was only Mrs Miya, her two daughters and her visiting sister from within Woodford. The husband was away for work in Pietermaritzburg. Some architectural attraction from the street suggested the visit into the Miya house which, responding to particular questions about the buildings, almost all explanations had to do with ancestors.

Mr Miya, the householder (*usokhaya*), was born by his father's first wife, but raised by a step mother after early death of his mother. Both his father and step mother also died of age and were buried in KwaMiya, a village to the north western hills of Bergville. The new building, under construction (pic.4.21), is a new house for all the three ancestors. As soon as the building is completed their spirits will be fetched ceremoniously to their new home.

General Layout of the Homestead

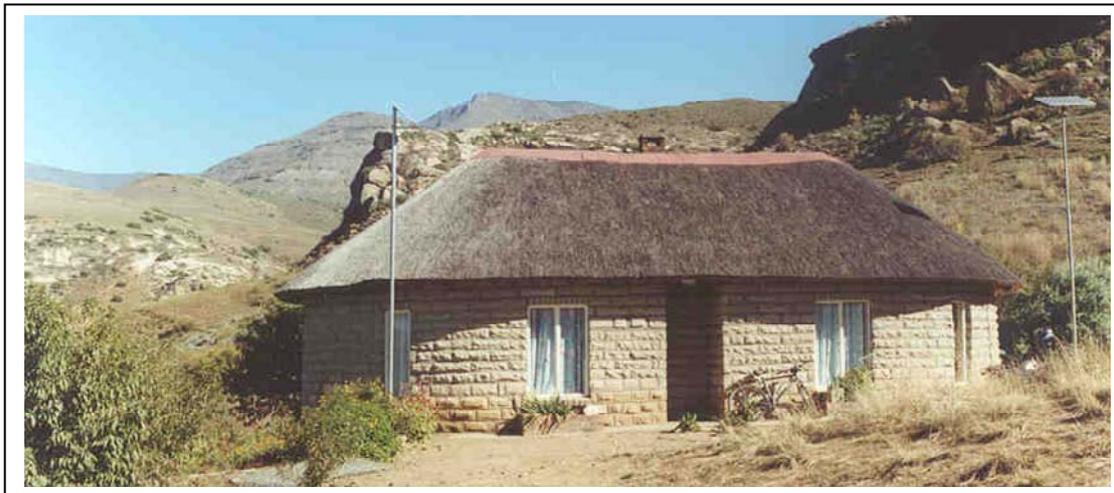
This homestead has a layout characteristic of Bergville, particularly Woodford, as analysed in the homestead of kwaHlatshwayo close by.

Of interest in this homestead is the internal layout of oval shaped building (fig.4.23). Room 1 is the main room where the father will live with his first wife, while room 2 is for his second wife. Though the three will all be under one

roof, the partitioning and separate entrances observe the culture of independent territories. The same typology is used by others with varying internal spatial layouts to suit specific uses.

Architecture

The Miya homestead has a combination of three building types (pic.4.20). That is, the gable ended thatch roofed cubic form, two corrugated iron flat roofed modern houses and an oval building under construction. The oval building is a recent development of the traditional cone-on-cylinder that has gained popularity in the area. It is said the Bergville people got this oval type from LeSotho (pic.4.22), though in LeSotho the buildings are traditionally stone walled. The interest of this study in kwaMiya homestead is focused on the latter type.



Pic.4.22. LeSotho stone walled oval shaped building

This unique building type is a literal combination of two cone-on-cylinders, or one laterally stretched and partitioned to suit the intended purpose (fig.4.23). Stretched in that the small side windows still remain in the same position as on a single traditional cylinder form.

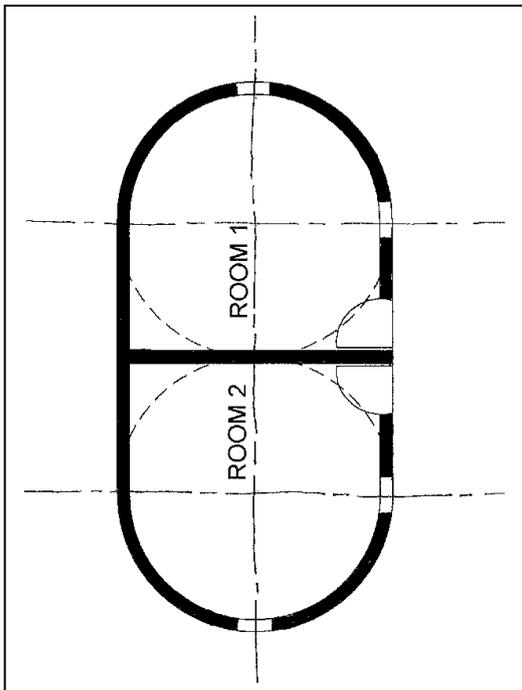
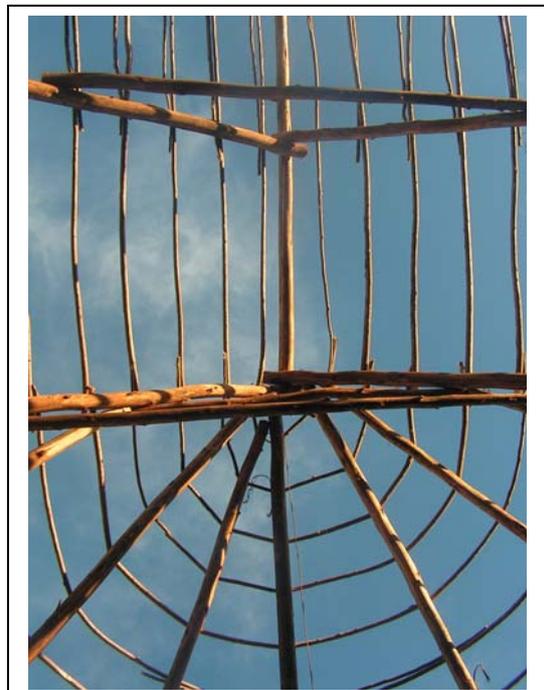


Fig.4.23. KwaMiya: Plan of ancestors new home



Pic.4.23. Spiderweb roof structure adapted to oval form. Viewed from the floor

Walls are built with cement bonded mud blocks made on site. The roof is the traditional 'spiderweb' timber structure from umtholo local wood shaped to suit the building form (pic.4.23). The regional tradition of earthy colours is maintained to all their buildings, by either leaving walls unpainted or finishing them with selected coloured soils mixed with cement for improved waterproofing.

KWAMAZIBUKO, ENTININI SETTLEMENT, EBABANANGO



Pic.4.24. KwaMazibuko homestead, eNtinini

Physical Context

Babanango is a rural settlement east central inland of KwaZulu-Natal, between uMhlathuzi river to the south and White Umfolozi river to the north. The landscape is, generally, characterized by low hillocks and shallow valleys with gentle slopes to almost flat lands. It is a sub-arid environment, predominantly semi-deciduous shrubland. The Mazibuko homestead sits on one of the gentle sloping landscapes of eNtinini. The environment has vast patches of grazing lands for livestock.

Climatic conditions of eBabanango have an average highest daily temperature of 20°C, average lowest daily temperature of 8°C and average annual rain of 10mm.

Social and Cultural Factors

The Mazibuko household is single-parented by a mother of two sons and three daughters. Her husband, the son of the initial householders, died. No detailed information was obtained regarding his death nor any existence of his brothers or sisters.

The mother, Mrs Mazibuko, did not have the privilege of contemporary formal education at all. All five children are in primary and high schools. The

householder does not have a formal source of income. The family lives on small scale subsistence farming, with both livestock and summer crops.

One of the two oldest buildings that were occupied by the late grandparents were been kept sacred for ancestral worship.

The Mazibuko homestead maintains the typical characteristics of territorial independence and privacy of certain activities and individual members of the household noted in all the homesteads recorded in this study. The numerical growth of the family is echoed by the numerical growth of its dwellings. Individuals and groups of family members are orderly positioned in clusters, as shown in fig.4.24.

General Layout of the Homestead

The Mazibuko homestead sits on a gentle slope requiring minimum levelling for buildings. The site is large enough to accommodate a large homestead with domestic scale crop and livestock. The Mazibuko homestead is one of the very few physically large indigenous homestead developments in the immediate surroundings of eNtinini. It was difficult in the discussion to find the actual age of the homestead. The two front most cone-on-cylinder buildings in cluster 1 (fig.4.24) are said to be the oldest and dedicated to the ancestors, one of which was erected in 1984, which may not necessarily represent the true age of the homestead, owing to the typical tradition of reconstruction of buildings as they collapse with age.

Though its architecture is typical in the sub region, the layout of buildings in the Mazibuko homestead is quite unique. All the twelve buildings are placed in two rectilinear rows. Construction of the thirteenth building had only started at the north-east end of the front row on the day of the visit. The layout pattern is not influenced by the landscape. While rectilinear, the homestead follows the tradition of radial growth recorded in other homesteads of similar scale like kwaNgcobo in the south.

The entire homestead has all door openings facing south-east, downslope, in response to rainwater. This orientation disregards the corridor between the

two rows of buildings. The negative space between the rows suggests a chain of communal social activities, where buildings or rooms within a cluster would face each other and communicate across the corridor.

Each domain has a dedicated kitchen (*idladla/ixhiba*), while cluster 1 also has the communal *idladla* and a bathroom for the entire household. The position of *isibaya* marks the core of the establishment of the homestead, as it sits just in front of the initial cluster. The two food stores were positioned in the vicinity of the first born son's domain, who eventually became the head of the household.

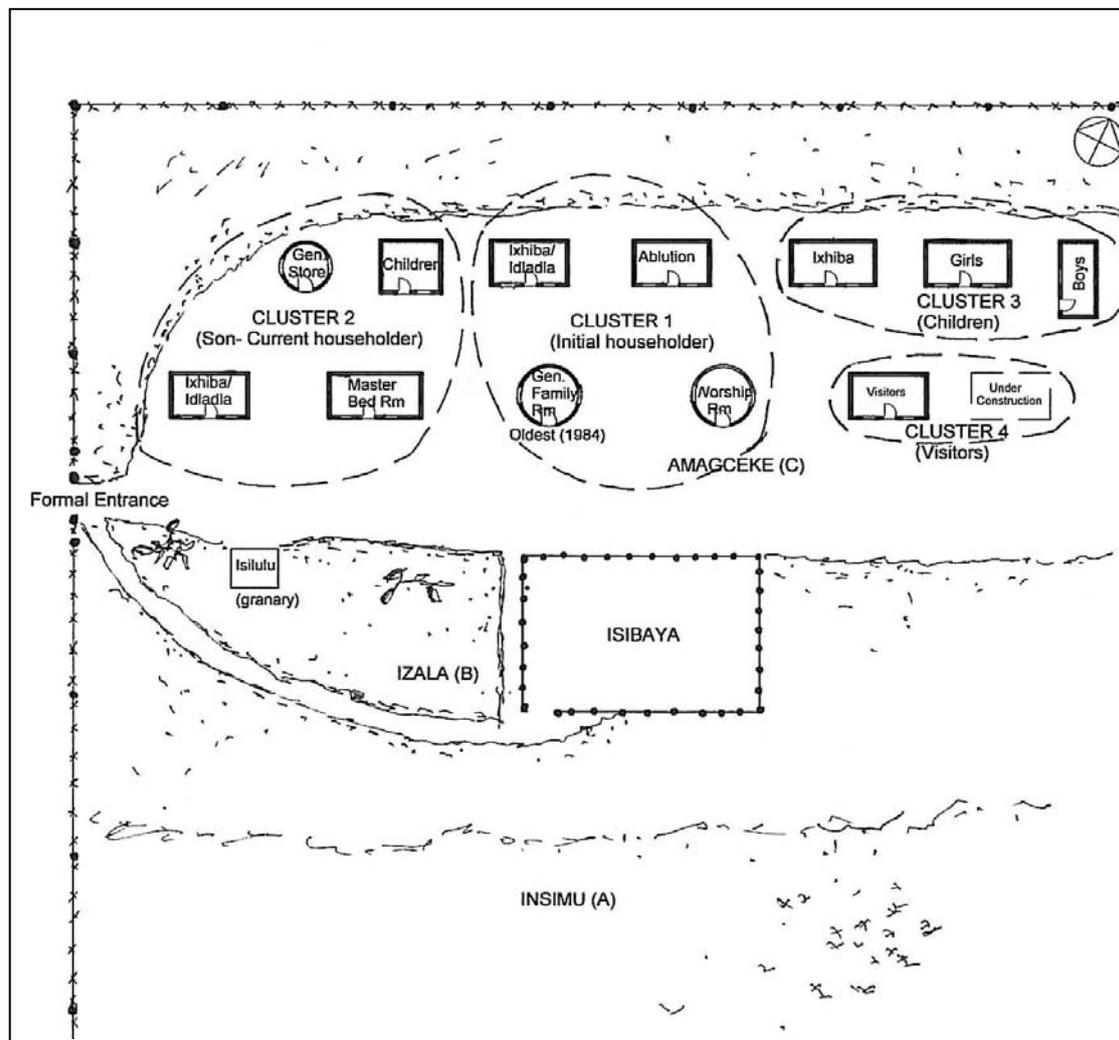


Fig.4.24. KwaMazibuko: Homestead layout plan

The hierarchy of zones in the Mazibuko homestead much similar to those recorded in all other homesteads in the province, that is, *insimu* (A), *izala* (B) with *isibaya* and *inqolobane/isilulu* (fruits and vegetable garden and harvest store) and *igceke* (C).

Establishment and Development of the Homestead

The development of the homestead started in cluster 1. The first born son was placed in his *ilawu* by the main entrance, where a new cluster began to grow (cluster 2). His children were placed at the far end of rear row (cluster 3). In the layout of this cluster, the boys domain is placed at the rear most end, embracing the girls domain between itself and the kitchen of the cluster. Cluster 4, visitors domain, was at its early stage of development, positioned at the far end of the front row of buildings, in front of the children's cluster.

Much like kwaNgcobo in the south, the establishment and early development stages of this homestead assumed the radial concept of growth discussed in detail in the next chapter. The fencing of the site suggests that the complex would turn to the circular or centripetal mode of growth recorded in the initial homestead of the kwaMbhele clan in uKhahlamba, a model also expatiated in the next chapter.

Architecture

Typical of eNtinini and most parts of eBabanango, the composition of the Mazibuko homestead has grown more hybridized with time. Of the twelve buildings, only three remain the historical cone-on-cylinder typology (fig.4.24). The rest of the homestead consists of mud block cubic forms with the thatched hipped roofs recorded in the northern parts of Ukhahlamba flowing eastward to the outskirts of uMnambithi and Colenso. Only the two recent cubic forms in the Mazibuko homestead have flat roofs with corrugated iron sheeting, one of which is a parapet (highveld) type.

Buildings are, predominantly, constructed with mud walls and thatch roofs on the traditional spiderweb timber roof structure. Mud blocks are made with soil from within the site. Grass and timber are also obtainable locally. Two recently built rooms of cubic forms have introduced corrugated iron roof sheeting, one of which has walls of concrete blocks and cemented floors, the visitors bed room. It was expressed that these new building materials are a very expensive way of building. All other buildings have floors treated with cow dung obtained from *isibaya* in the homestead. There is a strict adherence to the tradition of earthy colours used in the surrounding environment. Walls are either plastered and unpainted or left unplastered.

KWAMAPHUMULO SETTLEMENTS

Physical Context

KwaMaphumulo is a rural settlement south of uThukela river along the north coast of KwaZulu-Natal.

The general topography of the environment includes, predominantly, dramatic hills, cliffs and valleys. KwaMaphumulo is characterized by evergreen medium tall forests, with a typical humid coastal climate.

Social Background of Kwamaphumulo

KwaMaphumulo is one of the geographical environments with major historical significance in the early development of the kingdom of KwaZulu. One of the significant historical icons of the place is King Cetshwayo's palace called KwaDukuza, where the town Stanger is today and that is where his grave has been conserved to date.

The environment is characterized by poverty, semi-illiteracy in terms of modern education and lack of physical and social development infrastructure. The social environment of KwaMaphumulo have characteristics typical of KwaZulu, both north and south of uThukela, with regard to traditions, language dialect and, hence, their architecture.

Typical Homestead Layouts

KwaMaphumulo consists of settlements that represent the unique historical model of the Zulu clan in their homestead layouts. There are specific principles that identify this type of planning.

A traditional homestead has freestanding single building units placed in a circular arrangement around a large central court which houses household assets including granaries and livestock. Placement of these buildings and activities vary according to the type and complexity of the household, each of

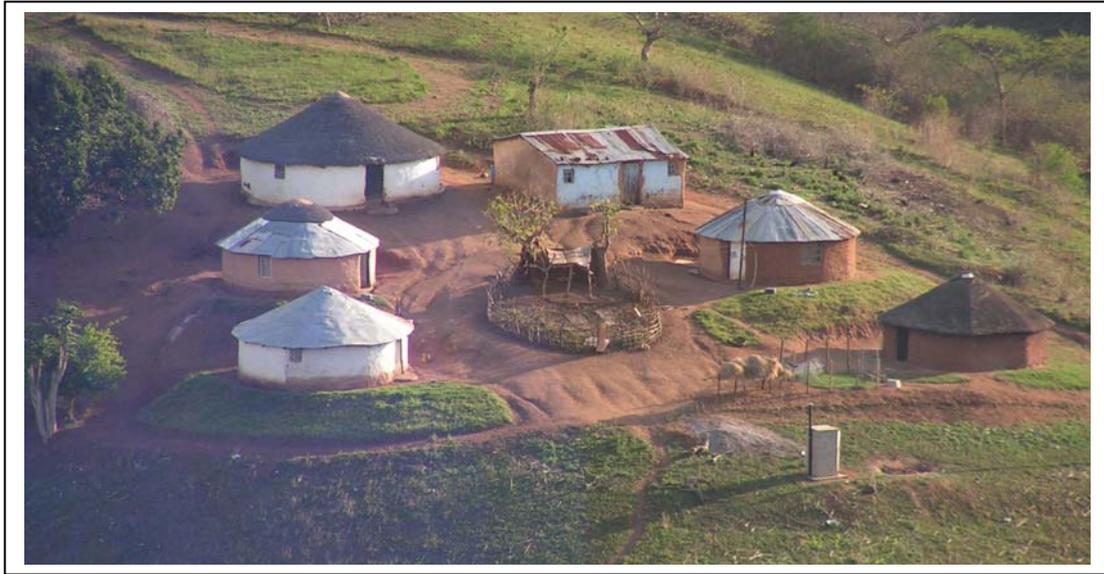
which applies spatial principles that are relevant to it. In the case of a royal setting, for example, the central area is so large that it is also used for the king's *imbizo* (public addresses and other public activities).

Establishment and Development of a Typical Homestead In KwaMaphumulo

The typical ordinary homestead observed in kwaMaphumulo has characteristics similar to those studied in most parts of the province, though the homesteads do not all necessarily look the alike.

The homestead initiates on a spur, most commonly for surveillance reasons. The first building is placed facing *isibaya* downslope. The uniqueness of this model is in that subsequent buildings are placed in an arrangement that eventually embrace *isibaya* (pic.4.25 & fig.4.25). There are, however, some homesteads that have their buildings arranged organically, but still embracing *isibaya*.

KWAMZIMELA HOMESTEAD, KWANDABA SETTLEMENT, KWAMAPHUMULO



Pic.4.25. Kwamzimela homestead, KwaNdaba

Physical Context

The homestead of Kwamzimela (Pic.4.25) sits on a spur in KwaNdaba, one of the settlements of KwaMaphumulo. This settlement consists of homesteads, predominantly, of similar type. The homesteads are sparsely distributed on a hilly terrain which is covered by evergreen medium dense indigenous forests.

Establishment and Development of Kwamzimela Homestead General Layout

Much like most of the large and medium scale homesteads studied in the province, the homestead of Kwamzimela (fig.4.25) initiated with the main cone-on-cylinder building facing down the slope on a spur. This first building served as an all-purpose space, sufficient for the monogamous couple at its initial stage. The building was built together with *isibaya* directly in front of it.

A general store followed shortly as the couple got more established with livestock and domestic crop farming. This building was, initially, a thatched cone-on cylinder and, when it collapsed, it was rebuilt as a cubic building lately used as a master bed room and living room for hosting visitors. When

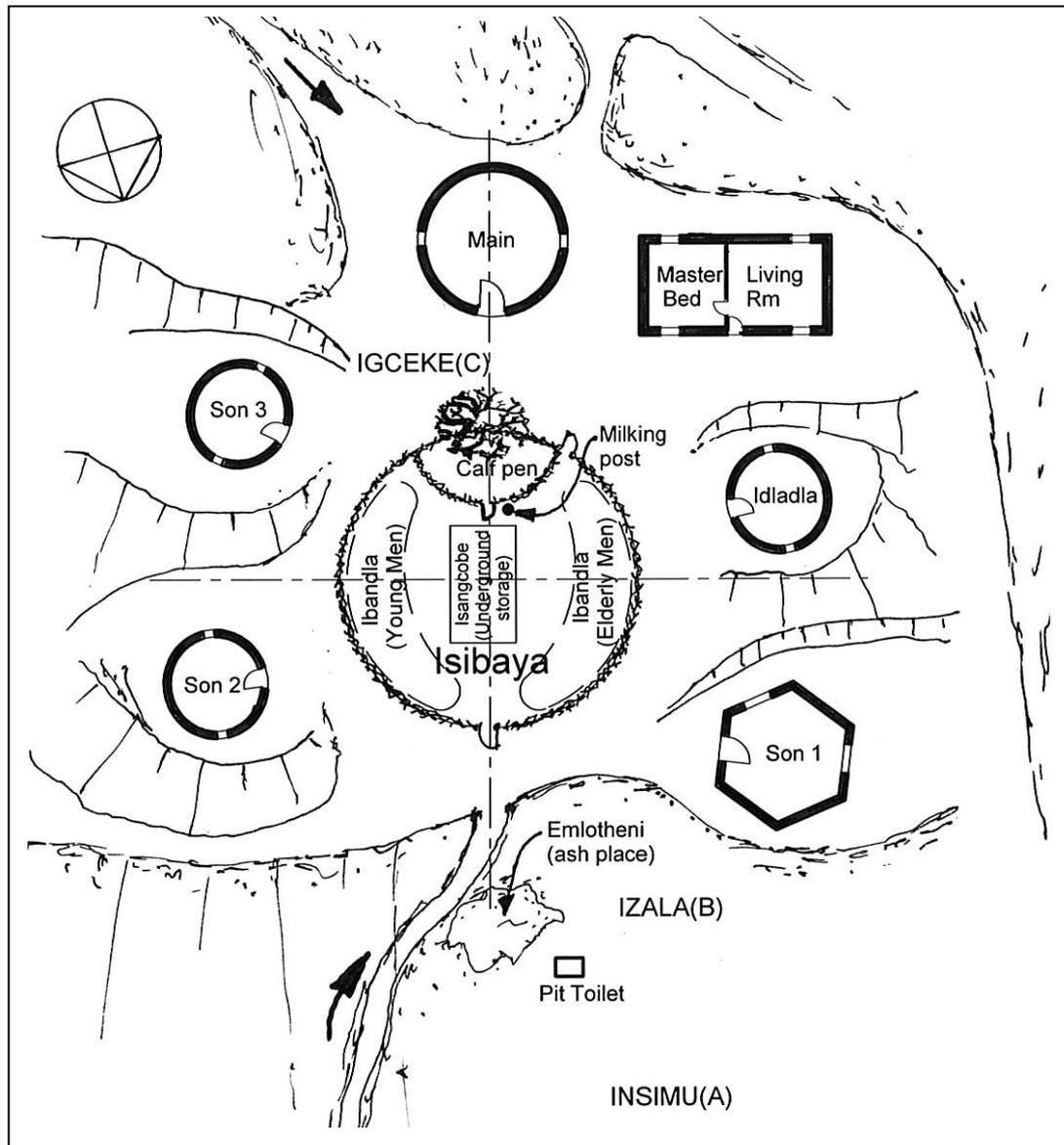


Fig.4.25. KwaMzimela: Homestead layout plan

the couple started having children, an additional cone-on-cylinder unit was built to be used as a kitchen (*idladla*), where the children are left to sleep after the traditional evening story telling. At the age of independence, their first born son was provided with his unit (*ilawu*) on the right hemisphere of the homestead by the formal entrance. This is a cultural position reserved for such purpose. At this stage the first born son has assumed a senior position in the household, that of a prince. The second born child is a girl. No provision was made for her in these premises. She remained in the kitchen, as means

to set her mind towards marriage and exit the house. Both the second and last born sons were placed in the left hemisphere of the homestead, as they are called *amakhohlo* (those belonging to the left) by culture. The last born son was placed next to the parents' (main) building, followed by their second born son below. The latter is positioned as an assistant to the eldest son in status. Culturally, only in case the prince dies prematurely, will the second born son take the position over, otherwise the status only flows through the lineage of the first prince.

All the units (*amalawu*) are placed with an expectation that they will develop into clusters as the sons grow to establish their own families. That will be the expansion of the homestead. When the first householders pass on with age their building is kept as a sacred building where they are worshiped as ancestors. Alternatively, the third generation first born son of the lineage of their prince occupies the main building, to restart the cycle.

At the bottom of the right hemisphere just outside the formal entrance is a place for ash disposal. This is a cultural place for family cleansing and peace making. Below the ash place is a pit latrine provided by the government through the Water and Sanitation Programme. Its position has no cultural trace. The positioning of all the buildings is such that they eventually embrace the central space where *isibaya* is located for security. For this reason, all buildings open directly to this central space.

The homestead has two entrances. That is, a secondary entrance approaches from the top and a formal one from the bottom, used by visitors and for formal cultural activities. This is where the prince is located. Much like all similar homesteads studied in the province, there is no fencing around the premises.

This layout does not follow any gender related principle. It is only about the cultural status of the individual members of the household.

The Layout of Isibaya in KwaMzimela

The function of *isibaya* is not limited to the keeping of livestock as generally understood. The main entrance faces downslope directly opposite the main building. This entrance is such that cattle enter and exit *isibaya* through the surveillance of the prince unit. The cultural use of this facility is strictly limited to men in their hierarchy, where they gather to discuss formal issues of the household (*ibandla*).

The internal spatial layout of *isibaya* is symmetrical. The right hemisphere is used by elderly men and the left is used by young men. At the *umsamo* position is a calf pen (*amankonyana*) by which is a milking post. At the centre of *isibaya* is a storage built underground for preservation of maize (*isangcobe/upata*). On our second visit to the house it was rainy. It was demonstrated how watertight dry cow dung is even under heavy rain conditions. The watertightness and thermal qualities of the cow dung are the perfect conditions for the preservation of the maize for up to a year. The dried cow dung behaves like a spongy soft carpet for comfortable performance of cultural activities in the *isibaya*.

The Architecture of Kwamzimela Homestead

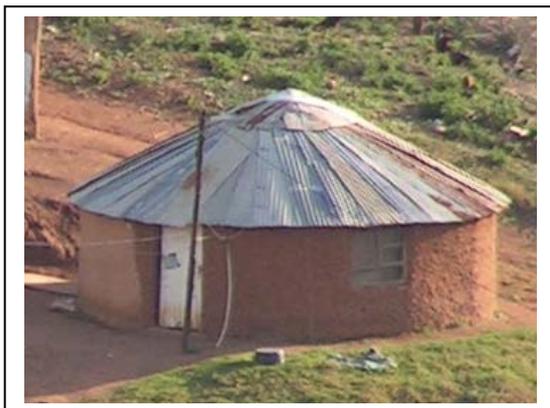
The architecture of the kwaMzimela homestead, much as the surrounding neighbourhood, is characterized by a combination of building typologies, that is, the traditional thatched cone-on-cylinder, cone-on-cylinders with the recent exploration of different metal roof sheeting types, polygon with thatched roof and a gabled cubic form with metal roof sheets.

Buildings of this environment have the characteristics of the north traditional earthy colours with some intervention of the traditional colouring of the south, though it is notable that the colour coding is not as maturely developed as that of the south, in that, one can see that the mud splash problems at the base is still unresolved.

All buildings are structurally framed with *umkhaya*, *umnqawe* and *umthombothi* local wood. *Isibaya*, is also built out of this combination of wood. Mud walls are reinforced with *izintungo* (laths) of local wood.

Of note in pic.4.27 is the bracing of the spiderweb roof structure at the apex where *insika* has been cut off. Conventionally, *insika* is used to hang bare maize, where the smoke from the fire below develops a protective coating that preserves it as seed for the next sowing season. In the case of the kwaMzimela kitchen, the bracings are used for the same purpose.

Much like the technological development trends of the south, the buildings in this sub region show explorations of various metal roof sheeting techniques (pic. 4.26).



Pic.4.26. Kitchen building with flat metal roof sheets



Pic.4.27. Smoke effect on kitchen roof interior sheets

Among the several challenges similar to those observed in the south (kwaNgcobo), a notable shortcoming of the metal roof sheeting is its inability to breathe, which keeps smoke trapped inside the building causing a health hazard.

KWAMCHUNU, KWANONGOMA

Lat: S28 06 51.1 Long: E31 31 39.5 Elev: 260m



Pic.4.28. KwaMchunu homestead, KwaNongoma

Physical Context

KwaNongoma is an indigenous rural settlement situated in the north-eastern part of kwaZulu-Natal, to the north of Umfolozi Omnyama (*Black Umfolozi*) river. The physical character of kwaNongoma ranges from fairly mountainous to vast gentle sloping landscapes. It is a mild sub arid environment with semi deciduous thick forests and shrubs.

Climatic conditions of kwaNongoma is characterized by an average annual rainfall of 7mm, average highest daily temperature of 27°C and average lowest daily temperature of 13°C.

The selected homestead, Mchunu (*Macingwane*), is situated at the south-eastern foot of Mosi mountain, on a fairly steep slope that required terracing of the site platforms for placement of the building.

Social and Cultural Factors

KwaNongoma carries the majestic history of the kingdom of kwaZulu, a status attributed to, particularly, the nineteenth and twentieth century kings of the

Zulu nation such as King Solomon, king Cyprian and the current King Zwelithini respectively. Five of King Zwelithini's both new and inherited palaces in kwaNongoma are kwaKhangelamankengana, kwaLinduZulu, eNyokeni, kwaDlamahlaha and kwaKhethomthandayo. These exclude palaces outside kwaNongoma.

Despite the above status, kwaNongoma is also one of the underdeveloped environments in KwaZulu-Natal, both physically and socio-economically.

The Mchunu homestead is one of the matured households in the area. It is a monogamous household from its history. The initial householders died and left their two sons growing their families within the premises, headed by the eldest brother. Their late parents are now acknowledged and worshiped as the ancestors of the household. The above family structure upholds the traditional role and hierarchy of each family member.

Both of the Mchunu brothers, with their wives, never had a privilege of contemporary education. Most of their children are in primary and high schools. However, the family is relatively wealthy. Within the premises there is a conventional grocery store which belongs to the family, as a central source of income. The performance of the store was not assessed in this study. The family also practices domestic scale livestock and crop subsistence farming.

General Layout of the Homestead

The layout of the dwellings is much similar to the homestead of kwaMazibuko in Babanango. Freestanding buildings are placed in two main rectilinear rows, on terraced platforms along the contours (fig.4.26). The linear layout of the homestead and the corridor between the two rows do not have any cultural nor functional significance. Neither is it influenced by the 'fire breaker' concept noted in the small homesteads like kwaKhambule in uMvenyane, kwaMsomi in kwaDweshula and kwaNdlovu in uKhahlamba central. This arrangement is mainly in response to the landscape. All doors open to the east down slope.

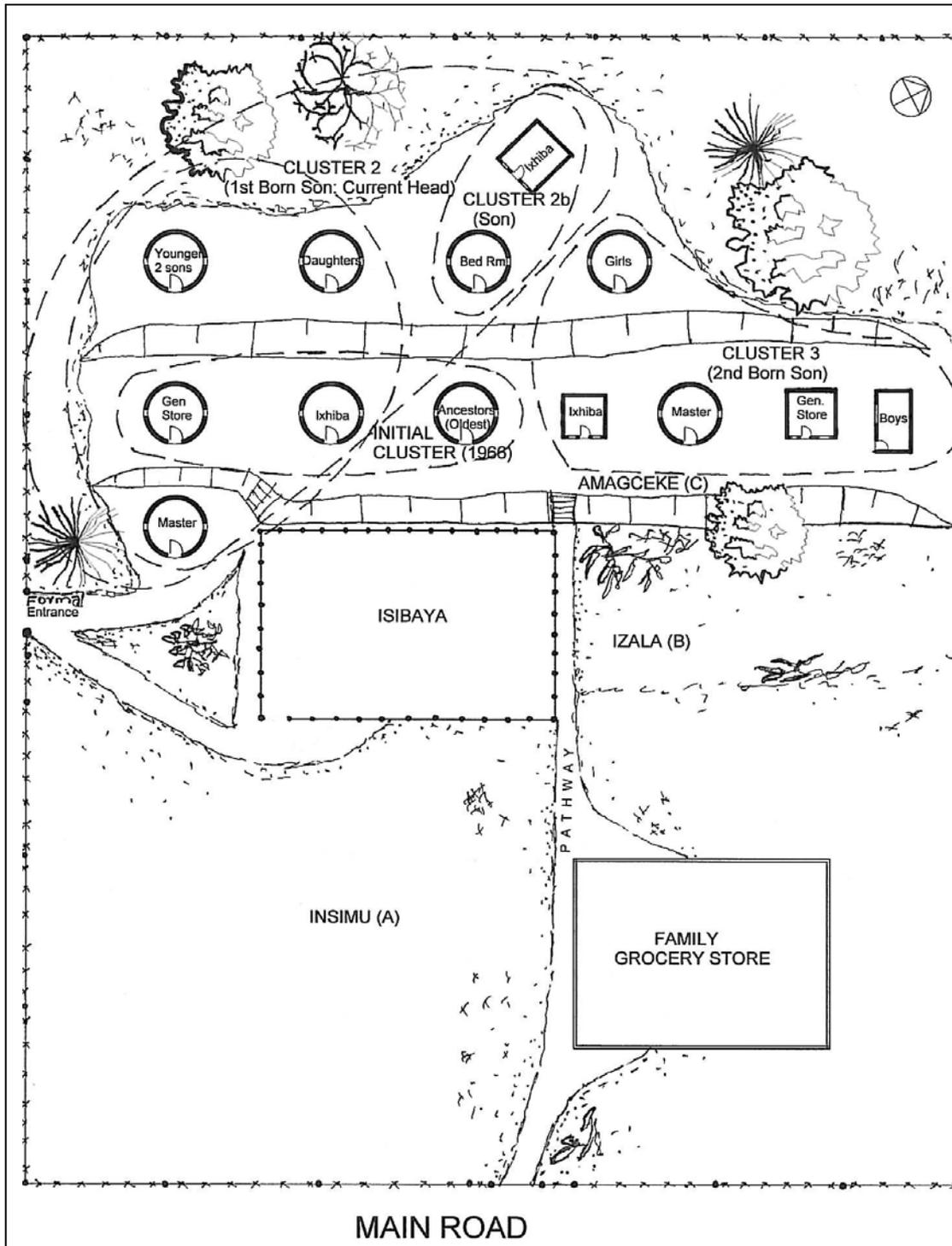


Fig.4.26. KwaMchunu homestead Layout

A rectangular shaped byre (*Isibaya*) is located in the traditional *izala*, zone B, just in front of cluster 1, as old as the cluster itself. Both the *isibaya* and the grocery shop located in the *insimu* (zone A) are communal assets of the family, centrally controlled by the family's eldest brother.

The hierarchy of spatial zoning in the site progresses from public, ie A,B and C (*insimu*, *izala* and *igceke* respectively), with the grocery shop closer to the road, to the most private zone at the dwellings.

Establishment and Development of the Homestead

The birth of the Macingwane homestead was in the middle of the site where building 1a remains to date (fig.4.26). It was stated in the survey that this building was erected in 1966. Much like kwaMazibuko, its growth radiates sideways in a rectilinear pattern.

When the two sons grew up their *amalawu* were positioned on both sides of their parents' cluster. Like all the other homesteads of similar scale recorded throughout the province, the eldest son (cluster 2) was placed by the entrance of the homestead, whose first born son was placed centrally (cluster 2b) behind his ancestors' cluster. The latter cluster was in the process of its establishment at the time of the visit, with a newly built kitchen. No cultural or traditional reason was given for its placement.

Owing to the limited size of the site and the nature of the landscape, any further growth would, likely, assume the centripetal direction discussed in the next chapter.

Architecture

The architecture of kwaMchunu homestead, much as the surrounding neighbourhood, is predominantly characterized by the traditional thatched cone-on-cylinder typology. There is, however, some intervention of corrugated iron flat roofed cubic forms.

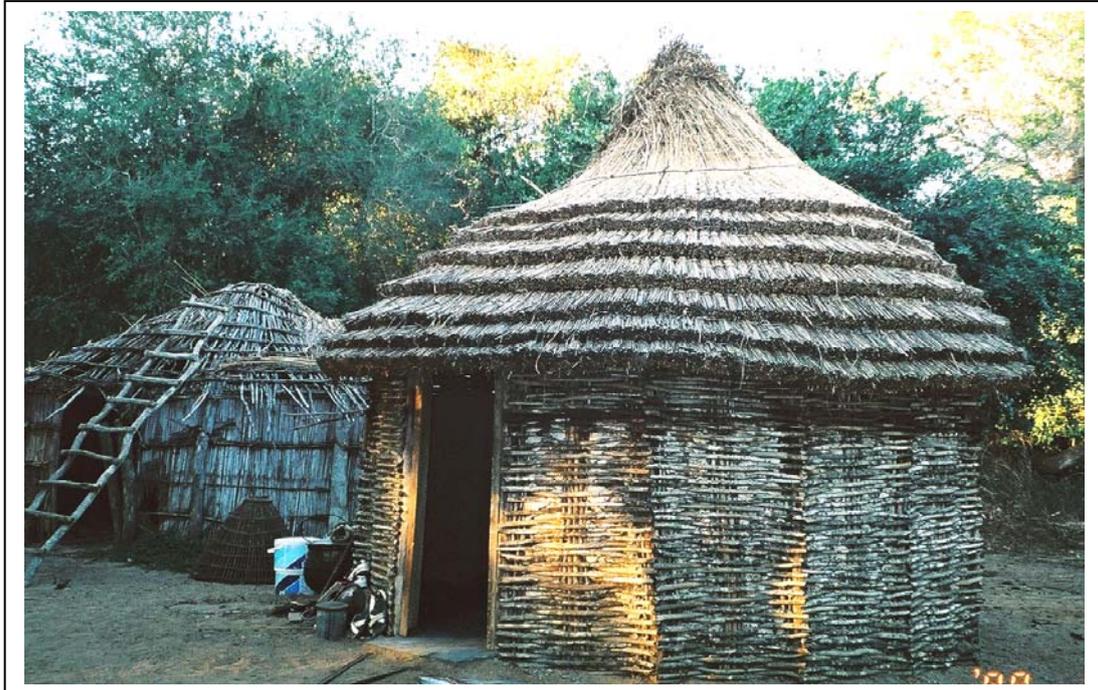
All buildings are structurally framed with *uMkhaya* and *uMthombothi* local wood. *Isibaya*, built out of this combination wood, has survived since the establishment of the homestead to date. Relative to those of the south, cone-

on-cylinder buildings in this region have completely thatched spiderweb roofs. A local *ugagane* tree is predominantly used for *izintungo* (laths) for roofs and for reinforcement of mud walls.

A selection of various coloured soils is used for the traditional earthy colours of the region (pic.4.28). Oxides are sometimes used where necessary for decorations. Floors are predominantly finished and maintained with a selection of local soils or cow dung.

KWATEMBE, KWATEMBE SETTLEMENT, KANGWANASE

Lat: S27 00 42.4 Long:E32 19 23.1 Elev: 142 ft 43m)



Pic.4.29. KwaTembe homestead: Newly built lath-woven cone-on cylinder replacing the collapsing reed-walled hut seen in the background (dedicated to ancestors)

Physical Context

KwaTembe is a rural settlement in kwaNgwanase at the furthest north end of KwaZulu-Natal along the coast, by the south political border of Mozambique and east political border of Swaziland. KwaTembe has a physical landscape typical of Maputaland, though not as evenly flat as kwaMhlabuyalingana, further south, with deep loose fine sand. As a result, roadways and pathways are difficult to manoeuvre. The flatness of the landscape and the deep fine sand suggests that Maputaland was once a sea bed.

Maputaland is characterized by evergreen indigenous tall thick forests. It has a generally hot humid summer coastal climate with an average annual rainfall of 11mm. The average highest daily temperature is 25° C and the average daily lowest temperature is 12° C.

Social and Cultural Factors

The Zulu speaking people of the northern part of Maputaland have an accent unique from the rest of the KwaZulu-Natal province, influenced by both their neighbouring amaSwati and amaTsonga. Their cultures, as a result, are also much hybridized. The major factor is that most men marry women from the two nations, predominantly Mozambique. Indigenous people of kwaZulu often use the expression: “*Induku enhle igawulwa ezizweni*”, (a stick from a foreign tree is most beautiful and valued). Historically men therefore, took pride in imported women from other ethnic groups for wives.

The selected homestead of the Tembe family is a member of a clan that grew to a fairly large village of kwaTembe. It is a relatively small monogamous household of seven members. The size of the household is exaggerated by the ancestral and medical practices of the householders. The husband and the wife are individually powerful and trusted traditional doctors and leaders of ancestral religion. Each of them practices with direct connection with his or her ancestors. The household, therefore, has two separate cores defined with courts. Both domains, however, operate harmoniously as a family with one head, traditionally the husband.

Both householders of the Tembe homestead have never had contemporary formal education. The family is sustained by the ancestral and medical services to their community, which is also a source of the growth of their livestock. The Tembe household upholds the typical order of hierarchy of a family structure. This is well expressed in the physical planning of the homestead.

General Layout of the Homestead

Most homesteads in the kwaTembe settlement have taken advantage of the dense indigenous forests for definition of premises. At the establishment of the homestead only unwanted trees are cleared, leaving the thick indigenous vegetation to define the edges of the premises, without having to use modern fencing systems.

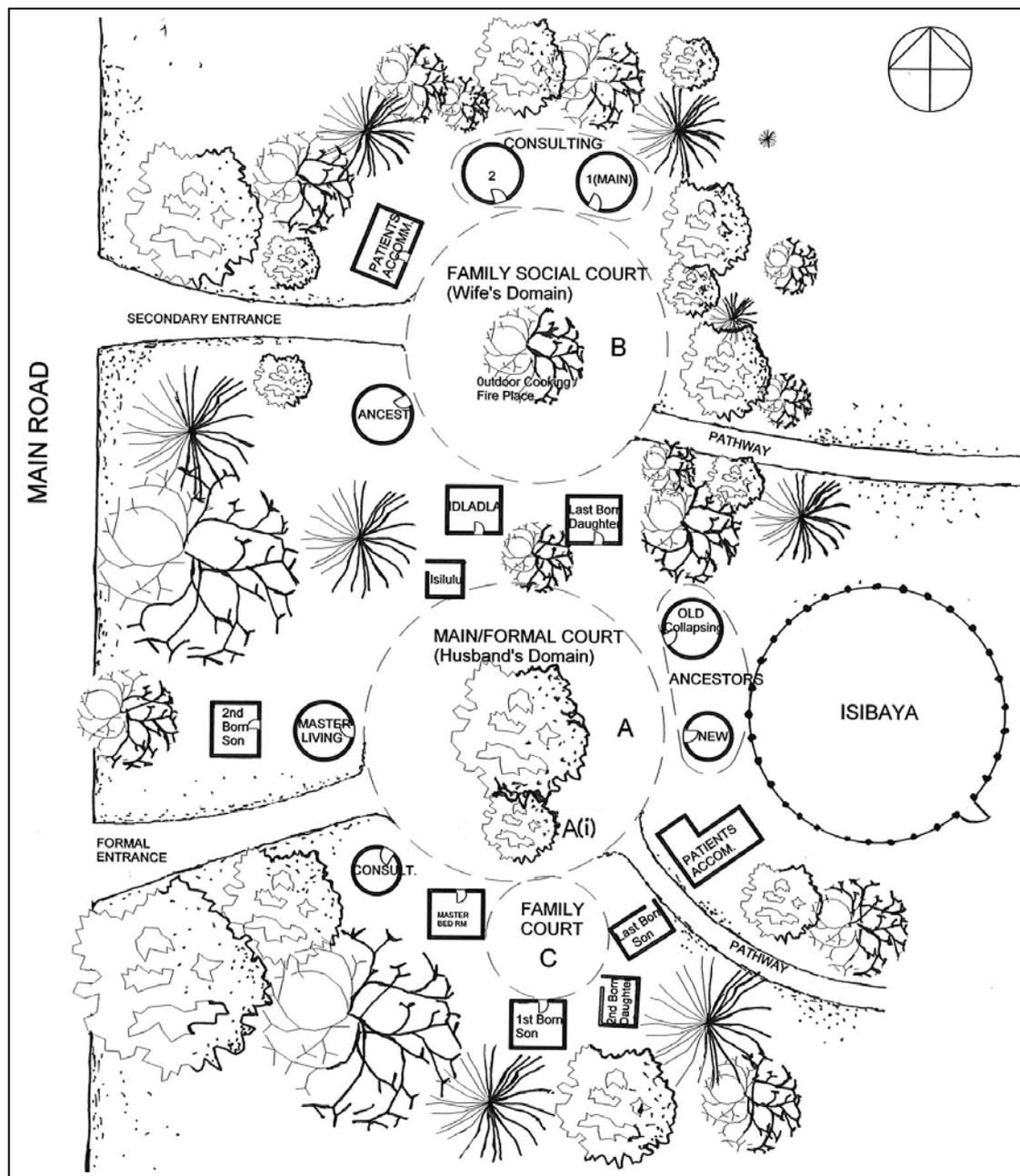


Fig.4.27. KwaTembe homestead layout

Positioning of specific buildings does not follow any rigid pattern (fig.4.27). It only takes close attention to notice that the spatial organization of this homestead is of a remarkable standard relative to any of the homesteads of its scale recorded in this study. For instance, the zoning and hierarchy of precincts and the physical relationships among spaces and buildings are at a high level of definition.

The complex has three well defined primary domains of various sizes and status. That is, the husband's medical and ancestral practices domain, the wife's medical and ancestral practices domain (B) and the family dwelling domain (C). Each domain is defined by free standing buildings organically placed around a central open court.

Though there is a number of accesses into the complex, the formal entrance is the one leading to the husband's court which, traditionally, is the main domain. The main court (A) consists of a large tree under which ceremonial gatherings are held. Next to the large tree is a smaller tree with built-in wooden seats, serving as the reception area for a visitor. *Isibaya* is placed directly in line with the master's living room across the court, a position that emphasizes the status of the main domain. All buildings and spaces for the family members and the husband's ancestral facilities open directly to the main court.

The wife's domain, to the north, also has a central court (B) with a large tree. The court space has a fire place for outdoor cooking. It is mainly used for family social activities. Unlike the husband's court, it is only defined by buildings used for the wife's ancestral activities and patients' accommodation. All these buildings open directly into the open court. Centrally, between courts A and B are the kitchen (*idladla*) and the harvest store (*isilulu/inqolobane*). For some reason untold, their last born daughter's room is also in this central zone.

The core family domain (C) is comprised by the master bed room, their first and last born sons' and second born daughter's bed rooms with their small

central open court. The position of the first born son's room is, typically, that of a head of the domain, suggesting that this could be the reason for the placement of the second born son by the formal entrance which is, traditionally, the first born son's position.

Architecture

The architecture of kwaNgwanase and the rest of kwaMhlabuyalingana is characterized, predominantly, by exposed timber frame with reeds infill, internally plastered with termite mound soil owing to its durable plastering quality (fig.4.28, pic.4.30). Cone- on- cylinder buildings have ribbed thatched roofs. A disadvantage of the reed walling system is that termites feed on the dry reeds, and the rest of the timber falls victim (pic.4.31).

However, there are some sparse interventions of concrete block walling. Cubic buildings are roofed with corrugated iron sheets (pic.4.32).

The architecture of the kwaTembe homestead is a composition of two major types of buildings. All buildings with functions related to ancestors



Pic.4.30. Exposed timber structure with reed infill and ribbed thatch

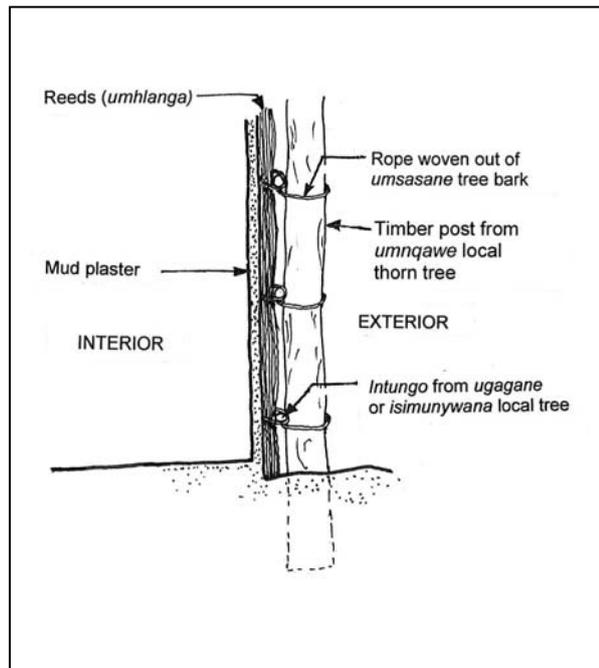


Fig.4.28. Detail section through Reed infill with plastered interior

are either the historical grass dome or the traditional thatched cone-on-cylinder. On the day of the survey the only dome in the homestead had collapsed and rebuilt in a form of a reed-walled cone-on-cylinder which, too, was already abandoned to disintegrate, replaced with a newly built cone-on-cylinder (pic.4.29). All buildings built for dwelling purposes are cubic in form with corrugated iron flat roofs. The functional identities of the two building forms are very distinct.

The architecture of this homestead is, typical of Maputaland, characterized by walls of exposed reeds with wooden frame structure.

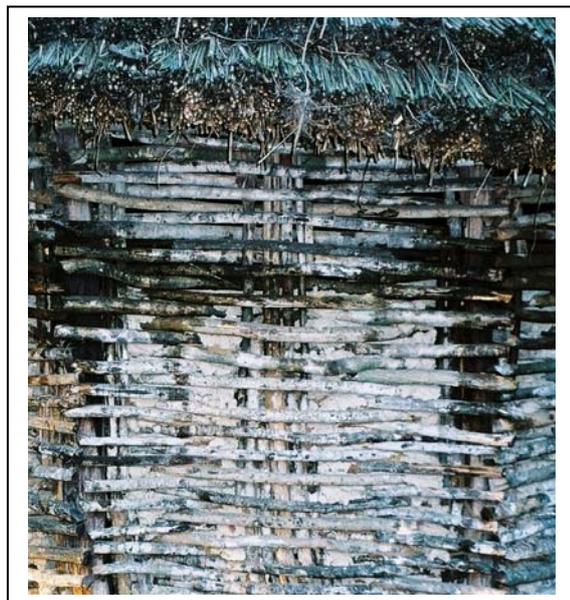
In kwaTembe the style that stands out, is the exposed basket type walling system (*uphico*) of woven *izintingo/izintungo* from *isimunywana* local tree (pic.4.33 & fig.4.29). In this type the interior is plastered up to about 600mm below roof level to allow for adequate cross ventilation and natural lighting while



Pic.4.31. Bottom of a reed wall eaten away by termites



Pic.4.32. Interventions of cubic forms and concrete block masonry walls



Pic.4.33. Lath-woven wall detail elevation

allowing for maximum privacy inside the building. All thatched roofs are ribbed, a style that was only noted from the north of Umfolozi River along the north coast, including eHluhluwe, oBonjeni, eMbazwana, up to the north end of Maputaland. These architectural elements are predominant in both Swaziland and Mozambique, suggesting a strong influence on this part of the province.

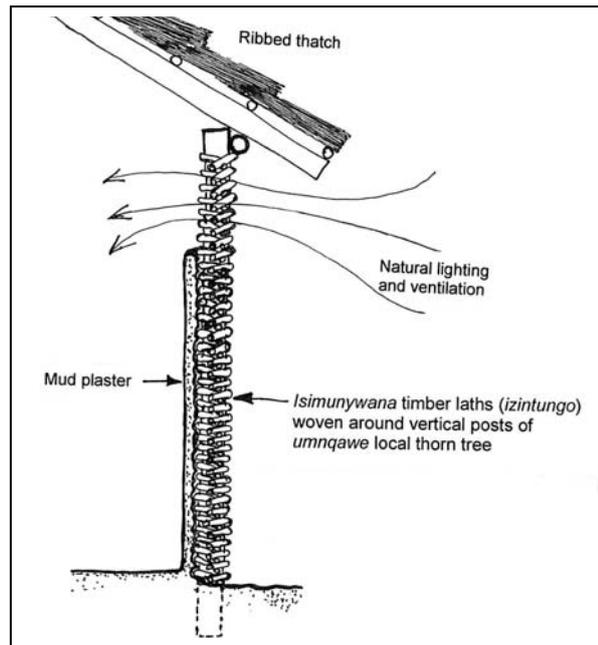


Fig.4.29. Cross section of a typical Basket type construction

Orientation of all the buildings is neither influenced by landscape nor climatic elements. Since the sandy topsoil poses no threat of possible rain water flowing into buildings, all doors comfortably open towards the central courtyards. The thick forest also serves as natural thermal cushion on the landscape. These conditions, therefore, have allowed planning to be more functional than responding to climatic and other physical factors.

CHAPTER 5

THE ESTABLISHMENT AND DEVELOPMENT OF A TRADITIONAL INDIGENOUS HOMESTEAD

INTRODUCTION

From the fieldwork it is notable that the establishment and development of a typical Zulu homestead is largely informed by the cultural and social organization of its household.

This chapter discusses those cultural and social aspects, in brief, and their manifestation on the establishment and development of a typical indigenous homestead.

CULTURAL AND SOCIAL ORGANIZATION OF A TYPICAL HOUSEHOLD

From this field research it was found that, although most geographical divisions coincided with clan boundaries, enough instances of geographical overlaps existed as to make the identification of a geographical site with regional culture, almost impossible to sustain.

A notable unifying characteristic of all the households studied in the province is the recognition of privacy and independency of individual members, usually as one passes teenage, while tied in the order of hierarchy within the family structure. This is the strongest determinant to the placement of each building in the homestead.

Traditionally, a first born son is next to his father in leadership status and he is, therefore, expected to assume the role of his father, as the householder, after he has passed on. However, the initiator of the homestead remains the core of the identity of the clan as *idlozi*, even after their death. The domain of the first born son is generally associated with responsibility, such as management of the household assets and receiving formal visitors. He is

usually positioned by the main entrance of the homestead. The youngest is placed at the rear most end, while an unmarried daughter is placed in a well protected position among her brothers but accessible from the back of the complex by her lover. These findings were constant in large homesteads across the province like, for example, kwaNgcobo eNgilanyoni, kwaMbhele eNyezane, kwaMazibuko eBabanango and kwaMchunu kwaNongoma.

Clusters that compose a homestead are named after the maiden names of the different wives that occupy them like kwaMaCele, kwaMaNdlovu, etc. The identity and autonomy of a cluster is assumed as soon as a dedicated kitchen is built for the wife who occupies it. This is an identity that differentiates a cluster from *ilawu* (young man's room).

Of the twenty seven households that were surveyed, only five had husbands present at the time of the survey. Those were self employed householders. In the rest of the households, husbands are out for work in the towns and cities. Their wives have, therefore, taken over weekday chores such as management of assets, ploughing, construction and other responsibilities that were traditionally carried out by men before the era of migrant labour. The general management and different role playing in households have, since, been affected in several ways which cannot be discussed in this document.

All the rural communities surveyed had the poorest economic lifestyle in terms of national standards. All the large homesteads that were analysed had an average of 15 cows and a few poultry. All the small houses that were visited had no *isibaya* at all. Older settlements still have grazing lands for their herds.

While all homesteads have crop fields within their living premises, some of the older and larger households are still privileged with large crop fields outside their living premises. Both crop and livestock farming are generally for household consumption.

In the survey it was noted that indigenous rural areas of KwaZulu-Natal range between extreme ancestral and Christian religions at various levels. In the

case of an ancestral worshipping household a room, particularly of a cone-on-cylinder type, is marked with goat horns and dedicated to activities connected ancestors. Christian households studied in the survey have a similar approach, except that the dedicated space does not bear any physical mark.

CULTURAL ORGANIZATION OF SACRED SPACES

It is important to note that not all the buildings in a homestead are subject to strict principles of the religious cultures, discussed earlier, in their internal functional spaces. Those rules apply particularly to sacred spaces such as household communal spaces and *isibaya*.

A. Communal and Worship Rooms

The early stages of the expansion of the initial cluster include general room which serves as the communal room and kitchen for the family. It is usually the largest of all the buildings in the homestead. This room is also used as the initial children's bedroom, where they are simply left to fall asleep after story telling every evening. This is the place where the interaction of the different members of the household requires observation of cultural orders with regard to the hierarchical position of each member in terms of gender and age.

When the parents pass on to be the *amadlozi* (ancestors) of the household, their bedroom remains the sacred place of their spiritual presence in the household. The *umsamo* space is dedicated to *amadlozi*, used as the altar (fig.5.2) where prayers are conducted.

The layout of functional spaces in the communal room follows a concept much similar to the Italian renaissance Vitruvian's 'ideal man' in a circle (Millon,1994), though applied differently (fig.5.1).

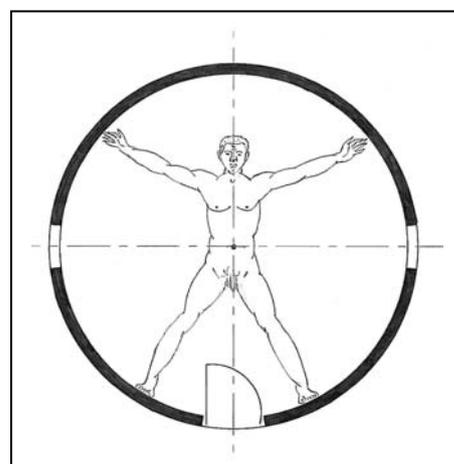


Fig.5.1. The 'Ideal Man' planning concept

The internal spatial layout is, to a great extent, influenced by the symmetrical floor plan of the room. Detailed arrangements of the functional spaces in those primary zones are in accordance with the hierarchical order of the household.

The room has five major zones, ie, the entrance area (*isithumbanja*), the centre with *insika* (post) and *iziko*, the male and female zones, and *umsamo* (altar).

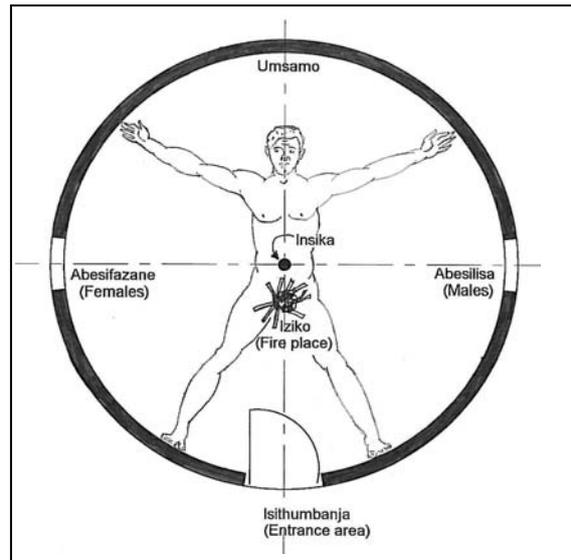


Fig.5.2. Basic interior layout of a typical communal room

It is customary that females sit on the left side of the imaginary 'ideal man', behind the door. Their sitting arrangement is such that elderly women sit more towards *umsamo* in the hierarchical of their seniority.

Males sit on the right side of the 'ideal man' in the hierarchical order of their seniority, with the exception of *uSokhaya* (the householder), who sits closest to the entrance for surveillance purposes, with his watch dogs just outside the entrance area (*esithumbanjeni*). Some householders prefer a special private door so that he does not use the same entrance with females, in case some are in ritually unclean conditions like menstrual periods.

Umsamo is the most sacred spiritual part of the entire homestead, representing the head of the human figure. It is where the family rituals are performed. When a member of the family dies, the coffin is placed in this sacred place as for transition before he/she is finally buried to join the ancestors.

The central post (*insika*) is at the umbilical point of the imaginary human figure, where the setting out of the building is centred. In the genital position

of the human figure is the fire place, around which the family gathers in the evenings and cold weathers. It is also where central food preparation is done for the household. The significance of the position of the fireplace, both as a food preparation place and as associated with the genital part of the human figure, has to do with reproduction. The growth and stability of the household is viewed as both in biological reproduction for numerical expansion and the nourishment of a physical body. As a fireplace for thermal warmth, it is the social focal point of the household. Since the aspects of reproduction and cooking or feeding are associated with mothers, the fire place is dedicated for use by females only. In cases where the fire needs to be increased it must only expand towards the female hemisphere of the room.

B. Isibaya

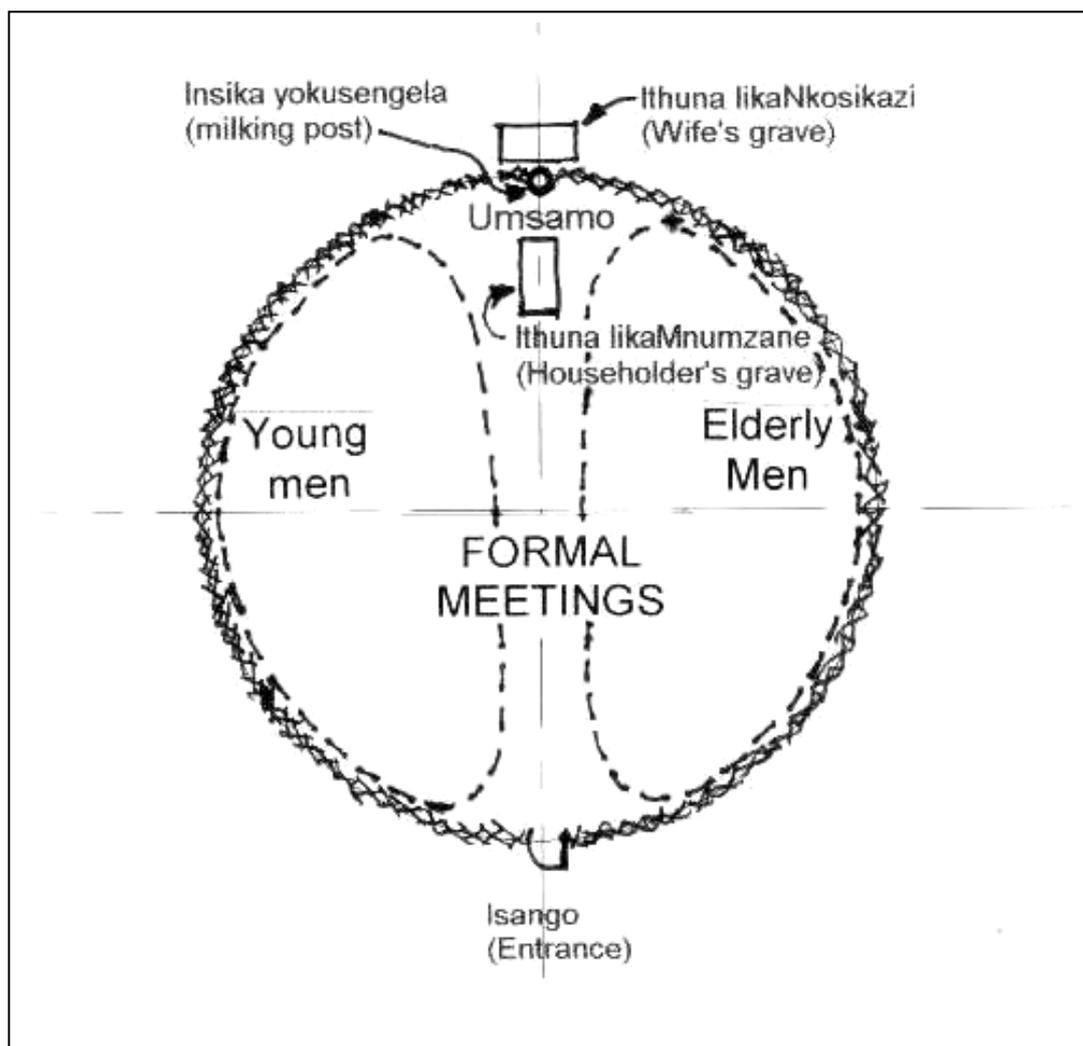


Fig.5.3. A sacred use of *Isibaya*

The layout of *isibaya* follows the same spatial concept as the communal room, though the similarity is only limited to *umsamo* at the head of the imaginary 'ideal man', in relation to its entrance. When the householder passes on, he is buried in the *umsamo* position, which becomes one of the most sacred places in the homestead. This is the only grave that sits within the byre. When his wife follows on, she is buried next to him but just outside the byre (fig.5.3).

In the case where *isibaya* has to continue to house cattle and certain cultural activities, the grave gets isolated within. In the much often cases where his sons have their individual byres, each one takes his share according to the old man's distribution of his will. His *isibaya* is then kept as his sacred grave premises in the homestead.

As the homestead grows further, one finds more than one sacred space dedicated to the various generations of ancestors. However, the initial ancestor remains the core in the homestead.

CHAPTER 6

TYPICAL HOMESTEAD LAYOUT PATTERNS

INTRODUCTION

Chapter 4 of this document uncovers one primary principle of spatial planning of a traditional homestead which successfully characterizes the indigenous architecture of KwaZulu-Natal. This planning principle manifests consistently in the different layout types across all the sub regions of the province.

This chapter outlines the various homestead layout types identified in the fieldwork, that is, Circular, Organic and Rectilinear layout, demonstrating the common traditional principle that distinguishes them as the indigenous architecture of KwaZulu-Natal.

CIRCULAR PLANNING CONCEPT

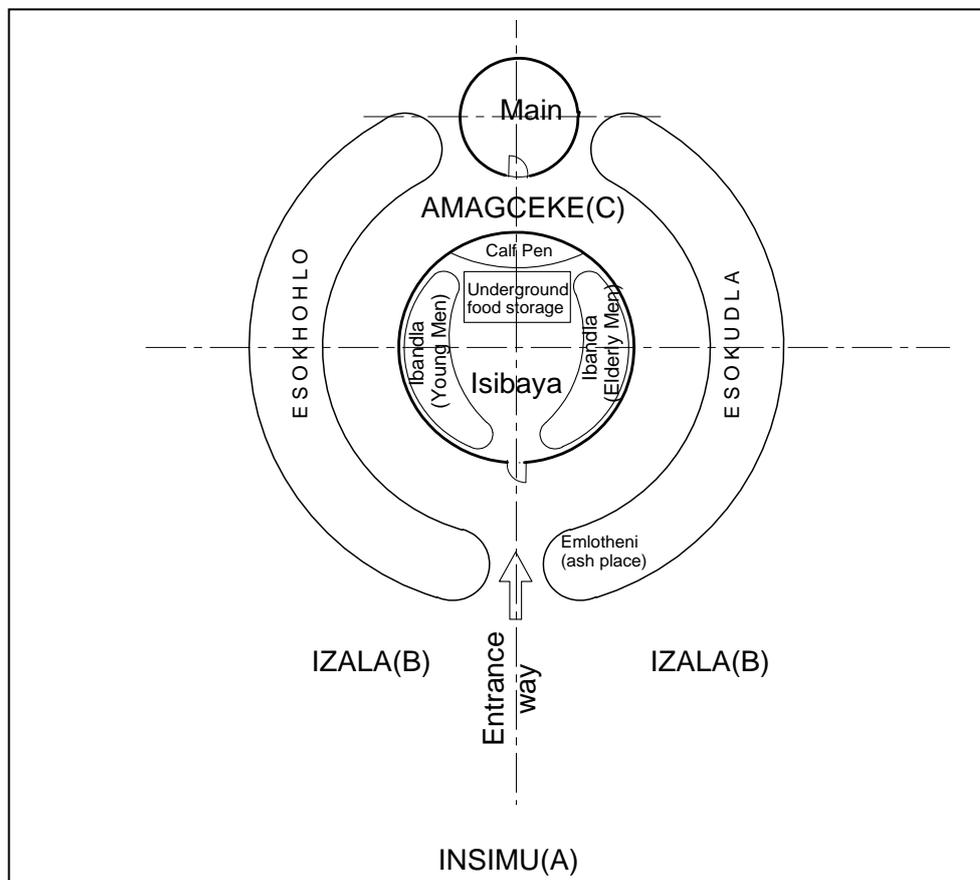


Fig.6.1. Circular planning concept of KwaZulu

This is the well known and widely documented historical homestead layout concept of kwaZulu, where buildings are placed in a circular arrangement around *isibaya* (fig.6.1). This type still exists in the rural settlements of the historical kwaZulu, though not as geometrically circular as the popular royal homesteads.

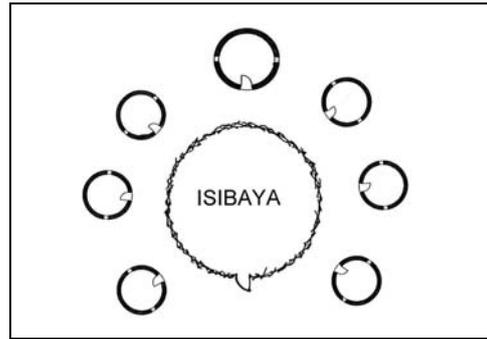


Fig.6.2. Typical Homestead

This model is commonly regarded as the Zulu homestead, representing the province of the current KwaZulu-Natal. On the contrary, this study has uncovered that this type represents the architecture of the historical kwaZulu in the surroundings of uThukela river, where it still exists.

Historically, there has been a distinction between a royal and an ordinary homestead layout. A palace was planned in a perfectly closed circular layout with rigid royal functional and cultural planning principles (6.3), whereas, the ordinary homestead followed the same traditional concept of a central space surrounded by freestanding buildings, but the planning principles were relatively relaxed and the homestead did not have to be a completely closed circle.

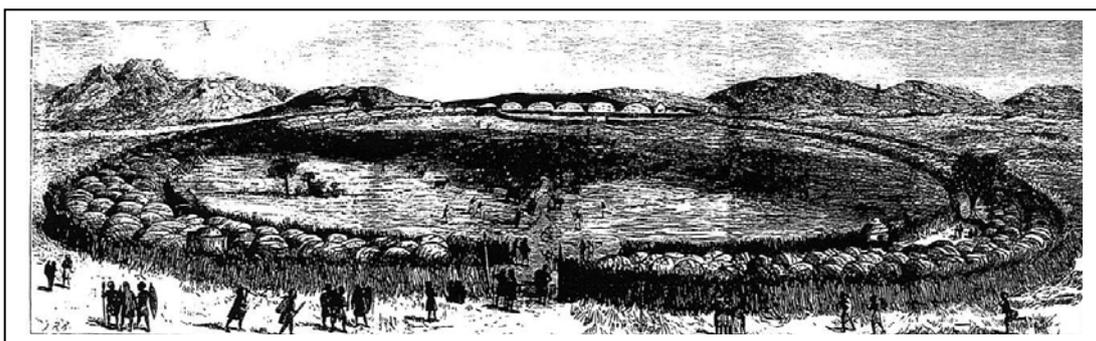


Fig.6.3. King Cetshwayo's palace (Frescura, 1981)

Frescura's (1985) comparative analysis of Southern African settlement patterns records that Khoi traditional homestead layout were circular, with treasured household assets placed in the centre of the homestead and surrounded by free standing building units.

This suggests that the traditional circular homestead layout found in this region is attributable to one of the strong influences of the KhoiSans who existed before the settlement of abeNguni. In the Zulu version, this planning concept was modified by the Nguni cultural organization of a household and the social order of the times. Another distinct characteristic of

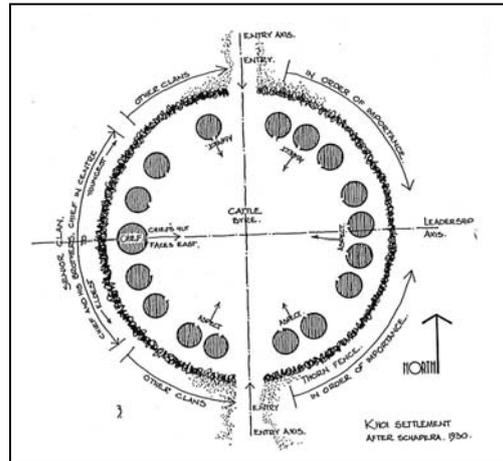


Fig.6.4. Khoi homestead (Frescura, 1985)

this model is the relationship of the main building, which is normally the first of all buildings in the establishment of the complex, with *isibaya* (fig.6.1). The position of a prince is, culturally, at the bottom end of the right hemisphere.

ORGANIC PLANNING CONCEPT

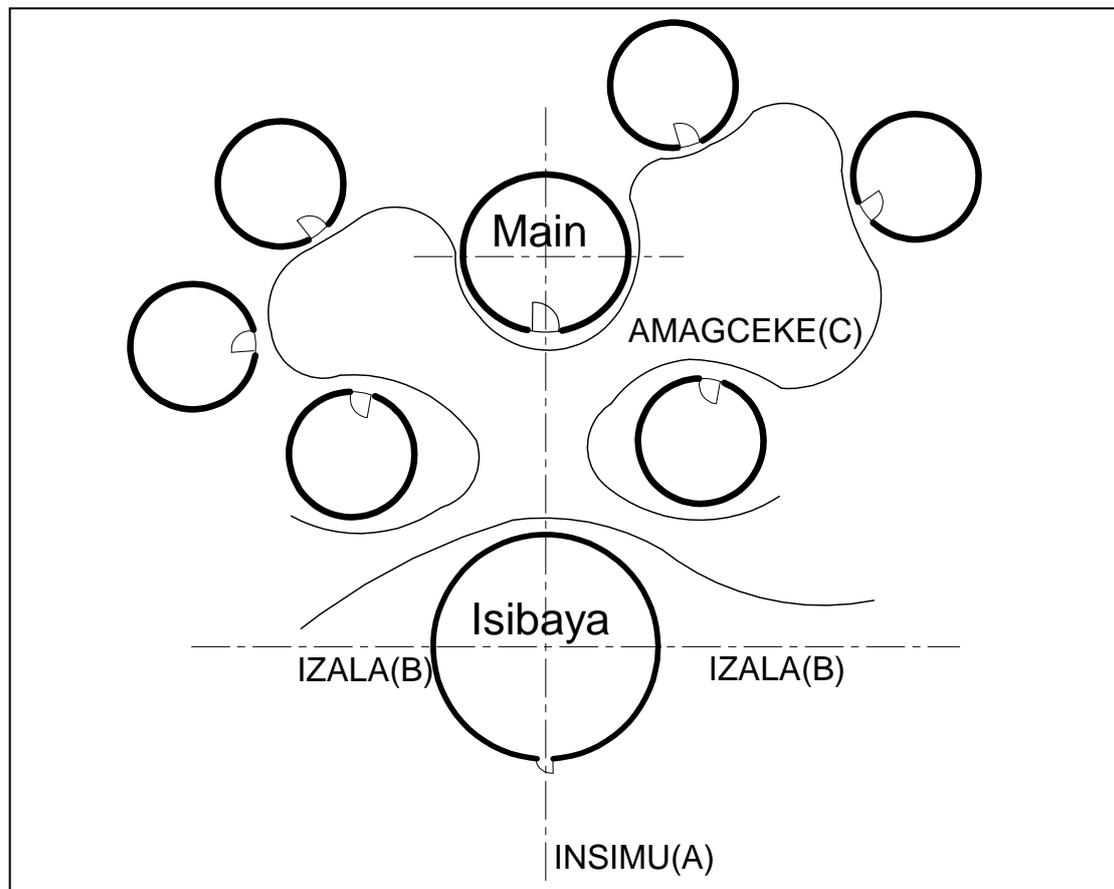


Fig.6.5. A typical organic layout of a homestead

This is a planning concept that is well expressed in the larger and older homesteads, like kwaNgcobo in eNgilanyoni, kwaMbhele in Loskop and kwaTembe in Maputaland, among others. Such homesteads are usually established on gentle sloping and almost flat lands where the complexes are laid out with little or no topographic limitations. Individual buildings, therefore, spread freely and randomly in the site. However, this is the type that has successfully showcased the complex cultural principles of planning.

This concept displays two of the major cultural principles of planning that were noted in the Zulu circular model. The main building sits directly symmetrically with *isibaya*. The prince of the family is also placed by the formal entrance into the complex overlooking *isibaya*, though without a definition of a hemisphere as noted in the circular concept.

RECTILINEAR PLANNING CONCEPT

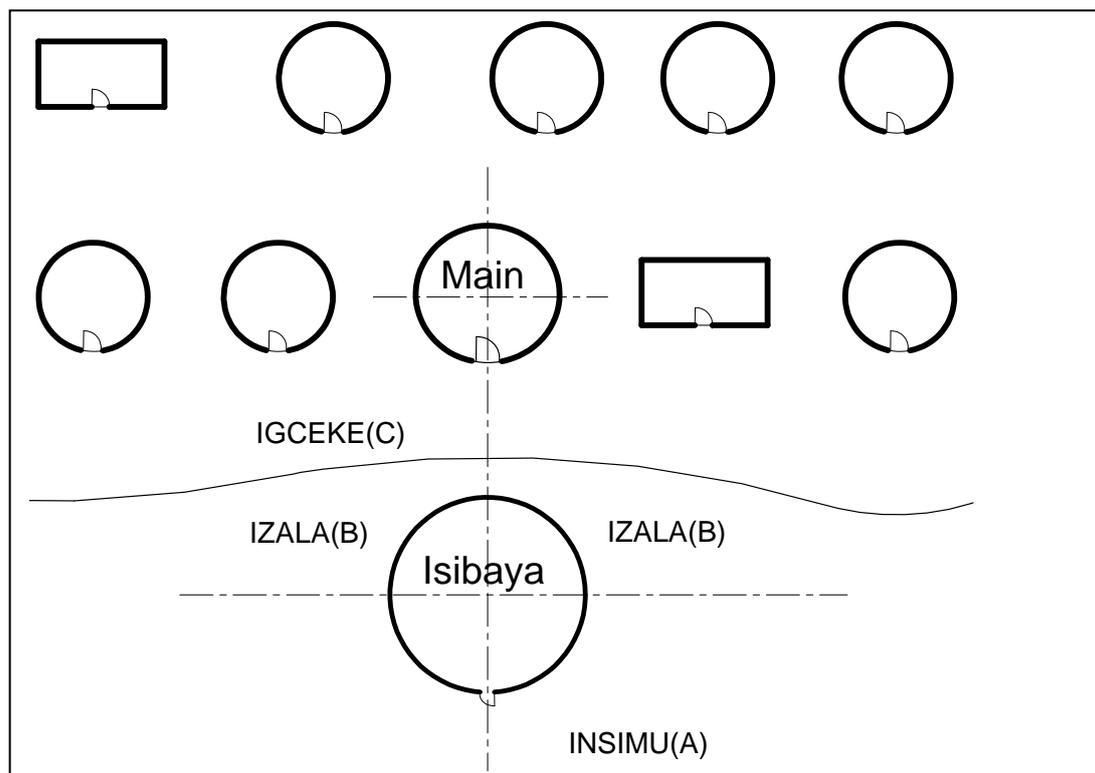


Fig.6.6. A typical rectilinear layout in a large homestead

Though the rectilinear layout pattern is found in some of the large homesteads like kwaMchunu in kwaNongoma and kwaMazibuko in

eBabanango, it appears to have given in to the dramatic growth of smaller and younger settlements that have spread on steep hilly landscapes of the province that developed, allegedly due to loss and scarcity of comfortable settlement land which is, predominantly, occupied by commercial farmers.

This model appears to have introduced a planning solution to those sites with such topographic conditions, homesteads like kwaKhambule in uMvenyane, kwaMsomi in kwaDweshula, homesteads of eGulube in Embo and kwaNdlovu in Loskop, have assumed a rectilinear layout of a hybrid composition of a 'circle-cube-circle' rhythm pattern (fig.6.7) along the contour of the slope. That was a development of a new typology that cannot expand physically, as households have grown poorer and smaller. These settlements are denser than the older ones. It could not be established in the survey as to which part of the province pioneered this typology.

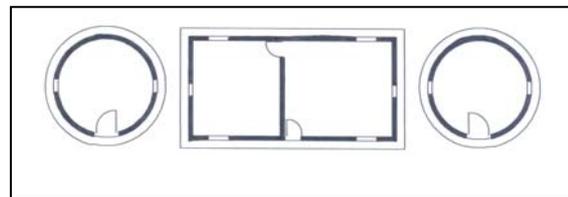


Fig.6.7. A typical 'cube-cube-circle' concept of rectilinear homestead layout

Beyond the technical origins of this typology, it has generally won the interest of most parts of the province as a style. It was interesting to note how Msomi in kwaDweshula has synthesized this style with modern architecture (pic.4.3, fig.4.8).

It was noted that this model also bears both characteristics that were identified in both the circular and the organic planning models. The first, main, building is placed directly symmetrical to *isibaya*. The prince of the household is placed by the entrance way into the complex overlooking *isibaya* rest of the homestead, though without a definition of a hemisphere as noted in the circular concept. This placement is considered to be position of responsibility.

PRIMARY ZONES

All the various models and sizes of homesteads covered in this survey follow the same ABC functional hierarchy (fig.6.8) of layout of primary zones in the site as detailed in chapter 4. That is, *insimu*, *izala* and *igceke* consecutively. The application of this principle varies from one homestead or regional environment to another in terms of layout patterns and sizes. *Izala* is the interface belt between *insimu* (crop field) and *igceke/amagceke*, the social and circulation spaces in the immediate surroundings of the buildings. Zone C, where buildings sit, is always at the upper end in case of a sloping site with *insimu* at the lower end. *Izala* comprises vegetable and fruit gardens and *isibaya*. Placement of individual buildings or clusters in the *amagceke* zone follows the hierarchical order of the household, which does not necessarily dictate a rigid layout pattern of the units in the homestead.

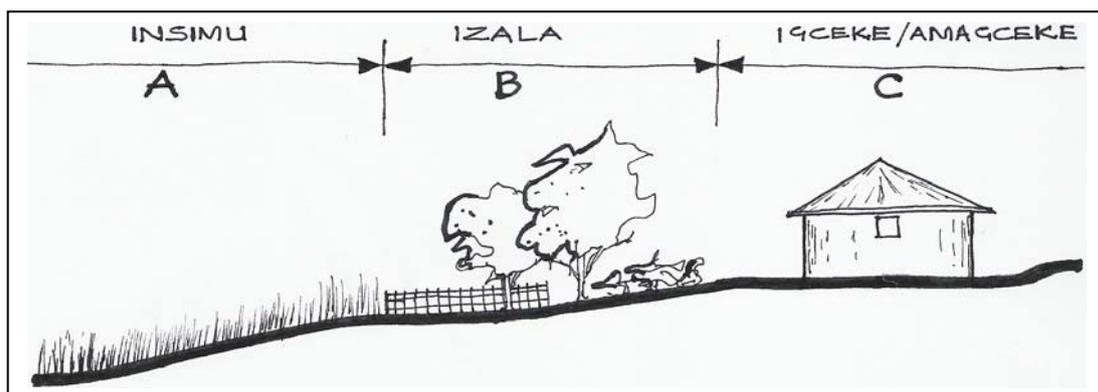


Fig.6.8. Section showing typical site zoning

For instance, the homesteads of kwaMchunu in kwaNongoma, kwaTembe in Maputaland, kwaMbhele in Loskop, kwaNgcobo in eNgilanyoni and many others, have applied the same cultural planning principles while the physical layout patterns are completely different from each other. However, some of the notable physical characteristics that link them all, except a negligible few in the province, is the placement of a first born son's domain by the formal entrance.

KwaHlatshwayo homestead in Bergville (fig.4.22) demonstrates the strength of the traditional planning principles. The homestead consists, predominantly,

of modern partitioned cubic buildings, but the spatial zoning in the premises follows the principles of the traditional homestead that consists of clusters of freestanding individual buildings recorded in kwaNgcobo, kwaMbhele, kwaMchunu and others.

There are three distinct layout patterns noted in the province. That is, circular, organic and rectilinear layouts.

ORIENTATION

Orientation of the buildings, predominantly in the rectilinear type of homestead layout, is in response more to landscape than to the sun as opposed to modern buildings, the difference being that the thermal behaviour of these traditional buildings is relatively well balanced. All buildings face downslope to prevent rain water from running into the building. This is even at the expense of available opportunities for positive manipulation of those negative spaces. The kwaMazibuko complex in eNtinini settlement (fig.4.24) and kwaMchunu in kwaNongoma (fig.4.26) are the best examples, where the layout of buildings is in two parallel rectilinear rows that face one direction downslope, leaving a dead corridor in between.

Homesteads with a circular type of layout such as those found in the historical kwaZulu settlements have all buildings opening doors to the central space, even as the homestead sits on a sloping spur. This principle involves adaptation of the landscape to create platforms for the individual buildings and to control rain water.

The same principle of orientation is notable in the kwaTembe complex (fig.4.27) in the far north coast, where the terrain is flat and the homestead layout is organic. All buildings have doors facing communal outdoor spaces, forming pockets of clusters in a hierarchical order. The principle of orientation of all the buildings in this setup is not influenced by any climatic factor but based on functions only.

THE METAMORPHOSIS OF A HOMESTEAD

It was noted in the study that the establishment of a traditional isiZulu household begins with a dwelling for the young householders which usually serves a multipurpose function. The next building is a kitchen which is used as a family social space, where children also sleep as the family begins to grow. The initial cluster also includes a granary (*isilulu*) and *isibaya* directly in front within the *izala* zone. When a son grows independent, *ilawu* (a freestanding room) is built for him, with a potential of developing a cluster when he gets married. The markable budding of a typical homestead starts with sons flanking or spreading around the core cluster occupied by the parents. Girls are no priority in the system as they are not considered permanent members of the household, except where it is established that she is settled in the house, like in the case of kwaNgcobo of eNgilanyoni.

Fig.6.9. shows a typical physical growth of a homestead informed by the cultural background discussed earlier in this chapter.

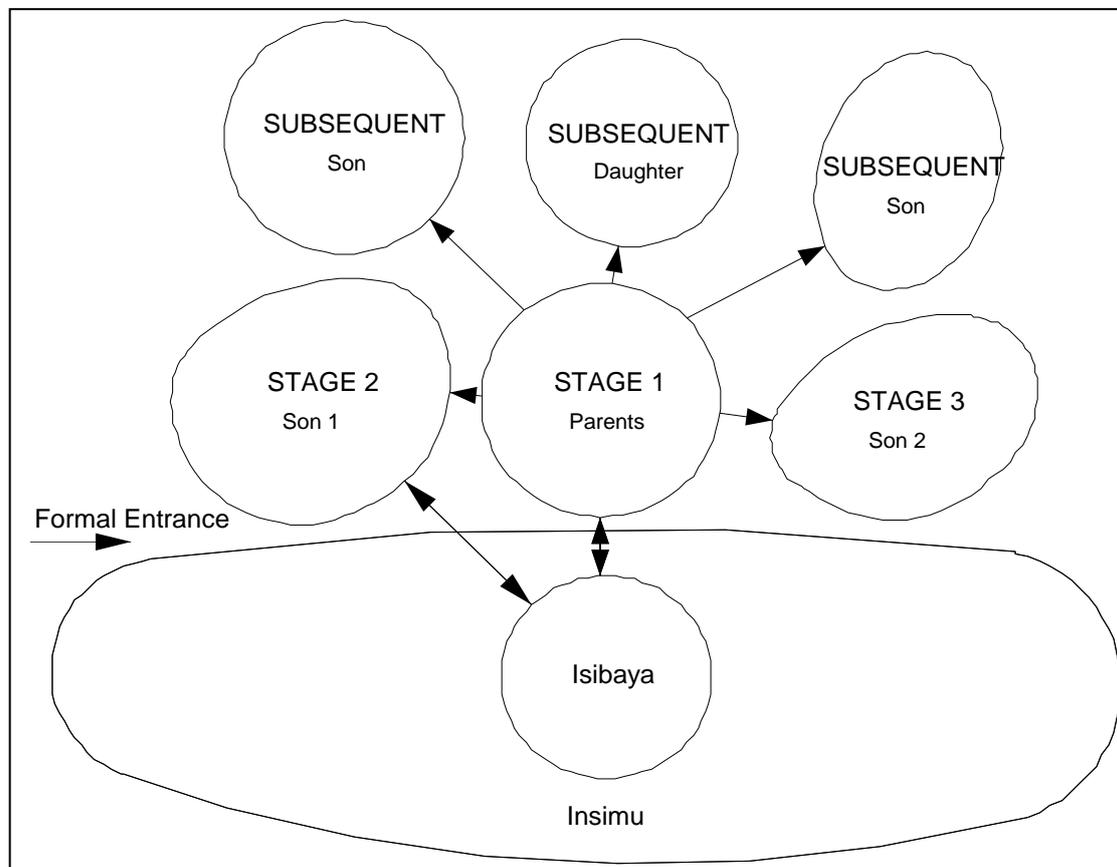


Fig.6.9. Diagrammatic Model of the early stages of Homestead development

CHAPTER 7

SETTLEMENT DEVELOPMENT MODELS IN KWAZULU-NATAL

INTRODUCTION

The large historical indigenous settlements seen in KwaZulu-Natal resulted from developments of single units of homesteads that grew in various ways.

Two typical growth patterns of homesteads were noted in the study. That is, radial or centrifugal and circular or centripetal. These two models are discussed in detail below

RADIAL/CENTRIFUGAL MODEL

Fig.7.1 illustrates the components of a residential complex represented as follows:

Core:	Initial householder
Cluster 1:	1 st born son
Cluster 1A:	1 st grandson
Cluster 1B:	2 nd grandson
Cluster 2:	2 nd born son (this position is usually occupied by daughter)
Cluster 3:	3 rd born son
Cluster 4:	4 th born son
Etc	

As sons develop clusters of sub families within the household, they radiate and spread around their parents cluster. After the death of the initial householders their huts are given functions that will keep them connected with the family as *amadlozi* of the entire eventual clan; functions such as family communal or sacred worship room. The kitchen remains central for the homestead, even while each cluster has its private dedicated kitchen.

The room dedicated to *amadlozi* is usually identified with goat horns above the entrance. That remains in the life time of the homestead. When that building starts aging and collapses, it gets rebuilt, so that its value and existence is immortal. When the homestead is deemed saturated, a new

homestead is developed as a further expansion of the household (fig.7.1). This direction of expansion continues as long as land is available.

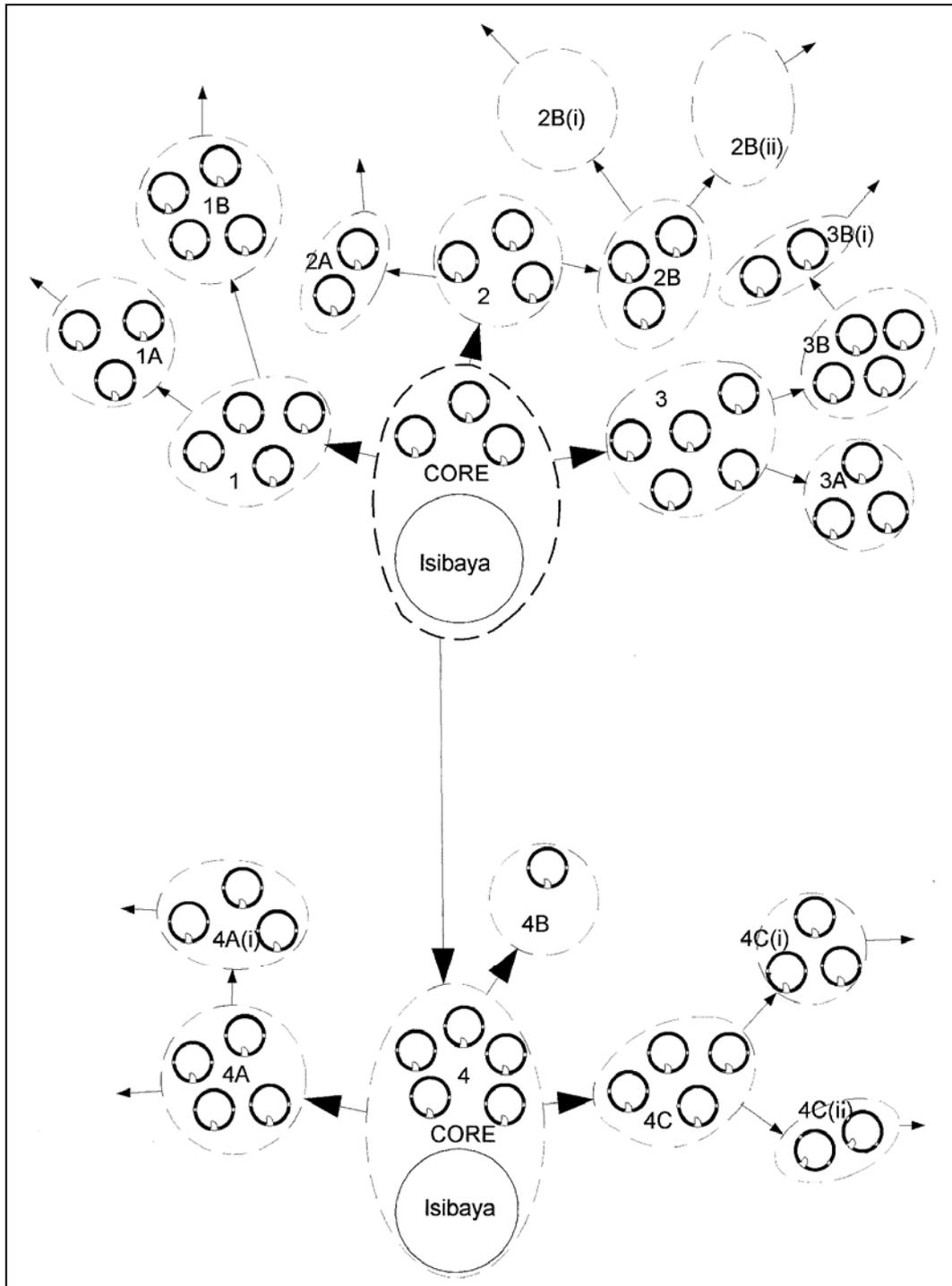


Fig.7.1. Diagrammatic Model of a Radial / Centrifugal Homestead growth

This is the type of expansion recorded in the kwaMbhele clan in Loskop. The initiator of the homestead remains the core of its identity to all extents of its

growth in terms of its name and cultures. Expansions of this nature are attributed for the historical developments of massive clan villages, like those in the Central Ukhahlamba area (emaHlutshini, kwaMkhize, kwaDlamini, etc) and the villages of eNquthu (kwaZondi, kwaMncube, kwaMazibuko,etc), in which case the initial head of the clan becomes king of the growing tribe, with a well defined system of his succession. This concept saw the radical expansion of a small family within a Nguni clan expanding to a tribe that was able to pull other neighbouring Nguni families and clans into itself to the eventual imperial amaZulu nation.

CIRCULAR/CENTRIPETAL MODEL

The establishment and early stages of the growth of this model is similar to the radial type. The numbering of clusters in the illustration of this model is therefore similar to the numbering used in fig.7.1.

Households with circular growth, like kwaNgcobo in eNgilanyoni, are usually influenced by limited land for physical expansion. Its physical growth is, therefore, only limited to its current premises and cannot spread outward to a large clan (fig.7.2)

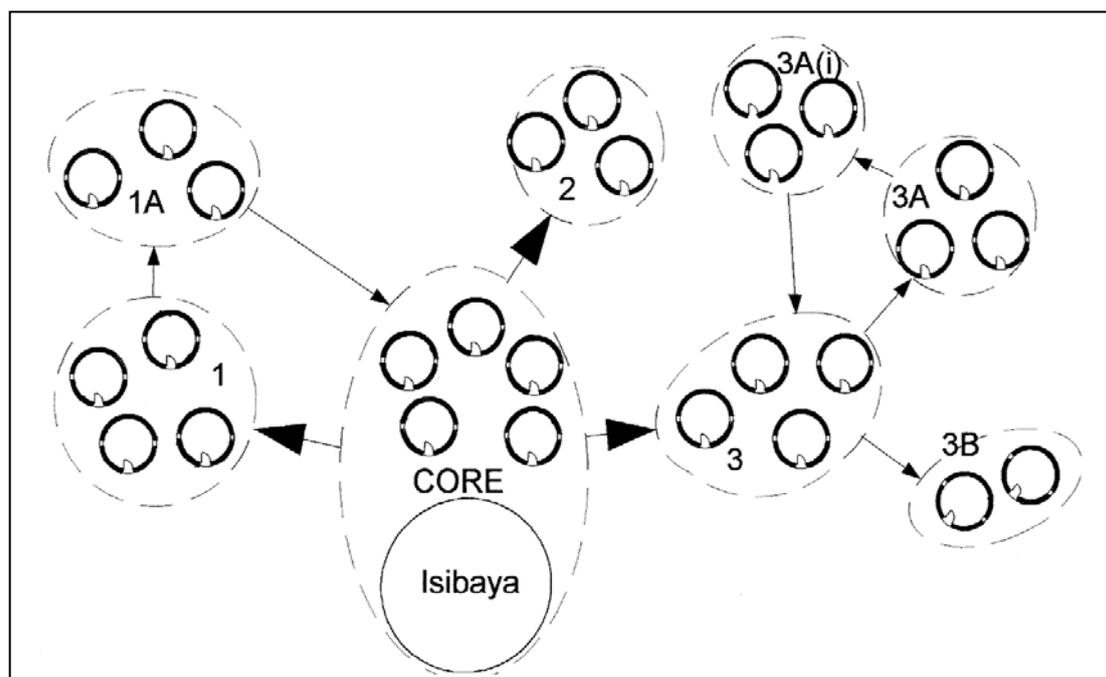


Fig.7.2. Diagrammatic Model of a Circular / Centripetal Homestead growth

In a circular model, when the householders pass away, their cluster is inherited by a second or third subsequent generation, following an established system of succession. For example, the household of kwaNgcobo of eNgilanyoni gave the significant part of the parents cluster to the second wife of the second born son. In the selected homestead of kwaMbhele of eNyezane, the late parents cluster was fully inherited by the eldest grandson from their first born son, to restart a perpetual cycle. One of their rooms gets dedicated to those late grandparents who have become *amadlozi*. When the building ages it is rebuilt to maintain the ever existence of *amdlozi* in the household. The latter arrangement is the commonest practice among amaZulu across the province.

Such a natural development of a settlement result in an organic type of a layout, relative to the colonial grid patterns found in urban settlements where land has to be highly economized.

Pic.7.1. shows a typical South Coast rural settlement that results from any of the above two models of homestead development.



Pic.7.1. Typical South Coast Settlement

Smaller households that were studied in this survey are structured much like the initial cluster of a germinating homestead. In dense settlements like uMvenyane, kwaDweshula, eMbuthweni and some of the recent settlements along uKhahlamba and inland, households naturally assume a centripetal direction of growth, owing to economic and land limitations for physical expansion.

CHAPTER 8

A TYPOLOGICAL ANALYSIS OF THE TRADITIONAL BUILDINGS OF KWAZULU-NATAL

INTRODUCTION

Through all the indigenous rural settlements surveyed in the province it was noted that architectural typologies are distinctly regionalized.

Frescura (1981) provides a well structured analysis of all the rural indigenous building types of southern Africa and their historical evolution. This chapter takes advantage of such an analysis but limiting it within KwaZulu-Natal.

BUILDING FORMS

As a result of this fieldwork it also became evident that, although there was a predominance of certain dwelling forms in specific regions, those were not clear enough to create either regional or cultural stereotypes. Unlike the work of Frescura (1985), which presumes a historical time line to dwelling forms, it was found that transitions between one dwelling form and the next were not evolutionary but often took place within the same homestead and within a relatively short space of time. This means that any historical transition which may have taken place before 1994 must now be considered obsolete and that the iconography of indigenous architecture has now focused upon the building of 'stable' dwelling forms rather than the existence of traditional nuances. On the other hand, much effort seems to be placed, in more recent times by indigenous rural builders, upon the creation of hybrid building forms. This proved to be an important finding in the structuring of this document as opposed to the reports of others researchers (Waltons, 1967; Frescura, 1981). No regional stereotyping could be drawn, particularly with regard to form. The reasons for this are manifold and can, probably, be laid at door of increasing urbanization. This appears to have been accompanied by a reduction in the number of building forms that are being built today in the rural countryside.

This turned out to be an important point in the structuring of this research, as the apparent loss of certain forms and technologies has inevitably influenced the concomitant issue of indigenous identities

This study has identified ten basic building forms that spread in the province as shown in fig.8.1. While some of these forms are found in specific regions only, most of these forms are common throughout the province. Each region handles these common forms uniquely, thereby defining its geographic identity in colours, roofs and layouts.

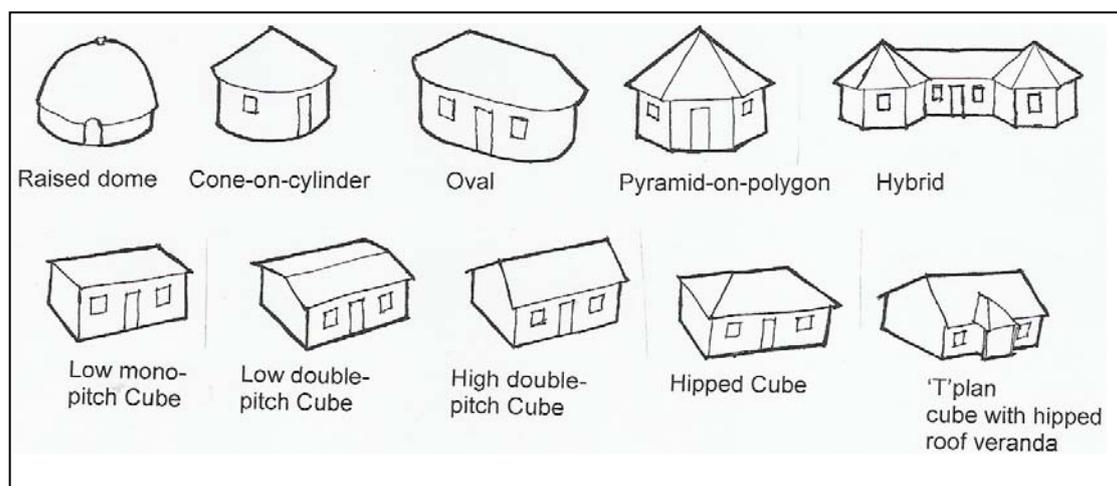


Fig.8.1. Basic Building Forms in KwaZulu-Natal

Compositions of indigenous homesteads across the province have developed a traditional combination of most of these forms within one complex. The historical grass dome (*amaqhugwana*) is almost extinct across the province. Attempts to resuscitate this building type

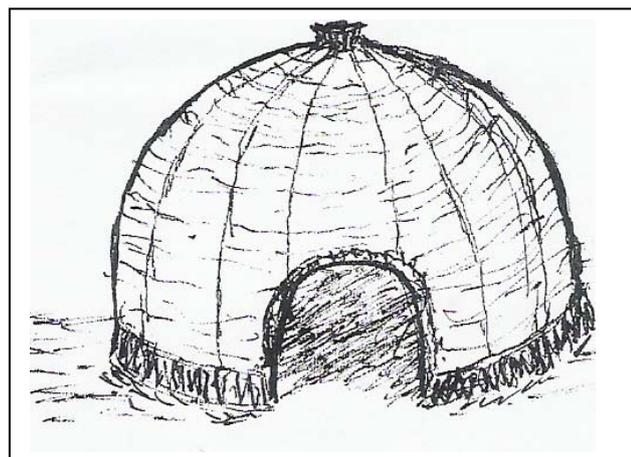


Fig.8.2. Historical grass dome

were noticed particularly in most of the settlements of the northern parts of the western region (oKhahlamba) though, generally, for their antiquity more than functional purposes.

Southern Regions

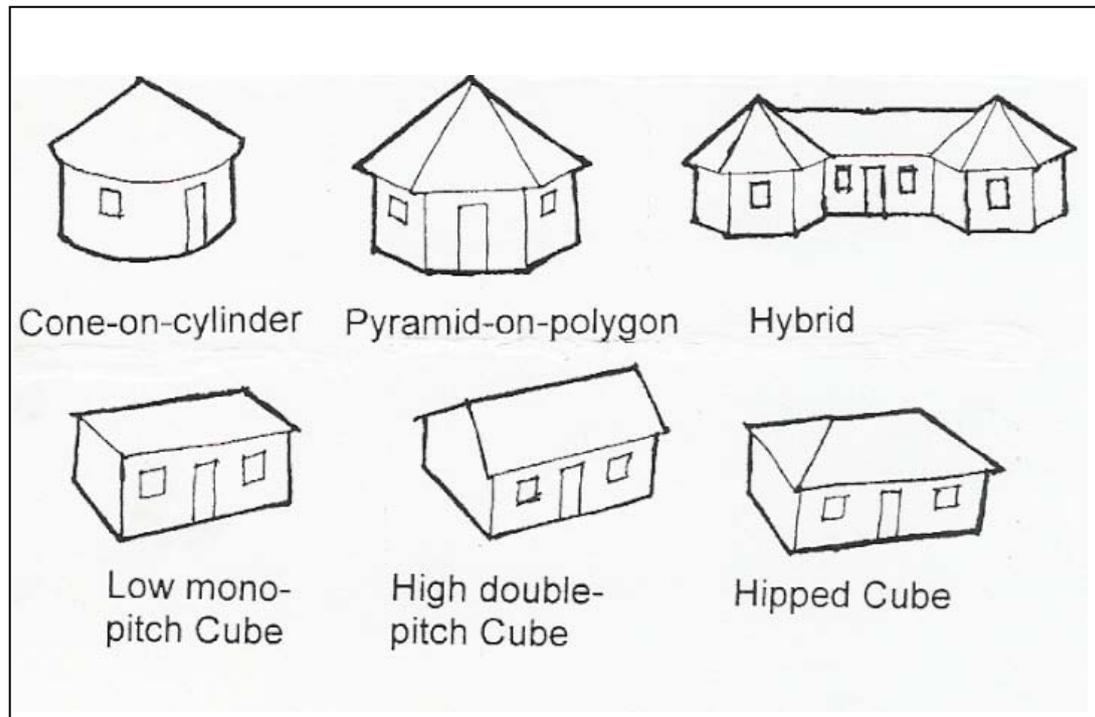


Fig.8.3. Building forms of the Southern regions

South West Region

Traditional forms in the homesteads of the western part of the south coast region are fully thatched cone-on-cylinders and cubic forms with gable-end double pitched and hipped roof types. The cubic forms are only roofed with corrugated iron sheeting.

South Coast Region

The south coast has appeared to be the most active in the exploration of forms and materials. This is one part of the province that has, to a great extent, introduced a gradual intervention of metal sheeting to the cone-on-cylinder forms towards the north end of the region. This intervention initially presents as hybrid roofs and gradually replaces the thatch completely (pic.4.9 and fig. 8.4).

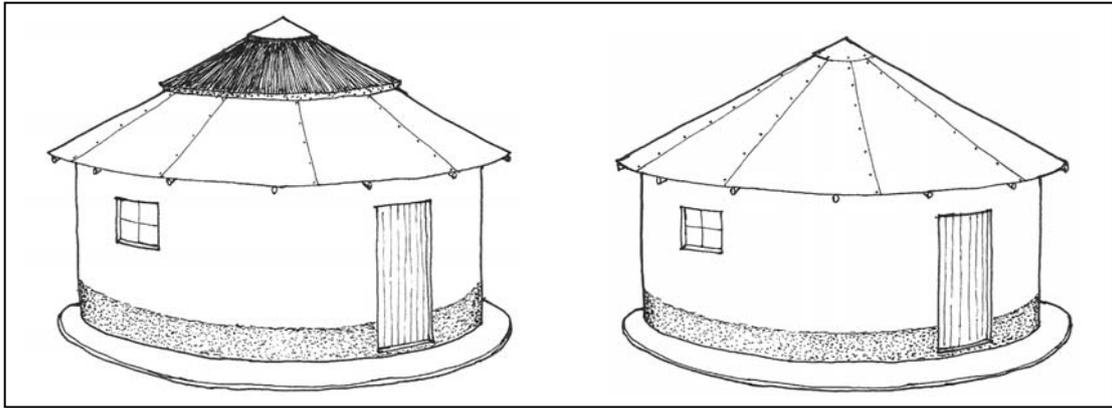


Fig.8.4. Introduction of flat metal roof sheeting: South Coast

Though this came as an exploration of the modern material merited for its relative response to fire, it has become a traditional style of the region. The south coast region has also explored the development of their cone-on-cylinders to polygonal forms with improved solutions to their metal roof sheeting problems. Such explorations further led to successful use of concrete roof tiling. This is the region that developed the traditional 'circle-cube-circle' concept further by merging the three components into one hybrid building, replacing the cone-on-cylinder with the pyramid-on-polygon.

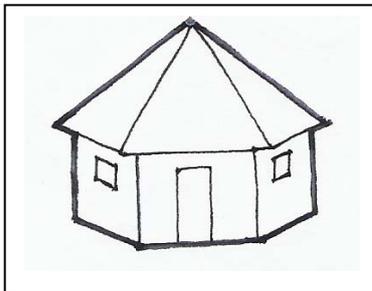


Fig.8.5. Pyramid-on-polygon type: South Coast

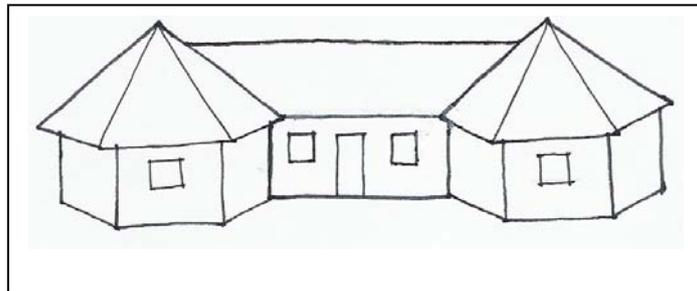


Fig.8.6. Hybrid type: South Coast

These developments are at peak towards the north end of the south coast region, fading off in the Umbumbulu rural settlements, just outside Umlazi and KwaMakhutha townships, south of the eThekweni city.

West (Ukhahlamba) Region

The western region, along uKhahlamba, is characterized by sparse existence of thatched raised domes, cone-on-cylinders, cubic forms with a range of roof types (fig.8.7). There is some introduction of thatch to some of the cubic forms.

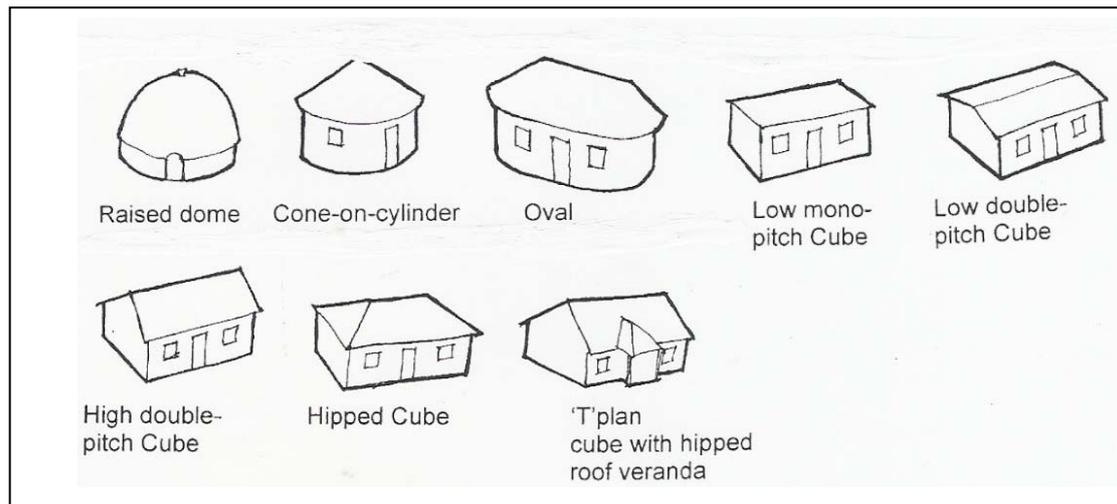


Fig.8.7. Building forms of uKhahlamba

The southern part of this region has further developed the uMsinga type of roof apex to the creatively woven type shown in fig.8.8. The north end of uKhahlamba, has recently introduced an oval-shaped or double cone-on-cylinder form which, apparently has been imported from Lesotho, west beyond Ukhahlamba.

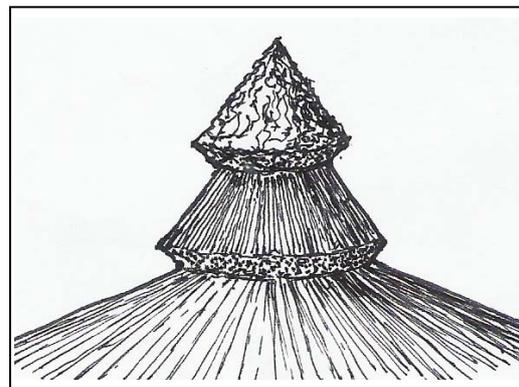


Fig.8.8. Roof Apex: Loskop

Walls are built with mud blocks, though the baSotho version has stone walls. This is the only sub region characterized by a typology of this kind in the province.

North Region

The north coast is characterized by a sparse spread of thatched raised domes, thatched cone-on-cylinders and cubic forms with corrugated iron roofs of mono-pitch, gable-end double pitch and hipped style.

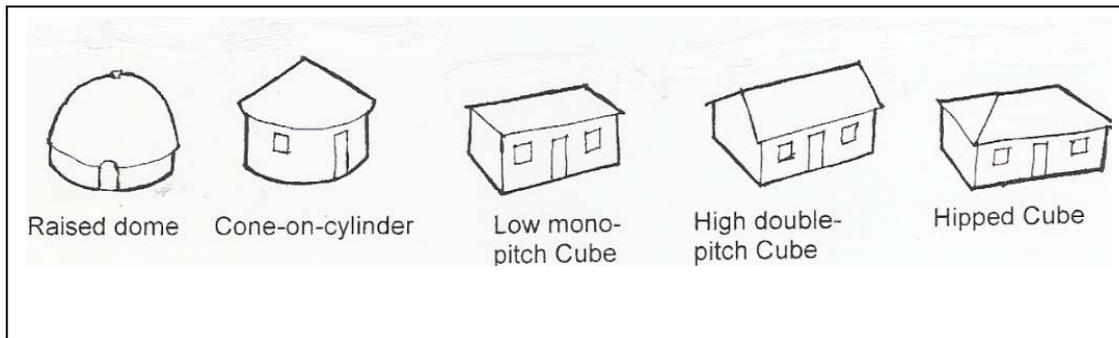


Fig.8.9. Building forms of the North Region

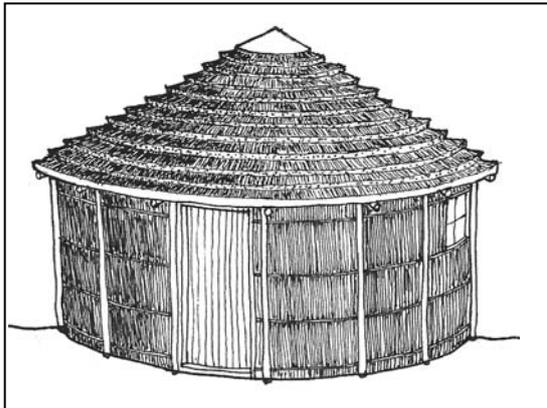


Fig.8.10. Reed infill type with ribbed thatched roof

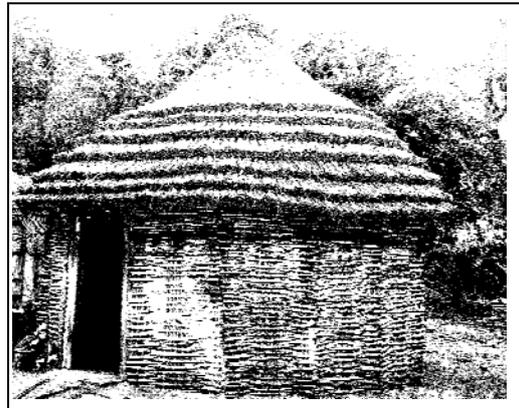


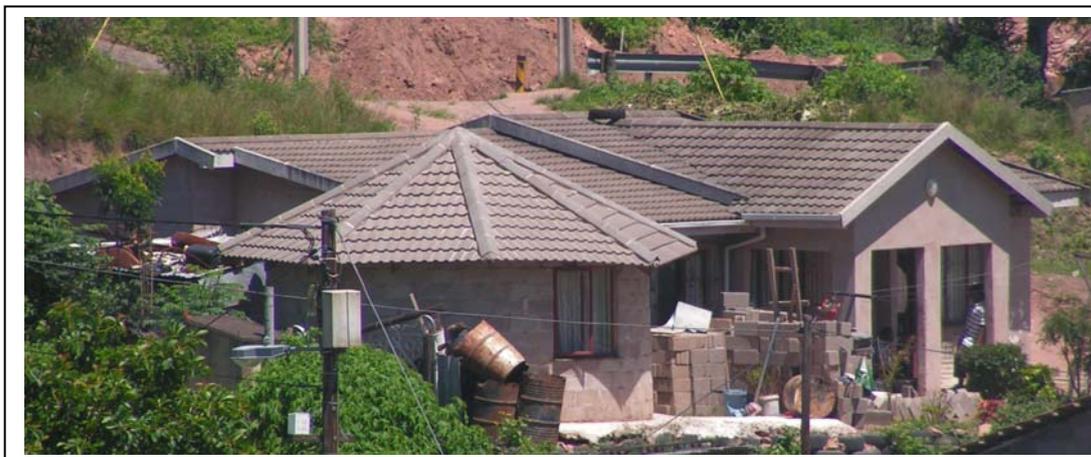
Fig.8.11. Maputaland Basket type with ribbed thatched roof

The architecture of this region is unique in the construction of the cone-on-cylinder forms. The indigenous construction materials are used in a manner that displays the artistic building methods used. The cone-on-cylinder forms of KwaMhlabuyalingana and further to the north and north-west borders of Maputaland are constructed such that they maintain their natural expression, with exposed timber frame and reed infill or woven lathing (*izintungo*) to

express like a basket. These are only plastered and finished internally (fig.8.10 & 8.11.).

Unlike the South Coast, the cone-on-cylinder buildings in this region are fully thatched. A unique character in this region is the ribbed thatch, which does not exist in any other region in the province. This character also marks the identity of the region which is distinctly notable from the settlements of kwaMaphumulo and across uThukela river up to the north east end of the province of KwaZulu-Natal.

Generally, in all the homesteads observed in this study, the room dedicated to worship is, traditionally, the cone-on-cylinder type only. This suggests that a traditional cone-on-cylinder has developed a religious value, because the typology is attached to a generation of ancestors that lived in it before the intervention of cubic forms. In Christian families like the Khambule, in uMvenyane, the worship room is also a cone-on-cylinder type but does not bear any physical mark. This prayer room has also leaped into townships, where one finds a freestanding cone-on-cylinder room at the back of a modern family size cubic building (pic.8.1). The movement of this typology is also gradually creeping into the formerly white suburbs, as indigenous black people of middle and high income are migrating from townships into those suburbs along with their cultures.



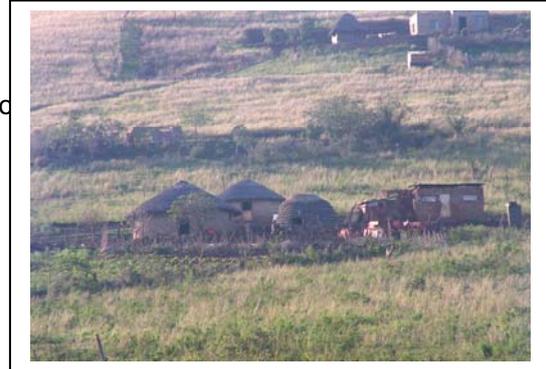
Pic.8.1. Unnamed: Cone-on-cylinder worship room in an urban setting

REGIONAL TRADITIONAL COLOURS

Pic.8.2. & 8.3. below show a striking contrast between the traditional colours of the southern and the northern regions. In their differences, each of these traditional colours depicts the people's relationship with their natural environment as they make their buildings communicate with the landscape in their unique ways.



Pic.8.2. Embo, Mpfana settlement: Typical colours of the South Coast



Pic.8.3. Hluhluwe: Typical colours of the Midlands, uKhahlamba and North Coast

Settlements from the south-west end of the province through the south coast to the immediate peripheral rural settlements south of eThekweni city are characterized by walls limewashed in white, light blue, cream or other colours close to white, trimmed with a black band at the bottom. This unique colour scheme is also applied to the modernized traditional buildings like kwaMsomi in kwaDweshula (Pic.4.3) and in the uMvenyane settlement in the south-west end of the province (pic.4.1). This is a traditional colour style that imposes a contrasting colour that presents a decorative expression of the settlement landscape.

In the settlements along uKhahlamba and eastward to the midlands of kwaZulu, the mud walls are either left unpainted or finished with a careful selection of local coloured soils that maintain the traditional earthy colour effect which blends with the natural colours of the surrounding landscape (pic.8.3). The same tradition is notable in the south end of the north region. The north region, particularly, in the KwaMhlabuyalingana area and further to the northern borders of the province, shows an attitude to the natural

landscape similar to the uKhahlamba and midlands settlements. The uniqueness of this part of the region is in the innovative use of the construction materials, which introduces an artistic expression of their natural colours in their blending with the natural environs. Pic.8.4. shows a spread of the various colour styles through all the regions of the province. These styles have given each region a unique identity in its architecture.

SOUTH	NORTH AND MIDLANDS
	
South west: <i>EMvenyane settlement</i>	UKhahlamba: <i>ENyezane- individual homestead</i>
	
South Coast: <i>EMkhomazi (EVishavisha) - Individual Homestead</i>	North Coast: <i>EHLuhluwe, KwaNtombigezile settlement</i>
	
Far South: <i>KwaDweshula- Individual Homestead</i>	Inner North Coast: <i>EBabanango- Individual Homestead</i>
	
South Coast: <i>EMbo- Individual Homestead</i>	Inner North Coast: <i>KwaNongoma- Individual Homestead</i>
	
South Coast: <i>Embo- Mpozana Settlement</i>	Midlands: <i>EMnambithi- Roseboom settlement</i>

Pic.8.4. A spread of regional colours across the province of KwaZulu-Natal

CHAPTER 9

BUILDING CONSTRUCTION

INTRODUCTION

Various construction materials and methods have been explored in the history of the indigenous buildings of the various parts of the province. This analysis limits itself to the construction of those buildings that were recorded in the fieldwork of this study.

It was noted in the study throughout the province that, generally, successful explorations of certain construction materials intended to resolve specific problems, developed to be traditional styles of those particular places. This was noted in the fieldwork when most respondents could not explain, in their generation, why certain buildings were built to look the way they were, but just regarded them as a style.

This chapter provides a general analysis of the technical aspects of building construction with regard to, firstly, response to elements such as fire and climatic conditions and, secondly, construction techniques of the basic components that play a role in the identity of the architecture of this part of the world.

CONSTRUCTION METHODS AND MATERIALS

A. Setting Out

In setting out a building, particularly of a circular form, a peg is nailed into the central point of the building to be built. A string woven with a choice of grass, like *ilala*, or *umsasane* tree bark, is then tied to the peg from which the radius of the

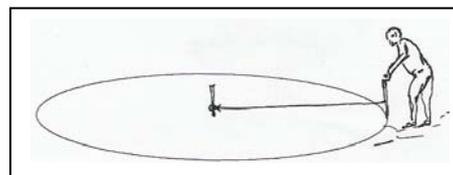


Fig.9.1. Setting out of a circular building

building is marked. The marked radius represents the exterior of the wall (fig.9.1).

B. Wall Construction

All parts of the province have introduced mud blocks bonded with cement mortar for improved durability. There is also some sparse prevalence of modern concrete blocks in those houses that afford them. Use of these blocks does not affect the architectural typology of those buildings. However, vernacular walling systems still continues to exist.

The mud walls of circular buildings are reinforced with *izintungo* of *ugagane*, *ubhici* or *isimunywana* tree. The most common development of reinforced walls is where the structure is framed with timber posts of *umkhaya*, *umthombothi*, *umtholo* or *isingawe* tree and *izintungo* to form a cage for stone infill (fig.9.3). The types of timber vary from one region to another as discussed in chapter 4 of this document. The reinforcement ties the cylinder together thereby preventing any possible outward thrust of the cone roof from collapsing the building. This walling system is common in all the parts of the province.

The use of colour in the south region came along with the challenge of mud splashes causing an unpleasant appearance of the building at the base (pic.9.1). The problem was even worsened by the absence of

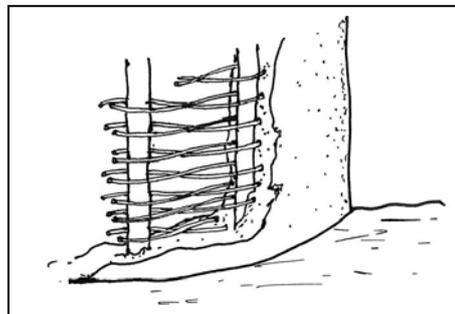


Fig.9.2. Mud wall reinforced with timber

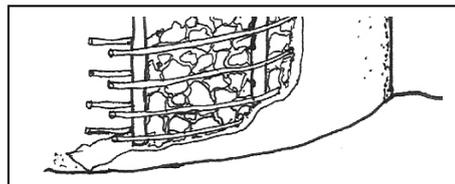


Fig.9.3. Stone infill with internal and external plaster



Pic.9.1. South Coast building with unprotected base showing mud splashes

rainwater gutters, as the metal roof sheeting became the material used. A dark coloured band was introduced at the base, as seen in pic.9.2. This concept has become the traditional colour style of the south.



Pic.9.2. Dark coloured band used to counter effects of mud splashes

The introduction of aprons around the base of the building acts as flashing to protect foundations from being weakened by rain water (fig.9.4 & pic.4.16). This is a concept used in all the regions of the province, but predominantly in the north. In some cases the apron is in a form of a raised *stoep* which also provides seating around the building.

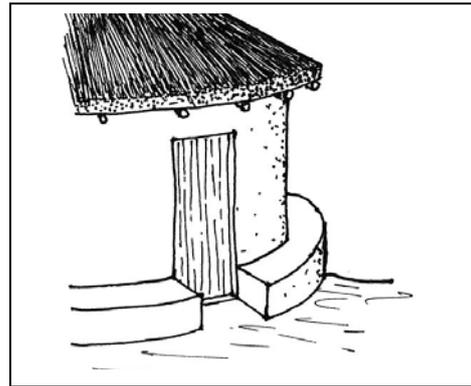


Fig.9.4. Raised apron to form stoep

A unique walling system that is predominant in the far north region is one with an exposed timber frame, usually of *umnqawe* thorn tree and *izintungo* of *ugagane* or *isimunywane* tree with reed (*umhlanga*) wall cladding (fig.9.5). The wall is plastered internally with termite mound soil (*isiduli*) and finished with *umcako*, a slurry of special selections of local soils for the purpose.. The challenge encountered in this walling system is the termite attack at the bottom of the building (pic.9.3). Most noted buildings of this type fail from the base.

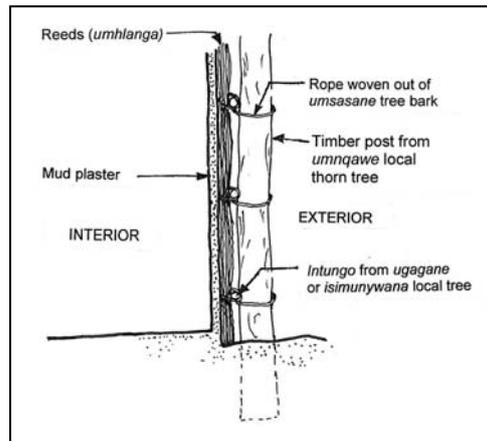


Fig.9.5. Cross section of a Reed wall with Exposed timber frame



Pic.9.3. Bottom of a reed wall eaten away by termites

One of the main reasons behind the extinction of the traditional grass dome was the rotting effect of rainwater at the base of the building. The dome was, thus, raised on a cylinder. The introduction of solid walls in the construction of raised domes and cone-on-cylinders has, on the one hand, improved the acoustic behaviour of walls relative to the grass or reed infill and the basket type walls while,

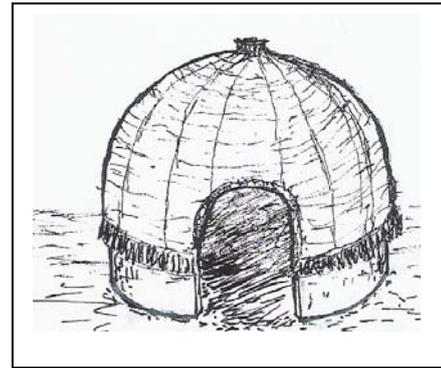


Fig.9.6. Grass Dome raised on a mud wall cylinder

on the other, the thermal fly wheel (heat flow) in these solid walls reduces their relative thermal advantages. However, where thatch roofs are used together with solid walls, the thermal difference tends to be negligible.

The acoustic properties of the grass or reed infill and the basket wall types are further improved with the introduction of internal plaster while keeping the unfinished natural expression of its exterior, particularly in the far north. (fig.9.5). The basket type wall of the far north region (fig.9.7) has made even further improvements to the thermal quality of the walling system. The interior of the room is plastered up to about 500mm below eaves. The unplastered band is woven in such a louvered manner that view from outside is difficult or impossible while it allows easy view from inside.

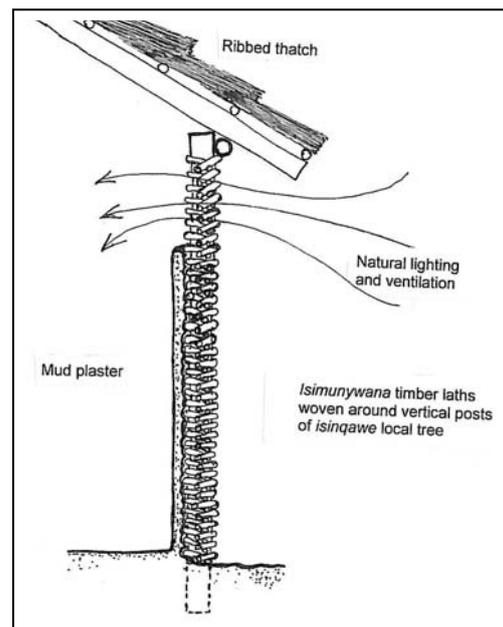


Fig.9.7. Cross section of a typical Basket type construction

The main purpose of this horizontal band is to let cool air into the building through the upper level which will only sink and cools the rest of the room, as the warm air rises and escapes.

C. Roof Construction

The roofs of the rectangular and square buildings are constructed with gumpole trusses and purlins. Most of these roof structures have even developed to the conventional modern pine trusses. Of interest in this study is the construction of the frame and cladding of the cone roof of the traditional cone-on-cylinder type of buildings.

All the three versions of roofs to the cone-on-cylinder that exists across the province use the one 'spiderweb' timber frame concept (pic.9.4). Types of timber used vary with regions as indicated earlier. The cone roof structure is engineered in relation to the cylinder such that its self weight, which tends to collapse from the apex and force its bottom sideways (fig.9.8), is held tight with a timber ring beam that sits on the top of the cylinder, also acting as a wall plate. The woven reinforcement in the walls also resists such forces. The weight of the roof is transferred directly through the timber posts to the ground, so there are no point loads to cause cracks on the weak mud walls. During construction the roof frame is held in place with a central post fixed at the apex while it is tightly fixed to the cylinder frame for lateral stability. The central post may then be removed as lateral stability of the frame no longer depends on it. Where the post has to be



Pic.9.4. Typical 'spiderweb' timber roof frame of a traditional cone-on-cylinder building



Pic.9.5. Interior of finished cone roof

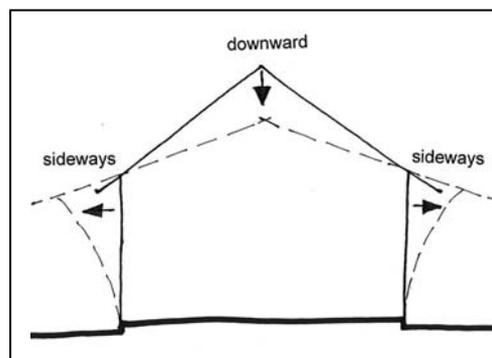


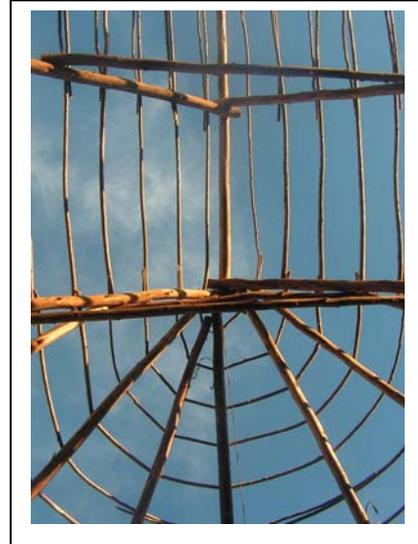
Fig.9.8. Stabilization of structural frame

removed the roof structure is braced for further stability.

The *izintungo* rings of the 'spiderweb' are structurally sufficient to keep the cone in shape in addition to the bottom ring beam. Where the building has such a structure it is common to complete all roof work first and then continue with the rest of the work under shelter.

The new oval shape found at the north of uKhahlamba has adapted the same concept to suit (pic.9.6). A development that was explored radically in the south region was the gradual abandonment of the thatch from their cone-on-cylinder buildings, introducing metal roof sheeting.

The introduction of metal roof sheeting on the south coast proved to them thatch roofing is indispensable. While the metal sheets offered advantages of relatively guaranteed availability and quicker installation, its accompanying problems are so much more than the advantages that there is an evident shift back to the former roofing system for its maintenance, acoustic and thermal attributes. The metal sheeting problems include maintenance due to the rapid corrosion, thermal and acoustic performance (pic.9.8).



Pic.9.6. Spiderweb roof structure adapted to the oval form.

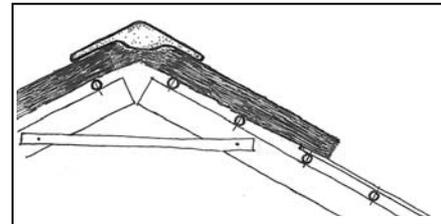
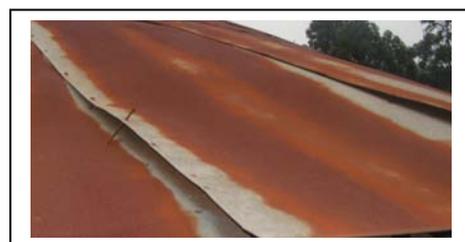


Fig.9.9. Detail of typical hybrid roof of thatch and metal sheeting



Pic.9.7. Typical hybrid roof with thatch and corrugated metal sheeting



Pic.9.8. Failing flat metal roof sheeting

The first major challenge was the adaptation of the corrugated nature of the sheets to the curvature of the building form, which led to the use of flat sheets and their subsequent problems.

All the above problems revolve around costs, in that, for the material to give the required performance, there must be added costs for handling thermal and acoustic performance, with specialized skills. All these are in addition to the costs of the materials themselves, given the state of economy in those rural environment. A shift back to thatch thus becomes the nearest best option.

In response to the vulnerability of the thatch roofing material, a new homestead concept intervened. Instead of abandoning the thatch material, a freestanding cubic building roofed with corrugated iron sheets was introduced as a fire barrier between two traditional thatch roofed buildings. This concept proved successful in preventing the spread of fire which, previously, would consume the entire homestead. This concept mainly takes advantage of the merits of the metal sheeting.

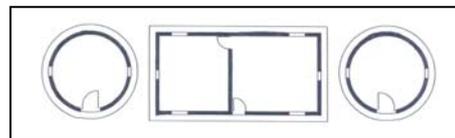


Fig.9.10. 'Circle-cube-circle' as fire barrier concept



Fig.9.11. 'Circle-cube-circle' concept Elevation

CHAPTER 10

INFLUENCES

INTRODUCTION

In the fieldwork analysis it was noted that the architecture of KwaZulu-Natal is generally influenced by certain physical, social and economic factors from within and without the province. Influences of neighbouring ethnic groups outside KwaZulu-Natal reflect not only in the built environment, but also in other social practices and even more pronounced in the regional dialects of isiZulu language.

EXTERNAL CULTURAL INFLUENCES

It was acknowledged earlier in this document that the evolution of the languages spoken by abeNguni demonstrates a very strong influence of the KhoiSans. It was further acknowledged that the principles of layout of the historical kwaZulu homestead reflects a similar strength of KhoiSan influence on architecture of the region.

The indigenous rural settlements of the far south coast and the south western sub regions of the province have a high degree of mixed cultural traditions and language influenced by both baSotho and, most predominantly, amaXhosa of the former and Transkei. The architectural expression of the built environment presents a strong influence of, particularly, the Xhosa traditional colour coding. This influence has spread northwards along the coast, fading at the south and west edge of eThekweni. However, the style has undergone sub regional adaptations along its northward flow. The South Coast is, thus, the largest part of the province with such a pronounced constant regional identity.

The northern part of uKhahlamba region is located at the interface of KwaZulu-Natal, Lesotho and the Orange Free State. The social character of this part of the province is less typical Zulu than the midlands. The spoken language, even down to the central sub region, has some elements of seSotho of the Orange Free State and Lesotho, much like the Zulu language of Gauteng. The north end of uKhahlamba is the only part of the province to actively introduce the Lesotho oval typology. Indigenous rural settlements further north of Bergville, such as eMangwaneni, kwaMiya, etc spread to the hills of the Drakensberg to the border of Lesotho, thereby subjecting the sub region to baSotho influences on their languages, social practices and architecture. The baSotho oval typology is traditionally built with stone masonry. UKhahlamba north sub region has adapted the typology to cement bonded mud block walls, as the materials available locally. The typology spreads eastward to the rural settlements in and around eMnambithi and Estcourt.

In like manner, indigenous rural settlements further north along the coast of KwaZulu-Natal like eJozini along Ubombo mountains, Phongola and Maputaland are subjected to influences of Swaziland and Mozambique languages and social practices. People of Jozini and Phongola, for instance, speak isiZulu more towards isiSwati of Swaziland. Similarly, settlements further north of Maputaland like kwaNgwanase, kwaNdaba and kwaTembe speak isiZulu with an accent of Tsonga language in Mozambique. These influences include architecture as well. The basket type of cone-on-cylinder and the ribbed thatched roofs of kwaTembe and kwaNdaba in Maputaland are typologies similar to those found in Mozambique.

One of the strongest catalysts of all the above influences is intermarriages. Zulu men have historically upheld the value of marrying women from other clans or nations. In the Tembe family discussed in chapter 4, for instance, the wife was given provision for her ancestral and other related practices from her home in Mozambique. Such provision influenced the cultural customs of the household and, hence, the physical layout of the complex.

A common typology found in the composition of almost all indigenous rural settlements across the province of KwaZulu-Natal, and the rest of South Africa, is the flat or hip roofed cubic form that exists in the northern parts of the continent. This is also an evidence of the existence of Europeans in the country. The south coast took the evolution even further and explored modern technology within their vernacular typologies with walling and roofing systems. Their adventures were only impaired by the economic standards dictated by those systems given the economic status skills levels of indigenous rural societies in South Africa and the rest of the continent. European influence is also manifest in the vernacular language and other social spheres of the Zulu speaking people at all levels.

The unsuccessful attempts to introduce modern construction materials, as recorded in the larger part of the south, demonstrate the role of the economic factor in the evolution of the indigenous architecture of the rural environments in the province.

The above analysis, therefore, suggests that the development of the indigenous rural architecture of KwaZulu-Natal, thus far, is a synthesis of various cultural and architectural elements, both from within and without the province, and socio economic factors in the community.

CHAPTER 11

CONCLUSIONS

INTRODUCTION

As indicated earlier in this document, the purpose of this study is to find an objective definition of the indigenous architecture of KwaZulu-Natal and to explore elements that qualify the indigenous rural architecture of KwaZulu-Natal as representative of contemporary indigenous architecture of the province as it exists today. A diversity of interpretations of the indigenous architecture of amaZulu and Africa in general, coupled with an empirical study across the province, was explored extensively to inform the discussion at this end of the document.

SOCIAL AND GEOGRAPHICAL DEFINITIONS OF ZULU ARCHITECTURE

Arguments by many, some of which were highlighted in chapter 2 of this document, have suggested that the architecture of the ancient amaZulu clan and its immediate neighbours has often been confused with the wide range of types of architecture of abeNguni that has existed and developed across the province known today as KwaZulu-Natal. In this study, perambulations across the province have revealed that there is a diversity of regional architectural identities that represent the various historical groups of abeNguni.

The architecture of the historical Zulu clan can, therefore, not represent the architecture of the province as it has generally been perceived. It is one among the several abeNguni types that has contributed significantly to the historical architecture of the province.

INFLUENCES ON ARCHITECTURE

The evolution of any social environment is a natural response to certain factors either from within or without the society itself. Architecture is a physical

expression of the milestones that mark particular eras in the metamorphosis of a social environment.

The 'circle-cube-circle' layout style identified in the uKhahlamba region (chapter 4), for instance, was an architectural response to local wars, which developed to a popular style that has grown to cover a large part of KwaZulu-Natal, with regional architectural identities. This development is a result of response to internal factors of social evolution.

It was established in this study that there are also external influences that have played a significant role in the development of identities in the diverse regional styles that exist in the province, as detailed in chapters 4 and 5 of this document. The architecture of the indigenous rural settlements south of eThekweni, for instance, has characteristics of the neighbouring Eastern Cape. That has made the region unique from the rest of the province. It was also established that the architecture of uKhahlamba, and most parts of the Midlands indigenous rural settlements, have some characteristics that show influence from the neighbouring Lesotho. Furthermore, the architectural identity of the indigenous rural settlements in KwaMhlabuyalingana (Maputaland) have characteristics of the architecture of both Mozambique and Swaziland. The settlement of European communities in all parts South Africa, since the 17th century, has also contributed significantly with architectural elements that produced a unique local identity, particularly in the context of poverty in the rural settlements.

The above traces of influences are attributed to social and economic interactions with communities outside the province itself. This develops an argument that the introduction of cubic building forms, as witnessed in all the indigenous rural settlements in the province, the introduction of certain European styles by some, and use of modern materials, are by no means a response different from those influences of social and economic interactions with Lesotho, Mozambique, Swaziland and others, much as the various abeNguni groups shared local influences among themselves to what one sees today. This opposes the prevailing unfortunate perception that attributes the

transmutations seen in the indigenous architecture of the province to African inferiority, particularly where cubic forms and modern materials are explored, much like the Lesotho oval form found in uKhahlamba, among other influences.

It has been established in this study that the adoption of a cubic form in the indigenous rural settlements has introduced a type of homesteads with a unique character, one that combines different types of forms while maintaining unique identities of the various regions.

The above trace of influences discovered in the indigenous rural built environment owes a significant role in the development of contemporary urban architecture in the province for a unique local identity. This is a crucial exercise for the post colonial and post apartheid generation of scholars and practitioners in this area of architecture

THE ROLE OF DETERMINANTS IN THE DEVELOPMENTS OF INDIGENOUS ARCHITECTURE OF KWAZULU-NATAL

From the fieldwork analysis of this study it was established that the power of culture in the indigenous architecture of KwaZulu-Natal manifests itself more in the planning of internal spaces of certain buildings, and in the layouts of old homesteads where, at initiation, land was not a challenge. As vast rural land was taken over by farmers, rural settlements became limited to unproductive hilly landscapes where homesteads could hardly expand to more than three buildings if cultural planning systems had to be applied. Under such circumstances so far, culture has only remained strong in the planning of internal spaces. It has to be emphasized that, according to the findings of this study, cultural principles of internal spatial planning in the indigenous architecture of KwaZulu-Natal apply to sacred buildings only. This finding opposes the prevailing interpretation that generalizes the application of the planning principles to all buildings in a homestead.

The historical developments of the round form of buildings, paralleled with cultural developments of spatial planning principles in certain buildings, developed a spiritual attachment to the particular type of a building, embedded beyond any external architectural influence seen in the composition of a traditional homestead in KwaZulu-Natal. As a result, one finds a freestanding modern cone-on-cylinder worship room in the backyard of an urban dwelling as indigenous rural people flow into urban settlements. It is in the worship room where the cultural spatial planning principles are strongly maintained.

It has been acknowledged earlier in this document that the recent architectural transmutation seen in the rural indigenous settlements of the province have characteristics symptomatic of poverty. Explorations of modern construction materials have hardly been successful owing to the cost of achieving desired technical performance, expression and maintenance, given the state of economy in those environments. This takes a primary attribute for the failure of indigenous African architecture to find its space in the first world. The ideology that marks African identity in architecture with underdeveloped construction materials is quite unfortunate. The glorification of first world modern buildings with such elements in the name of 'traditional' or 'contextual' architecture, as illustrated in chapter 2, is merely a celebration of the historical impoverishment of the indigenous African people, unless architects are naive.

WHAT WOULD BE REGARDED AS THE INDIGENOUS ARCHITECTURE OF KWAZULU-NATAL TODAY

From the findings of this study, it is established that the indigenous architecture of KwaZulu-Natal is the architecture that germinates within the region, gets further developed by the indigenes of the region such that it represents its unique local identity to the world. The study also reveals that the indigenous architecture of KwaZulu-Natal has, historically, been put together and further developed by a synthesis of internal and external influences.

Perceptions that limit the indigenous architecture of KwaZulu-Natal to ancient times only is most unfortunate. Such perceptions have, unfortunately, derailed the direction of its metamorphosis with economic and social suppression such that it has no place in the development of the modern built environment beyond tourist facilities.

It has been established in this study that the development of construction materials and techniques has been unsuccessful, owing to colonial economic disconnection of African architecture from the world. This resulted in the underdevelopment of modern expression of form. The identity of the contemporary architecture of abeNguni, in general, remains richer in spatial planning than form. However, the cone-on-cylinder, as a building form, has been conserved through generations owing to its religious value, because the typology is attached to a generation of ancestors that lived in it before the intervention of cubic forms. The movement of this typology is also gradually creeping into the formerly white suburbs, as indigenous black people of middle and high income are migrating from townships into those suburbs along with their cultures. Therefore, limiting the identity of indigenous African architecture to the cone-on-cylinder today is most inaccurate, as this form has only remained as a historical legend along the evolution of all aspects of architecture with time.

The analysis of homestead layout patterns in chapter 6 of this document identifies commonalities across the three major layout models, that is, the circular, organic and rectilinear planning concepts that exist in the province, with spatial planning principles characteristic of the architecture of the indigenous people of KwaZulu-Natal. The wealth of these planning principles is in the social and cultural principles that govern the use of space uncovered in chapter 5 of this document. This is one of the most critical explorations and findings of this study. The successful study of cultural and functional spaces and their detailed analysis, the metamorphosis of a homestead based on those cultural principles and the establishment of homestead development and growth models in chapter 7 are the pride of this project.

THE DIRECTION OF EVOLUTION IN THE ARCHITECTURE OF INDIGENOUS HERITAGE IN KWAZULU-NATAL

Two instances were recorded in the fieldwork, where people would refer to their type of local architecture as just traditional, ignorant of its actual origin. It is unfortunate that architects, both in research and practice have a much similar approach to the interpretation of the indigenous architecture of amaZulu in the province, in spite of their level of education in the field. Hence, one still finds such attempts as indicated in chapter 1 of this document, where contemporary buildings designed with good objectives of indigenous African identity battling to place African architecture on the global contemporary world of architecture.

From the arguments highlighted in the historical case studies in this document, it is generally acknowledged that documented research in this particular area of study were largely founded on the ideology of European supremacy. Hence, almost none of them have displayed any interest in the promotion and development of indigenous African architecture to the contemporary modern world, both in architectural education and practice. This, then, poses a challenge for accelerated production of transformed and objectively researched material in this particular subject.

Studies in African architecture today has to shift from basic research and be geared towards the advancement of relevant contemporary architecture. This is a missing approach in research so far. Missing in that, researchers in the subject have, so far, been stuck in the structuralist analysis of the indigenous architecture of the various regions of the continent for the joy of mere historical recordings.

The radical metamorphosis of the indigenous architecture recorded in most rural settlements, more expressly in the South Coast, presents one of the demonstrations of human evolution as a law of nature. The law of nature subjects all humans to evolution from a sperm cell through to the oldest age of growth and, further, to death. This evolution is in every aspect of human life,

and every product of human creation follows the same law. The metamorphosis recorded in this document suggests that this law of human evolution disputes the general perception that Africa would not have seen world class contemporary architecture until the intervention of Europe. It is generally acknowledged that the role that Europe played was to disconnect Africa from world advancement in all possible aspects. Today Europe has, in turn, appeared as a mentor for the development of the African people and their environment. If this is true, it is worth acknowledging that the architecture of the indigenous people of KwaZulu-Natal owes to accelerate the rediscovery of its centuries long lost track of evolution.

While the investigations and findings of this study are sufficient for the objectives of this project, it arises that its completeness would be accomplished successfully with research on the foundational history of the region in the context of Africa in greater depth and detail and, therefore, its space in the world of contemporary architecture. Such an extent could not be covered within the parameters of this dissertation.

However, I consider this project successful within its limits, in that, all parts and stages of the study achieved a successful development of an argument built on independent hands-on investigations that covered all parts of the province of KwaZulu-Natal.

BIBLIOGRAPHY

- ANDERSEN, KB (1978) "African Traditional Architecture"- *A Study of the Housing and Settlement Patterns of Rural Kenya*, Nairobi: Oxford University Press
- ATKINSON,R (1998) "The Life Story Interview" - *Qualitative Research Method*, Sage, London: Series 44,
- BENNETT, DR (1987) "A Guide to the History and Architecture of Durban", Durban: City Council
- BIERMANN, B (1977) "An African Village" - *A case Study: Housing People*, Johannesburg: Donker
- BIZZELL,J (2002) "Blueprints In Black And White"- *The Built Environment Professions in South Africa: an Outline History*, Cowies Hill: Solo Collective
- BOURGEOIS, (1983) "Spectacular Veracular" – *A New Appreciation of Traditional Desert Architecture*, Salt Lake City: Peregrine Books
- BRYANT, AT (1949) "The Zulu People" – *as they were before the white man Came*, Pietermaritzburg: Shuter and Shooter
- CALLINICOS,L (1987) "Working Life 1886-1940" – *Factories, Townships and Popular Culture on the Rand*, Ohio: University Press
- CLAUDE, D (1997) "Traditional Architecture". *Beyond the Usual Borders*: Maputaland, Durban: KZ-NIA Journal, Issue 2, Vol.22, (2-3)
- CRAIG, AP; GRIESEL,H; Witz, LD, "Conceptual Dictionary", Cape Town: Juta & Co Ltd
- DENYER,S (1978) "African Architecture"-*An Historical and Geographical Perspective*, London: Heinemann
- DE JAGER, EJ (1964) "Settlement Types of the Nguni and Sotho Tribes", Fort Hare Papers, 3 (19-30)
- FORDE, CD (1934) "Habitat, Economy and Society", London: Methuen,
- FRESCURA, F (1981) "Rural shelter in Southern Africa", *A Survey of the Architecture, House forms and Constructional Methods of the Black Rural Peoples of Southern Africa*,Johannesburg: Ravan Press,
- FRESCURA, F (1984) "Homesteads and Hierarchies"- *A survey of the value*

systems and spatial distributions inherent in the Architecture of African settlements, Johannesburg: University of the Witwatersrand

- FRESCURA, F (1985) "Major Developments in the Rural Indigenous Architecture of Southern Africa" - *of the Post-Difaqane Period*, Johannesburg: University of Witwatersrand
- GRIESEL, H (1994) "Conceptual Dictionary", Durban: Juta & Co Ltd in Association with University of Natal
- GOVERNMENT OF THE UNION OF SOUTH AFRICA (1927) "Native Administrative Act No.38 of 1927", Pretoria: Government Printer
- GUY, J (1982) "The Destruction of the Zulu Kingdom", Johannesburg: Ravan Press
- HALL, M (1981) "Settlement Patterns in the Iron Age of Zululand", *An Ecological Interpretation*, Cambridge Monographs in African Archaeological Bulletin, 33: 107-112
- HALL, M (1984) "The Myth of the Zulu Homestead" - *Archaeology and Ethnography, Africa* Vol.54
- HALL, M (1984) "The Burden of Tribalism" - *The Social Context of Southern African Iron Age Studies*, *American Antiquity* Vol.49(3), 455-467
- HARDIE, G (1981) "The Architect and the Third World- *A Stranger in a Strange Land*". Not published
- HERSEY, GL (1976) "Pythagorean Palaces" – *Magic and Architecture in the Italian Renaissance*, Ithaca and London: Cornell University Press
- HUFFMAN, T (1982) "Archaeology and Ethnohistory of the African Iron Age" *Annual Review of Anthropology*, 11, pg 133-150
- KEARNEY, B (1973) "Architecture in Natal" 1824-1893, Balkema, Cape Town: (1974) "The Veranda House" *Lantern* Vol. XXIII, No.3 March, 46-48
- KHUMALO, RS (1995) "Uphoko", Umqulu 1, Pietermaritzburg: Reach Out Publishers,
- KRIGE, AT (1950) "The Social Systems of the Zulus", Pietermaritzburg: Shuter and Shooter,
- KULTERMANN, U (1969) "New Directions in African Architecture", London: Studio Vista

- LAUGIER, M (1977) "An Essay on Architecture", Los Angeles: Hennessey & Ingalls Inc,
- MANNING, J (2004) "Racism in Three Dimensions"-*South African Architecture and the Ideology of White Superiority*, Social Identities Vol.10, No.4 November, Carfax Publishing
- MILLON, HA (1994) "Italian Renaissance Architecture"- *From Brunelleschi to Michelangelo*, London: Thames and Hudson
- MSIMANG, CT (1975) "Kusadliwa Ngoludala", Pietermaritzburg: Shuter and Shooter
- NGUBANE, S (2004) "Traditional Practices on Burial Systems with special reference to the Zulu People of South Africa", Indilinga, African Journal of Indigenous Knowledge Systems, Volume 3, No.2
- OLIVER, P (1997) "Encyclopedia of Vernacular Architecture of the World", Vol.1. *Theories and Principles*, Cambridge: Cambridge University Press
- OMER-COOPER,JD (1978) "The Zulu Aftermath" -*A Nineteenth Century Revolution in Bantu Africa*, London: Longman
- PAPANEEK,V (1985) "Design for the Real World", London: Thames & Johnson,
- PATTON,MQ (2002) "Qualitative Research and Evaluation Methods", 3rdedition. Calif, Sage: Thousad Oaks
- PEARSALL, J (1998) "The New Oxford Dictionary of English", Oxford: Clarendon Press
- RICH, P (1995) "Pride of the Ndebele", Architectural Review, The March
- RAPOPORT,A(1969) "House, Form and Culture", Engelwood Cliffs, NJ, Prentice Hall Society", Cape Town: University of Cape Town Press
- RITTER, EA (1955) "Shaka Zulu", London: Longman
- RODNEY, W (1972) "How Europe underdeveloped Africa", London: Bogle L'ouverture Publications,
- SAMUELSON, HL (1926) "Zululand" – *Its Traditions, Legends, Customs and Folk-Lore*, Durban: Griggs
- STANDARD ENCYCLOPAEDIA OF SOUTHERN AFRICA (1970), NASOU, Cape Town
- TRACEY, H (1948) "Zulu Paradox", Johannesburg: Silver Leaf Press

- TZONIS,A; LEFAIVRE ,L (2003)"Critical Regionalism" - *Architecture and Identity in a Globalised World*, Munich: Prestel
- VALE, LJ (1992) "Architecture, Power and National Identity", New Haven: Yale University Press
- VAN ONSELEN,C (1982) "Studies in the Social and Economic History of Witwatersrand, 1886-1914", New Neneveh, London: Longman
- WHEELAN, D (2001) "The Recent Transmutation of the Indigenous Vernacular Architecture of the people at KwaMthembu and KwaMchunu, Msinga District, KwaZulu-Natal, South Africa". Pietermarizburg: University of Natal
- WITTKOWER, R (1962) "Architectural Principles in the Age of Humanism", London: Alec Tiranti
- WOLFGANG, W (1978) "The Nomadic Alternative"- *Modes and Models of Interaction in the African-Asian deserts and steppes*, The Hague: Mouton

Appendix A

REGIONS	SUB REGIONS
South	<p>Far South : <i>Between Umtavuna and Mthwalume rivers along the Indian ocean</i></p> <p>South West: <i>From East Griqualand to Lotheni/uMkhomazi river</i></p> <p>South Coast: <i>Between Mthwalume and Umlazi river (towards Inland of the South Coast)</i></p>
Central	<p>Central: <i>Between Umlazi and UMngeni rivers to the west of Durban city.</i></p>
Ukhahlamba	<p>Ukhahlamba north: <i>Between Little Mooi river and Little Tugela river (including Bergville)</i></p> <p>Ukhahlamba central: <i>Between Lotheni/uMkhomazi and Mooi Rivers</i></p>
Inland	<p>Central inland: <i>Between uMngeni and uThukela rivers</i></p> <p>North inland: <i>Between uThukela and White uMfolozi rivers</i></p>
North	<p>North: <i>Between uMngeni and White Umfolozi rivers,</i></p> <p>Hluhluwe: <i>Between Hluhluwe and Msunduzi rivers</i></p>

Subdivision of the Province of KwaZulu-Natal into Fieldwork sub regions

Appendix B

SUB REGION	SETTLEMENT	SAMPLE	METHOD
South West: Cedarville	EMvenyane	Small single parented	All
South Coast: Far South	Oshadeni	Small household	Observation, Photographs
	KwaDweshula	Medium size household	All
	KwaPhungashe	General settlement	Observation, Photographs
South Coast: EMbo	ENgilanyoni	Small household	All
		Large polygamy Household	All
Central: Cato Ridge (EMbo)	KwaXimba	General settlement	Observation Photographs
UKhahlamba North: Loskop	ENgodini	Medium size household	All
	ENyezane	Large monogamous household	All
		Small household	All
UKhahlamba Ctrl: ELotheni & Midlands	Lower Lotheni	General settlement	Observation, Photographs
	EMnambithi	General settlement	Observation, Photographs
Central Inland	Pomeroy	Medium size household	Observation, Photographs
	Tugela Ferry	General settlement	Observation
	Ladysmith	General settlement	Observation Photographs
North inland	KwaNongoma	Large monogamy	All
	EBabanango	Large single parented household	All
	EMsinga	Settlements: Zondi, Mchunu, Mazibuko	Observation, Photographs
North Coast:	KwaMaphumulo	Medium size household	All
	KwaNtombigezile (EHLuhluwe)	Medium size household	Observation, Photographs
	KwaMcabuzela (EHLuhluwe)	General settlement	Observation Photographs
	EMthekwini (EHLuhluwe)	General settlement	Observation, Photographs
	ENgonyamaneni (EHLuhluwe)	General settlement	Observation, Photographs
Far North: KwaMhlabuyalingana	EMbazwana	Small household	All
		Medium size household	All
	KwaNgwanase: KwaNdaba/ Tembe	Large monogamous household	All

All settlements covered in the survey