

**AN EXPLORATORY STUDY OF INDIGENOUS KNOWLEDGE
SYSTEMS OF HOUSING IN THE XHOSA HOUSEHOLDS**

F. N. ROZANI Honours in Consumer Science

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Supervisor : Mrs. M.D. Venter

Co-supervisor : Dr E.L. Kempen

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ABSTRACT

Indigenous knowledge systems (IKS) refer to the complex set of knowledge and technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area. Indigenous knowledge systems of housing therefore refer to the complex set of knowledge and technologies regarding housing, held by populations and communities in particular geographic areas. Xhosa indigenous knowledge systems of housing in this study, refer to the set of knowledge and technologies regarding housing, held by the Xhosa people of the Eastern Cape. Housing refers to the variety of processes through which habitable, stable and sustainable public and private residential environments are created for viable households and communities.

All the data regarding the Xhosa indigenous knowledge systems of housing is collected through the use of various data gathering methods. The data gathering methods used are the following: literature review; focus group interviews with rural current households and peri-urban households; individual interviews with the rural elderly households and photographs of Xhosa indigenous housing. The advantage of using multiple methods of gathering data is that it renders the study trustworthy. The data that is collected explores the concept of place, through its various constituents, which are the following: activities, conceptions and physical attributes.

The results drawn from this research indicate that the Xhosa men and women of Gqebenya and Ezibeleni possess indigenous knowledge systems of housing. For example the results indicate that the respondents shared common conceptions, performed universal activities and occupied physical parameters that were common to all, depending on whether they were rural or peri-urban. The conclusions of the study also point out to a limitation that the results from this study cannot be generalised over all the Xhosa speaking people as the Xhosa are comprised of many different but related factions. Since the main aim of this study was to document this knowledge that has always been passed orally from generation to generation, it has therefore contributed to the larger body of knowledge in that it has exposed undiscovered facts and principles of IKS of housing. The documented Xhosa indigenous knowledge systems of housing in turn have the potential of leading to other important research in housing and other related fields.

ABSTRAK

Inheemse kennis sisteme (IKS) verwys na 'n komplekse stel kennis en tegnologie wat bestaan en omntwikkel het rondom spesifieke toestande van populasies of gemeenskappe wat inheems aan 'n spesifieke geografiese area is. Inheemse kennis rakende behuising verwys na 'n komplekse stel kennis en tegnologie rakende behuising wat deur populasies en gemeenskappe in 'n spesifieke geografiese area gehandhaaf word. Xhosa inheemse kennis rakende behuising verwys dus na die stel kennis en tegnologie rakende behuising waaroor Xhosas in die Oos Kaap beskik. Behuising verwys na die verskeidenheid prosesse waardeur bewoonbare stabiele en volhoubare openbare en privat residensiële omgewings geskep word vir lewensvatbare huishoudings en gemeenskappe.

Die data oor die inheemse kennis van die Xhosas rakende behuising is deur middel van verskillende data insamelingmetodes versamel. Data is versamel deur middel van 'n literatuurstudie; fokusgroeponderhoude met landelike huishoudings en semi-stedelike huishoudings; individuele onderhoude met bejaarde persone in landelike gebiede en fotos van Xhosa inheemse behuising. Data is telkens versamel totdat die inligting versadig was. Die voordeel om verskillende data-insamelingmetodes te gebruik is dat dit die studie betroubaar maak. Die data wat versamel binne die toeretiese raamwerk wat handel oor die “konsep van plek”. Die data wat versamel is ondersoek die konsep van plek na aanleiding van geïdentifiseerde elemente wat die volgende behels: aktiwiteite, konsepte en fisiese eienskappe.

Die resultate van hierdie navorsing dui daarop dat Xhosa mans en vrouens van Gqebenya en Ezibeleni nog oor inheemse kennis rakende behuising beskik. Die resultate dui aan dat die respondente die algemene konsepte identifiseer, universele aktiwiteite uitvoer en dat die fisiese parameters dieselfde is vir almal. Die gevolgtrekkings van hierdie studie kan nie na die hele Xhosa-sprekende gemeenskap veralgemeen word nie aangesien daar baie verskillende Xhosa-faksies is. Die hofdoel van hierdie studie, om die inheemse kennis wat tradisioneel mondelings oorgedra word te dokumenteer, is bereik en kan dus 'n bydrae tot algemene behuisingskennis maak. Nuwe feite en beginsels rakende inheemse behuisingskennis van Xhosas is geïdentifiseer en dit kan tot verdere navorsing in behuising en verwante velde lei.

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CHAPTER 1: INTRODUCTION

1.1 PROBLEM AND MOTIVATION

Indigenous Knowledge Systems (IKS) refer to the complex set of knowledge and technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area (National Research Foundation, 2003:1). According to De Guchteneire, Krukkert and Liebenstein (2004:5), human beings have been producing knowledge and strategies enabling them to survive in a balanced relation with their natural and social environment over many centuries. IKS therefore means that people of a specific area may hold valuable information that is part of their past and current existence that relates to a particular aspect such as housing.

According to the White Paper on Housing (SA, 1995:21), *housing* is defined as “a variety of processes through which habitable, stable and sustainable public and private residential environments are created for viable households and communities.” According to Venter (1999:1), it is also an environment or a place where the family needs are met. In line with this definition, *housing* therefore remains of particular interest especially where IKS are concerned as little research has studied this aspect of IKS.

The concept of IKS however, is relatively new and sometimes it is called indigenous knowledge (IK). Heyd (1995:1) uses the expression IK when referring to IKS and argues that IK is an expression that still has evolving conceptual boundaries. Heyd (1995:1) however concedes that, IK is the knowledge held by people, who comprise the descendants of the original inhabitants of a land. In this study therefore, the concepts IKS and IK are used interchangeably and refer to the indigenous knowledge that is inherent to the people of a particular area.

According to De Guchteneire *et al.* (2004:5) IK faces the risk of not being captured and stored in a systematic way because it is handed down orally from generation to generation. IK therefore needs to be protected by studying and documenting it in order to guard against its extinction. The National Research Foundation (2003:1) emphasises the fact that, IKS need to be recorded, protected, and utilised in ways that benefit their owners and communities. Thus, the documentation of IKS will make a valuable contribution through which this system can be sustained in the future.

Guided by the above argument, it becomes necessary to enquire and explore the IK of housing held by the Xhosa speaking people of the Eastern Cape in South Africa. In this regard research has not recently captured any form of IK of the Xhosa speaking people nor have studies featured any research on current housing design related to the Xhosa speaking people of South Africa. However West and Morris (1984:12) provide the best information about the indigenous people of the Eastern Cape and describe the Xhosa speaking people as the "Cape tribes proper". At this point it is necessary to indicate that although West and Morris (1984:12) recognise the Xhosa speaking people as the original inhabitants of the Eastern Cape and who have been so for centuries, the term indigenous people of the Eastern Cape has not been used in current literature. It is therefore suggested that the term indigenous people is relevant and needs to be applied to this study and outside the borders of this document in order to acknowledge the existence of the Xhosa speaking people of the Eastern Cape in South Africa.

In light of the fact that the housing environment of Xhosa speaking people of the Eastern Cape is the main focus of this study, it is necessary to find a way by which the housing environment can be studied. One theory that provides a framework through which this environment can be studied is the Theory of Place developed by Canter (1977:158). Canter (1977:158) purports that a place is the result of relationships between actions, conceptions and physical attributes. The model implies that any place consists of things that happen there and therefore the way it is used, and what occupants think conforms to the way it looks like. Therefore, this model provides the context in which indigenous knowledge systems of housing can be explored.

1.2 AIMS AND OBJECTIVES

1.2.1 Aim

The primary aim of this study is to gain a deeper understanding of the indigenous knowledge systems of housing of Xhosa households.

1.2.2 Objectives

It is envisaged that knowledge gained from this research can be used to further the research in the field of housing and other related fields. In order to do that, the following objectives were set:

1.2.2.1 To document and explore indigenous knowledge systems of housing of the Xhosa speaking people of the Eastern Cape.

1.2.2.2 To apply the Theory of Place to analyse the way in which Xhosa housing systems work with regard to the following constituents of place:

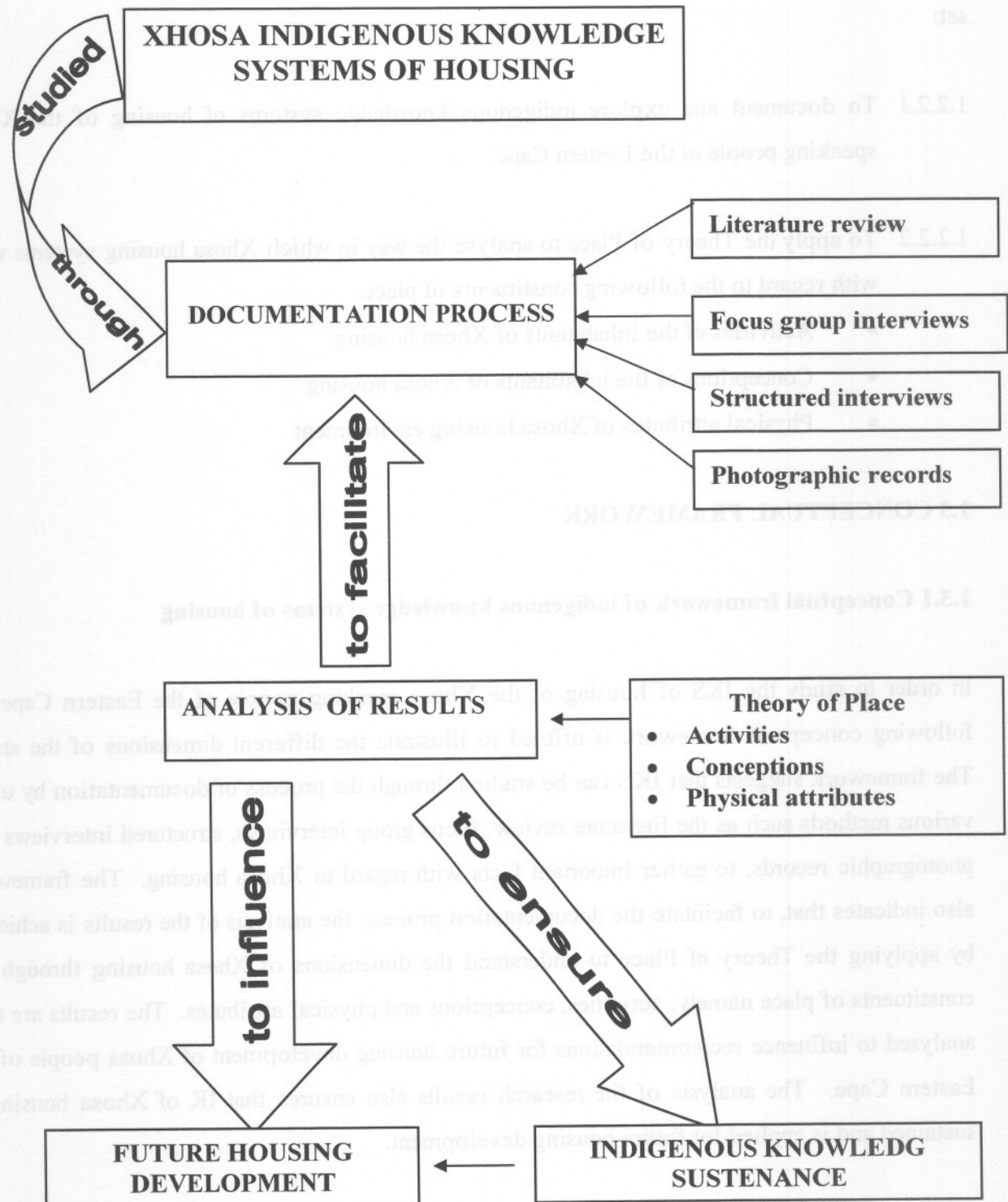
- Activities of the inhabitants of Xhosa housing
- Conceptions of the inhabitants of Xhosa housing
- Physical attributes of Xhosa housing environment

1.3 CONCEPTUAL FRAMEWORK

1.3.1 Conceptual framework of indigenous knowledge systems of housing

In order to study the IKS of housing of the Xhosa speaking people of the Eastern Cape the following conceptual framework is offered to illustrate the different dimensions of the study. The framework suggests that IKS can be studied through the process of documentation by using various methods such as the literature review, focus group interviews, structured interviews and photographic records, to gather important facts with regard to Xhosa housing. The framework also indicates that, to facilitate the documentation process, the analysis of the results is achieved by applying the Theory of Place to understand the dimensions of Xhosa housing through the constituents of place namely, activities, conceptions and physical attributes. The results are then analysed to influence recommendations for future housing development of Xhosa people of the Eastern Cape. The analysis of the research results also ensures that IK of Xhosa housing is sustained and is applied for future housing development.

Figure 1.1. Conceptual framework of Xhosa Indigenous Knowledge Systems of housing



1.4 RESEARCH METHODOLOGY

Different research methods have been applied with which to document the IKS of housing. For example: literature review was conducted through which a better insight into the dimensions and complexity of the IKS problem in housing was identified (Arkava & Lane, 1983:25; Van Den Aardweg & Van Den Aardweg, 1988:197), focus group interviews were performed with current rural and peri-urban Xhosa speaking households as this method provided a purposive discussion of the IKS housing problem of the research (Schurink, Schurink & Poggenpoel 2000:314), individual structured interviews were held with elderly men and women to capture cultural practices that may be extinct as this is a helpful method by which to learn that which cannot be observed (Patton, 1987:109) and lastly photographs were taken to capture the real-life situation and to enhance the descriptions and discussions of the participants in the focus group interviews (Schurink *et al.*, 2000:328).

These methods form part of a qualitative research strategy followed in this study. It can be argued that this strategy is the most feasible strategy through which an exploration can be made and understanding can be reached of the IKS of Xhosa housing. This is due to the fact that qualitative research presents the researcher with the opportunity to study and collect data about people's thoughts, feelings, experiences and activities (Cooligan, 1999:203) and thus a valuable strategy to implement when IKS in housing is studied in a descriptive way. However, trustworthiness was applied in this study through the use of Guba and Lincoln's (1985:289) model of trustworthiness and adapted by Krefting (1991:215).

Data analysis was performed by firstly transcribing audio recordings made of the focus groups and structured interviews. The data obtained from these transcripts were then coded after which themes were identified from the concepts used by the participants.

1.5 DEFINITION OF CONCEPTS

The following definition of some concepts is undertaken according to the meaning they carry in this study. The concepts are provided to ensure the most appropriate interpretation of the concepts used in this study.

- **Indigenous knowledge systems (IKS)**

IKS refers to the complex set of knowledge and technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area (National Research Foundation, 2003:1).

- **Indigenous knowledge (IK)**

IK is a term used interchangeably with IKS, and carry the same meaning.

- **Traditional knowledge**

The expression “traditional knowledge” is frequently used interchangeably with the expression “indigenous knowledge”, where the term “traditional” is intended to refer to distinctive beliefs held by indigenous people not or not fully integrated in modern, industrialised societies (Heyd, 1995:1).

- **Vernacular architecture**

Frescura (1981:3) uses the term “vernacular architecture” to refer to indigenous knowledge systems of housing of Southern Africa’s black rural people.

- **Byre**

The byre refers to a cowshed (POD:110).

- **Environment**

Environment refers to everything outside a system of interest, that influences a system, for example the individual system within a family environment, or the family system within a housing environment. Behera and Erasmus (1999:2) are of the opinion that when referring to the environment, not only is the natural environment considered but also the social and cultural aspects are included as well.

- **Technology**

According to the Policy Document of Education (SA, 1997:TECH 2), technology is defined as the use of knowledge, skills and resources to meet human needs and wants, and to recognise and solve problems by investigating, designing, developing and evaluating products, processes and systems.

- **Xhosa**

The term Xhosa refers to Xhosa speaking indigenous people of the Eastern Cape in South Africa. The Xhosa people are of the Nguni group, comprising a number of different tribes (West and Morris, 1984:7).

- **Housing**

In the White Paper on Housing (SA, 1995:21), housing is defined as a variety of processes through which habitable, stable and sustainable public and private residential environments are created for viable households and communities. This means that housing has to provide shelter from the elements, provide suitable living space for the inhabitants, be located within a pleasant living environment, and be well located for economic and social opportunities.

- **Household**

A household consists of occupants of a house as a unit (POD:426). Subsequently a household refers to those who live under the same roof and compose a family.

- **Peri-urban**

Dewar (1994:1) describes the peri-urban areas as areas, especially in South Africa, which do not fit easily into categorisations of either "urban" or "rural".

- **Contemporary**

According to Sherwood (1972:59), contemporary means “at the time”. In this study this term is used to mean “at the present time”.

1.6 EXPOSITION OF CHAPTERS

Chapter 1 is an introductory chapter towards the research that is undertaken. Chapter 1 consists of problem statement and motivation, aims and objectives, conceptual frameworks, research methodology, and definition of new concepts. Chapter 2 and 3 will discuss the literature relevant to the research undertaken. Chapter 2 will focus on indigenous knowledge systems of housing and chapter 3 will focus on the indigenous knowledge systems of housing of the Xhosa. Chapter 4 will discuss the research methodology. Chapter 5 deals with the analysis of data and the discussion of the results obtained during the research. Chapter 6 consists of the summary of the results, conclusions and recommendations.

The following chapter on indigenous knowledge systems of housing will focus on the literature that is relevant in this study.

CHAPTER 2: INDIGENOUS KNOWLEDGE SYSTEMS OF HOUSING OF THE SOUTH AFRICAN INDIGENOUS PEOPLE IN GENERAL

2.1 INTRODUCTION

This chapter concentrates on indigenous knowledge systems of housing in general. Indigenous knowledge systems of housing will be discussed with regard to a general definition of indigenous knowledge systems of housing. Characteristics of indigenous knowledge systems and their implications on housing are discussed next. The Theory of Place is applied to explore IKS of housing through various stages of development. The functions of IKS of housing are discussed and a concluding summary is presented.

2.2 DEFINITION OF INDIGENOUS KNOWLEDGE SYSTEMS OF HOUSING

The purpose of this section is to relate the aspect of housing to the general definition of indigenous knowledge systems in order to come to an understanding of *indigenous knowledge systems of housing*. According to the definition by the National Research Foundation (2003:1), indigenous knowledge systems exist and are developed around specific conditions of populations. Van Den Aardweg and Van Den Aardweg (1988:85) identify the specific conditions and influence, under which people live, as the environment. This means that specifically for this chapter the specific condition or the environment of the indigenous populations that is explored is housing. Indigenous knowledge systems of *housing* can therefore be understood to refer to the complex set of knowledge and technologies regarding housing, held by populations and communities in particular geographic areas.

In the context of this study, Indigenous Knowledge Systems of housing are understood and interpreted according to a *systems* approach of Melson (1980:7) and Deacon and Firebaugh (1975:7). It is therefore necessary at this stage, to outline a brief exposition of the nature of *systems* in order to understand the indigenous knowledge systems of housing fully.

2.3 A SYSTEMS APPROACH TO INDIGENOUS KNOWLEDGE SYSTEMS OF HOUSING

The systems approach needs to be clarified in order to have a common basis for interpreting relationships affecting the indigenous knowledge systems of housing. According to Melson (1980:16), “a *system* is simply some part of the world singled out for attention whose parts interact. When the term *system* is used to refer to a set of components in interaction, the *environment* is simply all other factors (outside the system) that impinge upon it.” Deacon and Firebaugh (1981:7) share the same view and refer to the *environment* of a system as a “set of conditions and properties that influence a given system but are not an integral part of it.” It can therefore be concluded that the environment is always defined relatively to a system and that systems are in constant interaction with the environments that surround them.

In summary, systems can be said to be an organised whole that consists of a set of elements in interaction with the environment. The indigenous people are singled out as one of the elements of the IKS that interact with the housing environment. It is therefore necessary in the following section to explore the characteristics of indigenous knowledge systems and how these characteristics affect housing as the environment that impinges upon IKS.

2.4 CHARACTERISTICS OF INDIGENOUS KNOWLEDGE SYSTEMS AND THEIR IMPLICATIONS ON HOUSING

According to De Guchteneire *et al.* (2004:6), the following are characteristics of indigenous knowledge systems: IK is generated within communities, is location and culture specific, is the basis for decision- making and survival strategies, is not systematically documented, concerns critical issues of human and animal life: primary production, human and animal life, natural resource management, is dynamic and based on innovation, adaptation, and experimentation and is oral and rural in nature. De Guchteneire *et al.* (2004:6) discuss each of these characteristics of IKS in detail. However the characteristics of IKS by De Guchteneire *et al.* (2004:6) will be expounded by arguing the relevance of these aspects to the IKS of housing in particular.

2.4.1 Indigenous knowledge is generated within communities

According to De Guchteneire *et al.* (2004:6), indigenous knowledge is embedded in the community. Sambo and Munyenembe (1999:88) support this statement and point to the fact that community-based solutions are more likely to succeed than those imposed from outside. Historically, rural communities have acquired detailed knowledge, skills, practices and strategies based on their interaction with the local environment over long periods of time (Sambo & Munyenembe, 1999:88). The above characteristic manifests itself in housing as noted by Frescura (1981:75) when tracing the unwillingness of the indigenous people to implement too radical a change in the house form. Frescura (1981:75) claims that the unwillingness stems from the very structure of rural society and the role that home – building plays within it. Furthermore he (1981:75) illustrates that in such a society, the technology of construction is learnt as part of the general education undergone by every member of that society. An awareness of building percolates to virtually every strata of rural life and cuts across lines of sex, age and social status (Frescura, 1981:75) claims that even when specialised builders do arise, the average householder and his family have an intimate knowledge of the building process and are able to take part in it. Therefore, IKS is part of the life of the indigenous people and they have an intimate knowledge of IKS.

2.4.2 Indigenous knowledge is location and culture specific

De Guchteneire *et al.* (2004:6), state that indigenous knowledge is unique to a given culture, location or society. Pfeifer (1996:10) holds the same view and notes that indigenous people's knowledge exists in innumerable forms among innumerable groups of peoples in innumerable environments. This characteristic is evident in housing and is testified by Frescura (1981:123) when claiming that, in building houses, the methods of the rural builder vary from location to location, group to group and even clan to clan. Tyrell and Jurgens (1983:174) give an example to this effect by mentioning that the size and layout of Sotho settlements vary to a much greater extent from place to place than do those of the Nguni. IK is therefore specific to people indigenous to particular geographic areas and cannot be generalised to larger populations. This means that it is determined by the people living in a particular locality or region or in the social environment to meet the needs of that particular community.

2.4.3 Indigenous knowledge is the basis for decision- making and survival strategies

IK can be used as cost-effective and sustainable strategies, to help poor people in their daily struggle for survival (De Guchteneire *et al.*, 2004:7). Engberg (1995:95) supports this opinion and notes that local people, including the poorest of the poor, can take action to improve their own condition. This characteristic is evident in the observation made of rural architecture by Frescura (1981:3), that the generating force behind rural architecture is the need for cheap durable shelter. Frescura (1981:x) found that the continued existence of indigenous architecture as being guaranteed by the economic necessity of implementing low- technology and self-help housing projects. Therefore, the decisions of indigenous people are not dependant upon financial resources but by making use of resources freely available to them.

2.4.4 Indigenous knowledge is not systematically documented

According to De Guchteneire *et al.* (2004:5), indigenous knowledge has the disadvantage of not having been captured and stored in a systematic way. De Guchteneire *et al.* (2004:5) acknowledge the dominance of the western knowledge system which has largely led to a prevailing situation in which indigenous knowledge is ignored and neglected, creating an implicit danger that IKS may become extinct. With regard to housing, Frescura (1981:1) cautions that rural vernacular architecture as a whole is a threatened element of the environment. Furthermore he makes an example that the beehive cone is not found today and pictorial records, from the early days are sketchy and generally open to interpretation. IKS therefore, need to be documented in order to be sustainable.

2.4.5 Indigenous knowledge concerns critical issues of human and animal life: primary production, human and animal life, natural resource management

De Guchteneire *et al.* (2004:5) note that over many centuries human beings have been producing knowledge and strategies enabling them to survive in a balanced relation with their natural and social environment. Behera and Erasmus (1999:9) concur and claim that indigenous people depend on the environment for survival and emphasise the importance of restoring the balance between nature and human needs. With regard to housing, Frescura (1981:7) notes that the distinctive character of indigenous housing is that it uses materials according to their nature and properties and

its performance relies greatly upon that of its constituent elements. Frescura (1981:9), further notes that the rural house is in itself subject to a delicate environmental balance and that rural housing as a whole is part of the larger environmental cycle of birth, life and death. Frescura (1981:9) gives evidence by illustrating that in the case of rural houses, materials are drawn from the earth, given validity by the builder and once the function and scope for maintenance ceases, the house is allowed to crumble and return to the ground whence it originated. The natural resources are therefore a source of life and their maintenance very critical for the sustainable development of the indigenous people.

2.4.6 Indigenous knowledge is dynamic and based on innovation, adaptation, and experimentation

According to de Guchteneire *et al.* (2004:5), indigenous knowledge is dynamic and is a result of a continuous process of experimentation, innovation, and adaptation. De Guchteneire *et al.* (2004:5), further point out that indigenous knowledge has the capacity to blend with knowledge based on science and technology. Frescura (1981:7) notes this characteristic in contemporary indigenous housing, and testifies that the final house form is influenced by culture, local tradition, language, availability of materials, materialism, modern influences, aspirations, finance, social groupings, building methods, site and aspect. Tyrell and Jurgens (1983:230) agree that with the passage of time there have been changes in the design of the dwellings of various indigenous groups.

2.4.7 Indigenous knowledge is oral and rural in nature

De Guchteneire *et al.* (2004:5) recognise that IKS refers to the large body of knowledge and skills that has been developed outside the formal education system and which is handed down orally from generation to generation. Heyd (1995:2) illustrates this notion by stating that indigenous knowledge is explicit. It is expressed, for example, in lore or in advice passed from generation to generation, or it may be implicit and embodied in specific traditional practices (Heyd, 1995:2). With regard to housing, Frescura (1981:3) illustrates that, for the indigenous people, architecture without architects is not only possible but is practised as an everyday occurrence by ordinary people as part of their ordinary life. Frescura (1981:10) notes with interest that the indigenous people have been housing themselves for aeons without the aid of architect, town planner or quantity surveyor. West and Morris (1984:18) note that, before the advent of formal schooling, education was by example and

imitation, and when about five or six years old, children began to perform useful tasks around the home. West and Morris (1984:18) give examples in this regard that for instance, small boys went with their elders to herd cattle, and girls would care for younger children and begin to fetch water, grind corn and cook.

In the preceding section of this study, the relevance of the characteristics of indigenous knowledge systems to housing was argued. It can be concluded that the characteristics of IK as proposed by De Guchteneire *et al.* (2004:5) are applicable to the specific condition or the environment of housing. The components of IKS are therefore in constant interaction and housing is the environment that impinges upon them. The aim of the following section then, is to use the Theory of Place of Canter (1977:158) and apply the constituents of this theory to give meaning to the interaction of the components of IKS of housing.

2.5 THE APPLICATION OF THE THEORY OF PLACE TO EXPLORE INDIGENOUS KNOWLEDGE SYSTEMS OF HOUSING THROUGH VARIOUS DEVELOPMENTAL STAGES

The Theory of Place, developed by Canter (1977:158) is used to provide the context in which IKS of housing is explored. In order to apply this theory, it is necessary to examine different developmental stages of IKS of housing by taking a brief examination of each of the constituents of place. De Guchteneire *et al.* (2004:5) testifies that IKS is dynamic and based on innovation, adaptation, and experimentation. IKS is affected by change and the IKS of housing of today may be different from that which was practised before and it is impossible to generalise about IKS. It is therefore possible to apply the constituents of the Theory of Place to understand what necessitated the different developmental stages of IKS of housing.

2.5.1 Theory of Place

The following is a model designed by Canter (1977:158), illustrating that a place is the result of relationships between actions, conceptions and physical attributes. It is applied in this section of the study to seek a way of understanding IKS of housing through different developmental stages.

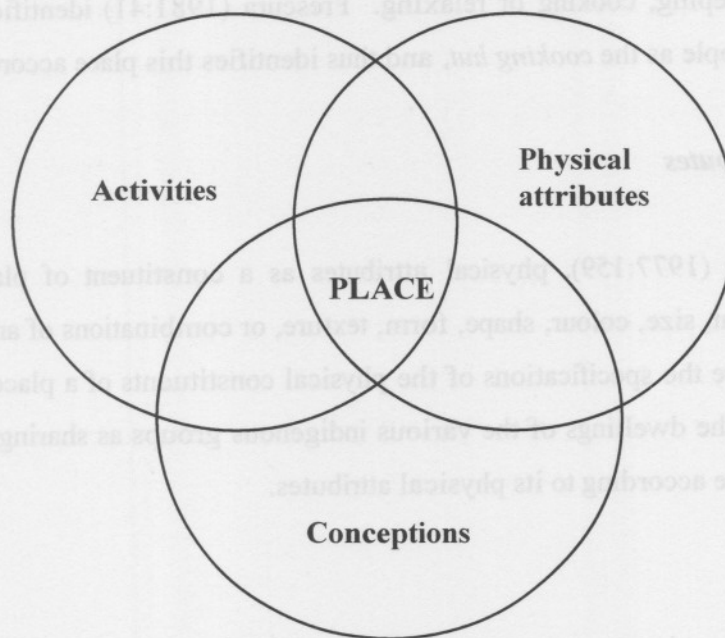


Figure 2.1: A visual metaphor for the nature of places

- *Constituents of place*

Canter's (1977:158) Theory of Place is divided into three constituents, which are activities, conceptions and physical attributes. According to Canter (1977:159), a place may be identified by using as a starting point, any of the major constituents of place. For example the place "kitchen" in a house may be identified and given that label because of the *activities* taking place there, the *physical attributes* that allow for the performance of those activities and beliefs and descriptions or *conceptions* people have for such a space.

i. Activities

Canter (1977:159) describes activities as constituents of place as the identification of the groupings of activities to be housed in a proposed design. Activities as a constituent of place therefore mean that a place may be identified, by taking note of the activities taking place in it. Examples of activities may be sleeping, cooking or relaxing. Frescura (1981:41) identifies the kitchen of the indigenous Nguni people as the *cooking hut*, and thus identifies this place according to its activities.

ii. Physical attributes

According to Canter (1977:159), physical attributes as a constituent of place are the physical parameters like weight, size, colour, shape, form, texture, or combinations of any of those. Physical attributes are therefore the specifications of the physical constituents of a place. Tyrell and Jurgens (1983:230), identify the dwellings of the various indigenous groups as sharing a *circular* plan, and thus identify that place according to its physical attributes.

iii. Conceptions

Canter (1977:159) describes conceptions in relation to the other two constituents of place and states that conceptions link activities to given physical forms. Conceptions as a constituent of place therefore refer to the meanings people attach to what behaviour in a particular physical setting should be. For example, according to Bennett and Peart (1991:308), the right-hand side of a Nguni hut is a man's side, which a woman must avoid at all the times. Peart and Bennet (1991:308) thus identify *a man's side of a hut* according to the conceptions the people hold of that place.

Since Canter's (1977:158) Theory of Place is used in this study to identify IKS of housing, it will be used in the following section to identify the various developmental stages of IKS of housing.

2.5.2 Historical development of indigenous knowledge systems of housing

Frescura (1981:x) notes that South African indigenous housing has over the years been subjected to a number of cultural and technological changes, which have resulted in its evolution through a number of stages. Therefore indigenous housing has evolved through various stages to its present

point of development. Frescura (1981:21) warns though that the structure of the indigenous houses did not evolve from one stage to the next, as a matter of course or because any one person or group of people decided it should. Frescura (1981:21) considers that subtle changes were made as the house structure and form responded to environmental, social, economic and technological pressures. Therefore the changes that can be observed in IKS of housing have been inevitable and will be traced in this study through the application of the Theory of Place

The historical development of indigenous knowledge systems of housing will be discussed through Frescura's (1981:15) classification of four major traceable stages of development of the house form. The following four developmental stages, as identified by Frescura (1981:15-18) are: the beehive house form, the cone-on-cylinder house form, the ridged roof house form and the highveld house form. Although these are more traditional, other house forms have also come into existence, such as the peri-urban house form. The peri-urban house form is contemporary in the peri-urban areas. The inclusion of this house form is motivated by an identification by Dewar (1994:1) of an increasingly visible phenomenon in many peripheral areas of South Africa, such as settlements, which do not fit easily into categorisations of either "urban" or "rural".

In light of the fact that these stages of house development have certain characteristics particular to the use and descriptions of behaviour people hold of physical environments of these house forms, it is necessary to evaluate the way in which the Theory of Place components relate to these historical aspects.

- *House forms in relation to Theory of Place*

- (a) *The beehive house form*

Frescura (1981:15) identifies the beehive house form as stage one of development of the South African indigenous house. Furthermore he describes the beehive hut as a circle of saplings bent inwards and crossing at the apex, with two series of arches crossing at right angles, usually with a centre post. The covering of the whole structure is then cladded over with thatch. There is no distinction between the walls and the roof and the floor is made of packed earth.

Figure 2.2: The beehive hut



(Frescura, 1981:17).

i. Activities

Activities are found in the beehive hut to be of a food preparation nature. For instance, Frescura (1981:41) notes that, in the beehive hut, smoke from the *cooking hut* was allowed to percolate through the thatch. The description by Frescura (1981:41) that the beehive hut was planned such that there was a central *cooking hearth* also suggests that it was a cooking hut. Frescura (1981:41) also notes a *storage space for household and cooking utensils*, which is a raised earth shelf to the rear of the hut and opposite the door. Therefore, the beehive hut can be identified as a food preparation or a cooking hut, or a kitchen, because of the grouping of activities housed there.

ii. Physical attributes

In relation to other constituents of place, Canter (1977:159) notes that the physical attributes have the greatest likelihood of linking to the other components of the place in question, such as those which facilitate the identification of places. For example, according to Canter (1977:159), during the design stage of a place, specific physical structures may be checked against the activities they will house. In the case of the beehive hut, Frescura (1981:15) describes the beehive structure as “essentially a timber frame which has been clad over with thatch”. The physical attributes of the beehive hut subsequently are conducive to the activities performed in that place as for example thatch is best suited for allowing smoke from the cooking fire to percolate through.

iii. Conceptions

The beehive house is generally associated with grass-oriented technology because it was found in the grass-rich lands of the Nguni people (Frescura, 1981:11). For instance he testifies that the beehive house form was predominant among the Swazi, Zulu and Xhosa groups whose major areas of settlement lie largely along the rain and grass-rich coastal lands east of the Drakensberg. Frescura (1981:55) describes the Zulu and Swazi as being imbued with highly disciplined traditional values and nationalism, which enabled them to cling to the beehive form through into the mid-twentieth century. The beehive house form is almost extinct at present and therefore conceptions associated with the discontinuation of this house form led to the emergence of the cone-on-cylinder house form.

(b) The cone-on-cylinder house form

The cone-on-cylinder house form is identified by Frescura (1981:15), as stage two of development of the South African house form. He describes the cone-on-cylinder house form as typified by the emergence of the roof and the wall as separate and identifiable structural elements of the hut, each with separate functions and criteria of performance. The timber roof frame, which is supported by vertical timber posts set within the wall, is thatched with grass. Deliberate eaves are formed for the first time and windows also find expression at first merely as ventilation flues and subsequently as light-admitting openings, the size increasing with the sophistication of the resident's life-style and the builder's constructional methods (Frescura, 1981:16). The changing mode of construction affects the house form and changes what was primarily a grass technology in the beehive dome to a grass roof and mud wall structure.

Figure 2.3: The cone-on cylinder house form



(Frescura, 1981:17)

i. Activities

Activities are found in the cone-on-cylinder house form to be of a variety. For example Tyrell and Jurgens (1983:175) note that within the Venda homesteads, hut pairs are arranged forming a double semi-circle, and each pair consists of a *living and a cooking hut*, which together enclose a private courtyard. Concerning the polygamous South African tribal societies, West and Morris (1984:9) explain that each wife had her own sleeping hut, a storage hut and a kitchen hut. In most homesteads, there would also be granary huts, separate huts for older boys and girls and a guest hut (West and Morris, 1984:9). Activities therefore, are varied and each hut has a grouping of activities that are performed there. A hut therefore, can be identified by the activities performed in it, as is the case with a *sleeping hut*.

ii. Physical attributes

The physical attributes that distinguish this type of a house-form are the materials used in its construction and the shape it has. Tyrell and Jurgens (1983:230) describe this dwelling, displacing the beehive hut as the wattle-and-daub hut with a conical, thatched roof. Frescura (1981:16) also offers the same description and states that the cone-on-cylinder is largely a timber roof frame, which is supported by vertical timber posts set within the wall. Frescura (1981:15) describes this house form as typified by the emergence of the roof and the wall as separate and identifiable structural elements. He attributes the development of the wall as a load-bearing structural element of the house, to threatened or real shortage of timber, which has forced the discontinuation of usage of posts. Therefore, the scarcity of some physical elements and the abundance of others led to the development of this house form.

iii. Conceptions

Frescura (1981:53) notes that possibly the cone-on-cylinder is the most universal of Southern Africa's house forms. West and Morris (1984:9) however, caution that the widespread occurrence these days of walled circular huts with conical thatched roofs suggests to many that this is the "traditional" form, but remind that the Nguni and Sotho huts were grass thatched beehive constructions on a frame of bent saplings. The beehive hut had some shortcomings and did not meet all the conceptions people had of a dwelling. As a result, Frescura (1981:105) notes that while

the thatched roof of the beehive hut was especially suited to the function of providing heat for comfort and cooking, had excellent thermal qualities, and also allowed smoke to percolate through, windows on the cone-on-cylinder were developed as ventilation flues. The conceptions of a well ventilated house therefore, necessitated changes that led to the development of this house form.

(c) The ridged roof house form

Frescura (1981:16) identifies the ridged roof house form as stage three of development of the South African indigenous house. Frescura (1981:17) describes this house form as being distinguished from the previous house forms by the introduction of the 90° wall construction. The separate structural identities of wall and roof are maintained from the cone-on-cylinder house form in the ridged roof house form. According to Frescura (1981:16), in the ridged roof house form, the invention of the triangulated roof truss has liberated the wall plan from the limitations of a radial roof system. Frescura (1981:16) therefore, notes that for the first time, the house plan is dictating the shape of the roof and not vice versa as was the case hitherto. By this stage, walls were fully load-bearing, and floor plan development was linear with rooms being set in a row.

Figure 2.4: The ridged roof house form



(Frescura, 1981:17)

i. Activities

Frescura (1981:90) conceives of this type of a house as allowing the various activities of a family to be performed under one roof than to scatter them to three or more separate structures. Frescura (1981:95) further notes that the biggest grouping of activities does not exceed three rooms and is divided as a central living room-cum-kitchen with bedrooms on either side. Therefore, the development of this house form allows the performance of different groupings of activities under one roof.

ii. Physical attributes

Frescura (1981:85) describes this type of a house as comprising of a ridged roof on a square or rectangular plan. Frescura (1981:85) notes that the walls of this type of house are generally load-bearing and made of monolithic sun-dried packed earth bricks or of undressed stone, held together by earth. The distinguishing physical features of this house form therefore from the first two preceding it are that it is a multi-roomed, square or rectangular house form with a hipped and ridged roof. These physical attributes therefore, allow a grouping of activities to be performed in a single structure.

iii. Conceptions

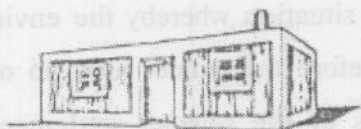
This house form developed as a result of how the indigenous people conceived of the suitability of the materials for building their houses. According to Frescura (1981:88), in terms of materials, this type of dwelling is usually found in areas where there is lack of suitable thatching grass, due to either climatic conditions, large settlements of people, the land being subject to intensive farming methods or a combination of any of the above. Frescura (1981:88) therefore concludes in this respect that whereas previously rural society would, under different conditions, have built two or three separate rooms, a shortage of materials as well as larger population densities have created conditions which encourage the development of more compact multi-roomed structures. The development of this house form therefore has been dictated by the spatial demands of the residents.

(d) The highveld house form

Frescura (1981:18) identifies the highveld house form as stage four of development of the South African indigenous house. Frescura (1981:18) explains that the highveld house derives its name because of its predominance amongst the rural dwellers of the former Transvaal and Orange Free State highveld. This house form usually consists of load-bearing walls, which carry a lean-to corrugated iron roof falling to the rear of the unit. Eaves are generally only created at the rear and the other three sides are trimmed by means of low parapet walls. Frescura (1981:18) concludes that, in general, the highveld house form has moved from a stage when structure failed to differentiate between roof and wall functions. Through various developments, which saw increasing emphasis

being made upon the structural role of the wall until the final stage when the wall became the dominant visual factor of the building, the roof became almost totally subject to the demands made by the floor plan.

Figure 2.5: The highveld house form



(Frescura, 1981:17)

i. Activities

According to Frescura (1981:105) activities like cooking are conducted either in the open or within a specially designated and usually thatched-roof unit separate from the highveld house structure. Therefore, the highveld house form is not suited to the function of cooking or making open-fires.

ii. Physical attributes

Frescura (1981:101) describes this house form as marking a stage where the relationship between wall and roof has travelled the full circle. This evolution can be traced from the time when the beehive hut offered no differentiation between the wall and the roof, through various developments when the wall matured as a full structural element until finally, in this house form, the walls have become dominant and the roof scarcely expressed. The main feature therefore outstanding in the highveld house form as opposed to its most recent predecessor is the flat galvanised iron roof.

iii. Conceptions

Frescura (1981:18) explains that the “highveld” house is so named because of its predominance amongst the rural dwellers of the then Transvaal and the Freestate highveld. Frescura (1981:101) notes with sadness that the flat-roofed form is held up to be the paragon of “modern” living over thatched roof forms. The highveld house form has therefore gained popularity amongst the

indigenous people because it embodies their aspiration towards a higher standard of living as this house form is a stylisation of the kind of dwellings found in urban areas.

(e) The peri-urban house form

Frescura (1981:9) describes this house form as emanating from a situation whereby the environs refuse to yield up the materials suitable for construction and therefore the builder turns to other sources. Frescura (1981:9) gives an example of the inhabitants of the squatter settlement at Crossroads, Cape Town, who have turned to the consumer society about them and used its cast-offs to create homes from corrugated iron sheets. Because the example given by Frescura (1981:9) is just an example and this house form does not have any definite pattern, no illustration of this house form is presented in this paragraph.

i. Activities

Occupants of this form of housing perform activities in whatever little space that is available. Frescura (1981:177) notes that in the peri-urban settlements, familiar materials and objects are given new functions and significance. He gives an example that, the same objects in the same room may be used for different activities to suit the purpose. For example a bed during the day doubles up as a couch and may even be used as a table and a storage place for clothes. Activities are therefore not restricted to a particular place as space itself is very limited in these settlements.

ii. Physical attributes

Frescura (1981:174) notes that this form of a house is constructed by making use of the cast-offs of a consumer society and may be made of tin, cardboard, or the timber of packaging cases. A peri-urban house form therefore does not have any definite pattern, and different materials are used in the construction based upon availability.

iii. Conceptions

Dewar (1994:13) defines the peri-urban settlements as a pattern of distribution of households which have a foot in both urban and rural worlds. Frescura (1981:172) concurs and notes that the

occupants of these areas represent the link between the rural and urban, and that their house form and constructional methods have had to adapt to a new environment, and, often, new materials. According to Frescura (1981:31), the very existence of this type of structure has been necessitated by economic factors. The peri-urban house form therefore, is characterised by the fact that the occupants use new materials in a new environment and have to find new solutions to new problems of construction.

Although the Theory of Place has provided a framework with which to explore housing, the Theory of Place does not take into account the basic functions a place should serve. In order therefore to fully understand a place, in whatever stage of development, it is necessary to formulate the primary functions of housing.

2.6 THE BASIC FUNCTIONS OF INDIGENOUS KNOWLEDGE SYSTEMS OF HOUSING

Cognizance is taken of the statement by Venter (1999:1) that housing is a place where the family's needs are met. It is therefore argued that the basic functions which shelter performs as identified by Melson (1980:195) can be applied as functions to meet the needs of the indigenous household. Therefore, the functions of IKS of housing will be discussed in relation to how they meet the needs of the household which are homeostasis, weather, protection, privacy and symbolic communication.

2.6.1 The support of homeostasis through limiting solar radiation as expressed through temperature

This function is developed around the idea of homeostasis. According to Melson (1980:16), *homeostasis* is a set of regulating mechanisms, which act to maintain the steady state of a system. Housing supports the regulating mechanisms to maintain indigenous systems in a steady state through limiting solar radiation as expressed through temperature. The indigenous housing environment therefore is able to yield temperatures that are comfortable, providing warmth when it is cold and cooling mechanisms when it is hot.

Frescura (1981:169) proposes that homeostasis can be found in Nguni indigenous housing as the rural house is oriented mostly to the north-east. The area to either side of the door is painted, usually white, but the sides and rear are not painted and sometimes daubed with a darker clay. The

morning sun therefore is reflected off the light surface leaving the dwelling comparatively cool during the day. In the afternoon the darker surface to the north-west of the dwelling is allowed to gain the afternoon heat in preparation for the cooler night. By morning the house has cooled again for the whole cycle to restart (Frescura, 1981:170). Frescura (1981:162) notes that it is in the former Ciskei, Transkei and KwaZulu that orientation is linked to the thermal role of the house through the day.

2.6.2 Protection against discomforts from changes in weather

According to Venter (1999:8), the housing function stated earlier is further related to the elimination of discomfort from changes in weather, by providing shelter to the occupants against elements such as cold, sun, rain, heat and wind. To this effect, Tyrell and Jurgens (1983:230) describe the beehive dome of the Nguni people as a sturdy and weatherproof hut that is constructed with expertise, using plaited grass rope to tie thatch on to hemispherical lattice of saplings. The beehive hut of the past therefore protected its occupants against elements of weather because it was constructed such that it provided warmth when it was cold, coolness when it was hot and the rain and wind could not penetrate through the thatch.

2.6.3 Protection against predators

Melson (1980:195) proposes that a house should also protect against predators. Venter (1999:9) concurs and states that a house is a place that offers security and safety because family members have the right to be there. To this effect, Tyrell and Jurgens (1983:174) state that in the Nguni homestead there may be an enclosure of thorn bushes which serves to keep out both unwanted animals and humans. Housing therefore is a place where possessions can be stored safely and the structure is able to protect its occupants from people who want to harm them.

2.6.4 Privacy for biological activities

Melson (1980:195) proposes that housing should provide privacy for the biological activities of its occupants. To this effect, Venter (1999:8) asserts that a house is a place that offers a healthy living environment and protection against diseases. Among other things, there must be enough space so that everyone can sleep in comfort. Tyrell and Jurgens (1983:174) illustrate how this function is

performed in the case of an indigenous polygamous household, whereby a wealthy nobleman may have his private hut located near the Great Hut which is the home of the First Wife and the most important in the homestead. Tyrell and Jurgens (1983:174) further note that if a husband does not have his own private hut, he spends his time in the huts of his wife or wives.

2.6.5 Symbolic communication

Melson (1980:195) claims that the function of symbolic communication illustrates the important point that the spatial environment not only protects its inhabitants from harm, but also expresses attitudes, values, and yearnings. To this effect Frescura (1981:101) gives the example of people building and occupying Highveld house forms. The rural dwellers regard the Highveld house form as a stylisation of the kind of dwellings found in urban areas and which embody their aspiration towards a higher standard of living, better education and a more sophisticated lifestyle. The Highveld house form therefore acquires symbolic meaning as its occupants may see their status in the community reflected in it.

2.7 CONCLUSION

IKS of housing of the South African people in general was explored in this chapter. For purposes of this study, housing has been highlighted as the environment that impinges upon IKS. The general characteristics of IKS therefore are applicable to the IKS of housing. Through the application of the Theory of Place, a way of exploring IKS of housing was sought. Each of the constituents of the Theory of Place is evident throughout the various stages of development of indigenous housing. Consequently the various indigenous house forms could be identifiable through the constituents of the Theory of Place. Lastly, it can be concluded that housing, in whatever stage of development has certain functions to perform to meet the needs of its occupants.

The literature of the IKS of housing of the South African people in general was reviewed in this chapter. In the following chapter, there is a need then to explore the IKS housing in the Xhosa homesteads as this study was designed to explore the IKS of housing of the Xhosa people of the Eastern Cape in South Africa.

CHAPTER 3: INDIGENOUS KNOWLEDGE SYSTEMS OF HOUSING IN THE XHOSA HOMESTEADS

3.1 INTRODUCTION

In this chapter, the indigenous knowledge systems of housing of the Xhosa speaking people in particular will be explored. This is important for this study because the study population is the Xhosa speaking people of Gqebenya and Ezibeleni in the Eastern Cape. To enable a full understanding of the IKS of Xhosa housing, it is necessary to explore it by looking deeply into the aspects that make the Xhosa people so unique. The IKS of Xhosa housing will therefore be explored under the following headings: the location of the Xhosa speaking people, the structure of the rural Xhosa homestead, application of the Theory of place, gender roles within the rural homesteads and the structure of the peri-urban Xhosa settlements.

3.2 THE LOCATION OF THE XHOSA SPEAKING PEOPLE IN SOUTH AFRICA

In the Republic of South Africa the largest group of the population is the Nguni, who make up 66% of the black population (West & Morris, 1984:7). According to West and Morris (1984:7) the Nguni includes the Zulu, Swazi, Xhosa and Ndebele tribes. Moreover, West and Morris (1984:8) and Tyrell and Jurgens (1985:13) note that the Xhosa are the largest of the Nguni group. These Xhosa people, reside mainly in the former Transkei and Ciskei, and are composed of several factions, the greatest being the Ngqika and the Gcaleka (Tyrell & Jurgens, 1985:13). The Xhosa people are scattered throughout the former Transkei and Ciskei according to their factions, and to the north east of the Ngqika and Gcaleka live the Mpondo, Mpondomise and Thembu, and to their east, the Bomvana (Tyrell & Jurgens, 1983:13). Therefore the Xhosa people are of Nguni descent, comprising a number of different tribes.

West and Morris (1984:12) and Tyrell and Jurgens (1985:13) concur that the Xhosa speaking people inhabit the former Transkei and Ciskei areas on the south east coast of South Africa as well as being present in large numbers in the major cities especially Cape Town, East London and Port Elizabeth. West and Morris (1984:12) further claim that historically, these people occupied an area roughly from the Fish river, to what is now Kwazulu-Natal, and from the coast spread well inland and north

to the Drakensberg Mountains. The present demarcation of the provinces of South Africa, which has combined the former Transkei and Ciskei and some areas in the former South Africa, place the Xhosa in an area now known as the Eastern Cape. Although the people occupying this stretch of land are referred to, broadly as the Xhosa people, it is important to note that they consist of a number of independent chiefdoms of which the "Xhosa proper" are merely one related group (West & Morris, 1984:12). The Xhosa people of the Eastern Cape are therefore regarded as indigenous people in this study because they have remained broadly in the same area for generations.

The Eastern Cape, is described by Dikeni (2002:10), as a land of remarkable natural diversity. According to Dikeni (2002:10), it ranges from the dry desolate Great Karoo to the lush forests of the Wild Coast and the Keiskama Valley, the fertile Langkloof, renowned for its rich apple harvests, and the mountainous southern Drakensberg region at Elliot. The people of the Eastern Cape therefore are as vast and varied as the lands they occupy. Dikeni (2002:11) testifies to this fact and claims that housing of the Xhosa reflects the rich heritage of the people.

3.3 THE STRUCTURE OF THE RURAL XHOSA HOMESTEAD

According to West and Morris (1984:9), the family was the basic unit of all the African people and was extended to include a number of close relatives. The basic residential unit housing the family, as identified by West and Morris (1984:9) is the homestead, which was characterised by a number of huts. Therefore the Xhosa speaking people like all the other African people resided and still reside as family members in homesteads.

Furthermore, Tyrell and Jurgens (1983:173) and West and Morris (1984:14) point out that the Nguni homestead units as opposed to the residential units of other African tribes that are organised into towns, give an appearance of being scattered about on the hill and lands where their herds roam. This appearance was mainly achieved through the placement of homes on slopes that faced the rising sun and away from arable land (West & Morris, 1984:14). West and Morris (1984:25) are of the opinion that homesteads were built on higher ground so that the lower-lying arable land was free for cultivation. Therefore, due to this reason, it appears as if the Xhosa speaking people, unlike many other black people, tend to live in homesteads strung out along ridges rather than in the concentrated villages so common elsewhere.

West and Morris (1984:14) illustrate that the huts of the Xhosa were commonly arranged in a semi-circle about the cattle kraal, with another one for smaller animals, usually nearby. According to West and Morris (1984:14), in broken hilly country, the main hut would be erected at the highest point. West and Morris (1984:14) are of the opinion that, now that the western culture has influenced the Xhosa society, and polygamy is on the decline, homesteads tend to be smaller and huts are often built in a straight line. The structure of the indigenous Xhosa homestead therefore points to the fact that IKS of Xhosa housing is dynamic and based on innovation, adaptation and is responsive to the demands of the present times.

3.3.1 Settlement patterns of a rural Xhosa homestead

According to West and Morris (1984:10), in a polygamous rural Xhosa homestead, a new wife established her own "house" in her husband's homestead and any other wives did likewise. Her husband and his relatives had to provide her with fields, huts, a kitchen, and granary, and sometimes livestock. The "house" of each wife was therefore the basic domestic unit of a woman and her children and it was something of an independent unit within the homestead, owning property in its own right, inheritable by children born to the house (West & Morris, 1984:10). "Houses" were ranked according to the seniority of the wife, and the senior wife's son was usually heir to the head of the homestead (West & Morris, 1984:10). The different wives of a man therefore, resided in their different houses with their children within the same homestead as the man and his relatives and this was regarded as one homestead.

The contemporary rural Xhosa homesteads are different from their traditional counterparts and this can be attributed to the different lifestyles of the past and the present. For instance, Tyrell and Jurgens (1983:161) note that the contemporary young couple set up home on their own, away from the groom's parents and attribute this change to the fact that the young man earns his own lobola and can be independent of his father's cattle and household. The settlement patterns of the Xhosa people therefore, have undergone changes due to changing social, political and economic factors (Frescura, 1981:143). The contemporary rural Xhosa households therefore, occupy their dwellings differently from their traditional counterparts and settle in ways that meet the needs of the present Xhosa society.

The Theory of Place will be applied in the next section in order to delve into the dimensions of Xhosa housing to understand the relations of the household to the homestead.

3.4 THE APPLICATION OF THE THEORY OF PLACE TO UNDERSTAND THE DIMENSIONS OF XHOSA HOUSING

The Xhosa homestead is the result of the relationships between actions, conceptions and physical attributes of the Xhosa indigenous people.

3.4.1 Activities

Various spaces within the Xhosa homestead will be identified through the exploration of what behaviour is associated with them. According to Canter (1977:159), it is possible to begin identifying a place by identifying the groupings of activities to be housed in a proposed design. Therefore the different spaces within the Xhosa homestead will be identified, by discussing the relationships between activities or actions and the particular physical parameters that house such activities or behaviour.

- *Living /Resting /Social activity*

The living/resting/social activity takes place in different parts of the Xhosa homestead depending upon the people partaking in such activities. For example Frescura (1981:120) notes that the cattle byre is a place of public gathering where many of the social functions of a settlement are fulfilled, during the day when the cattle are in the veld. West and Morris (1984:8) identify that the cattle kraal is the geographic and social centre of village life, the meeting place of men and a place of ritual importance, generally barred to women. McAllister (1997:282) testifies that male kin hold their private meetings (*ibhunga*) next to the cattle byre. Outside, the sitting place of women is near the woodpile and outside cooking fire, sometimes partly behind the huts, well away from men, the byre and the courtyard (McAllister, 1997:297).

The gathering of family members takes place in the main hut. To this effect Frescura (1981:107) points out that the family's social functions are centred in the main hut. McAllister (1997:282) also gives the example that the gathering of kin is in the main hut during the night. Although the family

may rest in the same hut, women and children sit on the left-hand side, while men sit on the right-hand side of a hut (McAllister, 1997:297). The manner of sitting of the men is also such that the older men sit so that they are closer to the door than their juniors (McAllister, 1997:297). The living / resting / social activity therefore is participated by every member of the Xhosa household and takes place in different parts of the homestead according to the gender, kin and age of the participants.

- *Meal preparation*

Meal preparation activities in the Xhosa homesteads are catered for in the physical structure of the huts. The huts may all look the same and be able to cater for the function of food preparation. To this effect Frescura (1981:41) describes that the planning of the central cooking hearth and the two support posts in the beehive hut was such that the circular room was divided into two, the half on the left being the wife's and on the right the husband's. This example further suggests that any other food preparation activities taking place in this hut would be performed on the left-hand side. The physical attributes of the huts further point out to the fact that all could keep up with the function of food preparation as all had the same features. To illustrate this point, Frescura (1981:114) notes that in many instances, little if any difference could be found between the cooking hut and the form of other dwellings within the same settlement.

- *Performance of ritual*

According to Frescura (1981:42) the performance of ritual in the Xhosa homestead is of vital importance and takes place at different locations within the homestead. The space within the Xhosa homestead is therefore arranged such that it is ideal for this activity to take place. According to West and Morris (1984:14) the Xhosa huts of the past were arranged in a semi-circle around the byre, and the main hut stood directly opposite the byre, with their doors facing each other. McAllister (1997:282) concurs and notes that the spaces of ritual importance within the Xhosa homestead are the cattle byre, the main hut and the space between the main hut and the byre.

Activities of ritual importance that take place in the byre may be performed in different areas according to the significance of the ritual. In this regard McAllister (1997:283) notes that during a ritual performance, the consecration and immolation of a beast is performed inside the cattle byre. During this process, the heart and lungs of the sacrificial animal are hung on the right hand gatepost

and the animal's head is placed at the foot of the post, until the last day of the event, when they are eaten (McAllister, 1997:283). The gateway of the cattle byre is revered and homestead heads are buried near the gateway of the byre and as a result, women are expected to respect this area and not walk in front of the main hut but behind it (McAllister, 1997:283).

A ritual that has started in the cattle byre may end up in the main hut. In such a case, a ritual dance is performed around a sacred hearth fire inside the main hut. During such an event, beer and meat are stored in the rear (entla) of the hut where the ancestors are expected to partake of it (McAllister, 1997:283). The activities involved in the performance of ritual therefore have symbolic meanings and this illustrates that activities are in relationship with the conceptions the Xhosa people attach to the spaces of their homesteads.

- *Sleeping and personal care*

The sleeping and personal care activities take place in different huts according to the status of the members of the household. In this regard West and Morris (1984:4) note that homesteads had huts for older boys, girls and guests. This implies that the younger children shared sleeping huts with their mothers. According to West and Morris (1984:9), in a Xhosa polygamous homestead, each wife had her own sleeping hut and the husband would take turns to spend a night with each of his wives. In the case of a wealthy nobleman however, the husband would have his own private hut (West & Morris, 1984:10). The activity of sleeping and personal care therefore, was private and all the family members and even guests were housed in different huts according to their needs.

- *Storage*

The storage space was available in different parts of the Xhosa homestead according to what was stored. For example, West and Morris (1984:14) note that the Xhosa homestead was structured such that each wife in addition to her hut had a storage hut and granaries. The hut of each wife in this regard was used for the storage of all the belongings of that particular wife and all that she had in terms of cooking utensils and all the things she brought from her home when she married (West & Morris, 1984:20). According to Tyrell and Jurgens (1983:174) the main hut was also used for the storage of sacred objects such as sacrificial spears. The storage activity therefore has implications

that storage space was located at different points in the Xhosa homestead according to what was stored and the conceptions the Xhosa people attached to each storage activity.

Any particular place in the Xhosa homestead therefore can be identified, by using the constituent of activity as a starting point. By knowing what takes place in the physical settings and noting how the Xhosa people described their spaces leads to a better understanding of the Xhosa IKS of housing. Therefore this is an indication that a place is the result of the relationships of all the constituents of place.

3.4.2 Conceptions

The Xhosa indigenous homestead will be identified by conceptions and it will be noted how these conceptions form relationships with physical attributes. According to West and Morris (1984:14), the settlement pattern of the Mpondo homestead, like any Xhosa homestead was arranged such that the central hut was that of the “great house”- the house of the senior wife who would normally produce an heir for the head of the homestead. The “great house” stood directly opposite the opening of the kraal, which was the focus of ritual importance. To the right of it would be that of the “right-hand wife” who was next in seniority, and to the left, that of the third ranking wife, whose house was “rafter” (iqadi) for the “great house” (West & Morris, 1984:14). The contemporary rural Xhosa homesteads however look different from the past counterparts in terms of settlement patterns and types of houses. Tyrell and Jurgens (1983:20) note with regard to the settlement pattern that at present, the Xhosa homestead consists of dwellings that are arranged in a straight line. This was necessitated by the fact that the homesteads are no longer polygamous and therefore there is no need to arrange many huts in the smallest possible space.

Conceptions are also evident in the behaviour that is exhibited by occupants of a dwelling. For instance, within the confines of the rural Xhosa homestead, a new bride is not allowed to walk across the meeting-place of men, which is the courtyard. When moving about the homestead, she has to take the back way from hut to hut (West & Morris, 1984:17). The above example therefore is an indication that in the Xhosa patriarchal society, there were a number of things, which the women were not allowed to do. In particular, they had to avoid the cattle kraal, for this was the traditional meeting place of men. Owing to the belief in ritual impurity of women of childbearing age, they had to keep away from places of ritual significance for fear of causing harm to the homestead (West

& Morris, 1984:17). In this instance therefore the relationship of conceptions with actions was evident.

The following example illustrates that conceptions link the relationships of activities and physical attributes. Frescura (1981:52) notes in this regard that at present, in any Xhosa homestead, different types of buildings may coexist, depending upon the conceptions of the occupants. A cone-on-cylinder may be the only thatched structure in the homestead because the occupants need a structure that is able to stand up to the activities of food preparation. A thatched hut allows smoke to percolate through and therefore the physical attributes of this structure are best suited to the function of cooking and making fires. The contemporary Xhosa dwelling is also characterised by house types, such as the ridge roof house and the highveld houses, which consist of two or more rooms in one building (Frescura, 1981:52). The emergence of multi-roomed structures within the Xhosa homestead is an indication that the conceptions of the occupants changed in relation to physical attributes and these conceptions also related to activities. For the contemporary rural Xhosa dweller therefore, it is easier to perform most of the activities, under one roof than to scatter them in different house structures in the homestead.

The identification of the Xhosa homestead in this section was achieved by understanding the descriptions or conceptions people hold of the behaviour in particular physical settings. The conceptions were explored so as to understand the relationships between actions and physical settings. A place can therefore be identified by describing the behaviour that is associated or is anticipated will be housed in a particular design. It can therefore be concluded from the above examples that the Xhosa people culturally defined their spaces, thus conceptualising them.

3.4.3 Physical attributes

In this sub-section, the physical attributes of a place will be used to identify the different spaces within the Xhosa homestead. According to Canter (1977:159), the specification of the physical constituents to identify a place is very significant. Therefore it is easy to identify a place by its physical parameters. The aspects of physical attributes that are discussed in this sub-section have been selected according to their ability to link to the other constituents of place in this study. The following physical attributes will be discussed: floors, walls, windows, doors and roofs.

- *Floors*

The floor of an indigenous Xhosa hut is made of earth and examples can be noted from literature. According to Frescura (1981:133), the floors of a Xhosa homestead are usually packed earth regularly plastered with daga or just a cow dung wash. Tyrell and Jurgens (1983:231) offer the same description and note that the floor of the hut is a well-swept, hard surface of cow dung or ant heap soil. Tyrell and Jurgens (1983:231) further note that the housewife may smear her floor as often as once a week to preserve a good finish. Therefore, the materials used in the construction of the floors of Xhosa huts allow for the activities that are performed in them like the making of fires in the central cooking hearth of a hut.

- *Walls*

The walls of a Xhosa dwelling have evolved from a stage when they were made of grass through the stage of wattle-and-daub, to the present where they are fully load bearing. For example, Frescura (1981:11) notes that the walls of the traditional beehive dome of the Xhosa were dependent upon the application of various types of grass plentiful in the region. The beehive form was constructed such that there was no distinction between the walls and the roof and one was the continuation of the other. Frescura (1981:13) notes that the subsequent reduction in the supply of grasses suitable for construction led the Xhosa to move into wattle-and-daub construction. Frescura (1981:72) notes that the walls of the Xhosa cone-on-cylinder may be built by using the wattle-and-daub construction, monolithic load-bearing walls or dressed stone. According to West and Morris (1984:14) however, clay-walled rondavels and rectangular houses are now the order of the day. The bricks used in the construction of the walls of the Xhosa dwellings are made of earth (Frescura, 1981:10). The walls are then finished with a mixture of cow-dung and soil (West & Morris, 1984:8) note that dung was used for fuel and for plastering walls and floors. To decorate the walls, a lime-washed finish is applied (West & Morris, 1984:25). Therefore, the materials of construction of the Xhosa walls, allow for the conceptions people use to describe their dwellings, like the morning sun being reflected off the painted surface, leaving the dwelling comparatively cool during the day.

- *Windows*

Windows as a physical structural element did not exist in the Xhosa dwellings of the past. Frescura (1981:45) testifies to the fact that the beehive dome had some structural limitations in that it could afford neither a bigger doorway, nor windows set into the hut sides. This limitation contributed to the development of the next stage of house development. To this effect Frescura (1981:51) notes that in the Xhosa cone-on-cylinder, windows were used first as mere ventilation flues, often left unshuttered. Frescura (1981:142) however points to a progression whereby windows developed to a stage where they were side hung timber shutters. Windows as a physical attribute of the Xhosa dwelling relate to the conceptions the people attributed as to the function they had to serve. The development of the Xhosa dwellings therefore point out to the fact that as the conceptions of the occupants change, so do the physical attributes. For example windows were only needed as ventilation flues at first but later developed into light admitting physical attributes.

- *Doors*

The Xhosa indigenous people did not put up doors in the context of the western culture. Instead what was available in the beehive hut of the past was the entrance or the doorway. In this regard Frescura (1981:41) notes that the doorway was one of the key aspects of the beehive hut because it was the only opening that let in light and ventilation. The structure of the beehive hut though imposed some limitations on the doorway, as the cross-arched framework was only able to accept a doorway of limited size (Frescura, 1981:41). The physical make-up of the beehive hut door related with the conceptions of the Xhosa inhabitants that the low doorway passage served a defensive function by ensuring that anyone entering the hut would render his back vulnerable to defenders within (Frescura, 1981:41). The doors of the Xhosa dwellings have been developed to a stage that with contemporary Xhosa housing that doors are commercial and the most popular being the “split” or “stable” type (Frescura 1981:142). The development of the door therefore is an indication that the conceptions of the Xhosa people have changes as to what activities the door should serve.

- *Roofs*

The roof structures of the Xhosa indigenous dwellings have developed from the beehive dome, the conical roof, the ridge roof and the contemporary flat roof, which is not very indigenous. The most common type of the Xhosa roof structure at present is the conical roof. Frescura (1981:16) describes the cone-on-cylinder of the Xhosa roof, as largely a timber roof frame, which is supported by vertical timber posts set within the wall. The roof structure has travelled full circle and in this regard Tyrell and Jurgens (1983:230) note changes in the roof as including the introduction of corrugated-iron roofs. The physical roof structure of the Xhosa indigenous dwellings are linked to the conceptions the Xhosa people have of their dwellings and therefore thatching that is so characteristic of Xhosa indigenous housing has the advantage of being weatherproof.

The Xhosa homestead has been identified as the result of relationships between actions, conceptions and physical attributes. It can therefore be concluded that the Xhosa homestead was fully identified by knowing what behaviour is associated with it, what physical parameters of the Xhosa structure are and the descriptions which the Xhosa people hold of that behaviour in their physical environment. The following section therefore examines how the role-players of the indigenous knowledge systems are affected by housing as described in the previous section.

3.5 GENDER ROLES WITHIN THE RURAL XHOSA HOMESTEAD

McAllister (1997:293) notes that the relevant boundaries that one observes in Xhosa homesteads are established based on kinship, genealogical position and gender. An awareness of gender issues therefore is crucial in studying indigenous knowledge systems of housing of the Xhosa people. Specifically, gender roles in the Xhosa homestead pertaining to women's roles and men's roles need to be explored.

3.5.1 Women's roles within the rural Xhosa homestead

In general, women perform most of the household activities. According to West and Morris (1984:17) and Bennett and Peart (1991:307), the first duty of a new bride, which involves much of the heavy domestic work, is taking care of her husband and his comfort. These activities may

continue up to childbirth and these activities can be broken down into various categories (West & Morris, 1984:17).

West and Morris (1984:30) point out that the duties of a Xhosa woman are relatively hard, for she is expected to do much of the arduous agricultural work and carry heavy burdens long distances- in addition to her domestic chores. The agricultural duties performed by women are achieved even in the absence of agricultural tools, as a woman would even rake the soil with her fingers to prepare for sowing (West & Morris, 1984:30). West and Morris (1984:8) however claim that the hoe is the principal tool used to till the fields and as such the hoe-culture of the women, has for a long time sustained the Xhosa indigenous society.

Women are responsible for the provision of food for their families and despite the focus of attention on cattle, the survival of Xhosa households depended on agriculture, which was the work of the women. The agricultural business entails much more than the sowing itself and involves harvesting and bringing the produce home. This includes chores like loading the harvest on to an ox-drawn sledge to take it home although in the times past, women were completely forbidden to have contact with cattle (West & Morris, 1984:30). The present scenario is necessitated by the changing values and the migrant labour system that draws many able-bodied men from the reserves to towns and cities, meaning that many exclusively male tasks have to be taken over by women (West & Morris, 1984:30). Therefore the agricultural round of sowing, hoeing, weeding and harvesting devolves upon the women and children (West & Morris, 1984:8).

The duties of a Xhosa wife are performed in all areas of the homestead and even move beyond its boundaries. According to Bennett and Peart (1991:307) the first virtue demanded of a bride is that she should be diligent and as a result rise at dawn, before any one else, to go and fetch water, sweep and go to the fields. Every day she should go to fetch wood and go to gather wild spinach from the distant fields do the heavy end of grinding and cooking (Bennett & Peart, 1991:307). The chores of a Xhosa wife may also include duties that are not performed on a daily basis like mudding and repairing of her huts (Bennett & Peart, 1991:307).

Although it can be concluded that women perform most of the household activities, cognizance is taken of the fact that there are some areas in the homestead forbidden to women and therefore the

exclusive domain of men. With this point in mind, the roles performed by men will be explored next.

3.5.2 Men's roles within the rural Xhosa homesteads

In general, the husband in contrast to his wife, who was a real "work-horse" did comparatively little work around the home (Tyrell & Jurgens, 1983:166). According to Bennett and Peart (1991:319) the principal activities of the husband are to supervise the care of the livestock and to hunt. In this regard Tyrell and Jurgens (1983:166) and West and Morris (1984:9) however note that the Xhosa man is no longer involved as he only milks cows and make the kraals and game is no longer abundant to be hunted. Therefore the contemporary Xhosa men are no longer obliged to work around the homestead because their duties have become obsolete since most of the time they work in the city, away from home and their duties have been taken over by their sons and even women themselves (Tyrell & Jurgens, 1983:166).

Although the Xhosa men no longer perform their duties, traditionally, they had a number of duties to perform. These included duties such as ploughing, hut building, and providing cattle (Bennett & Peart, 1991:309). In addition to these duties, the husband was obliged to provide his wife with a dwelling, clothing, food, and similar forms of support. In order to do that, the husband had to clear one or more fields for her to cultivate, and procure cattle and other livestock to furnish her and her children with milk and occasionally meat (Bennett & Peart, 1991:319).

The duties of Xhosa men have been listed as what the men are supposed to do rather than what they actually do. The lack of activity for men is due to the fact that their duties are currently taken over by women and children, who in the most cases are the ones who are left at home, when the men migrate to the cities in search of work.

3.6 THE STRUCTURE OF THE PERI-URBAN XHOSA HOMESTEAD

According to Frescura (1981:7), the distinctive character of indigenous architecture is that it uses "found" and "natural" materials. IKS of housing therefore uses its immediate environment as a ready quarry for the materials necessary for construction like the grass, sticks, stones and the soil

about it. When the environs refuse to yield up the materials suitable for construction however, the builder turns to other sources, as is the case with the peri-urban dwellers (Frescura, 1981:9).

The peri-urban dwellers are characterised by the fact that they are people who have been displaced from their original habitat due to so called developmental projects and pushed out of their traditional homes and forced to migrate to the urban areas in search of work (Behera & Erasmus, 1999:7). The inclusion of these people and their settlements as part of the Xhosa IKS was necessitated by the fact that the peri-urban dwellers represent the link between the rural and the urban, and their house form had to adapt to a new environment, and consequently new materials (Frescura, 1981:172). Although the peri-urban dwellers are a contemporary society, they originate from the rural Xhosa people, who have occupied the area now known as the Eastern Cape for centuries and are therefore the descendants of the original occupants of the Eastern Cape. The Xhosa peri-urban dwellers therefore also have homes in the rural areas of the Eastern Cape and this is where their ritual activities are mostly performed (Frescura, 1981:106).

The Xhosa people of Crossroads in Cape Town are an example of peri-urban dwellers that have turned to the consumer society about them and used its cast-offs to create homes. In the absence of the natural materials, the Crossroads peri-urban dwellers have created homes from corrugated-iron sheets, gardens from empty cans, welcome mats from milk trays and wall- paper from newspapers and printers' waste Frescura (1981:174). These settlements therefore do not have any identifiable pattern because their dwellers use any found materials in the immediate environment to create immediate shelter that is not permanent. The materials and type of buildings can therefore take any form and these buildings are temporary.

3.7 CONCLUSION

IKS of housing in the Xhosa homesteads was discussed in this chapter. The Xhosa people were identified as the indigenous people of the Eastern Cape because they have occupied the area for generations. Although the Xhosa people are divided into different tribes, the term Xhosa was used in this context to include all the various tribal groupings of the Xhosa speaking people. The peri-urban dwellers were included in the study of the Xhosa IKS of housing because although contemporary in the peri-urban areas, they are regarded as indigenous in this study because they originate from the rural areas of the Eastern Cape.

It can be concluded that the Xhosa people are varied depending on their locality and exploit the environment around them to house themselves. The Theory of Place therefore was applied as a framework to study these different dimensions of Xhosa housing.

In the following chapter the research methods used to explore the IKS of the Xhosa people of Gqebenya and Ezibeleni will be discussed in detail.

4.2 RESEARCH STRATEGY AND TYPE OF RESEARCH

A qualitative research strategy was selected and implemented to gain an understanding of the dimensions of Xhosa housing. The qualitative research strategy was the best choice for this study because qualitative research presents the researcher with the opportunity to study and collect data about people's thoughts, feelings, experiences and activities (Coulson, 1999:203). The type of research embarked upon in this study is exploratory research because it also relies on naturalistic inquiry, the collection of qualitative data and inductive analysis of data (Patton, 1990:35). According to Biers and Higson-Smith (2000:41), the purpose of exploratory research is to gain a broad understanding of a situation, phenomenon, community or person. The need for this type of research arose from a lack of basic information on Xhosa IKS of housing. De Guchteneire et al. (2004:2) acknowledge that the dominance of the western knowledge system has largely led to a prevailing situation in which indigenous knowledge is ignored and neglected. There is therefore a need for exploratory research on the Xhosa IKS of housing which affect and determine the quality of lives experienced by the Xhosa men and women of the Eastern Cape. The methods of data collection that are discussed next are therefore qualitative.

4.3 METHODS OF DATA COLLECTION

According to Biers and Higson-Smith (1999:41) the many different ways of collecting data are collectively known as data collection methods. De Vos and Fouché (2000:82) therefore define data collection methods as the ways in which data are actually obtained. Multiple data collection methods were used such as a literature review, focus group interviews, individual interviews, and photographs.

CHAPTER 4: METHODOLOGY

4.1 INTRODUCTION

The focus of this chapter is on the methods and techniques used for exploring IKS of housing in the Xhosa households. The methodology employed is discussed in terms of the research strategy and type of research, methods of data collection, the methods of data analysis and the evaluation of trustworthiness of qualitative research.

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Multiple methods of data collection applied in this study were intended to increase the reliability of the study of IKS of housing and are known as *triangulation* (Mouton & Marais, 1990:72). The advantage of using multiple methods of investigation is that, doing so gives the researcher a much more rounded picture of whatever is under study (Hayes, 2000:135). Therefore using several different methods or triangulation to explore the IKS of housing of the Xhosa was aimed at exploring whether the findings support each other and thus the instruments are giving similar data. A brief discussion of each the data gathering methods used in this study therefore is necessary to understand why and how they were used.

(i) Literature review

The literature review was used as one of the ways of gathering data in this study and it served several functions. Fouché and De Vos (2000:64) clearly indicate that the necessity of a literature review when undertaking a study is the contribution towards a clearer understanding of the nature and meaning of the problem that has been identified. The concept of indigenous knowledge systems of housing therefore, was explored extensively and a clearer understanding was achieved. According to (Babbie, 1989:100), a careful review of the literature also helps in clarifying the concepts involved in the study and in translating these concepts into operational definitions. Reviewing the literature in this study helped the researcher to come to terms with what is meant by indigenous knowledge systems of housing, and fit this information into a systems perspective of Melson (1980:16) and Deacon and Firebaugh (1981:7). Van Den Aardweg and Van Den Aardweg (1988:198) claim that a literature study penetrates beyond fact finding to the discovery of applicable generalisations or principles. Through the review of literature, the researcher ascertained that some theories address particular topics. In this regard, the Theory of Place by Canter (1977:158) was adapted and used as a way by which the housing environment could be studied. The review of the literature also enabled the researcher to recognise that there were some gaps to be filled in the field of housing, and Xhosa housing in more specific terms, which was a motivation to undertake the research.

(ii) Focus group interviews

Schurink *et al.* (2000:314) define a *focus group interview* as a purposive discussion of a specific topic or related topics taking place between eight and ten individuals with a similar background and common interests. The focus group interview was conducted as an open conversation on a specific topic, in which each participant may comment; ask questions of other participants or to respond to comments, by others, including the moderator (Schurink *et al.*, 2000:315). According to Krueger (1994:44) focus group interviews should be considered when insights are needed in exploratory or preliminary studies. Therefore, focus group interviews were used to gain insight of Xhosa indigenous knowledge systems of housing, by allowing the ideas of the participants to emerge from the group.

The following is an outline of how the focus group interviews were conducted:

- *Selection and recruitment of participants*

The selection of the focus group interview participants depended largely on the purpose of the study. Focus group interviews were conducted with the aim of obtaining specific information from clearly identified groups of individuals. In order to achieve this, the researcher made use of the purposive sampling method, whereby information-rich participants with both depth and breadth of experience and who shared commonalities were identified. Participants were therefore purposefully selected according to criteria identified by the researcher.

The participants were selected as men and women from rural and peri-urban backgrounds. The participants had children of school-going age. The participants were born and grew up in the rural areas of Lady Frere. The participants from the rural areas occupied homes with at least one indigenous structure. The participants from the peri-urban areas occupied informal structures.

In order to facilitate the selection process, identifying the participants for the focus group interviews was done by means of the list. Krueger (1994:82) maintains that the list is fast and economical and includes existing lists of clients, members, employees, or those who use services of an organisation. For the purposes of this study, in the peri-urban area of Ezibeleni parents of learners where the researcher works were invited by choosing the addresses of those living in the informal settlements.

The other criteria mentioned in the previous paragraph for selection were also applied. In the rural areas of Gqeberya in Lady Frere, the customers of a shop-owner were invited and the other criteria already mentioned in the previous paragraph of this study were applied.

- *The size of the focus group*

The size of the focus group was determined by considering the stipulation by Krueger (1994:78) that the ideal size of a focus group typically falls between six and nine participants. According to Krueger (1994:78) the size is conditioned by two factors in that it must be small enough for everyone to have opportunity to share insights and yet large enough to provide diversity of perceptions. Because of the reasons cited above, in this research there were four focus groups of eight members each in each locality, that is the rural areas and the peri-urban areas.

- *The number of groups needed*

The number of groups needed was influenced by the *theoretical saturation* concept expounded from the grounded theory (Kueger 1994:88). Krueger (1994:88) stipulates that in focus groups typically, the first two groups provide a considerable amount of new information, but by the third or fourth session a fair amount has already been covered. This principle was then employed in establishing the number of groups needed and there were four groups in the rural areas and four groups in the peri-urban areas. It was therefore anticipated that by the third and fourth sessions, very little, if any new information would be elicited. This lack of new information therefore signals that data generation has reached saturation point.

The following four strata of Xhosa men and women were therefore identified:

- Groups 1 & 2: Xhosa rural women
- Groups 3 & 4: Xhosa rural men
- Groups 5 & 6: Xhosa peri-urban women
- Groups 7 & 8: Xhosa peri-urban men

According to McAllister (1977:293) the Xhosa indigenous people established boundaries, based on, among other things, gender and it was therefore necessary to group men and women differently. It was thus anticipated that sharing would be influenced negatively, within the focus group discussions if the men and women sat together.

- *Ensuring that people will attend the focus group interviews*

Getting people to attend the focus group interviews was accomplished by establishing meeting times for the group interviews that did not conflict with existing community activities or functions. The focus groups interviews were therefore conducted in the afternoons during week- days, when the rural people would not be attending funerals and other social activities attended during week- ends. The same principle was retained for the peri-urban participants and time was allowed for them to be back from their part-time jobs.

- *Selecting the focus group location*

The location of the focus group interviews was chosen such that it was in favour of the participants. The location was easy to find; there were no outside distractions; the environment of the focus group was neutral; the participants sat such that they were facing each other (Krueger, 1994:48). This was accomplished at Gqebenya, where the premises of a local shop owner were chosen. This location was chosen because it was easy to find as all the participants were local and were used to go to the shop. Although the focus group interviews were not conducted in a room, and were conducted outside, there were no outside distractions as this shop is not in close proximity with other homes and the yard is big. The environment was neutral as it did not belong to any of those interviewed and did not influence the type of responses provided by the participants. The participants sat outside, in a relaxed informal environment.

For the peri-urban focus group interviews at Ezibeleni, a classroom during the afternoon when the school was out was used. This location was chosen because the location was easy to find, as this was where all the participants sent their children to school. The classroom was free from outside distractions as the focus group interviews were conducted outside school hours and inside a classroom. The environment was neutral, as it was in no way associated with what was being

discussed. The participants sat on desks that served as chairs and these were arranged in a semi-circle so that all the participants faced each other.

- *Designing the interview guide*

According to Stewart and Shamdasani (1990:87), the design of the interview guide is a vital task because it establishes the agenda for the focus group interview and provides the structure within which the group members will interact. Schurink *et al.* (2000:318) caution that before designing the interview guide or schedule, the concepts to be investigated need to be defined clearly. In this study therefore, questions that captured the intent of the study were identified during the designing of the interview guide. Although the questions seemed to be broad, they were actually limited to the constituents of place.

The questions were carefully selected and phrased prior to the focus group interview in order to elicit the maximum amount of information. In order to gain an understanding of the critical issues, specific follow-up questions and probing were catered for. The basic idea of the interview guide was to set down specific issues for the group to discuss. The questions in the interview guide were open-ended and allowed the respondents to describe their views about the IKS of housing. The questions in the interview guide were designed such that all the issues in the aims and objectives of the study were addressed.

- *Testing of the data collection instruments*

Babbie (1998:159) states that no matter how carefully one designs a data-collection instrument, there is always a possibility of error. The questions in the interview guide may be ambiguous, or ones that the people cannot answer. A way of protection against such errors is pre-testing the interview guide, in full and or in part. In this study, a pilot study was conducted and the interview guide was administered to two helpers who worked as a housekeeper and a gardener for the researcher. When the two helpers did not understand a question it was rephrased and probed until they responded appropriately. The final questions were therefore clear and asked what they intended to ask.

- *Recording of the focus group interview*

Each focus group session was tape recorded, and notes taken by an assistant moderator. Special care was taken that note taking did not interfere with the spontaneous flow of the group discussions. Group members were informed at the outset that the discussion was to be tape-recorded in order to capture everyone's comments. The tapes were then transcribed, translated and carefully content analysed with the help of two moderators in the following manner:

Directly at the end of each day in the rural areas and each day in the peri-urban areas, the moderators and the researcher worked together to transcribe the data. A copy of the interview guide was made for each group on the computer and all responses for a particular group were transcribed directly onto the computer into the interview guide under the relevant questions. Simultaneously, the tape recordings were translated into English and the back-up notes were consulted. The process took between two and three hours to complete for each group. The researcher and the two moderators are Xhosa speaking and worked together to ensure accurate interpretation.

- (iii) Structured individual interviews

The individual interview is in-depth interviewing with individuals and is one or more face-to-face interaction between the interviewer and interviewee, where the purpose is to understand the interviewee's life experience or situation as expressed in his own words (Schurink, 2000:299). Patton (1987:108) adds that interviewing involves asking open-ended questions, listening to and recording the answers, and then following up with additional relevant questions. Interviewing therefore probes beneath the surface, soliciting detail and providing a holistic understanding of the interviewee's point of view.

Bless and Higson-Smith (2000:105) claim that when there is a need for more specific and detailed information, which can facilitate comparison of the reactions of different participants, non-scheduled structured interviews are appropriate. Bless and Higson-Smith (2000:105) expatiate that through this method the interviewer has a much more precise goal and the types of questions to be answered by the interviewee are fixed. The non-scheduled structured interview is structured in the sense that a list of issues for investigation is drawn up prior to the interview (Bless & Higson-Smith, 2000:105).

Taking the above views into consideration, structured individual interviews with an elderly man and a woman in the rural area of Gqeberya in Lady Frere were conducted to capture the indigenous knowledge that may no longer be held and practised by the contemporary indigenous Xhosa people. In this regard, Patton (1987:109) explains that interviewing is necessary to learn about things we cannot directly observe, and in this case we cannot observe behaviours that took place at some previous point in time. It was therefore with this notion in mind that the elderly in the rural areas were selected, to capture that indigenous knowledge which may not necessarily be currently applied. The questionnaire used for the structured individual interviews in this study was the same as the one for focus group interviews and consisted of open-ended questions. When saturation was reached and no new information was gained from the participants the interviews were concluded.

(iv) Photographs

Photographs of Xhosa indigenous housing were taken to capture what the indigenous people disclosed in the focus group and individual interviews. Schurink *et al.* (2002:327) confirm that photography can be used in qualitative research to demonstrate the real-life situation and to enhance the description at hand. The photographs of Xhosa indigenous housing were randomly taken at the end of the focus group interviews and individual interviews in both the rural and peri-urban areas. In this study therefore, the photographs taken do not necessarily represent housing of the interview participants, but those found in the locality of the respondents. Harper (1994:406) identifies this type of photography used in this study as documentary and cautions that the researcher must report accurately what he has seen.

4.4 TRIANGULATION OF DATA

According to Hayes (2000:135), triangulation is the employment of different research methods to explore the same phenomenon. Duffy (1993:143) refers to the type of triangulation, whereby various methods of data collection procedures are used in a single study as methodological triangulation. Methodological triangulation was achieved in this study by using the literature review, focus group interviews, structured individual interviews and photographs of Xhosa housing. Methodological triangulation was employed in this study because no single method would adequately address the problem of lack of documentation of Xhosa IKS of housing and each method

reveals different aspects of empirical reality. The aim of triangulation in this study therefore was to ensure that the data collected was reliable and that the data collected by each method would yield the same results.

4.5 METHODS OF DATA ANALYSIS

The raw data of the focus group interviews are transcripts of the exact statements of the focus group participants as they responded to specific questions in the discussions. In order for the data to make sense, it has to be analysed. The process of analysis therefore involves processing of data by transcribing and fully translating the interviews. Analysis of the data then follows. According to Patton (1987:144), analysis is the process of bringing order to the data, organising what is there into patterns, and looking for relationships and linkages among descriptive dimensions.

The basic direction of the qualitative analysis undertaken for the focus group interviews and the individual interviews in this research was content analysis. Patton (1987:149) states that content analysis involves identifying coherent and important examples, themes, and patterns in the data. The analyst then pulls together all the data and subdivides it into coherent categories, patterns, and themes. By embarking on this process, the analyst is classifying the contents of the data. Organising and simplifying the complexity of data into some meaningful and manageable themes or categories is the basic purpose of content analysis.

The photographs were analysed by firstly recognising that the photographic images are “true”. Schurink *et al.* (2000:328), explain that this means that the photographic image holds visual track of the reality at which the camera was pointed. The photographs were created, organised and presented in terms of ideas that can be verbalised. In this research, photographs were analysed by translating what was in pictures into words. This data was then organised into the same patterns that the data from the focus group interviews and individual interviews were organised. This means that relationships and linkages between the different sources of data were sought.

4.6 THE EVALUATION OF TRUSTWORTHINESS OF QUALITATIVE RESEARCH

Trustworthiness allows the researcher to design ways of increasing rigour of the qualitative study and provide means for the reader to assess the value of the findings of qualitative research (Krefting, 1990:215). Trustworthiness was applied in this study through the use of Guba and Lincons' (1985:289) model of trustworthiness and adapted by Krefting (1990:215). According to Krefting (1990:215), Guba and Lincons' (1985:289) model is based on the identification of four aspects of trustworthiness that are relevant to qualitative studies which are truth value, applicability, consistency, and neutrality. The above mentioned aspects of trustworthiness are important in this study as they increase the rigour of qualitative research.

4.6.1 Truth value

According to Krefting (1990:215), in qualitative research, truth- value is usually obtained from the discovery of human experiences as they are lived and perceived by informants. Therefore truth value was ensured in this study, by conducting focus group interviews and individual interviews with the rural and peri-urban indigenous Xhosa participants, who have first-hand information about indigenous knowledge systems of housing.

4.6.2 Applicability

Krefting (1990:216) maintains that applicability refers to the degree to which the findings can be applied to other contexts and settings or with other groups, in other words the ability to generalise from the findings to larger populations. Krefting (1990:216) further points out however that applicability is not seen as relevant to qualitative research because its purpose is to describe a particular phenomenon or experience, not to generalise to others. Applicability was therefore not relevant to this study because this study seeks to enquire and explore the indigenous knowledge systems of housing held by the Xhosa speaking people of the Eastern Cape and not to generalise from the findings to larger populations.

4.6.3 Consistency

The third aspect of trustworthiness to be applied in this study is consistency. Krefting (1990:246) considers the consistency of the data to be whether the findings would be consistent if the inquiry were replicated with the same subjects or in a similar context. Krefting (1990:246) however recognises that there is an aspect of variability that is expected in qualitative research and in such a case consistency is defined in terms of dependability. Guba and Lincoln (1985:289) as quoted by Krefting (1990:246) further clarify that the concept of dependability implies trackable variability, that is, variability that can be ascribed to identified sources. Consistency in this study was ensured because during the focus group interviews, the inquiry was replicated with two groups within the same category and the findings were consistent. Variability was also apparent when the same inquiry was replicated to either men or women within the same locality. It can therefore be concluded that in this study, consistency in the findings was ensured and variability occurred as a result of variations in the study populations within the same context.

4.6.4 Neutrality

The fourth criterion of trustworthiness that was ensured in this study was neutrality. Krefting (1999:216) refers to neutrality as the degree to which the findings are a function solely of the informants and conditions of the research and not of other biases, motivation, and perspectives. According to Krefting (1999:217), Guba and Lincoln's model (1985:289) suggests that in qualitative research, confirmability is a criterion of neutrality, which is achieved when truth-value and applicability are established. Neutrality has been achieved in this study because the findings are from raw data, which are the expression of the lived experiences, by the informants themselves. The researcher therefore was able to offer sufficient descriptive data to allow for comparison for purposes of further research.

4.7 CONCLUSION

This chapter focussed on the empirical methods employed to explore the indigenous knowledge systems of housing held by the Xhosa men and women of the Eastern Cape. The use of qualitative research methods offered the opportunity to explore the Xhosa indigenous knowledge systems of

housing in its natural setting. The various investigative methods used for the research were therefore described in detail in order to fully comprehend how the study was conducted.

The following chapter will focus on the results that were obtained and will provide an analysis and discussion of the research results.

CHAPTER 5: AN ANALYSIS AND DISCUSSION OF RESEARCH RESULTS

5.1 INTRODUCTION

This chapter concentrates on the analysis and discussion of the research results. The process of analysis and interpretation of the research results involves a disciplined study, creative insight, and careful attention to the aims and objectives of the study (Patton, 1987:144). Although analysis and interpretation are mentioned as separate processes, Patton (1987:144) cautions that in practice, analysis and interpretation are not neatly separated. According to Patton (1987:144) then, *analysis* “is the process of bringing order to the data, organising what is there into patterns, categories, and basic descriptive units”. *Interpretation* on the other hand “involves attaching meaning and significance to the analysis, explaining descriptive patterns, and looking for relationships and linkages among descriptive dimensions” (Patton, 1987:144). The data will therefore be processed by first organising it into patterns and then attaching meaning into those patterns. In the following section, data from focus group interviews and individual interviews is therefore organised, categorised and analysed, supported by data from the literature review and photographs.

5.2 ANALYSIS OF DATA

5.2.1 Focus group interviews

Focus group interviews were used to elicit the experiences of the respondents as they are lived and perceived by the informants (Krueger, 1994:24). The advantage of this method in this study was that the participants shared views and discussed ideas. In the following paragraph, the profile of the focus group participants is tabulated and discussed.

5.2.1.1 Discussion of the results

Table 5.1: Profile of the focus group participants

	Groups 1 & 2	Groups 3 & 4	Groups 5 & 6	Groups 7 & 8
Locality	Rural	Rural	Peri-urban	Peri-urban
Gender	Women	Men	Women	Men
Ethnicity	Xhosa	Xhosa	Xhosa	Xhosa
Language	Xhosa	Xhosa	Xhosa	Xhosa
Number of participants	8 + 8 = 16	8 + 8 = 16	8 + 8 = 16	8 + 8 = 16
Ages	Child-bearing age with children in primary school	Child-bearing age with children in primary school	Child-bearing age with children in primary school	Child-bearing age with children in primary school
Type of residence	At least one indigenous structure in the homestead	At least one indigenous structure in the homestead	Informal residence	Informal residence

(i) Demographic information

The results indicate that all the contemporary rural participants met the general criteria of being Xhosa men and women with primary school-going children who had at least one indigenous structure in their homesteads. All the peri-urban participants met the general criteria of being Xhosa men and women with primary school-going children who lived in informal houses.

In the focus group interviews, both the numbers of rural and peri-urban men and women participants were the same. This was done to ensure that there would be a balance of views and no view of one big group would be considered at the expense of the other. The ages of both the rural and peri-urban

respondents was determined by the fact that they still had primary-going school children, and this criterion ensured that all participants were contemporary indigenous dwellers.

(ii) Interview guide

Questions in the interview guide were carefully selected and phrased in advance to elicit the maximum amount of information concerning the Xhosa IKS of housing. In order to meet the objectives of the study, all the questions in the interview guide that addressed the same underlying issue were subdivided into coherent themes based on the constituents of the Theory Place and which were physical attributes, activities, and conceptions. The following is the categorisation of the interview guide questions for analysis:

Table 5.2: Categorisation of the interview guide questions into themes.

QUESTIONS	THEMES
1. What does your house look like? 3. What materials were used in the construction of your house? 4. Where do the building materials come from? 8. How many rooms constitute a typical house?	PHYSICAL ATTRIBUTES
2. Tell me how you came to have your house. 5. What made you choose the specific materials that you used? 6. For how long does a house stay and when it deteriorates where does it go? 9. What has changed in your house as compared to the past and what has prompted these changes? 10. For what reasons do you live in houses? 12. When are houses built? 14. What is your opinion about the distribution of work around the home?	CONCEPTIONS
7. Who builds houses? 11. What do you do in your house from morning until you sleep at night and in which areas of the house do you perform your activities? 13. If I had been in the homestead with you, what would I have seen you doing?	ACTIVITIES

The answers to each question from all the different focus groups were then studied together. From these responses the researcher looked for specific words expressed by the respondents and these were used to generate concepts that emerged under each question to formulate a theme. Responses from each question sometimes yielded data that fit into more than one concept and concepts that fit into more than one theme and when this happened, the researcher placed the data into all the relevant categories. Quotes are given after each question so as to support the theme and highlight the concepts that emanated from the responses. The concepts are then discussed and given meaning.

The following codes are used for the statements of the respondents:

<u>Codes</u>	<u>Statements</u>
Crw	Current rural women
Crm	Current rural men
Pw	Peri-urban women
Pm	Peri-urban men

Theme: Physical attributes

The following questions were used to constitute the physical attributes of place.

Question 1: *What does your house look like?*

Crm: "Mine is a house with many buildings. I have a four-corner with amazinki as a roof, next to it stands uxande with three rooms, then there are two, mud ooronta with thatched roofs. All my buildings have earth floors and the four-corner and uxande are covered with tapeit, but the rondavels ziyasindwa."

Types of houses	
Number of rooms in each building	
Building materials	
Structural elements	

Question 3: *What materials were used in the construction of your house?*

Crw: “Different materials are used in the construction of a house and it depends on the part of the house that is being built. For instance, the different parts use different materials. The roof is thatched, the walls are made of mud, windows are bought and made of steel, the floor is of earth and the doors are also bought from the store and are made of wood.”

Question 4: *Where do the building materials come from?*

Pw: The building materials come from our surroundings, whatever they may be. For instance I pick anything that can work for my house. I have wallpapered my interiors with catalogues that they distribute to us from the shops. The step to my house is a crate, so I use anything I can lay my fingers on.”

Question 8: *How many rooms constitute a typical house?*

Crn: “There is no typical number of rooms in a homestead. The number of rooms depends upon the type of houses present in the homestead. For instance a rondavel is a one-roomed structure. You can have one or two or any number of rondavels. In actual fact you can have any structure you want and can afford and you can even have uxande if your money allows.”

Table 5.3: Concepts from respondents' statements (Physical attributes)

Theme	Concepts
Physical attributes	Number of buildings
	Types of houses
	Number of rooms in each building
	Building materials
	Structural elements

The data yielded different categories such as number of buildings, types of houses, number of rooms in each building, building materials, structural elements under which the theme of physical attributes can be discussed. The data indicate that the number of buildings in any homesteads varies and there

are no hard and fast rules to stipulate the number of buildings that make up a homestead. The various buildings may consist of different house types, which can accommodate different number of rooms, but the circular hut is only a one-roomed structure. Each structural element of the house is made of different materials that are easy to find and suit the function they are intended for. It is possible to discuss all the categories of the physical attributes of Xhosa indigenous housing under each house type.

Types of houses

In the data the following types of houses were identified: uronta, four kona, uxande, iplaat and iyotyombe. Data indicate that the types of houses are identifiable and are named by shape.

- *Uronta (cone-on-cylinder)*

Uronta is a one-roomed circular house with a conical roof and is sometimes known as the rondavel. The walls are circular and are made of mud. The mud walls are made of sun-dried mud bricks or kiln-fired bricks. When the kiln-fired bricks are used, the walls are not plastered. When the walls are made of sun-dried bricks, they are plastered with mud and painted at the front at either side of the door. The roof is made of thatched grass. The floor is made of packed soil, which is plastered with mud and smeared with cow dung. Windows are merely small openings on the walls but now these are developed and fitted with commercial windows of a timber-frame. Doors are of timber and are the “split type”.

- *Four-kona (Cone-on-cube)*

A *four-kona* is a one-roomed square house, which is a variation of the rondavel. The conical roof follows the shape of the walls and is ridged. The mud walls are made of sun-dried bricks or kiln-fired mud bricks. When the kiln-fired bricks are used, the walls are not plastered. When the walls are made of sun-dried bricks, they are plastered with mud and painted at the front on either side of the door. The roof is made of corrugated iron or thatched, or thatched and finished with corrugated iron. This is a single-roomed structure. The floor is made of packed soil, which is plastered, and smeared, with cow dung. Commercial windows are inserted in the walls and are of a timber frame.

- *Uxande (Ridge roof house)*

Uxande is a rectangular house with a ridge roof. This is a multi-roomed structure. The mud walls are made of sun-dried mud bricks or kiln-fired mud bricks. When the kiln-fired bricks are used the walls are not plastered. When the walls are made of the sun-dried bricks, they are plastered with mud and painted at the front on either side of the door. The roof is made of corrugated iron, thatched or a combination of thatching and corrugated on the same roof. The rooms in this house are two or three. The floor is made of packed soil, which is plastered and smeared, with cow dung. Commercial windows of a timber-frame are inserted in the walls. Doors are made of timber and are the commercial type.

- *Iplaat (Highveld house)*

A *plaat* is a rectangular house with a flat roof. It is a multi-roomed structure. It has four walls made of mud. The mud walls are made of sun-dried bricks or kiln-fired mud bricks. When the kiln-fired bricks are used, the walls are not plastered. When the walls are made of sun-dried bricks, they are plastered with mud and painted at the front on either side of the door. The roof is made of corrugated iron. The rooms in the house are two or three. The floor is made of packed soil, which is plastered and smeared, with cow dung. Commercial windows that are of a timber-frame are inserted in the walls. Doors are the commercial and are made of timber.

- *Ityotyombe (Informal dwelling)*

Ityotyombe is an informal house, usually rectangular with a flat roof. The walls are made of any material that the builder can lay his hands upon. The roof is made of corrugated iron or materials that are thrown to the roof. This is a single-room structure or at the most two-roomed. The floor is made of packed earth that is covered at some places with different materials. Windows are made of any materials. There is no differentiation of materials in this house type and the walls, doors, roof and windows may be of the same material.

Theme: Conceptions

The following questions were used to constitute the conceptions of place.

Question 2: *Tell me how you came to have your house*

Crw: "I stay with my husband in his home but we have built our own home within his home so it is our home and our parent's home. My mother in-law tells me that when she married, the home was already there and she stayed with her in-laws, so our home has belonged to the family for generations."

Question 5: *What made you choose the specific materials that you used?*

Crw: "I used materials that were available where I live. And there are other reasons of course like I use materials that will suit the function they are meant for. The materials must suit the purpose. Look, thatch is used for roofing the cooking hut because we cook there and there is smoke and it has to find its way out somehow and it does that through the thatch and becomes warm when it is cold outside and there are fires in the hearth. Another reason is that these materials were really not chosen by us, we used materials because they have always been used in our society and the house from these stay for a long time."

Question 6: *For how long does a house stay and when it deteriorates where does it go?*

Concepts	Themes
Crw: "Houses stay for a long, long time. Our home is where my husband was born and we extended it but the houses that have been there before still exist and are still in good condition because they are well looked after. When a house is not maintained, it falls down and the materials return to the earth because that is where they came from in the first place."	

Question 9: *What has changed in your house as compared to the past and what has prompted these changes?*

Pm: "There is nothing new or old with our houses in that this style of settlement is new in its self. Everybody in the past had his home in the rural areas and lived in the traditional houses. Because we had to come to town to find work we had to quickly put up a roof over our heads and therefore use anything that is available and build a structure that is not so permanent."

Question 10: *For what reasons do you live in houses?*

Pw: "A house provides shelter, that is the main reason I am staying in mine. Although my home is not a permanent structure, it still provides for my needs, like it's a roof over my head and keeps me safe from all the weather conditions."

Question 12: *When are houses built?*

Crm: "Houses are built any time that you want them. Anytime of the year, what is most important are your needs."

Question 14: *What is your opinion about the distribution of work around the home?*

Crm: "What is happening is okay because men do the hard work and housework is light and therefore the duty of women."

Table 5.4: Concepts from the respondents' statements (Conceptions)

Theme	Concepts
Conceptions	Acquisition of houses
	Reasons for choice of building materials
	Relationship of houses with the environment
	Functions of housing
	Cultural norms and values

The results of the data yielded different categories under which the theme of conceptions can be discussed. By allowing the respondents to discuss why they do things in particular ways within their settings brought the theme of conceptions into perspective. The conceptions the respondents discussed included how they acquired houses, reasons for choice of building materials, relationship of houses with the environment, functions of housing and cultural norms and values.

Concerning the acquisition of houses, the respondents discussed that they acquired their houses either by building them or inheriting them from their fathers. The reasons they choose certain

materials over others for building their houses were cited as availability, functionality, suitability, affordability, comfort, aesthetics, tradition and durability. The houses were perceived as relating well with the natural environment as the houses were described in relation with their ability to return to the environment when their function ceased to exist. It was also cited that, rubble from the ruins of a house was used again to make a new building.

Concerning the trends of the current rural respondents, it was cited that when nature is exhausted of producing building materials, the respondents turn to the commercial building materials. The functions of housing were listed as providing comfort, safety, health, privacy, security, and allowing for interpersonal relationships. The respondents cite that men do minimal work as compared to women but are satisfied with the status quo as they believe that the little that men do is hard work and women do light work and cultural norms and values dictate the distribution of work.

Theme: Activities

The following questions were used to constitute the activities of place.

Question 7: *Who builds houses?*

Crm: "We build our own houses, everybody in the home. You don't have to know everything though and you don't do everything all by yourself because everyone is involved and people specialise in particular activities. For example women make mud-bricks, men build up the walls and women plaster them inside and outside. Women cut the thatching grass and the men thatch the roofs."

Question 11: *What do you do in your house from morning until you sleep at night and in which areas of the house do you perform your activities?*

Crm: "There is not much for a man to do in the household. In the morning I wake up from our sleeping hut. I wash in the same room. My wife brings me breakfast in our bedroom and after washing in the same room I see to the cattle, like milking and supervising the boys to take them to the veld when they leave for school. I attend to the things that need to be done outside, like everything connected with the cows and the kraal. When the season allows I go out in the fields to

plough with cattle and during harvest time I take the sleigh with the cattle to bring back harvest. A man works outside and it is the duty of the females to see to the inside jobs and she may cook outside if she likes but she knows the areas she must never trample on.”

Question 13: *If I had been in the homestead with you, what would I have seen you doing?*

Pm: “The wife does all the household chores and I wake up every morning and go to work and bring money home.”

Table 5.5: Concepts from the respondents’ statements (Activities)

Theme	Concepts
Activities	Builders and roles
	Household chores

The activities cited by the respondents were building houses, household chores. All members of a household are involved in the building of a house and each performs a specific function. The following activities performed by women were cited: brick-making, wall-plastering, grass cutting, fireplace-building, preparation of thatch bundles and stamping of ground for floors. Men were cited as building walls, building kraals and thatching roofs. The data indicate that women perform the most of the household chores. Everybody is involved in the performance of activities and each has a special role to play and different genders are involved in different activities. In the peri-urban areas however it is observed that men do minimal or no work at all.

5.2.2 Structured individual interviews

In this study, structured individual interviews with an elderly man and woman in the rural area of Gqebenya in Lady Frere were conducted. Bless and Higson-Smith (1999:105) refer to this type of structured interview as non-scheduled because respondents are not confronted with already stated definitions or possible answers, but are free to choose their own definitions, to describe a situation or to express their particular views and answers to problems. In the following paragraph, the profile of the individual interview participants is presented and discussions follow.

5.2.2.1 Discussion of the results

Table 5.6: Profile of the individual interview participants

	Participant 1	Participant 2
Locality	Rural	Rural
Gender	Woman	Man
Ethnicity	Xhosa	Xhosa
Language	Xhosa	Xhosa
Number of participants	1	1
Ages	Elderly with great-grand children	Elderly with great-grand children
Type of residence	At least one indigenous structure in the homestead	At least one indigenous structure in the homestead

(i) Demographic information

For the structured individual interviews, the elderly rural participants met the criteria of being a Xhosa man and a woman who were grand parents or great grand parents, occupying homesteads with at least one indigenous structure in them. Only two participants were selected to represent this group, as only comparisons were needed with the contemporary rural participants.

(ii) Interview guide

In this study the same interview guide was used for both the focus group interviews and the structured individual interviews. The data of the individual interviews were organised in the same manner as that of the focus group interviews and discussed under the same themes and concepts. Although the responses from the questions yielded various concepts, all the questions that address the same theme are listed under a particular theme. In this subsection, conclusions are reached based on the concepts of the themes presented in the focus group interviews. Quotes are given at

each end of each question and the discussion of each theme is undertaken to support the theme and note any differences or similarities that exist with the responses from the focus group interviews.

The following codes are used for the statements of the structured individual interview respondents:

<u>Codes</u>	<u>Statements</u>
Erw	Elderly rural woman
Erm	Elderly rural man
<u>Theme: Physical attributes</u>	
The following questions were used to constitute the physical attributes of place.	
Question 1: <i>What does your house look like?</i>	

The respondents live in the same type of houses as their contemporary counterparts. The examples that follow indicate that the elderly also live in the present and their housing is influenced by the contemporary times.

Erw: "I live in an uronta made of mud bricks and plastered with mud. It is a one-roomed structure with a thatched roof. The floor *irhidwe* with mud mixed with cow dung and maintained regularly with cow dung."

Erm: "I have a stone-walled hut that is painted both inside and outside, next to it is uxande with two rooms and it is made of mud and has a roof of amazinki. The floor is covered with tapeit."

Question 3: *What materials were used in the construction of your house?*

The data collected from this question indicate that, housing of the elderly was constructed from natural materials. Due to the fact that the elderly also live in the present, the house form of the elderly man is influenced by the availability of modern and commercial materials like his contemporary counterparts.

Erw: "You know, everything that made this home was never bought. My rondavel is built of mud, grass and timber."

Erm: "The old house is different from the new one, in that, the new one has doors and windows that were bought from the store but, everything else was made from materials that are available in our neighbourhood, like the soil was used to make the walls and the floor, also cow-dung was used. The rondavel walls are of stone and kept together with soil."

Question 4: *Where do the building materials come from?*

The data collected from this question indicate that both respondents agree that building materials come from nature, the elderly man points out that the original buildings of his house were constructed of natural materials but the current additions are a combination of natural materials and commercial materials.

Erw: "From nature of course, where else do you think? You people don't know these things because you were born today, during our times everything came from nature. How do you think we lived before the whites came along? This is why my house has not changed, I have always lived in this hut and everything, the soil, the grass, the timber comes from nature."

Erm: "Nature provides the building materials. If it were not for my children, you would find everything here from nature, the grass, the stones, the soil and so on. But the other structure has been an addition to my old house and now you find the roof made of iron sheeting that is bought from the store."

Question 8: *How many rooms constitute a typical house?*

The data collected from the elderly, like their contemporary counterparts indicate that typically, a house must be able to accommodate all its family members. Since each household has varying numbers of the occupants, each house is unique to each household and there is specified size of a homestead.

Erw: "A home must be able to accommodate all its family members. I was the only wife and my house is very small, it is only this one rondavel. I am very poor and my husband left me with nothing. Our children died young and I only have two daughters who married and who are the mothers of these children I live with. The hut is enough for us."

Erm: "The size of the homestead depends upon the size of the family. If all your children still return to your home, they develop it and it becomes big because they also want to spend some time there. It also depends whether you have or had one or many wives and the bigger the number of wives the bigger the size of the house. The amount of money nowadays also determines because if you have money you develop your house to be big, but it also boils to the same thing because in the past you could not have many wives if you were poor and did not have many cows and therefore the economic status speaks."

Theme: Conceptions

Question 2: *Tell me how you came to have your house.*

The elderly respondents like their rural counterparts state that, the descent of the indigenous people is patriarchal.

Erw: "I got married and came to a house that belonged to my husband's parents. I stayed there for a very long time until all the children were born. We moved out to a site just next to my husband's home and built this one hut I am still living in."

Erm: "I am a man, and I built my own *umzi*, not alone of course. That is why I took *umfazi* in the first place so that we could build the house together. The children have built up an additional building."

Question 5: *What made you choose the specific materials you used?*

Both the participants, like their rural counterparts agreed that the materials that are readily available from the immediate environment are used. The elderly man even added that the knowledge of

which materials to use follows from the practices of generations before the present generations and that change is necessitated by the depletion of the natural resources.

Erw: "You see, you make do with what you have in your immediate environment and because you cannot afford anything else. Anyway thatching works best for me. Do you think I would get the same comfort from amazinki? Not in your wildest dreams. I went to my daughter's house the other day and she had made fire in her plaat which has a roof of iron sheeting and can you believe it? It was "raining" when we were sleeping and the fires were out. My thatched roof provides warmth and even the walls of my mud hut make the place warm at night and it is cool to sit there during the day, it is never too hot nor too cold, it fits your situation all the time."

Erm: "You don't even have to think about why you do these things, you know we grew up in a society where these are done the way they are done. All the generations before us have always done these things the way they were done before them, no by the way some circumstances force you to change, that is why I even have a house with corrugated iron in the roof, it's these children, they bought that because thatching grass is becoming scarcer by the day. You see the stone-walled hut has been there since I was a young husband and now I've grown white and old."

Question 6: For how long does a house stay and when it deteriorates, where does it go?

The data indicate that the housing of the elderly, like that of the contemporary participants, is durable. The responses of the elderly indicate that indigenous housing relates well with the natural environment and become part of it when they cease to exist.

Erw: "A house is there for keeps my child and all you have to do is keep it well-looked after. I have had my house for...you know I can't count but since I moved into my own house, I was still young then, my hut is still there. We put in a new thatch when the old one is old and maintain the floors with cow-dung. When I'm dead and gone, my house will also die and will fall down and after a long time nobody will know there was a house there."

Erm: "This house is a family legacy and it will always be there and as long as it is maintained it will never go anywhere. When it needs repair that can be done because the materials that made it in the first place are still available in the environment although I know that they are now not so abundant,

that is why uxande has a corrugated roof. When the house though reaches a stage when nobody wants it any longer, it will be left to fall to the ground and never to be seen again.”

Question 9: *What has changed in your house as compared to the past and what has prompted these changes?*

Data indicate that there are changes between traditional rural housing and contemporary rural housing. The changes are evident in the physical attributes and descriptions or conceptions of what the respondents, hold of the reasons for the changes include all the constituents of place.

Erw: “Everything has changed from the size of the homestead, to the number of rooms in each structure. In the past all the structures were huts and even huts that do not look like the one I have. In the past there were beehive huts and even today huts are one-roomed structures. The reason for amaxande neeplaat is because these houses can accommodate more than one room and the activities of the household can be centralised in one place especially for the more affluent people. I am old and don’t care for that, that is why I still have my hut.”

Erm: “The house of old is different from the present one in that not all the structures now are made of the naturally available materials. Look at my home, there is only one purely traditional structure. The other is a mixture of old and new. This is because uxande is an additional building in our home and the thatching grass is no longer freely available and we had to put up a corrugated- iron roof instead. There are many changes, you know before there were even beehive huts but those are no longer built because they were built of grass only which is very scarce nowadays and are uncomfortable for the people today because when you entered it you had to bend a lot and it suited the olden days but not now.”

Question 10: *For what reasons do you live in houses?*

The data indicate that the elderly, like their contemporary counterparts cite the same reasons why they live in houses. These can be summarised as functions of housing to meet the needs of the occupants.

Erw: "Houses are where people live so that they are protected from all the outside conditions. You can never be a victim of rain or wind or sun if you are inside your house. A house is where you can even put all your belongings in one place, even your children."

Erm: "We live in houses because that is a place a human being lives and is able to sleep at night, in the safety of unwanted humans, animals and all other enemies."

Question 12: *When are houses built?*

The data indicate that the elderly like their contemporary counterparts indicate that houses are built any time of the year.

Erw: "You build a house according to your needs. You also make sure that when you need a particular material it is available, anyway they are always available, the grass, soil, water and wood."

Erm: "There is no special time when you can build a house. A house is built and even additions made when the need arises like when the family grows."

Question 14: *What is your opinion about the distribution of work around the home?*

Data collected from the elderly, indicate the same opinions stated by the contemporary rural residents that although the distribution of work around the home favour men, it is fair as men are supposed to perform heavy duty tasks that can even move beyond the parameters of the homestead.

Erw: "It is our tradition that women look after the house, so that is why men have no business inside the house except for those building and repairing jobs. It is fine because the house is the territory of women."

Erm: "Women should work around the home, that is why they were married in the first place so it is okay that they work hard because a woman is a woman because her house is well looked after."

Theme: Activities

Question 7: *Who builds houses?*

Data collected from this question indicate that the elderly, like their contemporary counterparts recognise that all members of the household are involved in the building of houses, although each member may have a special role to play.

Erw: "All the family members are involved in the building of houses. If you stay with young grandchildren like myself and who cannot do adult roles, even the whole neighbourhood will gather together and help and that is called ilima."

Erm: "Building houses is part of our culture and any member of our society is able to contribute in one way or another. The more difficult tasks are performed by men and the easier ones by women and children. Laying up the bricks to build a wall is done by men while the women finish off the walls by ukurhida."

Question 11: *What do you do in your house from morning until you sleep at night and in which areas of the house do you perform these activities?*

Data from this question indicate that the elderly, like their rural counterparts cite that all the members of a household are involved in the activities of the homestead and each person has a special role to play. The age and status of the respondents determine what activities the respondents perform.

Erw: "I am old now and don't work much. I wake up in the morning and fold my bedding and place it neatly against the wall nearby where I sleep in the hut. I look after my grandchildren, and they also look after me. They can cook and clean and I tell them stories at night around the fire."

Erm: "I wake up in the morning from my hut which serves as the bedroom, my sitting room and where I eat. I do not do anything that is work now and I am only active when rituals are performed since I am elderly."

Question 13: *If I had been in the homestead with you, what would I have seen you doing?*

Data indicate that the elderly, like their rural counterparts acknowledge that generally women do most of the housework and men do minimal work.

Erw: "I look after the young children and socialise them. I am old now my child and don't work too much, I do those easy to do jobs. For instance if the neighbours help to cut thatching grass for me, I arrange it into nice bundles, ready to be used by men to thatch the roof."

Erm: "I sit with old men and socialise outside near the kraal. There is not much that can be done by an old man. I also look after the cattle."

5.2.3 Photographs

5.2.3.1 Discussion of the results

The data collected through photographs was analysed by printing them and displaying them in the annexures. The data contained in each photograph is discussed and used to support what was discussed in the literature review, focus group interviews and individual interviews under the various themes.

Theme: Physical attributes

All the photographs are visual representations of indigenous housing of both the rural dwellings of Gqebenya in Lady Frere and the peri-urban settlements of zone 3 Ezibeleni near Queenstown. The photographs however are not necessarily those of the housing of the participants of this study but are relevant because they have captured what the participants have discussed in the interviews.

Photograph 6, is an example of the cone- on- cylinder, identified in the literature by Frescura (1981:16). The people of Gqebenya refer to this type of building as uronta. Photograph 7, is an example of the walls of a hut made of kiln-fired bricks and of which the walls are not plastered. Photograph 9 is an example of a contemporary rural hut at Gqebenya, whereby traditional materials, as is the case with the roof, are used within the same building as commercial materials. The walls of

this hut are plastered in cement. Photograph 10, at Gqebenya is an example of the thatching process.

Photograph 1, a house at Gqebenya illustrates the simultaneous existence of both the traditional and contemporary housing. Photograph 12, a homestead at Gqebenya illustrates the co-existence of two house types in the same homestead. The two house structures are examples of the ridge roof house and the cone- on- cylinder house although the cone does not exist at this stage as the hut is under construction. Photograph 3, which shows stone walled houses and an unfinished mud-walled house at Gqebenya, illustrates that indigenous people use the available materials about them for building houses. Photograph 20, show uxande and uronta at Gqebenya, displaying the use of stones, which are so plentiful in the area, for building. Photograph 19, a ridge roof house at Gqebenya, locally known as uxande, is the house type that replaced the cone-on-cylinder.

Photograph 5, is an example of the highveld house, identified in the literature by Frescura (1981:101). The people of Gqebenya refer to this type of building as the plaat. Photograph 7, of a plaat at Gqebenya clearly shows the structural elements of the house such as walls, windows, door and roof. From this photograph it can be seen that the indigenous people have used structural materials from nature, all except for the roof which is made from corrugated iron. In the literature, Frescura (1981:105) indicates that the most common method of holding down the roof sheeting of this type of building is achieved by the simple expedient of loading the roof with bricks, stones, motor vehicle tyres and so on.

Photograph 13, is an example of a peri-urban house at Ezibeleni. Photograph 14, of a peri-urban house at Ezibeleni, illustrates that the materials for constructing a peri-urban house can range from corrugated iron, timber plastic to mud. Photograph 17, is an example of the interior of a peri-urban house at Ezibeleni. Frescura (1981:177) notes in this regard that peri-urban houses lose heat quickly in winter, methods of insulating the walls are therefore sought, like the timber finishing in the example of this photograph. In photographs 22 and 24, insulation is achieved by the use of catalogues used as wallpaper. Photograph 18, illustrates the use of the cast-offs of the consumer society as observed by Frescura (1981:174) and used by the peri-urban dwellers. In this photograph, used corrugated iron is reused in this building to make walls. Photograph 21, an example of a peri-urban house at Ezibeleni, shows that with peri-urban housing, the same building material may be

used for both the walls and the roof, as long as it is available. Photograph 23, of a peri-urban house at Ezibeleni, illustrates the use of “found” materials to build an informal dwelling.

Theme: Conceptions

Photograph 2, a deteriorating indigenous building at Gqebenya illustrates the relationship the indigenous people have with the environment in that it returns to the soil of which it was made of in the beginning.

Photograph 15, of a hut at Gqebenya. The windows in this hut illustrate the example cited by Frescura (1981:58) in the literature that windows are used first as mere ventilation flues, often left unshuttered.

Photograph 11, of *uxande* at Gqebenya, depicts the thermal functions of an indigenous house, as noted by Frescura (1981:169). The area to either side of the door is painted, usually white, but the sides and rear are left untouched to allow for the morning sun to be reflected off the light surface, leaving the dwelling comparatively cool during the day.

Theme: Activities

Photograph 4, of an outside fireplace at Gqebenya, otherwise known as *ingqami*, where cooking is done. Photograph 6 illustrates a woodpile outside the hut that supplies wood for making fire *eziko*.

Photograph 16, a garden in the peri-urban area of Ezibeleni. This is an example that household chores include the tending the garden, which is mostly done by women.

5.3 SUMMARY OF RESULTS

Methodological triangulation was employed in this study because no single method would adequately address the problem of the lack of documentation of Xhosa IKS of housing. It was important to apply methodological triangulation in the study of Xhosa IKS of housing because each method revealed different aspects of empirical reality. For instance, data collected from the literature review revealed that the Xhosa indigenous people housed themselves in beehive huts,

which do not exist presently. Individual interviews arrived at the same results with the literature review in revealing that the Xhosa homestead of the past consisted of huts for different wives, which made up a single homestead. Data collected from the focus group interviews revealed that there was a contemporary house form known as "ityotyombe" which never existed in the past. Triangulation that was applied during the data collection therefore influenced the data after they were interpreted. The use of methodological triangulation has therefore rendered this study trustworthy as triangulation enhances the quality of the research.

5.4 CONCLUDING REMARKS

The analysis and interpretation of the data collected in this study through the literature review, focus group interviews, individual interviews and photographs revealed that the Xhosa people possess certain IKS of housing. The data therefore reveals that some knowledge which is contained in the literature review is not held by the contemporary Xhosa indigenous people. Some knowledge held by the elderly is no longer practised by the contemporary Xhosa indigenous people. The knowledge held by the elderly Xhosa indigenous people may or may not be recorded in the literature review.

As a vehicle for recording the IKS of Xhosa housing, the various data-gathering methods yielded data that could be analysed and categorised into the three constituents of the Theory of Place, which are physical attributes, conceptions and activities. The data is analysed and documented according to the framework of the Theory of Place so that it may be available for use by people other than the indigenous people themselves who had this knowledge passed to them orally by generations before them.

CHAPTER 6: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

In this chapter conclusions will be drawn from the literature review, focus group interviews, individual interviews and photographs of the indigenous houses at Gqebenya and Ezibeleni. The use of the different sources of information was essential in this research to ensure triangulation.

6.2 CONCLUSIONS OF THE STUDY RESULTS

The following conclusions may be drawn from this research and will be discussed according to the objectives of this research (cf. Par. 1.3).

- **Physical attributes**

From the results of the data, it can be concluded that, Xhosa indigenous housing is identifiable by the physical attributes, such as the shape of the house form and the materials used in their construction. Although in the rural areas different types of houses exist simultaneously in the same homestead, “uronta” or the cone-on-cylinder is the most common type of Xhosa housing. The beehive hut is extinct and even the elderly respondents of this study did not and do not live in a beehive hut. The other types of houses found in the Xhosa homesteads are contemporary though indigenous. Contemporary indigenous housing on the one hand is characterised by the different house forms that incorporate the use of the natural indigenous materials. On the other hand contemporary indigenous housing is characterised by the incorporation of the use of commercial materials in the construction of the cone-on-cylinder. The most recent addition to the rural repertoire of houses is the informal house, known as “ityotyombe”. This house form has developed as a result that the Xhosa indigenous people at present use whatever materials they find in their immediate environment and therefore if they find plastic, they will use it in the construction of a house. The houses characteristic of the peri-urban areas are “amatyotyombe”, built in the form of the highveld houses, otherwise known as the “plaat” and constructed of “found” materials.

• Activities

It can be concluded from the results of the data that, Xhosa indigenous housing is identifiable by knowing what takes place where within the parameters of the homestead. Activities in the Xhosa indigenous homestead are performed by all the members of the household, but differ in their nature according to the role-players. Activities are performed in specific areas of the house and even if only one room exists, designated areas in the same room are used for specific activities. Women perform most of household chores. The role of men in household chores is very minimal and men only perform duties that require a lot of energy and are performed outside. In the peri-urban settlements the boundaries are not so rigid and differ considerably from the rural setting. House building is part of indigenous knowledge and the Xhosa indigenous people are able to house themselves and have been doing so even in the past without any help of specialised builders or architects. All the family members take part in the building of a house and their roles differ according to age and gender.

• Conceptions

It can be concluded from the results of the data that, Xhosa indigenous housing is identifiable by the conceptions of the links the activities have to given physical forms. Homesteads are family units that house extended families and are acquired through building or inheritance and remain in the families for generations. Xhosa indigenous houses are therefore durable. The man owns the house but no man can have a house without having a wife first. In the peri-urban settlements however, houses are acquired through building and the occupants attach no sentimental values to these and can demolish these temporal structures and build them again at different places. The peri-urban dwellers therefore do not cut their links with their rural backgrounds and refer to the rural areas even when a ritual has to be performed.

It can therefore be concluded from the data that the Xhosa IKS of housing is identifiable by knowing what activities are associated with particular physical attributes, and the descriptions the indigenous people hold of that behaviour in that physical environment. Therefore this means that Xhosa indigenous housing can be identified by using any of the constituents of the Theory of Place as a starting point. For example by noting the conceptions that a place is of ritual importance can lead to the knowledge of how it looks physically and which members of the household are role-players and

actively engage in such settings. IKS is in accordance with nature and can be used for nature conservation. It does not harm nature and is environmental friendly it is also in accordance with life's pattern of birth, death and rebirth. IKS is therefore inherent in people and they do not acquire this knowledge through formal schooling.

6.3 LIMITATIONS OF THE STUDY

Qualitative data do not need a lot of interviews because when the data is saturated, no new information is gained, and in this study the last groups in both the rural and peri-urban areas yielded the same information as the groups before them. The individual interviews were conducted to two elderly people only because the data was saturated and the photographs revealed what was discussed in the focus group interviews.

The results from this study also cannot be generalised to a wider population because the sample is not necessarily intended to be reflective of the entire population. IKS by nature is location and culture specific and therefore unique to a given culture, location or society. It was found out in this study that the Xhosa people are composed of different but related factions therefore this implies that what was found to be true at Gqebenya and at Ezibeleni, is not necessarily true of all the Xhosa speaking people.

6.4 RECOMMENDATIONS AND SUGGESTIONS

Based on the conclusions drawn from this research, it is recommended that:

- The IKS of housing be used to influence future plans for housing the homeless people of South Africa. For example the house form of the indigenous people does not require the invention of new methods of construction, or new techniques but can be implemented within the existing framework of rural technology and building experience.
- The indigenous people in the peri-urban areas must be encouraged to use IKS to build permanent structures. The owner would be able to build the house himself and he can do it for a lesser price, as he himself would be the builder.

- Indigenous knowledge systems should be documented so as to ensure that this invaluable information does not end in extinction.
- Adequate housing in South Africa has to differ considerably from what is considered adequate in other parts of the world. Context specific design therefore is essential to ensure that housing is appropriate for that particular community in that particular place and time.
- Structures should accentuate the culture of the indigenous people and reflect their being by incorporating those features that make them distinct.
- Indigenous knowledge in housing can be used effectively as a means of supplying cheap and durable shelter.
- The indigenous people must be encouraged to share this knowledge with others not necessarily belonging to their group so as to disseminate the indigenous knowledge systems.
- Since the IKS of housing of the Xhosa has been studied using focus groups, a more extensive study can be conducted and disseminated to groups outside the specific communities where the research was conducted.
- The current housing delivery in South Africa is lagging behind in terms of the number and quality of housing units. IKS can be used effectively in this regard to curb this problem by supplying cheap and durable shelter which people can assign a sense of ownership.

6.5 CONCLUSION

The main aim of this study was to document the Xhosa IKS of housing. An exploratory study was therefore embarked upon as a relatively new field such as this one is best studied by such methods. The study of Xhosa IKS of housing has contributed to the larger body of research in that it has put to the fore undiscovered facts and principles of IKS. A further contribution of this study to the larger body of knowledge is that it has made possible the documentation of knowledge that has always been disseminated orally. This study therefore has the potential of leading to other important

research in housing and other related fields. It is envisaged that conclusions drawn from this research can lead to further research.

A: Photographs

1. An illustration of the simultaneous existence of both the traditional and contemporary indigenous housing at Gdpebenya.
2. A deteriorating indigenous building at Gdpebenya, illustrating the returning to the soil of the indigenous houses from where they originated.
3. Stone walled houses and an unfinished mud-walled house at Gdpebenya, indicating that the indigenous people use the available materials about them for building.
4. An outside fireplace at Gdpebenya, otherwise known as ingami.
5. The nightd house as identified in the literature review and otherwise named flat or plant by the indigenous people of Gdpebenya.
6. The cone-on-cylinder house as identified in the literature review and otherwise known as woma by the indigenous participants at Gdpebenya.
7. A contemporary rural home combining both natural and commercial building materials at Gdpebenya.
8. The flat or plant of the indigenous people of Gdpebenya is an example of contemporary rural housing.
9. A contemporary rural home illustrating a thatched roof and a wall built of commercial building materials at Gdpebenya.
10. Thatching of a woma at Gdpebenya.

ANNEXURES

A: Photographs

1. An illustration of the simultaneous existence of both the traditional and contemporary indigenous housing at Gqebenya.
2. A deteriorating indigenous building at Gqebenya, illustrating the returning to the soil of the indigenous houses from where they originated.
3. Stone walled houses and an unfinished mud-walled house at Gqebenya, indicating that the indigenous people use the available materials about them for building.
4. An outside fireplace at Gqebenya, otherwise known as *ingqami*.
5. The *highveld house* as identified in the literature review and otherwise named *flat* or *plaat* by the indigenous people of Gqebenya.
6. The cone-on-cylinder house as identified in the literature review and otherwise known as *uronta* by the indigenous participants at Gqebenya.
7. A contemporary rural *ronta* combining both natural and commercial building materials at Gqebenya.
8. The *flat* or *plaat* of the indigenous people of Gqebenya is an example of contemporary rural housing.
9. A contemporary rural *ronta*, illustrating a thatched roof and a wall built of commercial building materials at Gqebenya.
10. Thatching of a *ronta* at Gqebenya.

11. *Uxande* at Gqebenya, an example of a combination of indigenous natural building materials and a contemporary type of a house.
12. A ridged roof house otherwise known as *uxande* and an unfinished *ronta* at Gqebenya are examples of two types of housing existing simultaneously in a homestead.
13. Peri-urban housing at Ezibeleni.
14. Peri-urban housing at Ezibeleni uses any found materials about them like plastic, timber and soil.
15. An example at Gqebenya illustrates that windows just started as ventilation flues.
16. An example of a garden in the informal settlement of zone 3, Ezibeleni.
17. The interior of an informal house at Ezibeleni.
18. An informal house at Ezibeleni built out of corrugated iron.
19. *Uxande* at Gqebenya, displaying the use of both the natural and commercial building materials in one building.
20. *Uxande* and *ronta* at Gqebenya built out of stones which are plentiful natural resource in the area.
21. A peri-urban building at Ezibeleni, displaying the fact that with peri-urban housing, the same building material may be used for both the walls and the roof, as long as it is available.
22. The interior of a peri-urban house at Ezibeleni, wallpapered with newspapers as a form of insulation and adding to the aesthetic value of the home.

23. A combination of timber and soil for the walls which are both natural resources in a house at Ezibeleni.

24. The interior of a peri-urban house at Ezibeleni, showing the door which has been made out of commercial timber.



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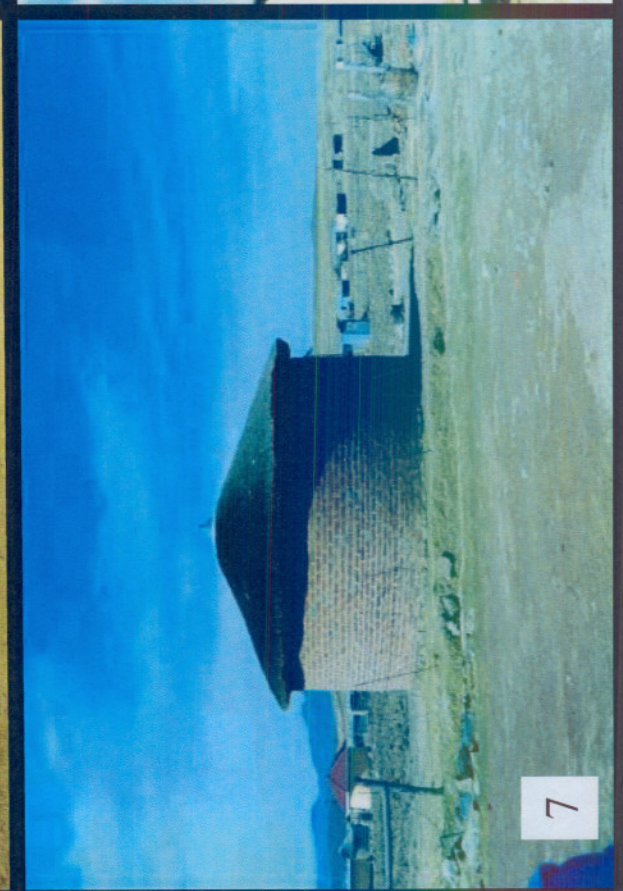
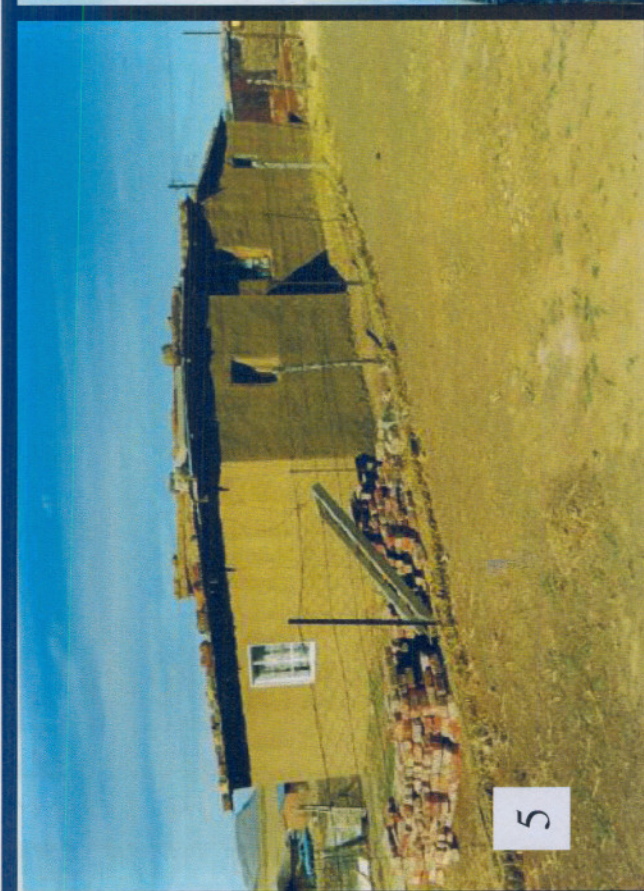
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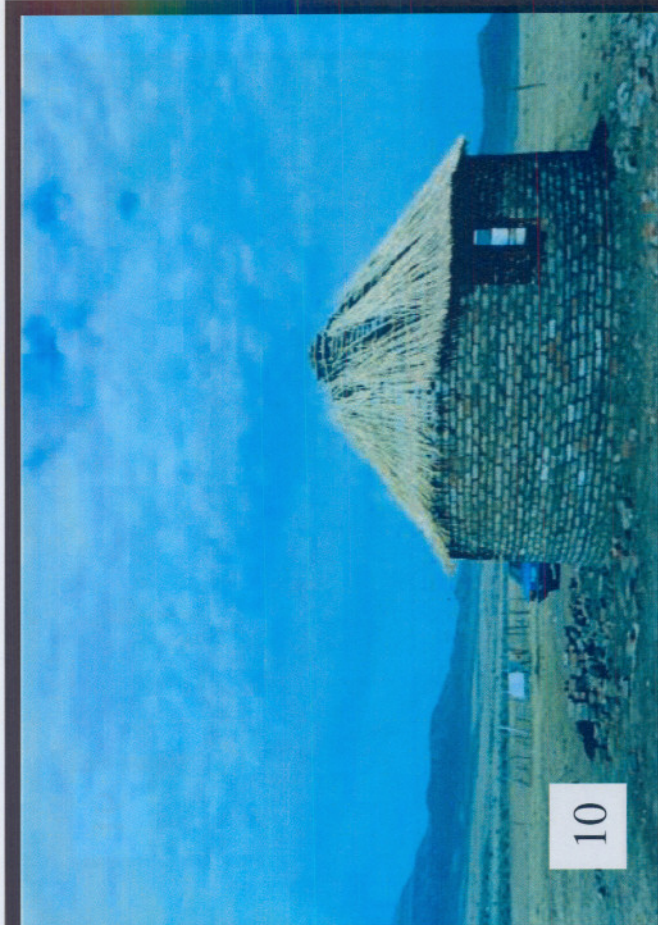


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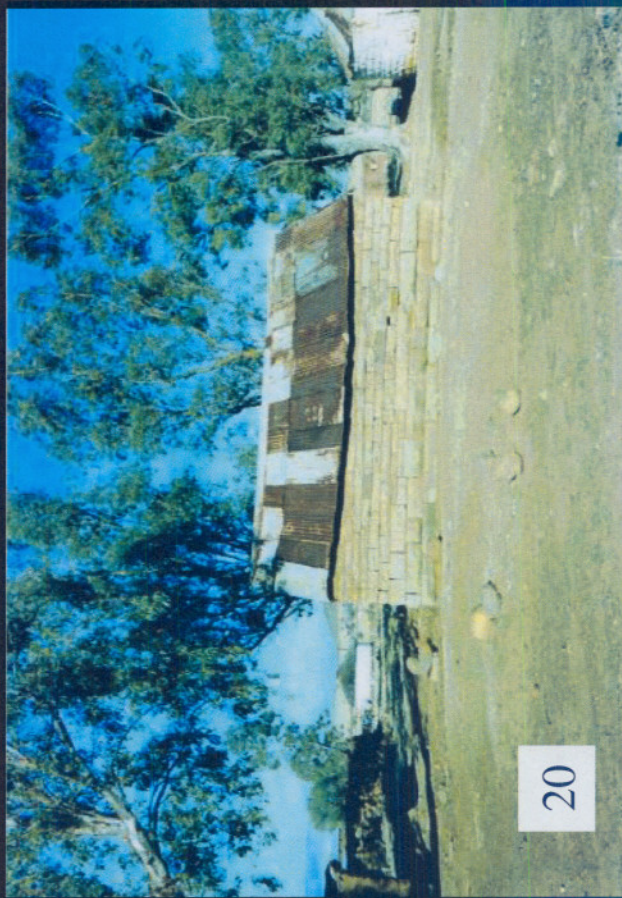








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B: INTERVIEW GUIDE: FOCUS GROUP INTERVIEWS (XHOSA)

Group no.

1. Nihlala kwizindlu ezinjani?

2. Nayifumana kanjani imizi yenu?

3. Izindlu zenu zakhiwe ngantoni?

4. Ezi zinto zokwakha zivela phi?

5. Nizikhetha ngabuni ezizinto zokwakha?

6. Izindlu zihlala ithuba elingakanani kwaye zakuguga zithini?

		Group no.
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7. Izindlu zakhiwa ngubani?

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8. Umzi oqhelekileyo unezindlu ezingaphi?

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9. Yintoni etshintshileyo kwizindlu zangoku xa zithelekiswa nezakudala kwaye oko kwenziwe yintoni?

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10. Nihlalela ntoni ezindlwini?

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11. Wenza ntoni emzini wakho, ukususela oko uvukile ude uye kulala, kwaye ezi zinto uzenzayo uzenza kweziphi iindawo apha emzini wakho?

Questionnaire	
1. How does your house look like?	

12. Izindlu zakhiwa nini?

13. Ukuba bendihleli nawe emzini wakho imini yonke, bendiza kukubona usenza ntoni?

4. Where do the building materials come from?

14. Uva kanjani ngolu hlobo umsebenzi wekhaya wahlula-hlulwe ngalo kumntu ngamnye?

	2. What made you choose the specific materials that you used?

C: INTERVIEW GUIDE: FOCUS GROUP INTERVIEWS (ENGLISH)

Questionnaire	
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1. How does your house look like?

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2. Tell me how you came to have your house?

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3. What materials were used in the construction of your house?

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4. Where do the building materials come from?

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5. What made you choose the specific materials that you used?

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6. For how long does a house stay and when it deteriorates where does it go?

7. Who builds houses?

8. How many rooms constitute a typical house?

9. What has changed in your house as compared to the past and what has prompted these changes?

10. For what reasons do you live in houses?

11. What do you do in your house from morning until you sleep at night and in which areas of the house do you perform your activities?

12. When are houses built?

13. If I had been in the homestead with you, what would I have seen you doing?

14. What is your opinion about the distribution of work around the home?

D: QUESTIONNAIRE: INDIVIDUAL INTERVIEWS (XHOSA)

Questionnaire	
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1. Uhlala kwizindlu ezinjani?

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2. Wawufumana kanjani umzi wakho?

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3. Izindlu zakho zakhiwe ngantoni?

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4. Ezi zinto zokwakha zivela phi?

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5. Uzikhetha ngabuni ezi zinto zokwakha?

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6. Izindlu zihlala ithuba elingakanani kwaye zakuguga zithini?

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7. Izindlu zakhiwa ngubani?

--

8. Umzi oqhelekileyo unezindlu ezingaphi?

--

9. Yintoni etshintshileyo kwizindlu zangoku xa zithelekiswa nezakudala kwaye oko kwenziwe yintoni?

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10. Nihlalela ntoni ezindlwini?

--

11. Wenza ntoni emzini wakho, ukususela oko uvukile ude uye kulala kwaye ezizinto uzenzayo uzenza kweziphi iindawo apha emzini wakho?

	Questionnaire
1. How does your house look like?	

12. Izindlu zakhiwa nini?

2. Tell me how you came to have your house?	

13. Ukuba bendihleli nawe emzini wakho imini yonke, bendiza kukubona usenza ntoni?

3. What materials were used in the construction of your house?	
4. Where do the building materials come from?	

14. Uva kanjani ngolu hlobo umsebenzi wekhaya wahlula-hlulwe ngalo kumntu ngamnye?

5. What made you choose the specific materials that you used?	

E: QUESTIONNAIRE: INDIVIDUAL INTERVIEWS (ENGLISH)

Questionnaire	
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1. How does your house look like?

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2. Tell me how you came to have your house?

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3. What materials were used in the construction of your house?

--

4. Where do the building materials come from?

--

5. What made you choose the specific materials that you used?

--

6. For how long does a house stay and when it deteriorates where does it go?

7. Who builds houses?

8. How many rooms constitute a typical house?

9. What has changed in your house as compared to the past and what has prompted these changes?

10. For what reasons do you live in houses?

11. What do you do in your house from morning until you sleep at night and in which areas of the house do you perform your activities?

12. When are houses built?

13. If I had been in the homestead with you, what would I have seen you doing?

14. What is your opinion about the distribution of work around the home?

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