RETAINING INDIGENOUS VALUES OF BUILT HERITAGE: A CASE OF MAKGABENG, LIMPOPO PROVINCE, SOUTH AFRICA

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DECLARATION

I declare that this research is my own unaided work. It is submitted for the degree of Master of Science in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any University.

(Matseliso Moremoholo)

This __22_ day of _March_ 2021

ABSTRACT

Values that influence the conservation of built heritage in South Africa have been based on the western perspective of what constitutes value. In turn, these western values are based on tangible values that focus on retaining the built environment using aesthetic and economic values, as well as sustainability. Intangible indigenous values, such as ancestral values, have been side-lined under the assertion that they are backward. The inclusion of intangible values within the conservation of the built environment has been under the influence of approaches such as Critical Discourse Analysis and Multi Criteria Decision Making through encouraging public participation processes.

Globalisation and urbanisation continue to affect how the conservation of indigenous built environments is dealt with. The Indigenous Knowledge Systems Bill was passed in South Africa only in 2017 and the Protection, Promotion, Development, and Management of Indigenous Knowledge Act (Act 6 of 2019) was enacted only in 2019. It can therefore be argued that the protection of indigenous knowledge and indigenous ways of life, as well as the indigenous built environments and values associated with them is still in its infancy in South Africa.

It is under these conditions that I seek to investigate how intangible indigenous values of built heritage can or have been incorporated and retained in brick-and-mortar architecture. This incorporation would not only ensure the conservation of said values but would also, in turn, render those structures as heritage. To tackle this, Makgabeng Plateau, located in the Limpopo province of South Africa, was chosen as a case study area.

DEDICATION

In loving memory of my father, Tsietsi ‘Kid’ Moremoholo.

Moea oa hau o phomole ka khotso Mokuena.

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I would like to thank God and my ancestors for being a forever flowing fountain where I drew my courage when things looked bleak and for providing me with constant light and guidance on my journey to producing this research. I am beyond blessed.

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GLOSSARY

TERM	DEFINITION
Conservation	Includes protection, maintenance, reservation, and sustainable use of a place or object to safeguard their cultural significance
Contemporary housing	Highveld style housing constructed using brick-and-mortar with or without corrugated iron sheet roofing.
Development	Any physical intervention, excavation, or action other than this caused by natural forces, which may in the opinion of heritage authority in any way result in a change to the nature, appearance, or physical nature of a place or influence stability and future well- being
Dwelling	A physical structure used by people for living and performing functions such as sleeping, eating, entertainment, safety, and privacy. It is a place that provides shelter and concealment (Coolen & Meesters 2012).
Globalisation	The flow of commodities, capital, technology, ideas, forms of culture, and people across national boundaries (Kellner 2002: 287)
Heritage	A place or object of cultural significance
Heritagisation	A process of heritage-making through (re)attachment of values and significance to things (Sjoholm 2016).
Indigenous	Originating or occurring naturally, innate, inherent, local. (South Africa 2017)
Indigenous dwellings	Houses constructed out of indigenous construction material such as mud (adobe or cob), wattle, and thatch grass (Rondavels, huts)
Indigenous knowledge	Knowledge which has been developed within an indigenous community and has been assimilated into the cultural and social identity of that community.
Living heritage	Intangible aspects of inherited culture and includes cultural traditions, oral history, performance, rituals, popular memory, skills and technology, and Indigenous Knowledge Systems
Management	Includes conservation, presentation, and improvement of a place protected in the Heritage Act
Significance	Aesthetic, architectural, historical, scientific, social, spiritual, linguistic, or technological importance.
Structure	Any building works, device, or other facility made by people which is fixed to land and includes fixtures, fittings, and equipment associated with it.
Urbanisation	The transition of populations, land-use, economic activity, and culture from rural to urban settlements (McGranaham & Satterthwaite 2014: 4).
Vernacular architecture	An architectural style that is designed based on local needs, availability of construction materials, reflecting local traditions and customarily owned- or community-built, utilising traditional technologies (South Africa 2017).

Western/ Eurocentric	The assumption that Europe or the 'West' is civilised and has unique historical advantage that gives it a permanent superiority over all other cultures (Xypolia 2016)

ACRONYMS

AHD-	Authorised Heritage Discourse
AH-	Analytical Hierarchy
CCP-	City Council of Pretoria
CDA-	Critical Discourse Analysis
ICOMOS	International Council on Monuments and Sites
IKS-	Indigenous Knowledge Systems
MCDM-	Multi-Criteria Decision Making
NHRA-	National Heritage Resources Act
RDP-	Reconstruction and Development Program
SANS-	South African National Standards
UNESCO-	The United Nations Educational, Scientific and Cultural Organisation

1. CHAPTER 1: INTRODUCTION

1.1 INTRODUCING BUILT HERITAGE

Built environment includes all buildings, whether grand or modest in design, including built heritage (Chandel *et al.* 2016). Rapoport (1969: 2) defined built heritage as the direct and unself-conscious translation of a culture's needs and values into physical form. Consequently, it includes all man-made structures such as temples, tombs, pyramids, and indigenous dwellings such as rondavels. Rondavels are typically constructed using earth and are roofed with thatch grass. Built heritage is also known as vernacular, rural, folklore, or popular architecture (Rapoport 1969; Frescura 1981). In southern Africa, this architecture was influenced by factors such as local traditions, language, availability of construction material, materialism, modern influences, finances, social groupings, site, and building technology (Frescura 1981: 7; Naude 2007). These factors can be grouped into physical and socio-cultural categories (Rapoport 1969: 18).

Focus on retaining the physical aspects of built heritage *in-situ* has become an obstacle in a rapidly developing world where there is limited available land for new developments. This has resulted in a conflict between heritage managers and developers where the former want to keep heritage resources untouched, while the latter need the land that these resources are on for development (Ndlovu 2012). This poses a challenge for countries like South Africa where development, especially in infrastructural and extractive industries has the potential to even out injustices caused by the Apartheid government (Ndlovu 2017:103). In South Africa, the National Heritage Resources Act 25 of 1999 (NHRA 25 of 1999) protects structures older than 60 years. Frescura (2015a) predicted that by 2020 buildings in major cities such as Johannesburg, Cape Town, and Durban will be older than 60 years. These buildings would, therefore, be protected under NHRA. Monumentalisation as explained by Frescura (2015b) occurs when the physical and material values of structures are viewed as more significant than socio-cultural values. However, this could further fuel the conflict between heritage managers and developers as it has potential negative consequences for economic development. The economic status of the country automatically favours development as a poverty alleviation strategy. The question then becomes

how best a middle ground can be reached where both developers and heritage managers and community's benefit.

Ndlovu (2012: 262) proposes that giving heritage management a "human face" through a true inclusion of communities in heritage management strategies can assist in reaching this middle ground. The real authority and decisions over what can and cannot constitute heritage needs to move from the hands of heritage managers and start reflecting the values of communities. The current practice is that heritage managers have their views of what should constitute heritage values and then impose these values on communities (Ndlovu 2012). Often, these values differ, with communities focusing on spiritual values, while heritage managers focus on tangible values. By focusing on tangible values, history and theory have neglected the most typical, indigenous dwelling/ house, despite it being a significant part of the built environment for decades. Research conducted on southern African indigenous dwellings that links the construction of these dwellings to the availability of construction material(s) sourced from the environment further indicates this focus on tangible values (Cuba & Humman 1993; Whelan 2003; Naude 2007; Van Vuuren 2007; Frescura 2015c).

Heritage resources are valuable within a society because they are finite (Lipe 1974). Once an archaeological site is disturbed, or a heritage resource is damaged, it can never be returned to its original state. To curb this Lipe (1974) proposed a 3-step approach: the education of communities about heritage resources, the involvement of archaeologists in all levels of decision making of planned development, and the implementation of appropriate legislation. Lipe (1974: 216) and Ndlovu (2017) are of the same view that the involvement of communities in heritage protection strategies increases chances of success for such strategies, especially with resources located within communities. However, unlike Ndlovu (2017), Lipe (1974: 216) is of the view that communities should be taught what heritage is and what it is not, and even in cases where the communities' values are solicited, communities still need to be taught how to protect these resources. This approach is indicated by Ndlovu (2017) as problematic as it assumes that communities cannot or do not possess the knowledge to protect their heritage, and there is a need for heritage managers to bridge the gap not just between themselves and communities by advocating for public archaeology, but between communities and developers.

Orbasli (2009) talks about a conservation-led regeneration or heritage-led conservation. The concept of conservation is about managing change and regeneration is about change. A conservation-led regeneration considers both pros and cons of reusing an old building against the construction of a new one (Orbasli 2009). It is not feasible to protect every single historic building, especially in urban areas. Demolition has therefore been viewed as a straightforward and hassle-free approach to development (Orbasli 2009). Despite this, the merits of reuse of an existing building have proved to be both environmentally and socio-economically sustainable (Orbasli 2009: 1). The demolition and construction of a new building have proven to be processes that have a higher embodied energy and therefore produce higher levels of carbon dioxide (CO_2) versus reuse of an existing building which is more environmentally sustainable (Orbasli 2009: 6). Socially, heritage buildings are seen to provide tranquil pockets of authenticity and culture, especially in cities with high-rise concrete buildings. Orbasli (2009: 5) goes further to indicate that property prices are usually higher in areas with heritage resources, benefitting the economic market. Notwithstanding everything, a conservation-led regeneration approach is a context-based approach and the pros and cons of each building need to be considered individually before a final decision is made. This case by case approach in heritage conservation should include the values of local communities.

Along with development, globalisation has placed further stress on heritage resources, especially indigenous dwellings. Globalisation, defined by Kellner (2002: 287) as the flow of commodities, capital, technology, ideas, forms of culture, and people across national boundaries, has provided for global intercultural contact. Missionary contact is such an example of intercultural contact. Before contact with missionaries, dwellings in southern Africa were indicated to have been constructed from mud, wattle, and thatch grass that were sourced locally from the environment. Along with religion, missionaries introduced brick-and-mortar with corrugated iron sheet for roofing as construction material (Frescura 1981). This housing style came to be known as the Highveld or parapet style (Frescura 1981: 17, 2001: 74). The missionaries viewed mud-and-wattle as uncivilised and therefore sought to end its use as construction material (Frescura 2015c: 65). These indigenous dwellings, along with other heritage resources are today subject to pressures from development and are caught in the tug of war between developers, heritage managers and local communities.

This research explores the importance of including values held by local communities in heritage protection. It draws from the rural community of the Makgabeng Plateau, specifically those living in the villages of Niewe Jerusalem and Thabanantlhana in Limpopo, South Africa. These values held by the community of the Makgabeng include both spiritual and architectural values attached to the rondavel as a form of an indigenous dwelling. Although both physical (tangible) and socio-cultural (intangible) aspects contribute towards the protection of indigenous dwellings, it is recognised that the socio-cultural aspects require more research.

Despite missionary influence, both indigenous dwellings and dwellings constructed out of brick-and-mortar can be found within the Makgabeng Plateau today. These indigenous dwellings, are rondavels that are constructed out of mud-and-wattle with grass thatch-roofing. Jones (2017: 22) and Khirfan (2010) argue that a community's built heritage is shaped and formed based on its social values, and the Makgabeng community is no exception. The introduction of rectangular walled brick-and-mortar Highveld/ parapet dwellings with corrugated sheet roofing to the plateau altered the indigenous built environment of the Makgabeng Plateau.

It follows that to understand the community of the Makgabeng, whether its character, identity, or its indigenous dwellings, its socio-cultural values also need to be understood. Rapoport (1969: 46) argued that man was a symbol-making animal that specialised in myth and rituals before he was a tool-making animal. Consequently, to study and understand indigenous dwellings within a community, their socio-cultural values first need to be understood. This research, therefore, aims to identify how socio-cultural values of indigenous dwellings have been retained and carried forth through their application onto brick-and-mortar housing with corrugated iron sheet roofing.

1.2 STUDY BACKGROUND

Interest in built heritage conservation and the measures employed comes from my professional experience in the heritage practice. Since 2015, my work in the cultural heritage management sector within the built environment exposed me to various built heritage conservation challenges caused by the increasing demand for land from infrastructure development companies. These companies considered indigenous built environments a hindrance to development and thus its conservation was given low priority or ignored completely, resulting in undocumented

demolitions. This approach is problematic as the indigenous built environment is considered as a medium where present generations learn about the thoughts and prejudices of past generations (Frescura 2015a). The destruction or demolition of such environments is tantamount to erasing all associated memories from our consciousness.

Where conservation strategies were instituted, they were based on hastily compiled data obtained through historical research on the indigenous built environment, a few site photographs, and reports such as cultural heritage impact assessments. Based on my experience, such reports are inadequate, hence they are not archived and are not easily retrievable for effective conservation monitoring. Furthermore, they are often based on conservation strategies that are reactive and lack clear implementation strategies (Forster & Kayan 2009: 210). In archaeology, preventive conservation measures are employed as an emergency-salvage approach when development is planned around heritage resources (Chirikure 2014; Ndlovu 2014; Shepherd 2015). Ndlovu (2012: 262) suggests that the fields of archaeology and heritage management need to be more proactive and pre-emptive if the gap between developers and heritage managers is to be bridged.

I was therefore challenged to address the question of how to protect indigenous dwellings within the indigenous built environment, examining how rural communities retain indigenous values within a rapidly changing built environment. Discourse on conservation of indigenous built environments acknowledges that it is not always feasible to retain indigenous structures in the state that they were in when they were constructed. This is due to changes in economic and developmental patterns that create pressure on these buildings resulting in them becoming obsolete (Azizi *et al.* 2016). However, retaining indigenous built environments does not always entail retaining the tangible; rather cognizance must be given to the intangible aspects that can also be retained. Intangible values can be solicited through engaging and giving local communities a platform to voice their opinions and values on their indigenous built environment through measures such as community consultations. As such, the result will be a holistic indigenous built environment protection strategy that reflects the significance of both tangible and intangible values of indigenous built environments.

1.3 PROBLEM STATEMENT

Retention of indigenous built environments has been met with many challenges, especially when faced with infrastructure development. In a world where developers view the conservation of indigenous built environments as a misuse of land that could be used for new developments to further economic growth, these environments are under threat of being destroyed. The assessment of value based only on architectural or aesthetic value has been proven to be inadequate as these environments also have intangible values attached to them. In cases where these indigenous buildings display no evident aesthetic value, they are rendered unprofitable and are therefore under threat of being demolished. A more inclusive approach that includes both tangible and intangible values of indigenous built environments is therefore required.

Indigenous values are integral to how rural communities construct their homes and determine both structure and function. Construction materials were sourced from the environment and indigenous knowledge determined how, where, and when construction would take place. The use of brick-and-mortar in rural South Africa is changing the indigenous built environment in areas such as the Makgabeng Plateau, as thatch, mud, and wattle are being abandoned for brick-and-mortar. Whereas change is expected, it is important to assess the effects that such change has on indigenous values of built heritage.

1.4 STUDY RATIONALE

Indigenous values of built heritage are often ignored or rarely considered by developers and specialists they sub-contract to conduct heritage assessments during new infrastructural developments. Despite there being an increase in recognition of indigenous values of built heritage during heritage assessments, focus is still largely on tangible values that are influenced by western value systems (Thebede 2008). These values associated with western architecture are foreign in the African context and have come about due to western influences during colonial contact. Consequently, these values are reflected in the built environment of communities such as that of the Makgabeng Plateau. The built environment of the Makgabeng Plateau reflects changes brought about by the introduction of brick-and-mortar as construction materials. The built environment now portrays a mix of indigenous dwellings constructed with mud-and-wattle

with thatch roofing and the dwellings constructed out of brick-and-mortar with corrugated iron or tile roofing.

This research has the potential to contribute towards literature on community-based approaches toward the protection of built heritage. As a multidisciplinary approach, heritage protection involves historians, archaeologists, architects, and communities to mention a few. This research will thus contribute to literature in all fields academically and in the heritage protection practise. In addition, it also has the potential to challenge the western concepts that have been employed in the conservation of indigenous built environments in South Africa. This challenge will not only affect the way heritage conservation is being practised but will also offer an alternative approach that is based on indigenous knowledge systems and indigenous values associated with these environments.

1.5 RESEARCH QUESTION

This research addresses the following question:

Drawing from the rural community of the Makgabeng Plateau in Limpopo as a case study, can the retention of indigenous values of built heritage into brick-and-mortar structures inform a value-based built heritage protection framework?

1.6 AIM AND OBJECTIVES

The main aim of this research is to examine whether indigenous values of built heritage are retainable in the context of present-day infrastructure developments, especially within the Makgabeng Plateau.

Specifically, the project objectives are to:

- Identify which indigenous values are taken into consideration during the construction of indigenous dwellings within the Makgabeng.
- Establish how these indigenous values can or have been incorporated into brick-and-mortar dwellings within the Makgabeng area to encourage their retention, and
- Propose a value-based framework as an alternative to the current protection strategies of indigenous built environments.

1.7 WHAT ARE INDIGENOUS VALUES

The significance of values ascribed to a place have been widely researched (see NHRA 25 of 1999; Howard 2003; Burra Charter 2013; Buckley & Sullivan 2014;; Giannakopoulou & Kaliampakos 2016) and popularised by the evolution of heritage conservation strategies (De la Torre 2014). Heritage conservation approaches anchored on values move conservation techniques from focusing on the physical to include socio-cultural values based on a community's perception of significance (Khirfan 2010: 57). Socio-cultural values also known as indigenous values encompass the significance of a historic environment and reflect a sense of identity, belonging, and the spiritual associations of present-day communities (Khirfan 2010). Socio-cultural values are fluid, culturally specific, and are embedded in indigenous experiences and practices employed in heritage-making. Such experiences and practices may include indigenous knowledge based on oral traditions, folklore, genealogy, and spiritual associations (Khirfan 2010: 24). The theoretical concept underpinning this research is based on the idea that heritage values are socially constructed, fluid, adaptive, and influence what is considered as heritage.

1.8 UNPACKING THE INDIGENOUS BUILT ENVIRONMENT

The indigenous built environment or built heritage is the physical evidence of cultural development. Chandel *et al* (2016) indicate that built heritage is inclusive of beautiful, majestic, or significant historic buildings and small, modest indigenous dwellings that reflect the social conditions of their occupants. It is a product of people, place, and culture and an aspect of identity **(**Giannakopoulou & Kaliampakos 2016; Parkinson *et al.* 2016). It consists of structures made from local materials as indicated in Table 1. It follows indigenous construction technologies based on indigenous knowledge also known as indigenous know-how. Indigenous know-how is the unique inherited knowledge of a society derived from an area's natural (topography or climate) and cultural environment (Chandel *et al.* 2016: 460). Indigenous built environments are also influenced by the socio-cultural values that shape identities and give a community a sense of belonging and spiritual associations (Khirfan 2010). It is estimated that about 1.5 billion people, which is 30% of the world's population, stay in buildings constructed

out of earth (indigenous), and about half of them are in developing countries (Keefe 2005; Niromoundi *et al.* 2013: 226).

Niroumondi *et al.* (2013) agree with Keefe (2005) that there are different methods of constructing indigenous built environments across the world. The most common method found in the southern African context employs adobe brick, rammed earth, cob, wattle, and daub and poured earth. Table 1 below details the different indigenous construction materials and describes their advantages and disadvantages. From this table, it is evident that the main components of the different building materials are earth, water, and a stabilising agent of some sort, in most cases cow dung. These indigenous construction techniques and materials are renowned world-over for their straightforwardness and sustainability (Hernandes & Verum 2011: 389). Indigenous societies used these materials to build their dwellings and therefore by mentioning indigenous built environments, I refer to indigenous dwellings, constructed out of these indigenous materials using indigenous construction technologies. The focus of this research is on indigenous dwellings known as rondavels or huts. Thus, the word rondavel is used interchangeably with indigenous dwellings throughout the study.

Table 1: Indigenous construction material (After Keefe 2005: 47; Niromoundi *et al*. 2013:227-229)

Housing material	**Description**
Adobe brick	• Made from a mix of soil and any stabilizing agent such as bricks, mud, or organic compounds such as manure, straw, blood, or plant juice. • Advantages: sound-proof, good thermal properties, and cost-efficient. • Disadvantage: thick walls, resulting in a house that looks big from the outside but has a small interior space.
Rammed earth	• The man-made equivalent of sedimentary rocks. • It is achieved through compacting soil to produce rock-hard structures. • Build in more damp areas and humid than the adobe that requires arid climates. • Made from a mix of an aggregate of silt, sand, clay, and soil poured into forms, usually made of wood, and placed into damp earth to dry. • Advantages: Durable and waterproof.
Cob	• The simplest of all earth buildings. • It consists of piling and moulding mud to create walls.

	• Cob mix is like that of adobe brick, but it is stiffer and contains a higher level of a stabilizing agent. • Each layer must be dried completely before the next layer is piled on.
Wattle & daub	• The earliest form of earth building technology that used tree branches to build a structural framework. • Mud would then be placed between the spaces of the interwoven branches (wattle). A wattle is a woven structure of small plant elements such as bamboo, reeds, branches, held together in a stiff frame. • Soil mix here usually uses dung as the binder. • It uses a smaller aggregate than adobe. • Daub, a mix of soil and aggregate is then smeared to cover the frame however desired. • Advantages: Earthquake resistant due to flexibility. • Disadvantages: Thinner walls and lacks thermal capacity
Poured earth	• Made from a mix of chalk, straw and soil poured into a formwork. Once the mix is dry, the formwork is removed.

1.9 NORTHERN SOTHO WORLDVIEW

Worldviews play an important part in African culture. They shape how Africans perceive their world which in turn affects their ways of knowing and acting (Baloyi & Makobe-Rabothata 2014: 234). Worldviews reflect peoples cultural being and identity. It is therefore important to note that although there is a general African worldview where similarities exist in the way Africans perceive the world (Wane 2005: 29), worldviews have theoretical underpinnings and are therefore contextual and culturally biased (Baloyi & Makobe-Rabothata 2014: 234).

The African worldview differs from the Western/ European worldview in that the former largely depends on spiritual dimensions and phenomena, while the latter is based on visible, measurable physical reality (Thebede 2008: 235). It is due to this reason that it is inaccurate to apply western theories to explain African phenomena. Although the use of a Eurocentric worldview in the context of Africa has negatively affected the use of an African worldview (see Dei *et al.* 2000; Breidlid 2009; Dei 2012; Baloyi & Makobe-Rabothata 2014), Thebede (2008: 235) argues that the philosophical integrity of African traditions remains.

To understand how the Northern Sotho community of the Makgabeng Plateau interacts with its indigenous dwellings, it is important to understand their worldview, as it feeds and influences

their understanding of phenomena, especially when it comes to the values that they ascribe to these dwellings. During times of the *Difaqane* in the 1820's, unsettlement within the interior of southern Africa, divided and scattered a group called BaSotho around the country (Lye 1967; Van Wyk & Harry 1998). One offshoot moved westwards and is now known as BaTswana. One other group moved north and are today known as the Northern Sotho or BaPedi while the southwards movers are the Southern Sotho or BaSotho (Van Wyk & Harry 1998: 54).

Like the original Basotho group, the Northern Sotho believe in ancestral spirits and invoke their presence in the protection of and construction of their dwellings (Monnig 1967: 210). Indigenous dwellings of the Northern Sotho make provision for the inclusion of a special place for the ancestors in the homestead in various forms. Ancestors are included either during the construction of an indigenous dwelling or with the provision of an ancestral plant or both (Monnig 1967; Vorster 2001). This interfacing is dealt with more extensively in chapter 5.

1.10 CHAPTER OUTLINE

Chapter 1 serves as an introduction to this research. It outlines the problem statement, research question, aims, and objective. It also provides a definition of key concepts and their contextual relevance to this study. Chapter 2 is an introduction to the study area. It serves to familiarise the reader with not just the geographic location of the research area, but some demographic information as well. Chapter 3 is a review of literary works relating to the research topic. This review serves as a critical analysis of existing literature, looking at the history of conservation of built heritage, the main theories surrounding the topic, and the main debates concerning built heritage conservation in South Africa. Finally, it details the conceptual framework that anchors this research.

Chapter 4 looks into the methodology that was employed during data collection, challenges encountered during research, and how these challenges were overcome. Chapter 5 is a thematic presentation of data collected during interviews. It also discusses key findings and how they address some of the research objectives. Finally, chapter 6 discusses the implications of the study on the conservation of indigenous built environments based on the findings outlined in chapter 5. It concludes by proposing a value-based framework as an alternative to the protection of indigenous built heritage.

2. CHAPTER 2: THE MAKGABENG PLATEAU

2.1 INTRODUCTION

This chapter discusses the environmental and demographic aspects of the study area. This not only assists with situating the study area, but it also feeds into the importance that the environment plays in the creation of identities (Setumu 2010: 70) and built heritage values. Humans cannot fully be defined without the inclusion of elements of their environment such as the soil, mountains, trees, animals, and such related natural features (Ibid: 71). In the Makgabeng, the environment has been an important means of sustaining livelihoods. For example, the soil has been a source of food for both animals and people, and historically the mountains were used as strongholds during battles. It is therefore important to discuss the environment to understand how it has shaped the people who identify with it.

2.2 STUDY AREA

The Makgabeng Plateau is home to a majority Northern Sotho speaking population. It is situated in the north western section of Limpopo province (Figure 1). Limpopo province borders Botswana to the west and north west, Zimbabwe to the north, and Mozambique to the east. Locally, it shares provincial borders with Gauteng, Mpumalanga, and the North West. Administratively, the Makgabeng area is under the Blouberg Local Municipality of Capricorn District.

Blouberg municipality is a rural area with 99.8% of settlements being tribal or traditional (Statistics South Africa 2011). It takes its name after the Blouberg Mountain Range that is located at the western end of the Soutpansberg Mountain Range, north west of Vivo town. The Makgabeng Plateau is located 22 km further south west of the Blouberg mountain range and about 45km from Vivo.

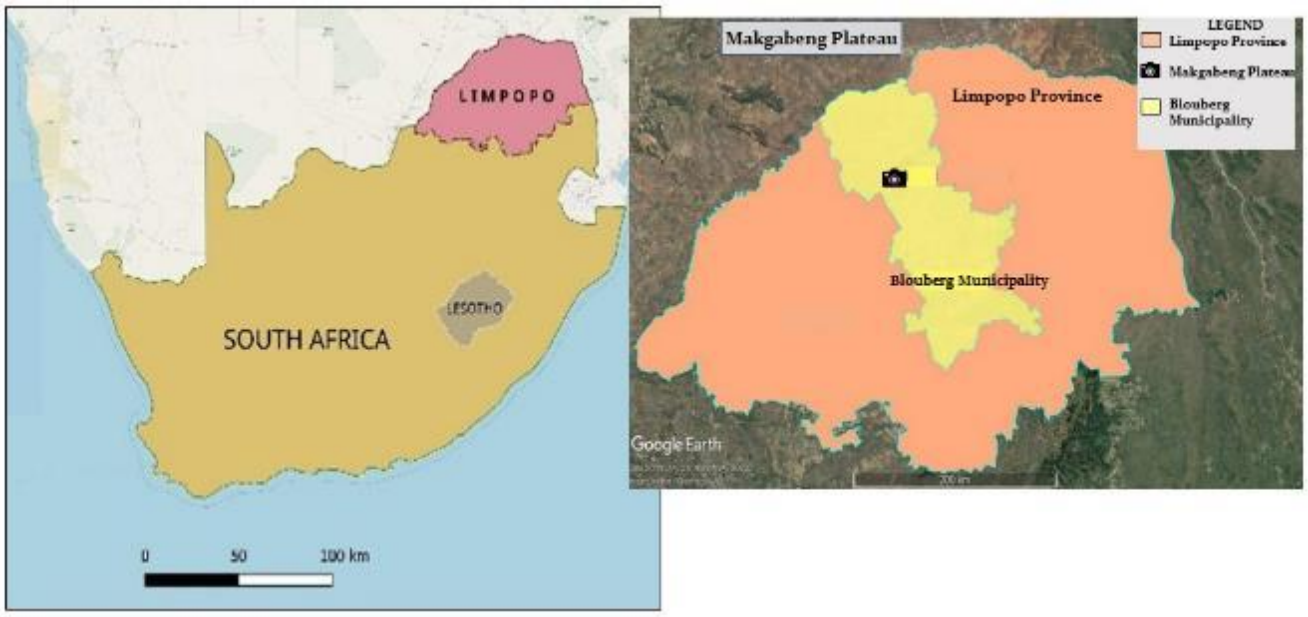

Figure 1: Location of Makgabeng Plateau within Limpopo province

To get to the villages of Niewe Jerusalem and Thabanantlhana from Polokwane, one would have to take the R521 north heading in the direction of Musina (formerly Messina) to the Dendron Senwabarwana (Bochum) junction and turn left. Although parts of the road from Senwabarwana town to the villages is tarred, after the turnoff to Dithabaneng, there are areas of deep sand all the way to Thabanantlhana village, ideally suitable for off-road vehicular travel.

The Makgabeng landscape includes the Masebe river that is vital for the immediate communities in the villages of Niewe Jerusalem and Thabanantlhana, among others. The Masebe river flows through the Masebe gorge and is surrounded by other ports and gorges such as Monotwaneng and Ditorong. It flows into the Mogalakwena River which ultimately merges into the Limpopo river. Mogalakwena River (Figure 2), a perennial river, is the biggest river within the Blouberg area (Blouberg Municipality IDP 2020: 30).

Figure 2: Water extraction from the Mogalakwena river

2.2.1 Climate

The semi-arid climate of the Makgabeng Plateau is characterised by hot summers and mild winters. It has an annual rainfall of around 550mm per annum that is experienced during the summer months (Van Schalkwayk & RARI 2009: 17). The summer months have temperatures reaching up to 40° Celsius while winters have temperatures reaching up to 13° Celsius. Frequent drought in the area negatively impacts the local economy.

2.2.2 Geology

The Makgabeng rock formation (referred to as a Plateau) that covers an area of approximately 400 km² is separated into lower and upper erg deposits by saline pan deposits. The Makgabeng rock formation, one of the oldest substantial erg deposits, is part of the eleven formations comprising the Waterberg group in the main Waterberg Basin (Heness *et al*. 2014: 265).

a **b**

Figure 3a & b: typical rock outcrops that display the sandstone formation of the Makgabeng.

The sandstone formation (Figure 3a & b) is believed to be almost 2 billion years old (Bumby 2000; Van Schalkwayk & RARI 2009). Sandstone usually retains many of the structures that were present during the initial deposition of the sand particles that form it. For example, if sandstone forms from sand that was wet from the ocean or from rivers, it will have ripples, unlike sandstone that forms under desert conditions (Bumby 2000). This helps to identify the environment in which the original sand was deposited from. The sandstone in this area is said to be a product of a sub-aerial deposit, meaning it was windblown from the desert (Bumby 2000). The landscape is believed to be the remains of a fossilised desert with traces of fossils in the rocks being recorded as an important step in the evolution of life on the planet (Bumby 2000).

2.2.3 Flora and Fauna

The Makgabeng Plateau is within the Limpopo highveld and the dry woodland ecological zone. The vegetation is classified as mainly sourish mixed Bushveld Savannah or Savannah veld (Setumu 2010: 79). The Makgabeng formation is important for riverine trees and is useful in preserving the water table needed for a variety of fruit trees (Figure 4a & b), berries, and other plants used for medicinal purposes (Figure 4c).

a **b** **c**

Figure 4: a) banana tree, b) pawpaw tree, c) Euphorbia tree (*mokgoto*) used by locals for medicinal purposes.

Table 2 is a summary of the dominant vegetation of the Makgabeng Plateau. Grasses such as the Broom grass (*Eragrostis pallens*) and Yellow thatching grass *(Hyperthelia dissoluta*) usually found near and around the Masebe gorge are used for thatching of indigenous dwellings and in making grass brooms (Van Wyk & Gericke 2007). The lavender tree, (*Molowa),* is predominantly used in the construction of indigenous houses. The Bushman poison (*Boophone disticha*) locally named *Mogaba,* is an ancestral plant that is used in various ritualistic activities and is found within homesteads. Crops such as millet, sorghum, maize, beans, and cowpeas produced by women are a significant source of food (Namono 2004: 4).

Makgabeng used to be a habitat for diverse and abundant fauna that included megaherbivores, small mammals, birds, and reptiles. Historically, the existence of animals such as Elephants, Giraffe, Rhinoceros, Lions, Leopards, Antelope, Eland, Zebra, and many more is evidenced through rock paintings (Setumu 2010). Many of these animals have since disappeared from the landscape due to human occupancy and disturbances caused by domestic livestock and practises such as farming and hunting. Animals that have remained within the landscape include Bushbuck, Duiker, Bush pig, Velvet monkeys, Samango monkeys, Baboons, Leopards, African wild-cat, Porcupine, and some small reptiles (Holt 2009; Setumu 2010: 82).

Table 2: Vegetation found around the Makgabeng Plateau (www.pza.sanbi.org; Van Wyk & Gericke 2007)

	ENGLISH NAME	**NORTHERN SOTHO NAME**	**SCIENTIFIC NAME**
TREES & SHRUBS	Red-bush willow	*Mohwelere*	*Combretum apiculatum*
	Hook-thorn	*Motholo*	*Acasia caffra*
	Sickle-bush	*Mogôbagôba*	*Dichrostachys cinerea*
	Live-long	*Morulamopane, Mokgôkgôthwane*	*Lannea discolour*
	Silver cluster-leaf		*Terminalia sericea*
	Peeling plane	*Monamane, Mopha*	*Ochna pulchra*
	Wild raisin	*Mothetlwa*	*Grewia flava*
	Euphorbia	*Mohlohlokgomo, Mokgoto*	*Euphorbia ingens*
	Lavender tree	*Molowa*	*Heteropyxis natalensis*
	bushman poison plant	*Mogaba*	*Boophane disticha*
	Lavender tree	*Molowa*	*Heteropyxis natalensis*
GRASSES	Fingergrass		*Digitaria eriantha*
	Kalahari sand quick		*Schmidtia pappophoroides*
	Wood grass/ Bottle brush grass		*Authephora pubescens*
	Cat's tail		*Perotis patens*
	Broom grass	*Motshikiri*	*Eragrostis pallens*
	Yellow thatching grass		*Hyperthelia dissoluta*

2.2.4 Socio-economy

The Makgabeng Plateau has a total population of 538 with 130 households, and 13 of these households are in Thabanantlhana. Makgabeng is the least developed of the Blouberg area, with electricity only being installed in 2017. The average household size is approximately 4.1 people with about 0.8% of households have running water and no household with a flushable toilet (Statistics South Africa 2011). About 31.8% of the population earn an income of between 9 601 and 19 600 South African Rands (ZAR), while 8.5% of the population has no income from formal employment (Statistics South Africa 2011). Female-headed households count for 60.8%,

with 9.3% being women over 65 years of age. Stockpiles of wood are a common sight within the villages (Figure 5b). This is because wood is used by 93.8% of households for cooking, heating, and lighting, while only 5% use electricity for these activities (Statistics South Africa 2011). This high usage of wood (yellowwood tree) is a major problem in the area as it has led to deforestation, which the government and local authorities have been unable to control.

a **b**

Figure 5: a) A common transport mode of donkey carts used by villagers, b) firewood stack.

The Apartheid regime divided the area into farms and different administrations, displacing many villages (Van Schlakywk & RARI 2009). Some of the farmlands, including Niewe Jerusalem, are under government authority while some others are under traditional authorities.

In 2009, the Blouberg Local Municipality identified heritage tourism as a key sector that could contribute to improving the household economy of the Makgabeng community and surrounding areas (Van Schalkwyk & RARI 2009). The Central Limpopo Basin, which is made up of Soutpansberg, the Limpopo-Shashe Confluence Area, north eastern Venda, and the Makgabeng have a recorded 460 Bantu language-speaker rock art sites with the Makgabeng Plateau being home to 340 of them (Eastwood 2003). Three distinct rock-art traditions attributed to hunter-gatherers, herders (Figure 6c & d), and Bantu language-speaking farmers (Figure 6a) can be found within the Makgabeng (Hall & Smith 2000; Eastwood *et al.* 2002; Smith & Van Schalkwyk 2002; Eastwood 2003; Namono & Eastwood 2005).

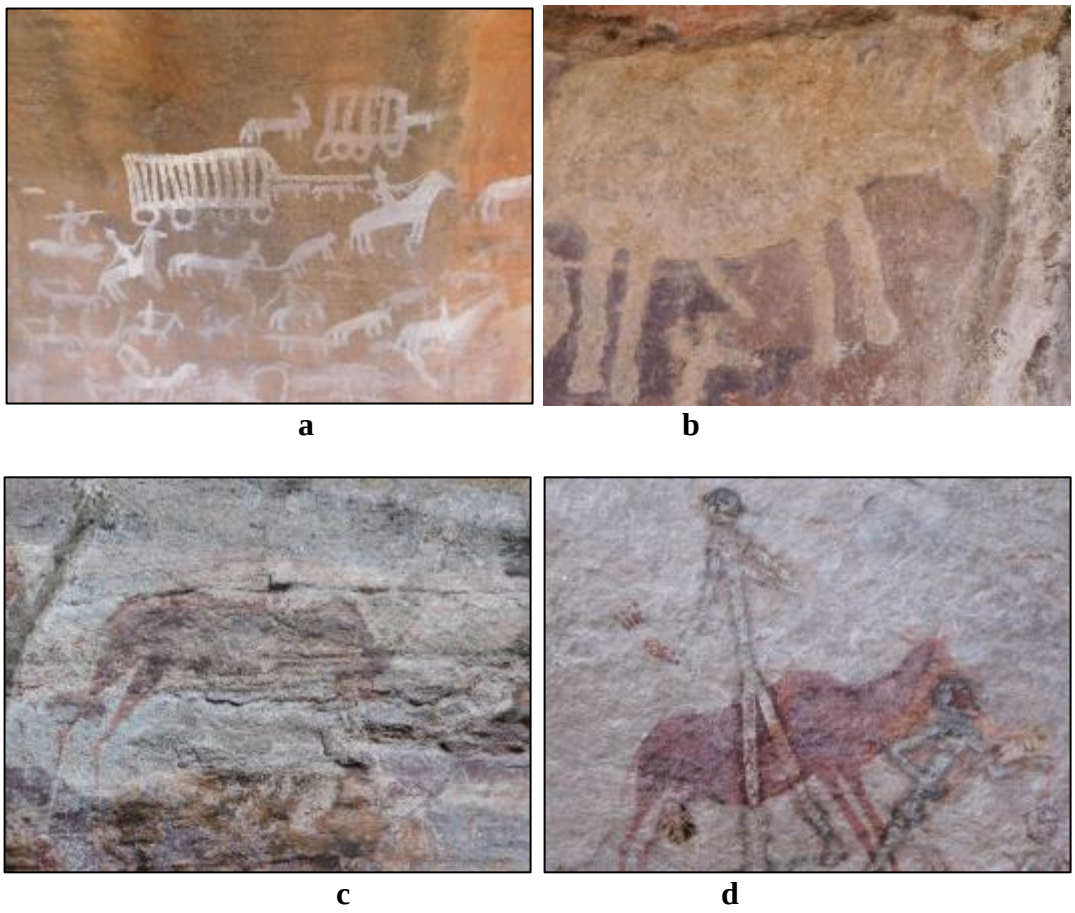

Figure 6: Rock art traditions within the Plateau, a & b depict Northern Sotho and c &d depicting hunter-gatherer art.

The San (hunter-gatherer) art is identified as fine line. This art was produced using fine brushes made from quills or sticks. This tradition is said to be associated with San spirituality and is dominated by depictions of men, women, and wild animals that were prominent in the landscape (Eastwood *et al.* 2002: 3). These animals include antelope, carnivores, zebras, and elephants.

Khoekhoe (herder) art is identified as finger-painted geometric designs in red and occasional white. This rock art tradition is linked to the initiation rites. Some motifs that are linked to women initiation rites strongly resemble those of the modern-day Nama of Namibia, who identify as Khoe (Eastwood & Smith 2005: 74). The Northern Sotho (Bantu language- speaking farmers) art is believed to also be linked with initiation. It is characterised by finger painted

geometrics mainly in white and can be divided into the art of animals and art of aggression or protest art (Namono & Eastwood 2005; Van Schalkwyk & RARI 2009).

2.2.5 Settlement history

Early settlers

The Makgabeng area has a rich history of occupancy as illustrated by the rock art (Hall & Smith 2000; Setumu 2015). The earliest inhabitants of the region are said to have been hunter-gatherer San and herder Khoekhoe (Hall & Smith 2000; Eastwood *et al.* 2002). The San of the Limpopo Basin were stone tool users who are believed to have arrived in the area around 5 000 years ago and existed there until the 19th century (Bradfield *et al.* 2009). They attached symbolic significance to their environment as they were hugely dependent on a gathering economy (Eastwood & Eastwood 2006: 29).

Migrating from the north of Limpopo, the San were later joined by the herder Khoekhoe with their animal herds around 2000 years ago (Eastwood & Eastwood 2006). Ehret (2008: 29) argues that linguistics can help trace the arrival of the Khoe group into Shashe-Limpopo Basin after migrating southwards from north-eastern Botswana and western Zimbabwe. It is believed that this is also about the same time that Bantu language-speaking farmers also joined the landscape (Ehret 2008: 28). Archaeological evidence found in rock art speaks of contact between hunter-gatherers, herders, and farmer groups (Hall & Smith 2000; Bradfield *et al.* 2009). The existence of fat-tailed sheep within hunter-gatherer rock art is evidence of this contact (Hall & Smith 2000: 40). The San are thus sometimes referred to as gatherers with sheep (Eastwood & Eastwood 2006: 59). More evidence of contact between these groups is found from excavated material that shows the continued use of stone tool technology within herder communities (Bradfield *et al*. 2009: 180).

Late settlers

Bantu language speaking group's occupation in the area began with the Moloko people around the 13th century followed by the Ndebele of the Transvaal in the 16th Century (Van Schalkwayk & RARI 2009). They were followed by the Koni of Kgosi Matlala around AD 1730, Moletse and

Tlokwa between 1756 and 1760. Then the Hananwa of Kgosi Sebudi Leboho joined the Birwa, the Venda, the Rolong with Motlatlane, and Madibana on the Blouberg mountain (Namono & Van Schalkwayk 2020).

Early contact with non-Bantu speakers occurred when Coenraad de Buys arrived within the Blouberg area in the 1820s with a racially mixed group of Koronnas and Griquas or *maSetedi* as they came to be called (Namono & Van Schalkwyk 2020). The first Whites in the area were Voortrekkers from the Cape around 1836. The Voortrekkers settled at Schoemansdal near Soutpansberg from 1846 to 1867 (Namono & Van Schalkwyk 2020). Christianity was introduced to the Plateau by missionaries and migrant workers who got exposed to it while working in the Cape Colony and the Natal (Namono & Van Schalkwyk 2020). When the first missionary, Reverend S. Hofmeyer of the Dutch Reform Church arrived within the area in 1868, he used these migrant workers to aid in his work. Rev. S. Hofmeyer set up a mission station in the Blouberg/ Makgabeng region (Namono & Van Schalkwyk 2020).

In 1894 Chief of the Hananwa or Maleboho people, Chief Leboho was captured by General Piet Joubert of the South African Republic (ZAR) (Van Schalkwyk & Moifatswane 2012: 1). The ZAR government had come into existence a few decades earlier when White farmer settlers, moved northwards from the Cape of Good Hope to escape the British rule (Van Schalkwyk & Smith 2004: 328). Conflict over ownership of land soon broke out between indigenous farmers and the white farmer settlers, leading to the Malehoho war (Van Schalkwyk & Smith 2004). Chief Leboho was finally defeated in 1894 and taken to prison in Pretoria and released in 1900, returning to Blouberg to rule his people until he died in 1939 (Van Schalkwyk & Moifatswane 2012).

Today, the Northern Sotho population of Makgabeng Plateau is made up of groups that identify as Koni, Moletse, Birwa, Tshadibe, Tlokwa, Tau, and Hananwa (Namono & Van Schalkwyk 2020). Each of these groups still speaks their language or dialect and maintains its culture and living heritage (Van Schalkwayk & RARI 2009: 3). The living heritage within the Makgabeng Plateau is evident with the indigenous built dwellings, food, dances, traditional beer, clay pots, music, dance, and traditional attire (Van Schalkwayk & RARI 2009).

2.3 SUMMARY

This chapter presented an introduction to the study area as it serves as a significant backdrop to this research. The geological formation of the Makgabeng Plateau plays an important role in the history of the area. Not only do the hills around the area form part of the cultural history, having provided refuge during wars such as the Maleboho war, they are also home to rock art sites (Hunter-gatherer, herder, and farmer art) that bear evidence of occupation in the region. The climate of the area has implications on the flora and fauna as it influences and affects sustenance for both humans and animals and the production of grasses that are used in the construction of indigenous dwellings. Crops produced mostly by women, provide a significant food source for households, and supplements the lack of income caused by unemployment. The history of the Plateau plays a key role in the understanding of how influences of indigenous activities such as dance, music, dress, traditional food, and the indigenous built environment have been passed on from general to general and have shaped the heritage of the present-day occupants of the Plateau.

3. CHAPTER 3: THE BUILT HERITAGE DISCOURSE

3.1 INTRODUCTION

This chapter highlights existing literature on the study of indigenous values of built heritage. It accomplishes this by critically reviewing and identifying how heritage has been studied and understood and where the gaps in knowledge about heritage exist. Firstly, it introduces indigenous dwellings by discussing their evolution as a house form. The chapter then moves on to discuss heritage as a concept. It investigates approaches and theories surrounding heritage, such as sustainability, that are used in the study and understanding of (built) heritage, including laws and regulations relating to it. The chapter then moves on to discuss indigenous dwellings in South Africa. It outlines the history of this house form, how it has become part of the South African identity, and the current standing of indigenous dwellings in the country. The chapter concludes by discussing the concept of heritagisation as the conceptual framework that anchors this research.

3.2 THE EVOLUTION OF INDIGENOUS DWELLINGS

Early dwellings in South Africa were makeshift or caves or stonewalled Iron Age shelters (Frescura 1981: 22). Makeshift shelters are believed to have been mainly used by nomadic societies. These shelters were easily erected and dismantled during hunting periods where societies followed herds of animals (Frescura 1981: 27). Due to their temporality, makeshift shelters have left no substantial archaeological evidence and comparison of their form can roughly be made with similar structures found within societies of today with permanent settlements. Within these settled societies, crude shelters are associated with transitionary stages such as initiation or death (Frescura 1981: 28). The Xhosa for example, erect temporary structures that get burnt down at the end of initiation ceremonies (Oliver 2006: 279). Unlike crude shelters, cave shelters have yielded archaeological evidence in the form of flora, fauna and rock art that have made it possible to trace not just the existence but economics and lifestyles of societies that utilised them (Frescura 1981). Today, cases where cave shelters are permanently settled can be found around the world in North America, Europe, and southern Africa for example. The Ha Kome cave shelter in Lesotho stands as an example within southern Africa. Iron Age settlements have been the focus of history and theory in multiple fields of study

including history, folklore architecture, and archaeology where radiocarbon dating techniques have yielded information about past societies (Frescura 1981: 22).

Historically, the evolution of house form (dwellings) can be roughly classified into four major traceable phases that displayed distinct differences in form and technology (Figure 7) (Frescura 1981: 15). Although these changes in form and technology can be roughly traced, it is not unusual to find two house forms coexisting. The first stage is the beehive form. This form includes makeshift shelters and all variations of the beehive-dome and is associated with grass-orientated technology. The second development is the cone-on-cylinder or cone-on-cube form. This form is classified by the emergence of walls that were separated from the roof. The third development is an introduction of western influences on indigenous dwellings. It is identified by the triangulation of the roof, linear floor plans, and rooms that are divided into rows. The fourth and final stage is a continuation of western architectural influences. It is characterised by a housing style named "Highveld" due to its predominance in rural dwellings of the Transvaal and the Free State (Frescura 1981: 18). With this development, corrugated iron sheet-roofing and sunburnt brick become common.

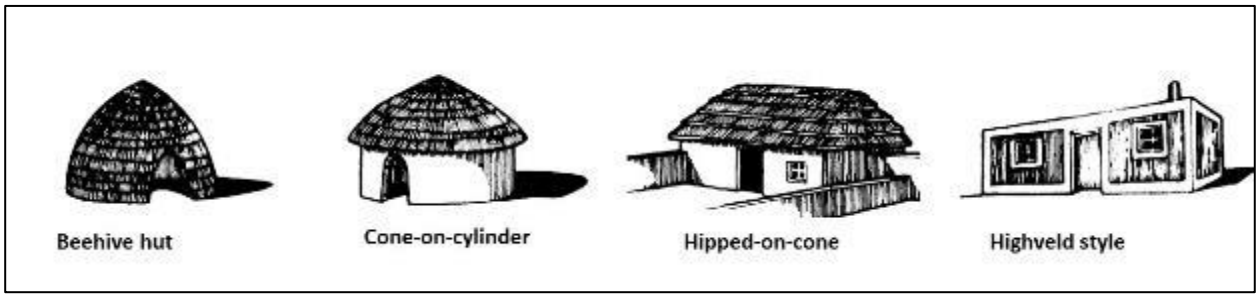

Figure 7: Evolution of the house form. (After Frescura 1981: 17).

Two dominant indigenous dwelling construction technologies in South Africa were grass-orientated and wattle and daube technology (Frescura 1981: 11). Although these technologies may both be found within the same region, the grass-orientated technology is predominantly found in wetter grass-rich regions of the country where Zulu, Swati, and Xhosa groups lived. The wattle and daub technology are predominant among the Sotho, Tswana, and Venda in the drier highveld regions of the country where rain was not a threat to the mud walls (Frescura 1981).

The dependence of indigenous architecture on material found around the environment meant that construction technology was highly developed because methods of construction had to change with a change in the environment (Frescura 1981: 11). Change in the environment was either gradual or rapid. Rapid changes were due to factors such as war. For example, wars such as *Difaqane* in the 1800s resulted in the scattering of different ethnic groups and their subsequent settlement in new environments that provided different materials for the construction of dwellings (Frescura 1981: 13; Whelan 2003). Gradual or subtle changes are believed to have depended on what Rapoport (1969) termed the physical and socio-cultural factors. Rapoport (2005) agrees with Frescura (1981: 21) that these factors were made up of environmental, social, economic, and technological pressures.

3.3 APPROACHES TO THE STUDY OF HERITAGE

Over the years, various approaches to studying heritage have emerged (Smith 2006; Marmion 2012; Parkinson *et al.* 2016). These included defining it, designing methods of protecting it and building concepts around it. Main-stream approaches to the study of heritage have been based on western definitions of what constitutes heritage (Dei *et al.* 2000; Deacon *et al.* 2004; Mkabela 2005; Wane 2005). Whilst these approaches may be theoretically sound, they are often practically inappropriate, especially in the African context due to different belief systems. Africans believe in an ancestral cosmological understanding of their environment and therefore used this knowledge system and understanding as a starting point in the conservation of their heritage (Wane 2005: 36). Boateng (1983: 335) argues that this exclusion of African based knowledge systems in the study of African heritage has left Africa in a “vacuum” that can only be filled with confusion. To address this challenge Mkabela (2005) proposes a decolonised African centred approach to heritage discourse.

The concept of heritage has been identified as fluid. This fluidity poses a challenge in the definition of and the understanding of values that constitute heritage. Heritage in its simplest form is defined as that which has been or may be inherited. The National Heritage Resources Act 25 of 1999 defines a heritage resource as any place or object of cultural significance (NHRA 25 of 1999). The Act further defines heritage significance as that which has aesthetic, architectural, historical, scientific, social, spiritual, linguistic, or technological value(s). The Burra Charter

(2013) defines heritage as that which is for past, present, or future generations. Marmion (2012: 39) states that heritage comprises of valued objects and qualities, historic buildings and cultural traditions, things of architectural, historic, or natural value. Heritage includes everything that people want to conserve or collect to pass on to future generations (Howard 2003). Howard (2003), and Armitage & Yau (2006) agree that heritage is an invaluable public asset that represents aspects of social capital worth conserving. It is shaped by a community's cultural, social, historical, political, and economic values (Government Architects 2019). An object must be valued to be considered as heritage, either by an individual or a group of people. Fredheim & Khalaf (2016) argue that ascribing value is what creates heritage; these may be tangible values such as architectural value associated with buildings and monuments or intangible values such as spiritual values.

According to Smith (2006: 11) heritage only exists as discourse, and as such it not only deals with the use of words and language as suggested by Gee (2011: 8), but it also involves social practises that form social meanings, knowledge production, power relations, and regulate understanding (Smith 2006: 4). Smith (2006) refers to this concept as Authorised Heritage Discourse (AHD) or elite discourse that is also known as the top-down approach. It is led by professionals who influence what is considered heritage and worth conserving (Parkinson *et al.* 2016). Professionals and scholars engage with and shape heritage through AHD (Smith 2006: 11; Parkinson *et al.* 2016: 268). However, AHD was criticised for excluding communities in the development of heritage protection strategies (Parkinson *et al.* 2016). Instead, the involvement of communities is perceived as unofficial and referred to as unauthorised heritage discourse or bottom-up approach (Parkinson *et al.* 2016: 262). Cognisant of Smith's ideology of AHD, I note that the use of the term unauthorised heritage is due to a lack of recognition and acknowledgement of the important role that indigenous knowledge from communities plays in the construction and retention of heritage and associated values.

To address the limitations of AHD, a Critical Discourse Analysis (CDA), has been proposed as a method to introduce the bottom-up perspective. This perspective is based on the engagement of all stakeholders, especially local communities. Yung & Chan (2011) define stakeholder engagement, also known as public participation, as a process by which communities, especially disadvantaged communities, can exercise influence over policy formulation and design

alternatives in the management of heritage resources. CDA or 'lay' discourse focuses on the importance of local identity and how this identity is created (Parkinson *et al.* 2016: 264). Specifically, it addresses identity creation through individual rather than collective memory, where it considers aspects such as nostalgia and how it shapes modern life and enables social behaviour. CDA also considers heritage within its historic, cultural, social, and physical context. The CDA approach was proposed over 30 years ago, but it is only with the increase in acknowledgement of the importance of an integrated conservation approach, that stakeholder participation is being taken into consideration in the definition of heritage (Sarah-Ashley *et al.* 2015: 675). Despite the recognition of its importance, 'lay' discourse is often overlooked, especially with heritage protection. This overlooking has resulted in conservation policies and regulations that are limited in scope as they are not inclusive of all stakeholder opinions (Sarah-Ashley *et al.* 2015).

Another alternative to AHD is a Multi-Criteria Decision Making (MCDM) approach. This approach recognizes that in a project, at any given time, there will be multiple and diverging stakeholder views that need to be considered before decisions are made (Yau 2008). These stakeholders may consist of the government, the private sector, and communities. MCDM is a critical decision-making tool used in the identification of project objective(s) and the determination of how the said objectives affect the outcomes (Yau 2008: 195). Wang *et al* (2009) state that MCDM aids in eliminating the difficulty in decision making, especially when there are high levels of uncertainty, conflicting objectives, and perspectives. To mitigate the conflicting objectives, Yau (2008) proposes an Analytical Hierarchy process (AH). The AH process evaluates, weighs, and compares alternatives proposed through an MCDM process, and arranges them hierarchically (Velasquez & Hester 2013). It is from this that a most suited alternative is selected.

3.4 CONSERVATION OF INDIGENOUS BUILT ENVIRONMENT

The concept of conservation of indigenous built environments is based on the notion that these environments are sustainable. Conservation takes place in three ways: repair, upgrade, and reform (Zwarteveen n.d). Zwarteveen (n.d: 2) indicates that conservation, like sustainability, can be measured using 3 aspects:

1. social relevance,
2. environmental significance,
3. and economic feasibility

These three aspects can be evaluated using a value-based approach. A value-based evaluation is based on a multi-disciplinary approach that goes beyond the physical fabric of a structure to fully understand the value of the structure within society.

Approaches to the conservation of heritage in Europe have undergone drastic changes since the 19th century. The development of heritage conservation in Europe can roughly be divided into three phases from the 19th century to the 21st century. In the 19th century, heritage conservation was mostly focused on monuments and presenting heritage resources in museums (Ndoro & Pwiti 2001: 22). The 20th century saw the emergence of charters and conventions such as the World Heritage Convention. The rapid increase in commercialisation of heritage in the 21st century, has led to a global concern over the conservation of heritage (Orbasli 2017: 158). The commercialisation of heritage was also around the concept that heritage needs to be financially self-sufficient and needs to yield monetary benefits. The focus of what was considered as heritage also widened. The recognition of value-based approaches that included tangible and intangible values alongside scientific requirements of conservation changed the way that heritage conservation was conducted (Orbasli 2017). This resulted in a shift in focus from monuments to include environments that these monuments were found in. By the end of the 20th century, conservation had evolved into two streams: conservation as an approach and conservation as a science (Orbasli 2017: 161).

As a science, heritage conservation was conducted for academic research purposes where resources were to be kept from the public and surrounding communities (Ndoro & Pwiti 2001). As an approach, conservation followed the post-modernist approaches that introduced plurality and the importance of embracing regionality and localness (Orbasli 2017). Regionality and localness are based on a value-based approach where conservation of meaning became a priority. Conservation of meaning saw conservation become a process of negotiation as it now included multiple overlapping values (Orbasli 2017). The meaning was derived from values, and these values contributed to identity.

The manifestation of conservation as we know it within southern Africa is a biproduct of the evolution of heritage conservation in Europe (Ndoro & Pwiti 2001: 21). Historical, documentation of heritage conservation in Africa inaccurately indicates that this practice only started after colonial contact. The result of this has been that the measure of values of heritage has depended on the beliefs of colonizing powers, disregarding local opinions, beliefs, and values (Ndoro *et al.* 2018). Ndoro & Pwiti (2001: 22) argue that even after southern African countries gained independence, this measure has not changed as heritage protection is still under the watchful eye of international organisations such as the International Council on Monuments and Sites (ICOMOS) and The United Nations Education, Scientific and Cultural Organisation (UNESCO). For countries that are signatory to the World Heritage Convention in southern Africa, a national heritage site is of outstanding value and reaches world heritage status if it complies with values stipulated by the Convention.

The influences of these conventions can indeed still be witnessed today. To correct this reliance on international legal instruments, Orbasli (2017: 163) calls for the denationalisation of heritage, especially in previously colonised countries. This process would involve local communities having a direct influence on what is heritage and therefore protected. Looking at South Africa, heritage conservation legislation divides heritage resources into national, provincial, and regional/local categories. At the national level, heritage values reflect western standards as national legal instruments continue to undervalue and misrepresent indigenous heritage values (Ndoro & Pwiti 2001: 24). It, therefore, follows that if a national heritage site is to be considered in the world heritage arena, it needs to meet the standards set out by the world heritage convention. However, it is also important to acknowledge that the colonial/ western-based heritage conservation approach too are changing. These changes are evident within institutions such as UNESCO and the transformation in South African national legislation regarding conservation of intangible heritage. UNESCO has recognised the importance of African indigenous knowledge and the role it plays in valuing of heritage, especially indigenous built heritage. The South African heritage legislation has also been amended to include intangible values alongside tangible values (Ndoro & Pwiti 2001). Esterhuysen (2009: 1) adds that the South African heritage legislation is progressive. Despite this progressiveness, Ndlovu (2016) indicates that, there is a lack of coordination between heritage departments, heritage agencies and

heritage councils due to a fragmented approach, especially when it comes to balancing socio-economic developments and heritage protection.

3.4.1 Sustainability

Opuluwa *et al.* (2012: 98) explain sustainability as "a closed-loop nutrient cycle where there is no waste from birth to death and one organism supports the next." Zwarteveen (n.d: 1) speaks of the 3 pillars of sustainability: social, environmental, and economic pillars. Sustainability goes beyond these pillars to include the assurance that our decisions and actions today do not compromise the future generation's ability to sustain themselves (Salman 2018: 6). In terms of the built environment, sustainability takes into consideration the processes that work together to create a building: from its design, site selection, material sourcing, construction, and operation of a building.

The indigenous built environment gained popularity within the sustainability discourse due to the use of construction material with low embodied energy (Adebayo 2001: 9). Embodied energy is amount of energy required to process and supply construction material to a site (Hammond & Jones 2008). This energy not only refers to the energy used in obtaining this construction material and transporting it but also the energy required in processing the material (Adebayo 2001: 4). Hammond & Jones (2008: 87) refer to this as the "cradle-to-site approach. Indigenous construction material such as adobe are said to have a low embodied energy as they emit lower levels of environmentally harmful pollutants such as carbon dioxide (CO_2) during their manufacturing (Shukla *et al.* 2009) Judson (2012: 20) suggests that this is what can be called the environmental value of indigenous building materials. Both Adebayo (2001: 9) and Chandel *et al.* (2016: 462) state that contemporary construction materials (concrete, aluminium, steel, plastic, and glass) have a high embodied energy from their production to their transport. Notwithstanding the impact that sustainability has had on the protection of the indigenous built environment, I stand with Bosman (2015: 32) that, the use of the thermal capacity of indigenous construction material as a value to determine sustainability is not a new concept. African communities have long been conserving their indigenous built environment pre-colonial contact (Ndoro *et al.* 2018). It is during colonial contact that colonising countries and missionaries

changed African-based methods of conserving the indigenous built environment for western value systems (Palsson 2010; Frescura 2015).

Despite their sustainability, the use of indigenous construction materials is on the decline. This is an indication that other factors contribute to the protection of indigenous built environments (Idegun & Adedeji 2017). As a stand-alone factor, sustainability lacks the understanding of the complex interaction between cognition, beliefs, norms, and attitudes that people have towards their indigenous built environment. Research has indicated that other contributing factors towards the protection and continued production of the indigenous built environment, especially indigenous dwellings, include social, institutional, cultural, economic, technological, and environmental factors (Keefe 2005; Bosman 2015; Chandel *et al.* 2016; Idegun & Adedeji 2017). Socially, Chandel *et al.* (2016: 466) argue that indigenous dwellings are becoming less acceptable as they are perceived to indicate poverty, especially when they are used for general housing purposes. I echo these sentiments expressed by Chandel *et al.* (2016) as I have worked with communities that have cited this as one of the major reasons why they no longer construct indigenous dwellings for housing purposes, but rather use them for ritualistic/ ancestral activities.

In South Africa, the use of thatching grass as a construction material is regulated by the South African National Standards on thatching roof construction (SANS 2016). Although these standards do not directly apply to the use of thatch in the construction of indigenous dwellings, I believe that the presence of a regulatory structure could assist in the sustainability of thatch as a construction material. Bosman (2015: 57) argues that, in a country such as South Africa, where building guidelines are enforced so strictly, the lack of minimum guidelines for the use of indigenous construction material such as adobe and cob is one of the reasons that has contributed to view that these indigenous materials are inferior Technologically, such indigenous construction materials, when faced with wet climatic conditions, lack the strength and durability that brick, and mortar have (Chandel *et al.* 2016: 466). Sharma *et al* (2015) argue that the strength and durability of adobe can be increased through means such increasing its compressing strength properties.

More research is required regarding the complex socio-cultural dynamics of society and how these dynamics influence the measures and steps taken in conserving indigenous built

environments. The understanding of these socio-cultural dynamics can be aided by the implementation of approaches such as CDA and MCDM, specifically their stakeholder engagement aspect. With this, I posit that the inclusion of stakeholders in the formulation of built heritage conservation strategies can result in more sustainable approaches to the protection of the indigenous built environment. I support my statement with Poulios's (2010: 172) and Lwongo's (2017) argument that a stakeholder-led heritage conservation strategy is a value-based strategy that considers the values of community members in decision-making processes. Despite this, I also acknowledge that the biggest challenge is that true decentralization has not yet been achieve as the 'real' authority and final decisions still rest with heritage managers (Poulios 2010; Fredheim & Khalaf 2016).

To avoid this predicament, Lwongo (2017) suggests professionals (heritage managers, archaeologists, developers) need to recognize that the protection of the indigenous built environment is determined through affection and control over the said environment. If the concerned stakeholders do not have any affection towards the environment, then they show reluctance towards its protection. This affection is driven by the love of place and can be an indicator of the attachment people have to the environment (Lwongo 2017: 395). In the western world, this affection is largely influenced by historical views relating to identity, sustainability, and familiarity while in Africa, people's affection is mainly related to sacredness, spirituality, and identity (Lwongo 2017: 396). In this regard, conservation strategies need to be context-specific to be effective. In Africa, the term sustainable development, therefore, needs to be re-examined to understand it from an indigenous perspective (Breidlid 2009).

Poulios (2010: 176) also proposes that a living-heritage approach that captures, equally, professional and non-professional stakeholder values can be used in the protection of indigenous built environment. A living heritage approach not only embraces change, but it also recognizes that indigenous built environments are a process rather than a product. The living heritage approach is anchored on the continued usage of heritage resources (Government Architects 2019). As a heritage resource, the interpretation and conservation of the indigenous built environment is a cyclical ongoing process rather than a once-off event (Ichumbaki 2016). Indigenous built environments should be considered as flexible heritage resources that are not

only based on the present but also on the same breath orientated towards the future and articulated and consumed through time and use (Ichumbaki 2016: 47). The flexibility of built heritage is witnessed with each generation that consumes it as it ascribes its different and varied values to make it relevant to them without completely altering it.

Economic value can also be used to assess the sustainability of indigenous built environments. Economic value is often linked to tourism opportunities that are in turn linked to indigenous built environments, especially in rural communities. In developing countries, this economic approach seems attractive as it is believed that these indigenous built environments will sustain themselves and also stimulate a range of other income-generating community-based initiatives (Infield 2001: 800). Despite this, Infield (2001) warns that placing monetary value on heritage results in the downplay of its cultural values. Using economic gain as a driving factor for the protection of heritage may have negative effects as most heritage resources cannot generate enough revenue to self-sustain (Infield 2001).

To guard against these negative side effects of economic value, Giannakopoulou & Kaliampakos (2016: 425) propose the concept of cultural economics. This concept provides a better mechanism in the valuing of non-market goods like intangible values (Giannakopoulou & Kaliampakos 2016: 427). Cultural economics depends on the public's opinion of value and therefore dictates what should be conserved (Giannakopoulou & Kaliampakos 2016). It is based on criteria such as option value, bequest value, and existence value. The option value is about the possibility or option to use a heritage resource in the future; bequest value is based on the benefits derived from preserving heritage for future generations and existence value deals with benefits acquired from having the heritage resource in the present (Buckley & Sullivan 2014).

3.4.2 Indigenous built environment as identity

Salman (2018: 2) describes identity as that which makes something unique. Identity can be attached to a place, a thing, a person, a group of people, or society. It is influenced by both cultural and natural environments (Cuba & Humman 1993: 112). As part of the built environment, indigenous dwellings contain personal, social, and cultural values and therefore tend to influence, create, and maintain our identity (Giannakopoulou & Kaliampakos 2016: 552).

When place, the indigenous built environment in this context, is used to identify oneself, a connection with it is created, resulting in what Anton & Lawrence (2014) have termed place attachment. Place attachment is influenced by the significance that is attributed to said place. According to approaches such as AHD, what constitutes this significance would only be influenced by heritage practitioners and what is stipulated by legislation (Sarah-Ashley *et al.* 2015). With 'lay' discourse, place attachment is influenced by place character (Parkinson *et al.* 2016: 271). Place character is based on what local communities perceive as significant based on what makes the place distinct. It is this place character or distinctiveness that creates place identity for local communities (Giannakopoulou & Kaliampakos 2016). Place identity is established when people distinguish themselves from others using place. It is based on values such as place uniqueness and sense of community (Giannakopoulou & Kaliampakos 2016: 426). Salman (2018) posits that the emergence of place identity as a concept in the Arab world, is a reaction to globalisation which has resulted in similarities in cultural values and architectural styles. Before globalisation, every place developed its unique identity based on its environment, ensuring that each place stays distinct from the next (Salman 2018: 4).

Indigenous dwellings reflected the environment that they existed in and therefore created a certain identity for those who occupy them. According to Cuba & Humman (1993), a home and a house, are different. The term 'house' is commonly used to describe a physical lived-in structure. A house becomes a home when its occupants attach meaning, emotion, and memory to it (Coolen & Meesters 2012) and can, therefore, be used by the occupants as part of their identity (Anton & Lawrence 2014). Cognisant of the definition of heritage outlined in section 3.3 Approaches to the Study of Heritage), I argue that indigenous dwellings, as homes, can become heritage. This is because the process of creating a home and of creating heritage is similar: the attachment of value(s). Attaching value(s) to indigenous dwellings is what turns them into a home and consequently into heritage. As heritage, these indigenous dwellings are used in identity creation by those who occupy them.

3.5 INDIGENOUS KNOWLEDGE SYSTEMS (IKS)

The term Indigenous Knowledge (IK) is hard to define as the word indigenous is laden with political implications (Tharakan 2015). Despite this, there is a commonly accepted understanding

that IK is based on knowledge systems that have developed within various societies independent of, and before, the advent of the modern scientific knowledge systems (Wane 2005; Breidlid 2009; Tharakan 2015). The South African Protection, Promotion, Development, and Management of Indigenous Knowledge Act (Act 6 of 2019) defines Indigenous Knowledge as knowledge that has developed within an indigenous community and has been assimilated into the cultural and social identity of that community (Act 6 of 2019). UNESCO defines IK as knowledge, understanding, skills, and philosophies developed by societies with long histories of interaction with their natural surroundings (UNESCO 2017). Boven & Morohashi (2002: 13) define indigenous knowledge as knowledge of people in each community that is based on experience often tested over centuries of use, adapted to local culture with dynamic environments. It is based on cultural complexities such as language, systems of classification, resource use, practices, social interaction, ritual, and spiritual elements. It informs decision making, especially in rural communities, and controls their day-to-day life (UNESCO 2017). IK can therefore help in understanding the indigenous community's ways of acting, feeling, knowing, and making sense of their social and natural world (Dei *et al.* 2000: 71).

IK is also understood concerning a society's worldviews. In Southern Africa, this worldview is deeply embedded in values based on spirituality, religious ceremonies, rituals, and other practices (Dei *et al.* 2000; Breidlid 2009; Tharakan 2015). Breidlid (2009: 141) explains worldview as a culturally organised micro-thought that determines the behaviour, decision-making, and the organising of symbolic creations of a people. This worldview declares that the world has two aspects: the physical and the spiritual and regards them as compatible and coexisting (Breidlid 2009).

IK was learnt through demonstration and experience through appropriate technology as indicated by Tharakan (2015: 53). Appropriate technology (AT) is technology that encourage sustainability and builds skills and capacity within a community by using locally sourced construction materials (Tharakan 2015). It empowers people to take control of their human, natural, and technological resources to respond positively to their environment and resource challenges (Tharakan 2015: 54). While the use of AT is associated with small scale projects such as the construction of indigenous dwellings, the concept can still be adapted to large scale projects through engaging the community in processes such as project conception, development,

and implementation which results in the empowering of the said community (Tharakan 2015). In the context of this research, rural communities utilise AT, aided by indigenous knowledge in the construction of indigenous dwellings.

The introduction of the formal classroom has replaced teaching through demonstration and experience (UNESCO 2017). The classroom replaced parents and elders as holders of knowledge, with teachers favouring the use of national languages over vernacular languages as mediums of teaching. In indigenous southern African societies, heritage conservation was the duty of Chiefs, custodians, and elders who looked after important sites such as shrines (Ndoro *et al.* 2018). This introduction of the classroom as a teaching platform has encouraged what Du Plessis (2017: 1) terms westernised science culture. Western science culture gave little to no consideration to the existing indigenous epistemologies of local communities based on indigenous knowledge systems. The conservation and protection of indigenous built environment thus needs to be re-examined in terms of what African IK has to offer. Sillitoe (1998: 224) urges that it is important to introduce locally informed perspectives into development and educational systems as a means of promoting IK. Dei *et al.* (2000) and Setumu (2015) place emphasis on the relevance of IK by arguing that indigenous societies could not read and/or write as we understand it today, but through indigenous knowledge, they could comprehend astrological phenomena, seasons, weather, count their livestock, plan their buildings, and even inscribe on rocks. Despite the availability of this information, the indigenous built environment discourse has not fully been amended to fully incorporate indigenous knowledges.

In South Africa, the Department of Public Works through its Green Building Committee established IKS Guidelines in 2017. These guidelines stipulate how best to incorporate IK of built heritage into construction projects as a way of ensuring the conservation of indigenous built heritage values. The IKS Guidelines seek to encourage the incorporation of indigenous practices that are either forgotten or dismissed in the modern built environment (South Africa 2017). The guidelines are premised on the argument that contemporary designs ignore indigenous building practices and thus modern buildings based on global standards are devoid of indigenous cultural meanings of the environments they are constructed within (South Africa 2017: 10). The

guidelines also state that the discipline of architecture acts as a perfect platform for this endeavour as it is constantly responding to needs, trends, and styles in the built environment.

The IKS Guidelines also recognise that the retention of indigenous practices and/or structures is the retention of identity. Indigenous African identity is being diminished through Eurocentric modern approaches to design and construction (South Africa 2017: 11). The importance of merging Eurocentric designs with indigenous ones is also stipulated by Du Plessis (2005: 281) that previous designs have been based on western concepts only. Now the question is, to what extent can IK influence contemporary architectural practice, not only in its functional form but also through indigenous values inherent in designs and construction of built heritage (Du Plessis 2005).

Motshekga (2018) builds on the importance of IK by discussing the concept of Karaism. The origins of Karaism have been greatly debated (Nemoy 1950; Lasker 1992; Akheizner 2012). As explained by Motshekga (2018), the concept of Karaism revolves around spirituality and in the African context, is based on ancestors. Along with the outlined definitions of IK highlighted earlier in this section, I posit that Motshekga's (2008) concepts of Karaism and African worldview, both based on spirituality and ancestors, can be applied, just as with IK, in defining indigenous values of built heritage. This is because these concepts share the same principles that spirituality and ancestors shape and inform a community's outlook on life (Boven & Morohashi 2002; Breidlid 2009; Motshekga 2008).

3.6 DECOLONISING INDIGENOUS BUILT ENVIRONMENTS

Decolonisation of the built heritage conservation field is evidenced by the increase in interest towards conservation approaches that are more inclusive of a wider range of stakeholder values, especially indigenous communities (Vellinga 2013). During colonial times, the objective within professions such as planning, and architecture was to protect and preserve the fabric of the built environment by maintaining its authenticity and integrity. Fabric, aesthetics, and economic values were the core values with which indigenous built environments were assessed on and the broader social practices of host communities were disregarded (Vellinga 2013). The term fabric is defined by the Burra Charter (2013) as all the physical material of a place, in this context, built

heritage. Built heritage conservation based solely on values such as fabric/ aesthetics is no longer adequate, especially when faced with phenomenon such as globalisation, within the built environment where issues such as place identity and place attachment play a role in identity creation. Adebayo (2001) argues that the result has been that built heritage conservation discourse has had to recognise that built heritage values go beyond just the fabric of a building to also include intangible values.

The concept of decoloniality in this research is based on the inclusion of previously disregarded indigenous knowledge that informed indigenous values of indigenous dwellings. The use of western science in the African context over indigenous knowledge has had shortcomings as western science has not completely been successful in fulfilling human developmental needs while protecting nature and the ecosystem (Breidlid 2009; Kneiter 2014). These shortcomings have led to a slow increase in the recognition of African IKS and the contributions it can make to the knowledge and scientific understanding of indigenous built environments. It is increasingly recognised that developmental initiatives that pay attention to the opinions of local communities are more likely to be sustainable as they are relevant to the needs of those communities (Breidlid 2009). Rapoport (2005) argues that these western-based theories used in the conservation of African indigenous built environment only focused on high-design traditions, ignoring the indigenous environment that these structures exist within. Vellinga (2013: 577) further emphasises the danger of focusing on high-designs only, especially in the African context by stating that a high-design structure may perform well in terms of western conservation standards but be culturally undesirable to the indigenous community it exists within for various reasons such as a reminder of an oppressive past. An example of such is the Voortrekker monument in South Africa where its significance has been topic of debate (Coombe 2000). A decolonised indigenous built environment conservation approach would, therefore, accommodate for the inclusion of local value systems, providing a more holistic understanding of valuing of these high designs (Rapoport 2005).

Much like colonisation, globalisation has also resulted in a shift in the way societies today view their traditions and cultural heritage. Globalisation has facilitated the acceleration of the flow of cultures across geographical, political, and cultural borders (Dei *et al.* 2000). This process has

left indigenous communities with a crisis of knowledge, resulting in fragmentation of values and beliefs, erosion of spirituality, and distortion in local, regional, and national ecosystems as well as economies (Wane 2005). Globalisation brought with it the concept of opposites where there are winners (developed countries) and losers (less developed countries), the rich, the poor, and cultural imperialism (Bhola 2002: 6). Indigenous societies today are reacting to this by increasing their desire for localisation, by searching for community and indigenous values, and by wishing to protect their culture and indigenous knowledge systems through decolonised approaches (Bhola 2002). A decolonised approach is one that recognises that indigenous people have a right to control their heritage (Hodder 2010). This is done despite most people still perceiving indigenous methods as old fashioned and stagnant and view modernity as representing liveliness and civilization (Salman 2018: 7).

Dei (2012) discusses the concept of decolonising the education system and introducing a system that is based on African perspectives. These perspectives account for African lived experiences rooted in African cultures, histories, and heritage. To achieve this Dei (2012: 112) proposes an "Anti-colonial framework." This framework is based on the theorisation of the colonial rule, relations, and the implications of power and imperial structures in Africa. These theories would be about transformation and not just about understanding complexities, disjuncture, and contradictions of social realities. The anti-colonial approach puts the African at the centre where learning takes place from the intelligence agency of an African (Dei 2012: 112). Being rooted in IK, AT can be used in decolonising the education system, especially in fields such as agriculture and the built environment where indigenous methods of irrigation and crop production or construction of buildings can be implemented (Tharakan 2015).

The inclusion of socio-cultural values is important for a holistic indigenous built environment conservation approach. However, little is said about what these values are and how they can be retained in the contemporary built environment. It is about time for the theoretically recognised socio-cultural values that are argued to play a key role when assessing indigenous built environments to be practically included in assessment methodologies (Salman 2018: 10). Traditional societies coexisted with their environment(s) sustainably through a balanced lifestyle of growing their food, constructing their homes with locally sourced biodegradable materials,

and using their hands as labour. It follows that conservation strategies of indigenous environments should be aligned with these aspects (Salman 2018). It is thus imperative that previously employed western typologies of assessing indigenous built environments be refined to better fit the African context (Sarah-Ashley *et al.* 2015).

Asante (1980) discusses the concept of Afrocentricity in the protection of indigenous built environments. Afrocentricity is a philosophical system that aims to relocate Africans historically, economically, socially, politically, and philosophically (Asante 1980). The need to relocate Africa within history arises because Africans have lost their cultural footing as they know little about their classical heritage and what that heritage has contributed towards knowledge around the world. Afrocentricity is about dealing with Africans from an African point of view. To achieve this African view, an "African-centred" approach that is based on Africans looking at knowledge from their perspective is required (Chawane 2016: 80). By so saying, it by no means denies Eurocentric views of the world, but it proposes that these views not be imposed universally, especially in Africa as it becomes misunderstood when studied from outsider's perspectives (Chawane 2016: 83). Mazama (2001: 387) indicates that the main problem is when Africans unconsciously adopt the western worldview. To achieve true decoloniality, concepts of development, planning, political, and social organisation in the African context need to be closely re-examined.

It is also important to note that the idea of adopting concepts such as Afrocentricity, Karaism, and IKS is not about being anti-western concepts (Chawane 2016: 83). It is rather about the domestication of international solutions and the internalisation of local values to create local best practices informed by indigenous knowledge and socio-cultural values of indigenous societies in the valuing of indigenous built environments (Ndoro *et al.* 2018). The aim is to produce, not just conservation strategies, but an education system that puts Africans at the centre of learning and of understanding indigenous values of indigenous built environments.

Local best practices are legal instruments achieved through a fostered partnership between communities and heritage conservation professionals (Ndoro *et al.* 2018). They are based on the notion that carefully documented case histories can provide excellent guidelines for policymaking and project planning (Boven & Morohashi 2002:19). In addition, they are centred

around the localisation of international values by merging them with local indigenous values to create practices based on multiple worlds (Chawane 2016; Ndoro *et al.* 2018). Unlike local best practices, international best practices are based on values determined by western scholarly evaluation systems, then rolled out onto Africa and the rest of the world (Hodder 2010: 863; Ndoro *et al.* 2018). There is a need to move towards a system of value evaluation that is grounded on the social values of local communities (Hodder 2010). In line with these views, I agree that a holistic indigenous built environment protection strategy is one that is based on local best practices that are informed by both indigenous social values and international best practices.

3.7 INDIGENOUS BUILT ENVIRONMENT OF SOUTH AFRICA

3.7.1 The rondavel: Indigenous dwellings of South Africa

According to Frescura (2015c: 65), the arrivals of missionaries and colonialists in southern Africa brought change to the indigenous built environment through the introduction of brick-and-mortar and corrugated iron sheet roofing as construction materials. The use of mud-and-wattle as construction materials was deemed barbaric by missionaries. In addition, the people who lived in such dwellings were viewed as uncivilised (Frescura 2015c). Comaroff & Comaroff (1997) and Frescura (2015c) argue that this missionary's skewed perspective was anchored on the form and design of these indigenous dwellings that they found indigenous societies living in. The cone-cylinder or cone-on-drum indigenous dwelling that this research study focuses on, that is colloquially known as the rondavel in South Africa and a hut in other parts of the world of , was typically one room (Naude 2007). According to the missionaries, a home consisted of functionally divided and distinct spaces. Missionaries claimed that a house with no internal divisions and no rooms signified savagery and it was animalistic (Comaroff & Comaroff 1997). It was argued that a house that had rooms resembled the house of the Lord and therefore guaranteed its occupants entry into heaven (Comaroff & Comaroff 1997: 278). By misunderstanding the layout of indigenous dwellings, the missionaries failed not only to understand that religion was already being practised before their arrival but also to understand the value attached to these dwellings (Van Wyk & Harry 1998).

Depictions by early 20th century travellers into the South African interior show that indigenous societies lived in compounds consisting of cattle kraals, open living spaces and dwellings made

of mud-and-wattle with thatch roofs (Steyn 2006: 21). These compounds or homesteads formed an important aspect of the social arrangement of indigenous societies. Within the Northern Sotho communities, homesteads traditionally consisted of one or more indigenous dwellings arranged in a courtyard and enclosed by a wall. This wall was historically built using reeds but has evolved to use mud (Monnig 1967: 208). The Southern Sotho used the courtyard for various communal activities such as religious acts and eating (Van Wyk & Harry 1998: 107). The missionaries failed to understand the socio-cultural life of these societies by misunderstanding their architecture. Naude (2007: 220) indicates that to understand these indigenous mud-and-wattle dwellings, their social context needs to be understood as well. This is because the development of these structures was influenced by particular social frameworks and socio-economic processes that resulted in their form, shape, or type as illustrated in Figure 8.

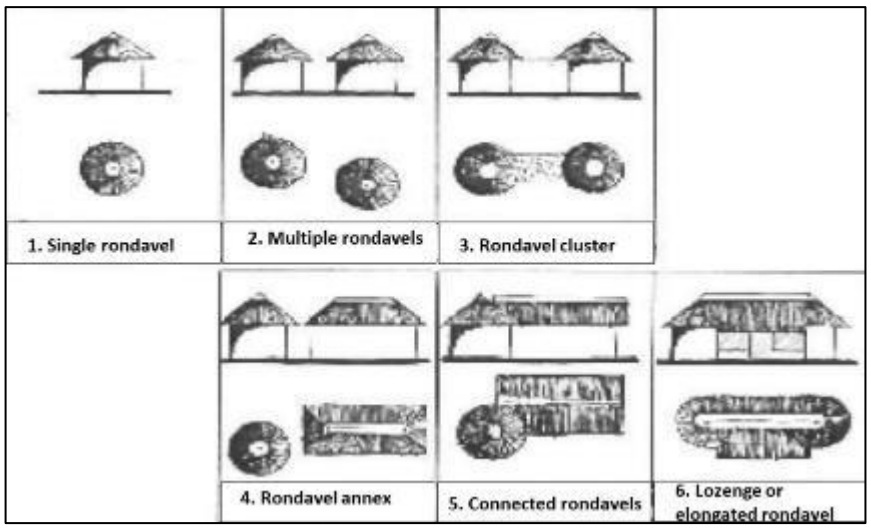

Figure 8: Showing 6 Rondavel typologies (Naude 2007: 220)

A bird's-eye view of these different forms is illustrated in Figure 8. From the top left-hand corner going in chronological order:

1. A single hut operating as a dwelling on a site.
2. Several rondavels operating as several units but each supporting the other in the setting.
3. A cluster of connected rondavels and operating as a single autonomous building.
4. A single rondavel erected separate from a rectangular building as support to a corner house.

5. A rondavel is connected to a corner house and becomes part of it.
6. A “lozenge-shaped” rondavel, which are two rondavels fused.

The exact origins of this circular shape of the indigenous dwelling are unknown. Naude (2007: 221) states that older settlements of southern Africa have always been circular as is evidenced by cattle kraals, lapas, and courtyards. Iron Age settlements in the south of the Zambezi indicate that settlements such as the Mabweni from AD 180 and Silver Lakes in Zimbabwe that date as far back as AD 270 also had circular layouts (Naude 2007). There are, however, a few assumptions on the origins of the word “rondavel” Naude (2007). In Afrikaans, it means a circular room or building that was used for storing milk. The second meaning is associated with structures that Jan van Riebeek erected that were called bastions or blockhouses (Naude 2007). These blockhouses were called *kijkuyt*, *kornkop,* or rondewatch which were structures for security guards or watchmen (Naude 2007: 217). In Portuguese, the word *rodavallo* means circular wall; *roda* meaning round or circular and *vallo* meaning wall (Naude 2007: 217). In the far east, the word *dewals* means small pyramid-shaped building and it is speculated that it could have made its way to South Africa with the Cape Malay builders and masons when they settled in the Cape (Naude 2007: 217).

These indigenous mud-and-wattle dwellings with thatched roofs are a symbol of indigenous identity for Africa, especially southern Africa (Van Vuuren 2007; Frescura 2015c). In South Africa thatch was predominantly used in the Swazi, Zulu, Xhosa, and Ndebele areas due to the wetter environmental conditions that supported an abundant supply of this grass while daub and wattle were more prevalent in drier hinterland regions of the Tswana, Northern Sotho, Venda and Tsonga communities (Van Vuuren 2007: 180). Villages and cities in other parts of Africa were also constructed out of similar materials that the environment provided and the indigenous built environment as we see it today was created.

Post-colonial discourse has since disqualified the perception that pre-colonial African societies were uncivilised. These societies demonstrated and displayed organisational skills in the way they planned their cities and villages (Frescura 2015c). The compound/ courtyard layout that Steyn (2006) refers to is what Huffman (2001) called the central-cattle-pattern. Indigenous African societies organised their communities in two main layouts; the circular plan and grid

plan, with the former as the most prevalent (Huffman 2001: 249). The circular layout was a display of political sophistication based on a hierarchical structure, gender, rituals, and social status Huffman (2001). I find it peculiar that despite the existence of these layouts, the colonial discourse has perpetuated the notion that indigenous African societies lacked political sophistication and organization to build cities before colonial contact. It is also unfortunate that the use of earth as a construction material was only linked to its abundant availability, and little was understood about the socio-cultural meanings attached to it.

Despite post-colonial literature providing evidence of pre-colonial civilization within African societies, mainstream discourse has not fully embraced indigenous knowledge in the context of indigenous built heritage (Opuluwa *et al.* 2012: 98). Whilst working on urban and rural heritage management projects in Lesotho, I realised that brick-and-mortar structures were preferred over mud-and-wattle as construction material. Indigenous built environments were categorised as old with no economic and/or aesthetic value. In addition, Oliver (2006) and Opuluwa *et al.* (2012) argue that this view is due to the inability to classify these indigenous built environments within scientific, architectural, construction, and design parameters. However, the sustainable and eco-friendly properties of indigenous construction materials are aiding in the recognition of indigenous built environments (Rapoport 1969; Opuluwa *et al.* 2012).

3.7.2 History of housing in South Africa

South Africa is no exception to colonial contact and its aftermath (Guelke 1976). Views that indigenous ways of life are ancient, simple, ‘pre-historic’, and or mythological are also prevalent in South Africa (Ichumbaki 2016: 51). These views have affected the creation of a socio-economically equal post-Apartheid South Africa as the process has been plagued with the struggle for control over land, political power, wealth, and the right to author the past (Van Schalkwyk & Smith 2004). For a long time, the history of the country and to a great extent, its image, was authored by government-funded ethnographers and historians; outsiders, who served the purpose of the government. Marginalised groups were not allowed to write their history, and in a few cases where this history existed, it was rather referred to as folklore (Van Schalkwyk & Smith 2004: 326). It is, therefore, safe to assume that any ‘new’ history, despite the sensitivity of the author, that would be based on accounts from these outsider sources will automatically be

biased as information is already tainted by the bias that exists within the information (Van Schalkwyk & Smith 2004: 332).

To understand the history of housing in South Africa, I believe it is important to appreciate the history of settlement and colonial contact within the country. The first formal colonial settlement in South Africa was at Table Bay (Cape town) by the Dutch East India Company led by Jan Van Riebeek in 1652 under instructions of the VOC to establish a fort, take over fertile lands and establish gardens and secure pastures for cattle (Pooley 2009). As illustrated with Figure 9, the Dutch of East India Company occupied South Africa from 1652- 1795 and again from 1803- 1806 while Great Britain occupied it from 1795- 1808 and again 1806- 1961 (Oliver & Oliver 2017). Apartheid began in 1946 under the rule of the independent Afrikaner National Party and ended in 1994 when South Africa became a democratic state.

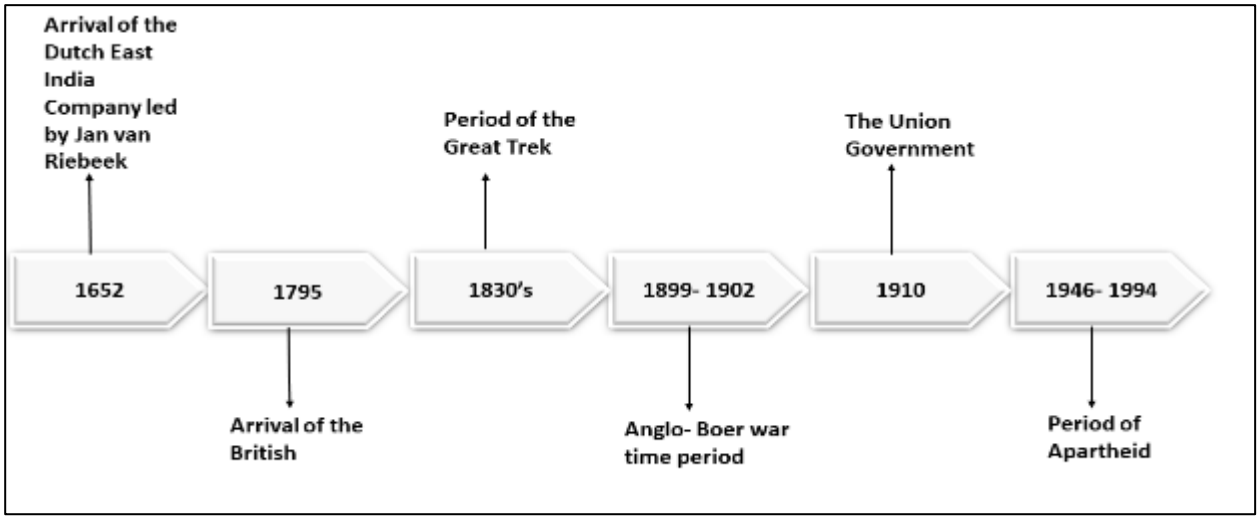

Figure 9: Illustration of chronological colonial settlement in South Africa.

The legacy of forceful removals of indigenes by the Apartheid government can be seen with the current spatial planning of South African cities, towns, and their surroundings (Du Plessis 2014). In trying to correct this, the democratic government implemented spatial planning policies, notably, the Integrated Development Planning (IDP) and Sustainable Development Framework (SDF) to encourage integration. Despite this, it is believed that South Africa is still fragmented along both racial lines and economic lines, with the poor, especially those in rural areas, continuing to be marginalised (Du Plessis 2014: 70). This colonial legacy of South Africa means

that a decolonised approach to heritage discourse and indeed the urban and regional planning discourse is required. As a multi-ethnic country, the incorporation of a multi-ethnic approach that would foster mutual respect for the historic contributions of various ethnic groups would be required (Haswel 1986: 45).

To this, Krige (2001: 9) proposes that a new generation of urban developers and managers has to be trained and the existing one supported in a way that will assist in the development of a truly integrated approach. This training can be achieved through the transformation of universities to produce a generation of architects, historians and planners geared with the right tools to ascertain sustainability and a more integrated future in South Africa (Krige 2001) and to avoid and correct past mistakes such as inefficient development strategies.

South African governments, both Apartheid, and post-Apartheid have a history of development strategies that included the provision of housing. The Apartheid government, having divided the country along racial lines in both rural and urban areas (Musvoto 2014: 158) attempted to provide housing for Black residents of Vlakfontein (known today as Mamelodi West) in 1947 (Steyn 2006: 24). Post-1994, the democratic government implemented a nation-wide Rural Development Program (RDP) that had the provision of housing as one of its key performance indicators (South Africa 1994). In 1947, the City Council of Pretoria (CCP) under Jan Smuts's leadership, bought land on the eastern side of Vlakfontein to establish a black township under the Native Consolidation Act 25 of 1945 and constructed rondavels that were later used as classrooms (Bakker & Matlou 2003). The layout and design of these rondavels was such that they reflected indigenous social organisations based on a hierarchical structure, mimicking indigenous sociological patterns. The assumption was that this would reduce uprisings amongst the Black residents of the town (Bakker & Matlou 2003: 17). Unfortunately, the beneficiaries deemed the township structures as patronising and demeaning; as such, they refused to occupy them (Bakker & Matlou 2003: 18). Subsequently, an alternative township was established based on rectangular-walled brick-and-mortar housing in 1951. It is my belief that, had appropriate and adequate community consultations taken place, both governments could have had better success rates at their housing schemes as there would have been a better understanding of the needs of each society.

3.7.3 Housing in South Africa today

In the new dispensation, the democratic government of South Africa introduced the Reconstruction and Development Program (hereafter RDP) through The White Paper on Reconstruction and Development (1994). This document stipulates that RDP is a framework for integrated and coherent socio-economic progress that seeks to mobilise all people and the country's resources towards the eradication of the results of Apartheid (South Africa 1994). It outlines six principles that were aimed at achieving its integrated and socio-economic growth (Sandre 2017). Integrated and socio-economic growth was to be achieved by addressing the negative social, political and economic legacy of the Apartheid government through poverty alleviation of previously disadvantaged and marginalised groups (Bidandi 2007; Musvoto 2014; Sandre 2017). Homes provided through the RDP have colloquially been termed RDPs.

Reference of both the VIakfontein and RDP housing projects bare relevance to this study as the implementation of both initiatives was problematic due to a lack of context appreciation (Adelzadehi & Padajachee 1994; Fine 1994; Fuller 2014). On an institutional level, Adelzadehi & Padajachee (1994) and Fine (1994) criticised this program for attempting to be a stand-alone contributor to poverty eradication without considering supporting elements such as government departments and funding institutions, leading to an approach that lacked focus and direction on implementation strategy. On the ground, the rolling out of the RDP housing program as a one-size-fits-all approach with lack of understanding of each communities socio-cultural dynamics, for both urban and rural areas, resulted in a negative reaction from host communities (Fuller 2014).

These two housing projects took place during different political climates in South Africa; the Mamelodi rondavels symbolised the Apartheid government (Bakker & Matlou 2003: 2) while the RDP housing was an initiative of the democratic government aimed at eradicating the effects of the Apartheid government. The CCP Mamelodi rondavels were meant to be appealing to the black community, yet it seems they preferred brick-and-mortar housing. Brick-and-mortar housing is provided under RDP, yet it is still not accepted in some parts of the country due to reasons such as poor location of the houses and lack of stakeholder involvement (Manomano *et al* 2016). With this, I am inclined to agree with the views of Bakker & Matlou (2003) and Fuller

(2014) on the reasons why both housing projects were not well received by communities. I would also add that the lack of success of these housing policies was due to a lack of context appreciation. The CCP housing failed because it was provided by an oppressive government and the aim was to perpetuate the oppressive system (Bakker & Matlou 2003). RDP housing was provided by a post-Apartheid government, but due to a lack of thorough community consultation and needs assessment, these homes were not received as expected (Bakker & Matlou 2003), especially in rural areas. In rural areas, community consultation would have revealed that a home is made up of more than just its location or the quality of construction material. These consultations would have revealed that rural communities ascribe significance to their homes, the process of construction, and the type materials used.

Steyn (2005) argues that house provision strategies such as that of the RDP that are based on linear settlement patterns are outdated as current settlement patterns are focused on compact living. The linear settlement is not just outdated in the standards of western concepts of compact living, but also indigenous settlement standards. The western concept of compact living is modelled around high-rise buildings that can fit numerous people in a small space. The courtyard pattern is an indigenous compact settlement arrangement as it has a cluster of indigenous dwellings in a small space, offers privacy, and protected outdoor living (Steyn 2005: 111). To achieve Afrocentricity within architectural, indigenous African settlement and land use patterns need to be reconsidered. Steyn (2005: 123) terms this concept African urbanism.

3.8 CONCEPTUAL FRAMEWORK: HERITAGISATION

Heritagisation is a process of making heritage through ascribing value(s) to things/places. I draw on this framework to interrogate the ascription of indigenous values on built heritage in traditional and modern contexts. In academic discourse, the term ‘heritagisation’ was used by Walsh (1992: 4) to refer to “the reduction of real places to tourist space, constructed by the selective quotation of images of many different pasts which more often than not contribute to the destruction of the actual place.” It may also be a continuous process by which objects and places are transformed from functional things into cultural heritage (Sjoholm 2016). In this regard, heritagisation is a process of heritage-making through (re)attachment of values and significance to things. Milsson (2018: 37) defines heritagisation as a concept or a process of recycling old

ideas and making them relevant so that they can be used to repossess the past in a way that supports the legacy of the present communities.

According to Varutti (2015: 1040), heritage is produced through the interaction of social actors. Drawing on artisans in Taiwan who make heritage through ascribing values and authenticity, Varutti (2015) argues that it is important to understand that value, like heritage, is not inherent; it is a judgment of a thing in the process of converting it from ordinary to heritage (Varutti 2015). The Taiwan artisans rejected western values and incorporated their indigenous spiritual and historical values into objects they crafted. They believe that these objects keep their traditions alive and are a celebration and revival of indigenous material and methods of production embellished with cultural and ritual meanings (Varutti 2015: 1041). In this context, heritagisation is a way to transmit knowledge to the younger generation through heritage making and skill preservation (Varutti 2015: 1054). This passing of indigenous knowledge participation and skills preservation can be compared to appropriate technology as proposed by Tharakan (2015). Communities like the Taiwan artisans perceive the inability to make or know about a traditional artefact, its indigenous name, or a story about it, as a loss of one's identity. In the context of heritagisation, visual access communicates value, enables interaction, sharing of memories, anecdotes, stories, and myths that provide not just a cultural but a historical contextualisation of objects (Varutti 2015: 1043).

Merillas & Gomez-Redondo (2016) define heritagisation as a constructive process and that nothing is heritage until the process heritagisation occurs. For Merillas & Gomez-Redondo, the process of heritagisation can occur with an individual or within a group. With an individual, the process involves the individual acknowledging that they have a role to play in how they use their environment to self-identify, resulting in what Heinich (2011: 5) termed the singularity realm. The group-based or communal based process is centred around a community's contextual associations with the environment (Merillas & Gomez-Redondo 2016) resulting in what Heinich (2011: 5) termed the community realm.

I consider that the ascription of values is what turns ordinary objects into heritage, and this is the case with indigenous dwellings. The process of heritagisation can occur based on individual or collective value(s) influenced by environmental, psychological, social, or cultural setting

(Rapoport 1980). To understand the relevance of heritagisation Giaccardi & Palen (2008: 282) argue that it is important to acknowledge and understand that humans are conditioned to want to preserve and conserve what they find to be valuable. No one conserves what they do not value (Sandis 2014: 15). This conservation is done not just as an effort to understand the past but also as a way of explaining and capturing lived experiences and to leave a legacy for future generations (Giaccardi & Palen 2008). This same principle can be applied to indigenous dwellings were their value in society (tangible or intangible), needs to be understood in order of to know what aspects of it to conserve (Sandis 2014).

Palsson (2012) discusses the importance of the passage of time or time-depth in terms of value ascription by considering whether the period (time) of the existence of a resource factors in on the process of heritagisation or not? To understand this Palsson (2012: 562) looks at countries such as South Africa that have undergone a significant political transformation. During the Apartheid government, bias was towards the conservation of heritage that represented the oppressive colonial and Apartheid governments using aesthetics and age to determine value (Palsson 2012). After 1994, the democratic government through the National Monuments Council redressed the bias that was present in the heritage list of the country, leading to an emergence of a new nature of heritage and heritage sites that complimented the new South Africa (Palsson 2012: 562). Following Palsson's (2012) argument of time and the concept of heritagisation, I posit that indigenous communities are consequently at liberty to dictate what and which indigenous value(s) associated with their indigenous dwellings they ascribe to brick-and-mortar structures in the effort to retain said values.

3.9 SUMMARY

The study of heritage has evolved over the years with it moving from being based on what professionals deem as heritage to including views and values of lay communities. Indigenous dwellings and the indigenous environment they exist in at large, influences how people self-identify. If a sustainable approach to heritage conservation is to be achieved, then the values of all those who identify with said heritage resource need to be considered. These values could be aesthetic, architectural, historical, scientific, or spiritual. Unlike Western societies that placed value on architectural and environmental values of indigenous built environments, African

societies lean towards spiritual/ ancestral values which inform their indigenous knowledge and the values they ascribe to their indigenous dwellings. This difference in values can be witnessed with previously colonised countries such as South Africa where the definition of what constitutes heritage value has had to be broadened to include values of previously marginalised groups.

The importance of IKS in sustainability and decolonisation of the built heritage discourse were also outlined, with relevance being placed on the creation of meanings of heritage that are better suited and reflect local communities. The inclusion of communities in heritage creation through processes such as heritagisation could have more sustainable results in the heritage conservation practice.

4. CHAPTER 4: METHODOLOGY

4.1 INTRODUCTION

This research was based on case study approach that used qualitative and quantitative methods to study indigenous values of built heritage in the villages of Niewe Jerusalem and Thabanantlhana in the Makgabeng Plateau. Although the Plateau is made up of several villages, these two villages were randomly selected as they displayed relevant research material for this project. The built environment of these two villages displays a mix of indigenous dwellings constructed out of mud, wattle and thatch and houses constructed using brick-and-mortar.

Primary data was obtained through fieldwork that included photography of the physical artefacts (dwellings), sampled interviews with the local community and discussions with key stakeholders as the drivers of change within the built environment and built heritage conservation. The purpose of interviewing the communities in both villages was to understand the values they ascribe to the different dwellings found in the villages. Key respondents that were chosen to represent the fields of history, heritage conservation and green/sustainable architecture were engaged to get a broader understanding of indigenous built heritage. A literature review of relevant literary studies was also conducted.

In the identified villages, participants were interviewed from purposively selected households that had a combination of mud-and-wattle and brick-and-mortar structures. The Makgabeng Plateaus is made up of an estimated 130 households, with Thabanantlhana having an estimated 13 households (Statistics South Africa 2011) Although the sample size of 15 households from both Thabanantlhana and Niewe Jerusalem was also limited by time and resources, data collected was adequate to address the research question and objectives. Due to village size differences, most participants came from Niewe Jerusalem as it had more households than Thabanantlhana. A spatial analysis of the sampled households was also conducted using Geographic Information System (GIS) program.

This data collection process sought to address the question:

Drawing from the rural community of the Makgabeng Plateau in Limpopo as a case study, can the retention of indigenous values of built heritage into brick-and-mortar structures inform a value-based built heritage protection framework?

Three objectives sought to address this question, namely:

- Identify which indigenous values are taken into consideration during the construction of indigenous dwellings within the Makgabeng.
- Establish how these indigenous values can or have been incorporated into brick-and-mortar dwellings within the Makgabeng area to encourage their retention, and
- Propose a value-based framework as an alternative to the current protection strategies of indigenous built environments.

4.2 RESEARCH METHODS

The case study approach employed in this study enabled me to design a study protocol; conduct the study using primary sources of evidence; analyse the evidence through examining, categorizing, and graphic presentation; and draw evidence-based conclusions and implications (Tellis 1997). Although case studies are often conducted within a practise-oriented research approach, in this study, I adopted a theory-oriented approach based on the development of a set of propositions about the object of study (Dul & Hak 2008). Whilst a theory-oriented approach is divided into theory-testing and theory-building, this project focused on theory-building, given that my core objective was to formulate propositions based on the evidence drawn from the collected data. Theory-building was also better suited as it addressed the third research objective. A theory-building approach is also an exploratory tool that enabled me to gain insight and familiarise myself with the case study. It enabled me to gain insight and familiarise myself with Northern Sotho perspectives on built heritage thus address the first and second objectives of this research.

Homesteads with the desired attributes were identified and purposely selected by walking through the villages. Dul & Hak (2008) stated that exploratory research approaches are best used to explore situations to understand how people relate within a case study environment and what meaning(s) they ascribe to their actions. According to Labaree (2009), exploratory research

generates new ideas and assumptions and gives direction for future research and techniques, making it suitable to address the aims and objectives of this research.

The interviews I conducted allowed for an in-depth understanding of the Northern Sotho built heritage values derived from members of the villages of Thabanantlhana and Niewe Jerusalem. I analysed, coded, and categorised the collected data into themes that were based on emerging built heritage values. Drawing on the collected data and themes, I identified key findings and discussed their meanings and implications for this study. This data analysis enabled me to identify nuances in the data cognisant of subjectivity in the responses from the community members in meaning-making and ascription of values (Baxter & Jack 2008: 544).

4.2.1 Fieldwork

Ethics clearance

To ensure good practise and conduct, honesty, transparency, and fairness throughout the research process, I obtained a non-medical ethics clearance from the University of the Witwatersrand so that I could commence with my interviews. An ethics clearance was issued under protocol number H19/07/39 with an ethics clearance certificate.

Fieldwork was conducted between the 2nd and 7th of September 2019 in the Makgabeng where I interviewed members from 15 households using an interview schedule attached in Appendix 5. Participants indicated that they would like to remain anonymous. I have, therefore, ensured participant anonymity by using initials of the participants instead of their full names. Interviews were conducted in Northern Sotho. I am a Southern Sotho-speaker, and despite the dialectical connections between these two languages, I was aware of the subtle differences. I sought assistance from Mr Filix Mosebedi, a Northern Sotho-speaking resident of Niewe Jerusalem to help translate and transcribe the interviews. Filix's participation prevented the possibilities of meanings of words being lost in translation and or being misinterpreted. Although I can understand Northern Sotho, I would not have been able to capture the nuances of the language without the assistance of a translator. Mr Filix was subject to a confidentiality agreement to further ensure that participants remain anonymous.

Unfortunately, after fieldwork, my field equipment: laptop, voice recorder, camera, and data were stolen from my residential room on campus. Although this traumatic experience set me back, I had backed-up photographs elsewhere and the interviews were transcribed/annotated in my notebook. This back-up enabled me to recover and proceed with research.

Participants

Participants were drawn from fifteen homesteads: 5 from Thabanantlhana and 10 from Niewe Jerusalem villages. Initially, I had envisioned an equal proportion of homesteads and a balanced ratio of male to female participants. However, only two males and thirteen females between the ages of 53 to 76 years old were interviewed due to *inter alia*, the demographics of the villages. In households where both males and females were available, the males preferred the females to respond to the interview, stating that females were more conversant with the construction of indigenous dwellings. The intended age of participants was from 18 years and above as this is the national legal age where parental consent would not pose ethical issues, but it emerged that majority of the youth in both villages had moved to urban areas or were not at home and therefore could not participate in the project. The interview age sample selection was intended to obtain views on built heritage from the youth and the elderly members of the villages for a more holistic perspective of the research topic. Variance in village size and availability of the required sample resulted in most participants being drawn from Niewe Jerusalem (Figure 10).

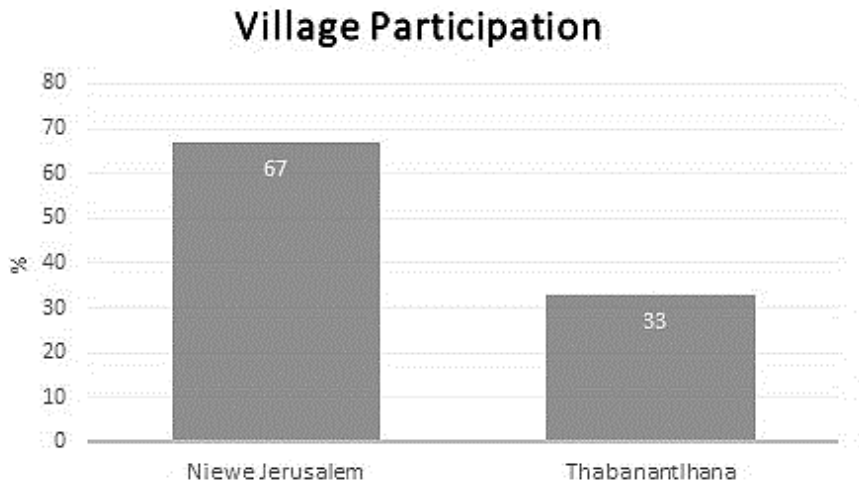

Figure 10: The ratio of participants from each village

4.2.2 Interviews

Before each interview, I introduced myself and the project using a project information sheet (see Appendix 1) and requested permission to conduct and record the interview as well as take photographs (see Appendix 2 & 3 respectively). Once consent was granted, the interviews and other recordings commenced. The translator completed a non-disclosure agreement attached in Appendix 6. Participants' responses to the values of built heritage differed. A thematic analysis of these responses is presented in chapter 5.

Although the interviews were free flowing, a semi-structured interview schedule guided the process. This was to ensure that I solicit information on the indigenous values of heritage of the selected villages and engage with any associated values of existing structures within interviewed homesteads. I was also able to probe into responses that had the potential to yield relevant data previously not anticipated. In addition, a digital audio tape recorder was used during the interview process. Using the recorder enabled and allowed the participants to relax and freely engage with me thus enabling a conducive environment for the interview process. I conducted the interviews on a one-on-one basis with one person being interviewed per homestead. The interviews were also conducted at the participant’s homesteads.

4.2.3 Photography

Using a Canon EOS 800D DSLR digital high-resolution camera, I photographed the external structures, parts of the interior of rondavels, as well as floor and wall designs. These photographs enabled the interrogation of the physical artefacts and provided a visual record of the built heritage landscape. All photographs and written information collected during the interview process are archived at the Makgabeng Community Heritage Archive in Senwabarwana and backed-up at the division of Archaeology, University of the Witwatersrand.

4.3 DATA PROCESSING

Thematic analysis is often used in data management to enable identification of recurring subjects during qualitative data collection. Themes also help identify relationships and textual patterns (Fereday & Muir-Cochrane 2006) and enable the organisation of repeated ideas to effectively respond to research questions (Aronson 1994).

Codes (Table 3) were created based on the 3 values of conservation identified by Zwarteveen (n.d) as; cultural history, economic feasibility, and social relevance, with the focus being on the value-based approach to evaluating them.

Table 3: Codes and aspects grouped under them.

CODE	ASPECT
Code 1	Cultural History (indigenous dwellings)
Code 2	Economic feasibility
Code 3	Social relevance (indigenous values)

Under these codes, 8 recurring subjects from participant responses were identified and in no specific order, they were: house type preference; gender roles in dwelling construction; construction material; resource availability; government-provided housing (RDP); decoration designs; Ancestral significance; ancestral plant and the kitchen *morale*. For clarity of presentation and discussion, I grouped these subjects into two broad themes/ values used to analyse the indigenous built environment: architectural and spiritual values (Table 4).

Table 4: Themes and associated subjects.

THEMES	
Architectural value	**Spiritual value**
House preference (Indigenous/ brick-and-mortar)	Decoration designs
Gender roles in the construction	Ancestral significance
Construction material	Ancestral plant
Resource availability	Kitchen *(Morale)*

The relationship between the subjects is graphically illustrated in Figure 11 &Figure 21. Responses are arranged under headings based on the themes of architecture and spiritual values. Under these headings, there are sub-headings based on the identified values of conservation: Cultural history, social value, and economic feasibility. The subjects under each identified theme were critically discussed, based on the conservation value, through presenting and analysing responses from participants, key experts, and literature.

4.4 SUMMARY

A qualitative case study research approach was conducted from the 2nd to the 7th of September 2019 in the Northern Sotho villages of Thabanantlhana and Niewe Jerusalem in the Makgabeng Plateau where 15 members from 15 purposively selected households were individually interviewed. Despite initial plans, participants were mostly females. Both male and female participants were between the ages of 53- 76. Data was collected through fieldwork where semi-structured interviews, with the assistance of a translator, were conducted and photographs were taken. Data were processed using a thematic approach where interviews were transcribed, coded, and grouped under two themes, with each theme having subjects under it.

The research aimed to identify indigenous values that are taken into consideration during the construction of built heritage; establish how these values (tangible or intangible) can or have been incorporated into contemporary architecture to encourage their retention, and to propose a values-based indigenous built heritage conservation framework.

5. CHAPTER 5: DATA PRESENTATION AND ANALYSIS

5.1 INTRODUCTION

This chapter presents data collected from interviews with participants from the villages of Niewe Jerusalem and Thabanantlhana and interviews with key experts. The data collection process was informed by available and existing literature on indigenous values of built heritage and the conservation of indigenous dwellings. The chapter is divided into two. The first section presents participant responses arranged under architecture and spiritual value themes. Subjects under each identified theme are critically discussed under sub-headings based on the identified values of conservation through presenting and analysing responses from participants, key experts, and literature. The second section outlines the key findings and how they respond to the research objectives and the research question.

Although data has been presented thematically, I note that there is an interrelationship between subjects under different themes. For example, ancestral value of indigenous dwellings is a subject under both architectural and spiritual values themes. In addition, Adebayo (2001) defines architectural value as a value associated with the fabric and aesthetic of the built environment, but in this context, aesthetics (decorations) is categorised under spiritual value. There is also an interrelationship between subjects under the same theme, that is, in the end, they all influence the choice and retention of values attached to indigenous dwellings (Figure 11 & Figure 21). It is important, therefore, that themes and the subjects associated with them not be viewed as definite categories, but rather as fluid and free-flowing, just as with the process of heritage-making (Khirfan 2010; Sjoholm 2016).

5.2 THEME 1: ARCHITECTURAL VALUES

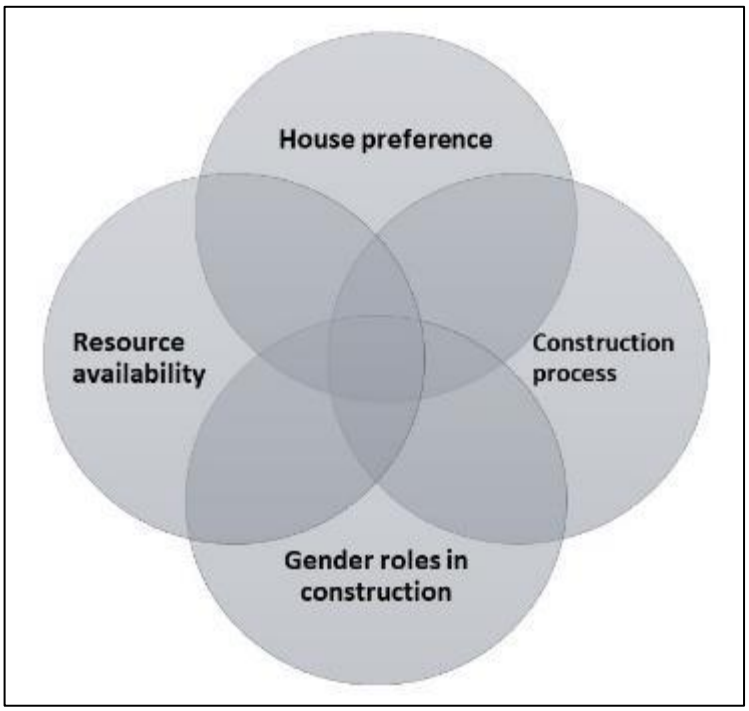

Figure 11: Illustration of the interrelated nature of subjects under architectural value.

The community of the Makgabeng indicated that the availability of construction resources, labour division based on gender during indigenous dwelling construction, construction processes, materials used, and house preference as some of the factors that influence the continued production of indigenous dwellings. These subjects influence and affect each other. The construction of indigenous dwellings is a communal/ familial activity where each member of the family has a role to play (Larsson & Larsson 1984). Women, who are usually tasked with wall construction and plastering do not participate in the construction of thatching the roof as that is a task for men. Participants noted this as one of the factors that have influenced them to opt for a brick-and-mortar house.

Thatching grass as a resource was also indicated to influence house preference. Thatching grass was collected at least 3km from Thabanantlhana, which is the village closest to the Masebe gorge. With the average age of residents in Makgabeng being 65 years (Statistics South Africa 2011), this laborious task of thatch-grass collection had become a daunting task. Brick-and-

mortar are a less labour-intensive resource as the labour used in the construction of dwellings using them is usually outsourced. Despite this, participants still showed a preference for indigenous dwellings over brick-and-mortar dwellings (Figure 13). The reason stated for this preference was cultural and spiritual affiliation.

5.2.1 Cultural history (indigenous dwelling)

House preference

House preference has been studied from an economic and a socio-cultural view (Coolen 2008: 3). This preference has been based on intention and choice. During contact, missionaries misunderstood the choice of indigenous dwellings made intentionally by indigenous society. These dwellings were typically cone-on-cylinder or cone-on-drum (Naude 2007). According to Dr M.M (pers. comms. 2020), an expert in African spirituality, the origins of this circular shape are unclear and difficult to trace, but they can be linked with African spirituality as illustrated by Figure 12 below.

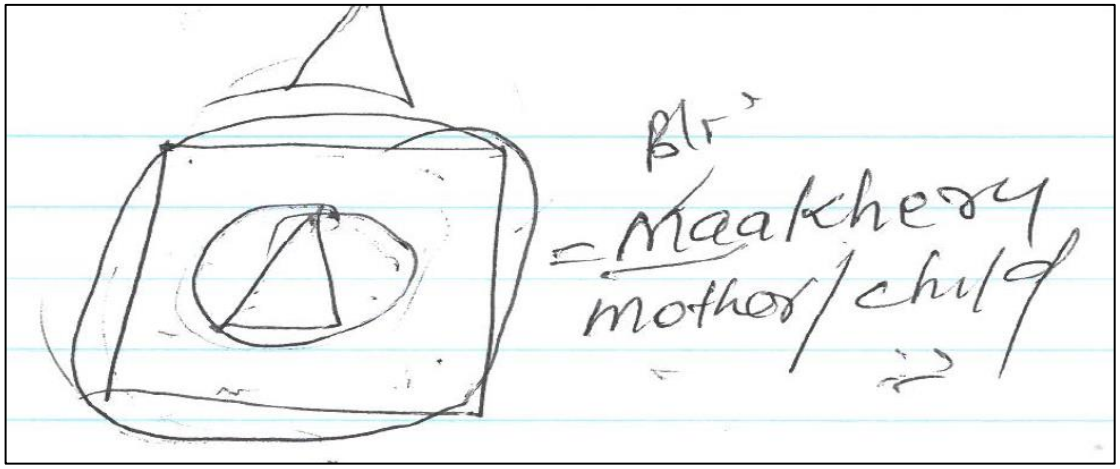

Figure 12: A sketch of the postulation of the spiritual origins of a rondavel. (Source: Dr M.M. pers. comms. 2020)

The outer circle is said to represent an enclosure (indigenous dwelling) while the inner circle with a triangle represents mother and child, a symbol of fertility and life. This relationship exists and belongs within the outer circle, a dwelling. Mokorosi (2017: 109) supports this premise by referring to the Southern Sotho beehive-shaped indigenous dwelling with a spout-like entrance

called *mohlongoa-fatse,* that is modelled along the analogy of life and fertility. Walton (1948: 139) defines a *Mohlongoa-fatse* as a house stuck in the ground.

Participants also highlighted that the origins of the circular shape were unclear to them. Despite this, 57% indicated a preference for this indigenous dwelling constructed with mud-and-wattle with thatch-grass roofing over the 14% that preferred dwelling constructed with brick-and-mortar with iron-sheet roofing (Figure 13). An indifference was indicated by 29% of participants. This preference for the indigenous dwelling (Figure 14) was because participants considered them as heritage and therefore something their children should not forget as indicated by Ms T: *"I also love it because it is our culture and we do not want our children to forget them"*.

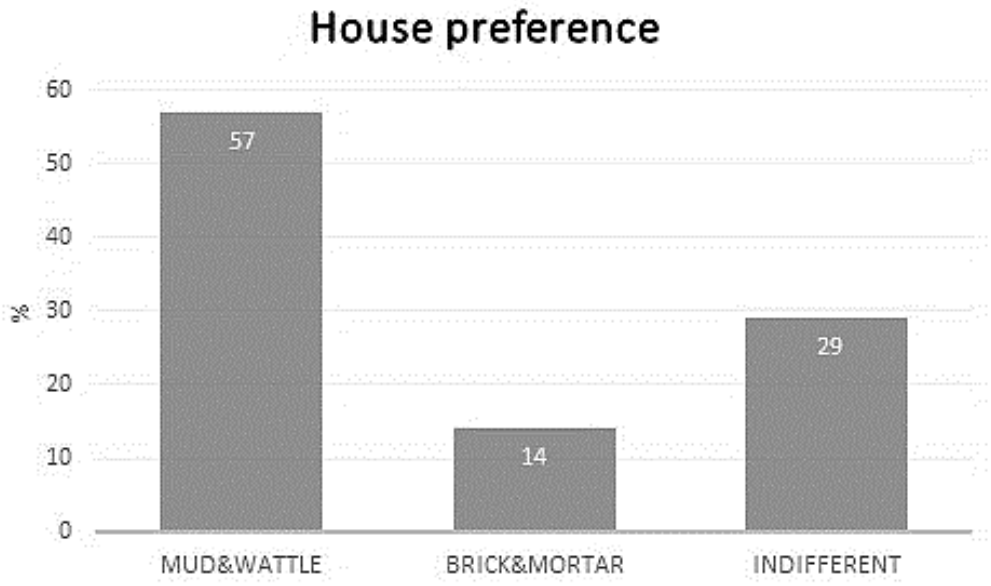

Figure 13: House preferences indicated by participants from both Thabanantlhana and Niewe Jerusalem

The consideration of indigenous dwellings as culture means that participants have attached value to them. According to the definition of heritagisation provided by Sjoholm (2016) outlined in section 3.8 Conceptual Framework: Heritagisation), the attachment of cultural value and significance is how heritage is made. Ms T also indicated that they do not want their children to forget these indigenous dwellings, implying that they want to pass the knowledge about these dwellings to their children. According to Varutti (2015), this is also a process of heritage-

making, as heritage is made through the transmission of knowledge to a younger generation through skills preservation. Therefore, it can be safely assumed that indigenous dwellings are built heritage to those who attach value to them.

The attachment of value to a structure (house) turns it into a home (Coolen & Meesters 2012). Therefore, it is evident that the Makgabeng community not only views these indigenous dwellings as their homes, but also as their heritage because of the values they attach to them. As a home, the community can use these dwellings to self-identity (Giannakopoulou & Kaliampakos 2016). It can, therefore, be understood why Ms T indicated that they do not want their children to forget these indigenous dwellings as they are a part of their built heritage.

Figure 14: Examples of mud-and-wattle grass-thatch indigenous dwellings (rondavels) around interviewed villages

I, therefore, argue that, as heritage, the protection of these indigenous dwellings is of importance. Previous protection strategies of these dwellings have mainly focused on their sustainability regarding the thermal capacity of materials used in their construction. The concept of sustainability of indigenous dwellings was explained by an expert in the field of green architecture Mr T.M. He indicated that sustainability of indigenous dwellings depends on the value(s) ascribed to it by those who use it (Mr T.M pers. comm. 2020). Mr T.M noted that values of indigenous dwellings have had an influence on contemporary architecture as is visible with concepts such as open plan living:

> *"People of old times lived outside where they engaged with each other and their environments. The idea of open-plan living is an African way of living. Even rondavels were not partitioned, creating that openness"* (Mr T.M pers. comm. 2020).

The idea of open space living was indicated by Monnig (1967) and Steyn (2005) with the courtyard living arrangement. The courtyard set-up of open yet protected outdoor living can be compared with the open-plan arrangement that Mr T.M indicated. The change in interpretation on 'open-space' from times of missionary contact to today is worth noting. The lack of partitioning that rendered indigenous dwellings as uncivilised to the missionaries (Comaroff & Comaroff 1997) is possibly the inspiration behind open plan living in architecture today.

Notwithstanding such developments in the field of architecture, Mr T.M indicated that one of the hindrances to the conservation of indigenous dwellings is the way that they are perceived by them as practitioners and in the academic field. Academically, architecture students are mostly exposed to European ideologies and theories with not much being taught about African architecture. As practitioners, Mr T.M stated that the conservation of indigenous architecture is influenced by South African construction rules and regulations. As much as these regulations do not specifically stipulate or restrict the use of indigenous construction material, they have resulted in perceptions among the public that indigenous dwellings are inferior to brick-and-mortar structures. Mr T. M (pers. comm. 2020) also suggested that the public should be encouraged to adopt the principle of buildings based on functionality rather than trends.

An expert in sustainable architecture in academia, Dr S.M indicated that the sustainability of indigenous dwellings based on indigenous values is still in its infancy (Dr S.M pers. comm. 2020). This is due to the lack of a preceding model that is anchored on the values of indigenous societies and indigenous knowledge to challenge the current Eurocentric academic models. However, academia could contribute to a change in the narrative through research and experiments (Dr S.M pers. comm. 2020). According to Dr S.M, research projects such as ones that incorporate indigenous architecture with concepts of indigenous knowledge such as storytelling can provide a platform for imparting indigenous values of built heritage. Storytelling, as an indigenous form of education, can be a sustainable approach of influencing appreciation of not just indigenous dwellings, but indigenous ways of life (Du Plessis 2005).

> *"People like to hear stories. Stories are how you get the narrative going, how you catch people's attention and how we can re-orientate people's relationships about indigenous ways of life"* (Dr S.M pers. comm. 2020).

Ndoro *et al.* (2018) and Dr S.M (pers. comm. 2020) agree that storytelling is more effective if it is done by an esteemed member of the community. This could be an elderly person, a Chief, or a traditional healer, or a person considered to be a custodian of culture and tradition. This is because the onus of guiding and influencing continuity, change/ alteration, or discarding of tradition rests with these categories of people (Dr S.M pers. comm. 2020).

On the matter of legislation, Mr J.M, a government official, indicated that the South African government has plans to incorporate values of indigenous dwellings into new buildings and existing government buildings through the implementation of an IKS Guidelines document. There are some existing government buildings in major cities and towns that reflect a colonial past. Through the implementation of the IKS Guidelines, the South African government plans to embark on refurbishing interiors of such colonial buildings to incorporate indigenous architectural values as a measure of retaining these values. It is with new buildings that the designs and exterior will reflect indigenous built heritage values.

The IKS Guidelines is a document that provides a framework on how to incorporate knowledge of indigenous architecture into the mainstream brick-and-mortar construction environment. These Guidelines are also aimed at encouraging the production of indigenous construction

material such as thatching grass and using appropriate technology to pass on indigenous construction skillsets in communities. The impact of the IKS Guidelines is yet to be determined because the document was only established in 2017. Despite this, this document is already faced with challenges (Mr J.M pers. comm. 2020). A major challenge is recognising the guidelines as a policy to foster compliance. It is believed that once this is achieved, then the guidelines can be rolled out and put into action (Mr J.M pers. comm. 2020).

The construction process and construction material

Participants gave a detailed description of how they construct an indigenous dwelling with indigenous construction material based on indigenous knowledge and technologies. They indicated that this task was divided along gender lines. Constructing walls of an indigenous dwelling began with males making a wattle frame and securing it into the ground. Thereafter, females use adobe brick or cob to fill out the frame and create walls. Both adobe and cob are usually made with mud, mixed with a binding agent, usually cow dung, at different consistencies depending on which was being made. The same mix, with a different consistency, would again be used to plaster the walls and close any visible gaps.

The participants' use of indigenous knowledge came out when they indicated that dung served as an adhesive, enabling the plastering process, and protecting the wooden frame from termite infestation. Having constructed these dwellings over centuries as is indicated by Frescura (1981; 2005), indigenous communities, through trial and error, found material and means of mitigating problems relating to these dwellings.

Wall plastering was a two-step process where mud was first applied to cover either the adobe bricks or cob then when it dries, cow dung gets added to the mud to plaster and seal the walls. Ms L.M. mentioned a similar process but indicated that she first smears the wooden frame with a watery cow dung mix to repel termites. Ms R.M mentioned that:

> *"The current rondavels were made of mud-brick and a wooden pole frame. A mix of mud and cow dung was used to plaster the walls, in layers…maybe 4 layers … on different days so that they dry. Cow dung is a very important part of the mix because it acts like cement or glue. It is used as a traditional cement to bind the soil."*

Participants indicated that they had preferences on how they constructed rondavel walls. 60% of participants used cob only, while 33% of the participants preferred adobe bricks (Figure 15). This was because adobe required more effort and time to make. Furthermore, cement brick was preferred by 7% of the respondents for constructing walls and floors of an indigenous dwelling but with a thatched roof as demonstrated by Ms N.N: *"[To] construct the new rondavel, I am going to use cement brick, but I will plaster it using soil on the inside and use thatch to roof it."*

Respondents also indicated that traditionally indigenous dwellings did not have windows. Ms M.F. attributed this absence to the use of wattle as a frame. She stated that: *"…it would be difficult to make a window through the poles in the wall"*.

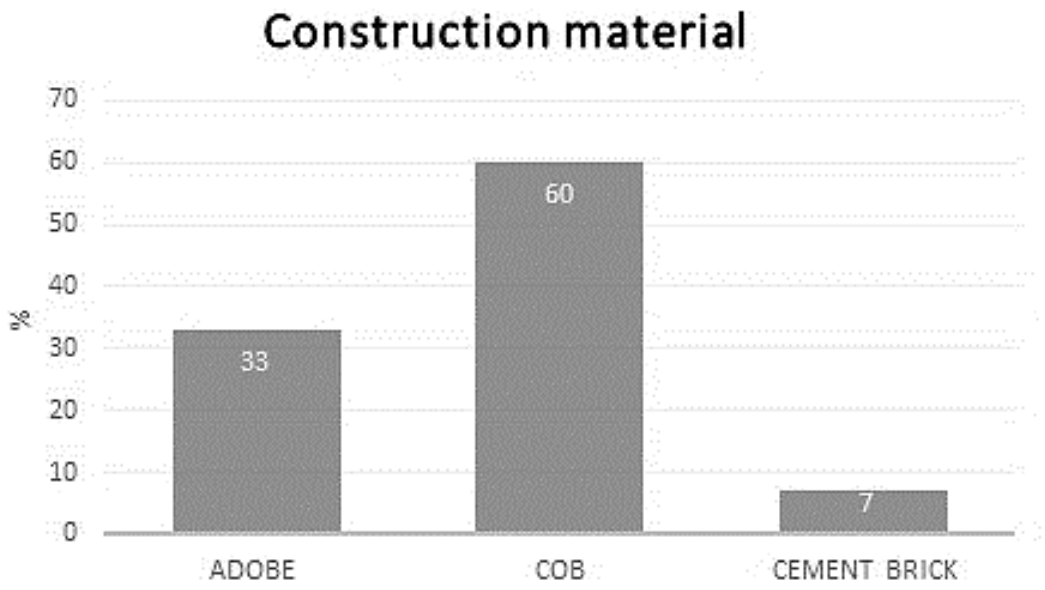

Figure 15: Material preferred for construction of rondavels.

The process of roofing with thatching grass was best explained by a 65-year-old professional thatcher, Mr P with over 10 years' experience in thatching. According to Mr P, the thatching process begins with making a conical wooden structure using a termite resistant tree like the Celiber cluster tree (*Terminelius ceresia*) locally known as *monekanekane*. This tree, sourced locally, is indicative of the sustainability of indigenous dwellings as indicated by Adebayo

(2001). Thinner branches from the same tree are then attached around the conical frame with a rope (Figure 16c). Traditionally, this rope would also be made of grass (Frescura 1981:138). Thatch grass is then sewn onto the frame and tucked neatly with a spatula-like tool called *tekespane* (Figure 16b). Mr P indicated that he uses thatching grass called *motshikiri* (*Eragotis pallens)*, sourced locally from around the Masebe gorge.

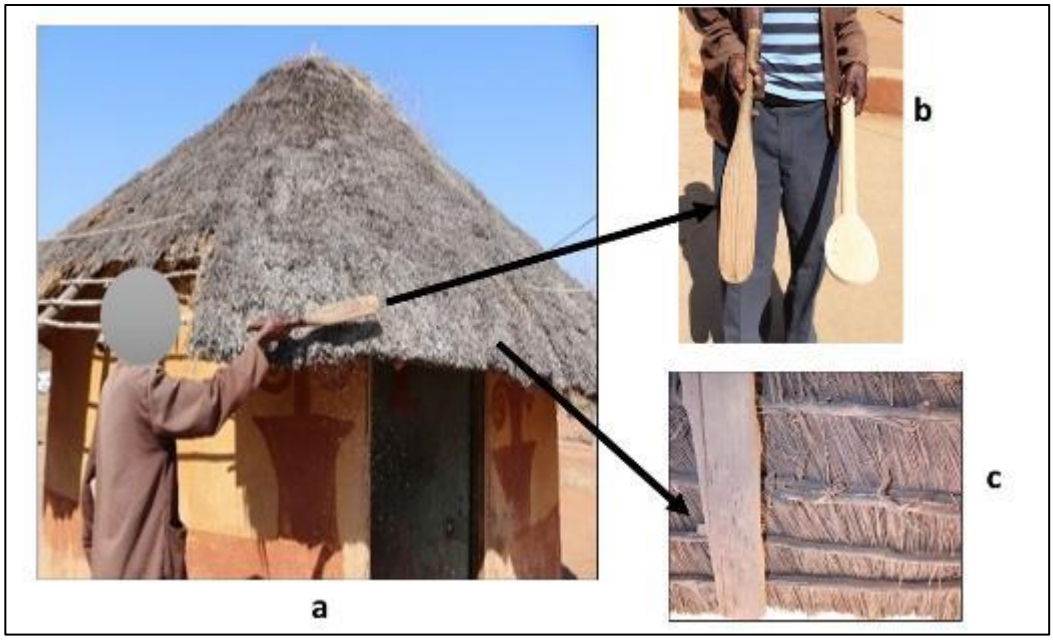

Figure 16: (a) Illustration of the thatching process, (b) thatching tool and (c) the inside of a thatched roof showing ropes.

The 14% of respondents who preferred a brick-and-mortar dwelling with a corrugated sheet roofing illustrated in Figure 17 stated that indigenous dwellings are prone to insect infestation. They also indicated that these dwellings need frequent repairing which they are no longer able to do. This was stated by Ms A.M when she said: *"We moved into the brick house because we could not keep up with maintaining the rondavel"*. 29% of indifferent participants indicated that they do not have a preference.

Figure 17: Brick-and-mortar with corrugated iron sheet-roofing houses of interviewed homesteads in Niewe Jerusalem.

Participants with two indigenous dwellings in their homestead indicated that one was used as a bedroom and the other as a kitchen. Mr P was among those participants who owned two indigenous dwellings. He indicated that: "*I use the other one as a bedroom because it helps me connect with my ancestors through dreams*". Ms R.M indicated that she used the rondavel as a bedroom because of its tranquillity. This relationship between indigenous dwellings and ancestors is explored in more detail under theme 2. The introduction of brick, mortar and corrugated iron sheets as construction material has altered the indigenous built environment. The 14% of participants that already preferred dwellings constructed out of these materials is evidence to this. The most dominant style of brick-and-mortar housing within the Plateau is the RDP (Figure 18) also known as the Highveld housing style as named by Frescura (1981: 17). Reasons for the preference of the Highveld style included that indigenous dwellings require constant maintenance, which was hindered by age of the homestead owners and the availability of building resources. Participants also listed insect infestation as another reason influencing

preference of brick-and-mortar. I found this reason to be peculiar as they had also indicated that cow dung was used was to avoid such incidences. This indicated that participants have one or a compound of reasons to shift from indigenous dwellings.

5.2.2 Social value

Social value has been identified by Rapoport (1980) as an influence in the process of heritagisation. Despite being identified as intangible values, I have intentionally categorised the following subjects under architectural value as I felt they had a direct influence on the physical retention of and production of indigenous dwellings. Participants indicated that some of the socio-cultural aspects that influenced their choice of dwelling included gender roles ascribed to the process of construction and the way that indigenous dwellings are viewed within the community.

The built environment of the Makgabeng displays a mix of both indigenous mud-and-wattle dwellings and brick-and-mortar dwellings. Within interviewed homesteads, 43% had two brick-and-mortar dwellings in their courtyard. They indicated that one was constructed by them while the other one was an RDP house provided by the government under the RDP program (Figure 18). The remaining 57% had an RDP only and an indigenous dwelling.

Figure 18: A standard RDP house provided by the government.

Despite having an RDP house, 43% of participants indicated that they had no connection with it. Ms T and Mr P both indicated that this was because they had not had an input in its construction. Due to this, they were more attached to their indigenous dwellings and to the brick-and-mortar homes as they constructed themselves. The RDP house was modified by 7% of the respondents by extending as it was too small. It can be argued that by extending the RDP's, participants add the missing sentimental connection and can therefore relate better the RDP houses. Despite these feelings towards the RDP, participants indicated that the social status of having a brick-and-mortar dwelling within the homestead was one of the driving forces behind acquiring the RDP. This is because a dwelling made of brick-and-mortar was considered an indication of wealth while a mud-and-wattle dwelling, despite being a preferred dwelling choice, was said to indicate poverty.

I argue that this view by the community that indigenous dwellings signify poverty is historical and akin to that of the missionaries when they arrived in southern Africa. I attribute both views to a lack of knowledge and understanding. The cause of this misunderstanding is systematic and can be summed up as consequences of colonisation and globalisation. I base my argument on data presented in this chapter and on literature presented in CHAPTER 3: THE BUILT HERITAGE). Firstly, the misunderstanding is systematic because indigenous knowledge within the education system is largely disregarded in favour of western education methods and curriculum. Dr S.M and Mr T.M also stated that indigenous dwellings are considered inferior because that they are not represented in academia or the architectural. Steyn (2005) proposes that a possible failure of social housing projects, in the context the Makgabeng Plateau, could be the same; lack of regard for indigenous knowledges, especially those relating to settlement planning. Settlement planning strategies of today encourage compact living spaces. Steyn (2005) argues that the courtyard living plan can be argued to be a form of compact living. If indigenous knowledges on settlement planning had been part of academia and practise, then planners and architects would have been cognisant of this fact. Following Steyn's (2005) position, I hypothesis that RDP could have faced better odds of success had they, maybe, prescribed to the same form of indigenous settlement ideologies.

Secondly, the disregard was systematic as laws and legislation around the protection of heritage have, for a large part of history, reflected western heritage values (see Adebayo 2001; Palsson 2012; Bosman 2015). With this, I draw attention to Ndlovu's (2017) argument that it is important that archaeologists, heritage practitioners, architects, and indeed all professions that deal with heritage to be weary of imposing their values on communities. For a truly decolonised and decentralised indigenous heritage conservation strategy, we must do away with approaches such as AHD.

Gender roles in the construction of indigenous dwellings

The community indicated the gendered nature of indigenous dwelling construction as one of the hindering factors to its production. The different gender roles have already been highlighted earlier in this chapter where it was indicated that thatching and construction of the conical frame for the roof was the domain of men who had requisite skills for the task. The domain of women was construction and the plastering of walls and floors. 43% of female participants indicated that they constructed the walls of the indigenous dwelling(s) they currently occupied:

> "*The rondavel was easier to construct as I made it myself."*- Ms A.T
>
> *"I build the walls of this rondavel…The roof required men to look for the right poles to make it."*- Ms R.M

Ms M.F.M and Ms F.M.M stated that these gender divisions were hindering them from constructing more indigenous dwellings as their husbands were deceased and their sons had moved to the cities/ towns for economic reasons. This has left a community made up mostly of women. They indicated that whilst they could erect the walls of the indigenous dwelling, the roofing would entail hiring someone with roofing skills and they could not afford to do so. The consequences of males moving to cities has mostly been studied in relation to loss of labour in terms of agriculture and little is said about loss of labour in terms of indigenous dwelling construction (Larsson 1985: 38).

There are several implications on the production of indigenous dwellings in a community with a majority female population such as the Makgabeng. The first implication is that the lack of males not only hinders the production of indigenous dwellings but also affects the

passing down of indigenous knowledge on these dwellings through the process of demonstration as there is no one to conduct the apprenticeship. The second consequence is that this will not only result in a decline in indigenous dwellings but eventually their loss as part of heritage in the community. As has been indicated, heritage forms part of identity, and a loss of heritage is tantamount to a loss of identity.

5.2.3 Economic feasibility

Resource availability

Participants indicated that resource availability in terms of financial resources, age and, availability of construction material also played a considerable role in their decision to either continue to construct indigenous dwellings or to move to brick-and-mortar housing (Figure 19).

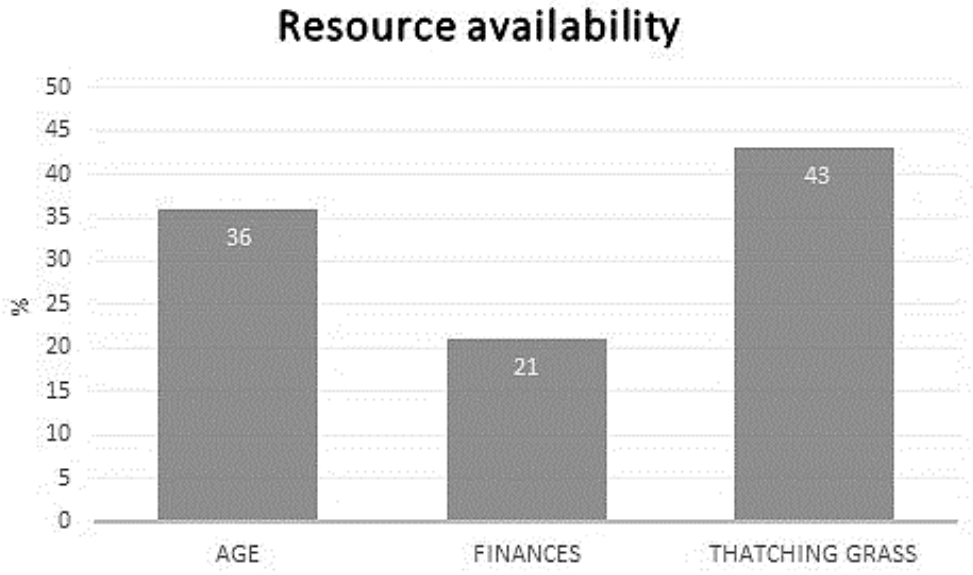

Figure 19: Resource affecting the production of housing.

Access to thatching grass as a construction resource was indicated as affecting the production of indigenous dwelling. 43% of participants indicated that thatching grass was collected by the Masebe gorge and that the grass was not available in abundance anymore due to reasons such as changes in climate. Mr P, the professional thatcher, seemed to disagree with the view that

thatching grass was no longer available in abundance. He stated that the grass was available, but its collection took longer because of age.

Age, as indicated by 36% of participants, plays a significant role in the production of indigenous dwellings. Not only does it affect the collection of construction material but also the maintenance of these dwellings. Mud-walls need to be constantly retouched, especially after heavy rains which were prone to the Makgabeng. Thatch roofs also need to be maintained every five years or as often as required to ensure they last longer. Masebe gorge is approximately 6 kilometres from Niewe Jerusalem and almost 3 kilometres from Thabanantlhana as illustrated with Figure 20. Ms N.N indicated that travelling these distances to the gorge in deep sand with steep inclines and sharp downhills was challenging as one got older.

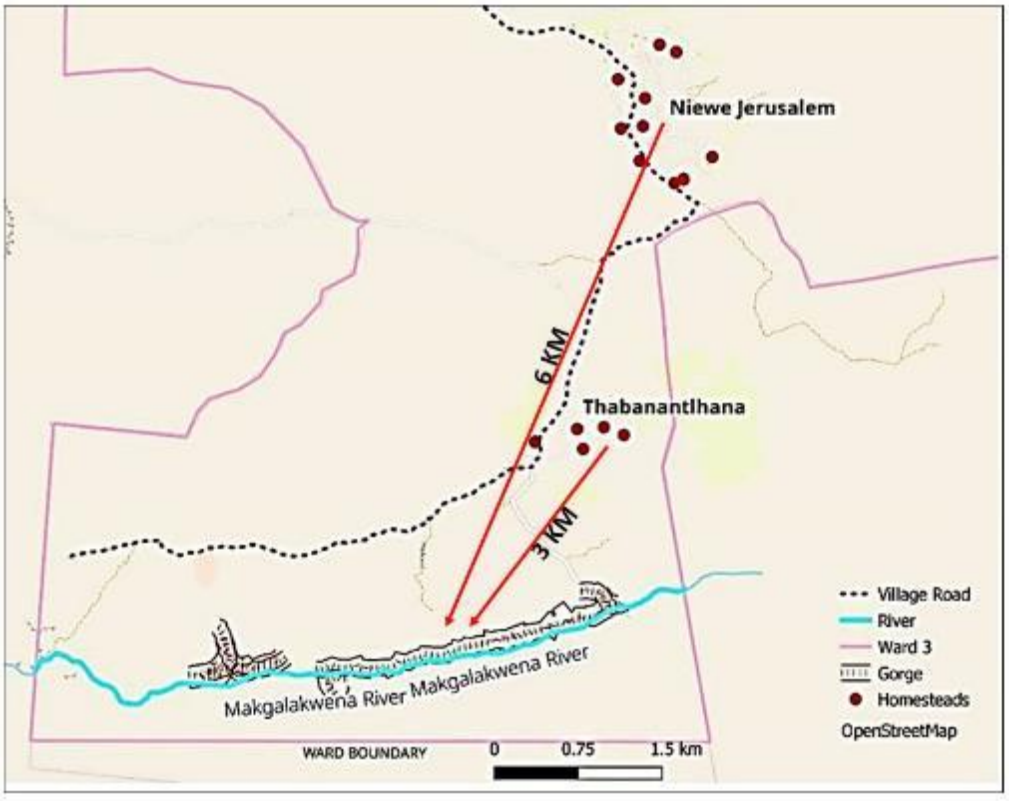

Figure 20: Map showing distance between interviewed homesteads and Masebe gorge where thatching grass is collected.

Taking age into consideration, the next best option would be to purchase thatching grass despite its availability in the environment. Unlike other indigenous construction material, thatching grass can be purchased from the markets. However, purchasing is not an option for 21% of participants that indicated financial constraints as a hindering factor as they would have to purchase the grass from hardware stores in Senwabarwana, which is the nearest commercial centre. Ms F.M.M stated that *"…thatch grass is too expensive."* Due to the possible frequency that they would have to purchase thatch grass for renovations purposes, participants indicated that they end up opting for brick-and-mortar dwellings with corrugated iron-sheet roofing.

The IKS Guidelines document proposed by the government aims, among many of its objectives, to encourage the production of indigenous construction resources such as thatching grass and to encourage the use of indigenous construction skillsets in both urban and rural areas. If these guidelines are implemented and turned into policy, they could aid in the continued construction of indigenous dwellings as resources will be easily available within rural communities such as the Makgabeng.

5.3 THEME 2: SPIRITUAL VALUE

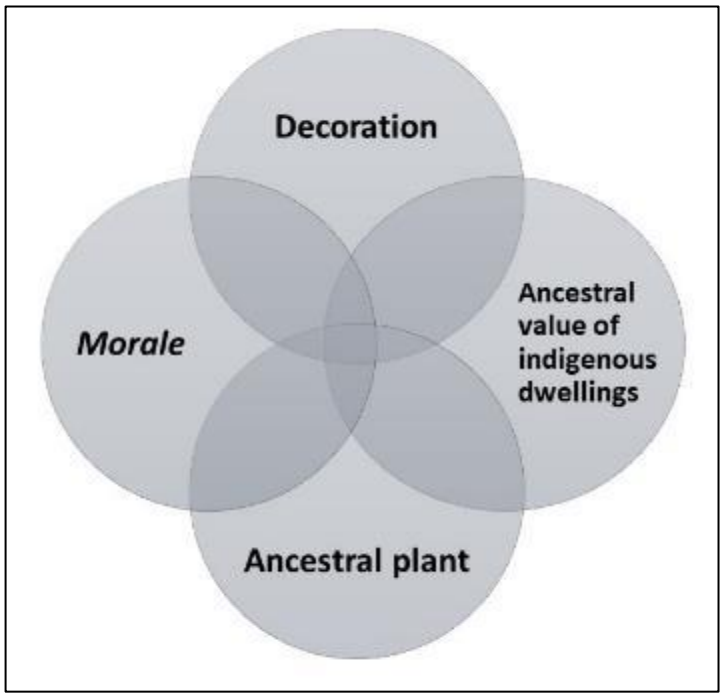

Figure 21: Relationship of subjects under ancestral value

In this section, subjects under spiritual value are assessed under the socio-cultural pillar of conversation as spiritual value is a social-cultural value. Ancestral significance was earlier indicated as a subject that crosscuts both architectural and spiritual value themes. This section focuses on the intangible aspect of ancestral significance of indigenous dwellings as it was mentioned by both key experts and community members from the participating village.

Figure 21 illustrates the interconnectivity of the subjects placed under the spiritual value theme. These subjects are interrelated and affect each other, much like subjects under architectural value. The ancestral value that the community places on their indigenous dwellings dictates how they interact with them. Activities conducted in and around these dwellings are aimed at invoking the ancestors. Activities such as the use of the indigenous dwellings as kitchens or *Morale,* the decorations done on and around them and the ancestral plant found next to them are all related to ancestors.

5.3.1 Social value

Ancestral value of indigenous dwellings

Approaches to the study of indigenous dwellings have emphasised the importance of spirituality associated with these dwellings. However, literature on the origins of this spiritual attachment fails to thoroughly explain the relationship between indigenous societies and these dwellings (Van Wyk & Harry 1998; Palsson 2012; Dr M.M pers. Comm 2020). This failure can be attributed to the colonial narrative on these dwellings that led to concepts such as monumentalisation as discussed in section 1.1 Introducing Built Heritage. Participants and key experts have, however, outlined the possible connection that these humble indigenous dwellings have with ancestors.

Both participants and expert indicated that the spirituality of indigenous dwellings is linked to fire. According to Dr M.M (pers. comm 2020), in African spirituality, indigenous dwellings are significant as they are known as “fire matter” (Figure 22). Dr M.M indicated that the fire matter or place of fire was connected to the cone-on-cylinder shape of these dwellings:

"*The shape of the rondavel is historically known as pyramid or pyramaat; Pyra meaning fire and maat meaning matter. This is dictated by the African indigenous spiritual knowledge. The rondavel is therefore a fire-matter, or a place of fire"* (Dr M.M pers. comm 2020).

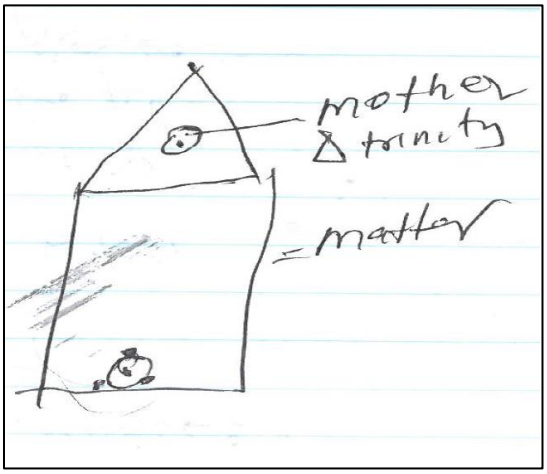

Figure 22: Sketch illustrating the origins and connections between the use of a rondavel as a kitchen and spirituality (Dr M.M pers. comm. 2020)

To add to Dr M. M's view, 78% of participants indicated an ancestral connection to these indigenous dwellings while 22% did not believe there was an ancestral connection (Figure 23). They indicated that they were Christian and therefore only used the rondavels as shelter and did not associate them with ancestors. Participants stated that:

"I would not tear down the rondavel because the ancestors connect with it better."- Ms M.

"We cannot even dream or connect to our ancestor properly in the corner house"- Ms N.N

"Thatch rondavel is Sesotho, and it connects us to our ancestors"- Ms M.F.M

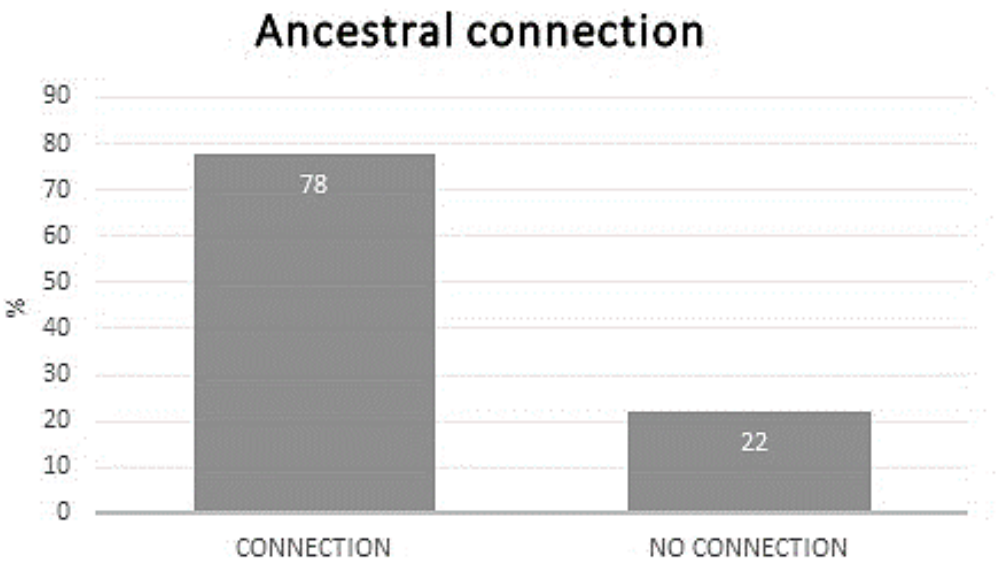

Figure 23: Representation of participants who believed rondavels had an ancestral connection.

Participants attributed this ancestral connection to the use of mud and thatching grass as construction materials because ancestors relate better with them, especially for traditional ceremonies. Despite this, the option of using a house constructed from both brick-and-mortar and indigenous construction material for traditional ceremonies was indicated by Ms T and Ms M.F.M. They both stated this could be achieved through either thatching a brick-and-mortar house or using a mud and dung mix to plaster the floors of a brick-and-mortar house. Ms N.N indicated that she had the intention of building a brick-and-mortar rondavel dedicated to the ancestors but plaster its floors with mud and roof it with thatch. Mud and/or thatch as construction materials were significant as they facilitated the connection with the ancestors. When discussing the significance of mud, Ms T indicated that: *"The floors should be plastered with mud and not cement because the ancestors want soil.*"

A decolonised approach to the study of indigenous built environment will go a long way in misspelling the misconceptions of these indigenous dwellings. I consider approaches to the study of heritage such as Multi- Criteria Decision Making (MCDM) and Critical Discourse Analysis (CDA) that recognise the importance of involving lay communities in the conservation of heritage as a starting point to decolonising the discourse. I also believe that concepts such

Afrocentricity offer a theoretical baseline of where to begin, but a more practical approach that could involve a change in the educational approach regarding indigenous ways of life is required.

The possible consequences of change in the education system and the production and passing on of indigenous knowledge relating to indigenous dwellings have been outlined where traditionally, education was a task for elders and custodians of knowledge (see Tharakan 2015: Du Plessis 2017; Ndoro *et al.* 2018; Dr S.M pers. comm 2020). Due to western influences, this has changed. I am inclined to agree with Chawane (2016) that it may not be possible to completely revert to indigenous methods of teaching. However, the adaptable and fluid nature of indigenous knowledges allows for innovative means of incorporating indigenous methods of teaching back into mainstream academia. Methods such as storytelling as suggested by Dr S.M can be incorporated into mainstream education system and used as an Afrocentric approach to education.

Evidence of the adaptable and fluid nature of indigenous knowledge can be found within the community of Makgabeng. The introduction of brick-and-mortar into the indigenous built environment of this rural community drastically altered the physical and social environments. In an area where indigenous dwellings hold ancestral significance, the construction of dwellings using brick-and-mortar affected the relationship between ancestors and dwellings. Participants indicated to adaptability by stating that nowadays exceptions are made where a brick-and-mortar dwelling can be used if there is no mud-and-wattle indigenous dwelling. Ms A.M indicated, such a case is dealt with by communicating with the ancestors and introducing the brick-and-mortar dwelling to them through performing a ceremony. Ms N.N agreed by stating that:

> *"I can still perform rituals in the corner house, but I have to ask for permission from the ancestors by brewing beer and slaughtering a goat to ask to move their work into the corner house."*

Adaptability was mostly evident through the integration of indigenous construction material and brick-and-mortar. The first evidence was a brick-and-mortar rondavel with a thatch roof that had 'window' openings on its exterior walls (Figure 24). Responding to this, Ms K.M.T indicated that the decision to use brick-and-mortar rather than mud-and-wattle for the walls was due to permanence of brick-and-mortar, especially in the event of floods. Past floods had damaged

many mud-and-wattle rondavels in the village, including her previous one. Adding to this, Ms M.F.M indicated that if brick-and-mortar are used to construct a rondavel, it was important to roof with thatch-grass and not with corrugated iron-sheets for the ancestors.

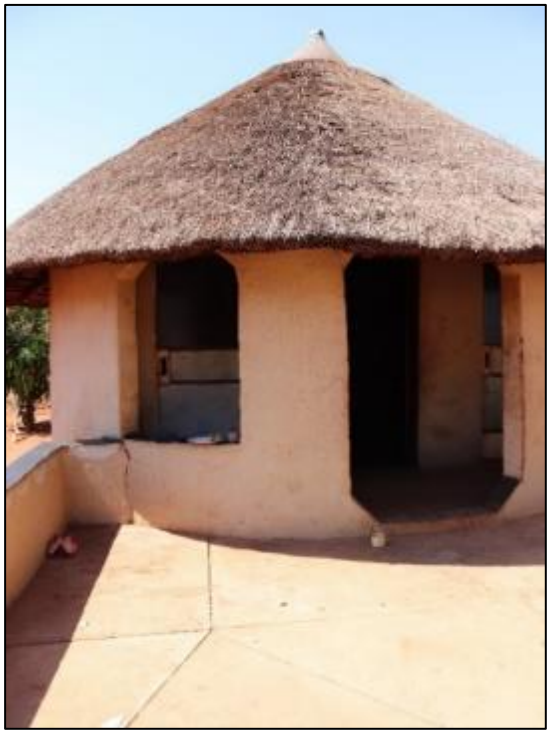

Figure 24: Rondavel made of brick-and-mortar and thatch roofing.

Responding to the plastering of brick-and-mortar walls with mud, Ms T believed that the difference in materials would make it near impossible to plaster brick-and-mortar walls with mud. However, Ms M.F.M stated that it was possible to plaster the floor of a brick-and-mortar house with mud and dung.

Despite Ms T's belief, an example of a brick-and-mortar wall that was plastered with mud existed within the community (Figure 25). These courtyard walls were constructed using brick-and-mortar, plastered with the indigenous plastering mix of mud and dung, then indigenous decoration designs were painted on the walls using store-bought paint. The difference in views of the participants is an indicator of the process of adaptability and fluidity of heritage and indigenous knowledge. Rapoport (1969) indicated that this process can be drastic as with times

of war or gradual. With the community of the Makgabeng, it can be said that this adaptability is gradual as it is due to a change in socio-cultural factors.

Figure 25: Brick-and-mortar courtyard walls plastered using mud with decoration made with black and white store-bought paint.

A third example was an abandoned corner-walled dwelling found in Niewe Jerusalem (Figure 26). This dwelling was constructed with adobe brick and plastered with mud. As has been expressed throughout the interviews, adobe brick was commonly used in the construction of circular indigenous dwellings (rondavels). This structure raised questions regarding when it was constructed and whether it was a product of financial scarcity where the previous owner could not afford cement brick, and thus opted for adobe, or if the intentions were to use adobe brick in the construction of corner dwelling. I also considered whether similar ancestral values associated with mud-and-wattle indigenous dwellings were applicable with dwelling. Unfortunately, information about this corner adobe structures could not be solicited during fieldwork as it was abandoned. Its previous occupants had moved to another village outside the scope of this research.

Figure 26: Abandoned corner-walled house constructed with adobe brick.

Due to the lack of primary information on this structure, its existence within the Makgabeng can only be referenced through literature. Frescura (1981) indicates that the introduction of the 90° corner (cube) wall dwellings in southern African indigenous architecture was due to western influences. Despite being highly adaptive, the influence of tradition and ancestors on indigenous architecture dictates the pace of its adaptability (Frescura 1981: 75). This means that the incorporation of western influences was gradual and took place over time. Figure 26 can then be viewed as evidence of this process of incorporation and as a transitionary phase during the evolution from circular indigenous dwelling to corner-walled brick-and-mortar dwellings.

While walls adapted and developed a cube shape, roofs still retained their conical shape (Frescura 1981: 75). It is not easy to trace the development from cone-on-cylinder dwellings to cone-on-cube but the change in the floor plan from circular to square had major developments in rural architecture (Frescura 1981: 78). The adobe brick corner-walled house found in Niewe

Jerusalem had no remains of a roof, therefore it was impossible to tell if it followed the cone-on-cube form or the ridged and hipped roof form (Figure 7).

Wall and floor decorations

Interviewed homesteads displayed decorations on courtyard floors and walls of indigenous dwellings. It was evident that there were two styles of decorations. For the context of this research and for the ease of comprehension, I refer to style achieved through the process illustrated with Figure 27 as floor designs. The other evident style, for which I will refer to as painted designs, is traditionally achieved by using and mixing soils of different pigments (Figure 29). The name given to both these decorations styles, *ditema* (Northern Sotho) or *litema* (Southern SeSotho) derives from the act of *ho lema,* to cultivate (Van Wyk & Harry 1998: 78). Mud walls were likened to crop fields and the decorations on them likened to cultivation (Van Wyk & Harry 1998: 11). The name *ditema* is relevant because these decorations are said to honour and please the ancestors, to ask for peace, rain, and a good harvest (Van Wyk & Harry 1998).

Figure 27: Floor decorations. Clockwise from the top dikomkom mixed with dithupana, dithupana, dikomkom and dikomkom.

According to participants, floor designs are made on mud-plastered floors while the painted designs are made on mud-plastered walls. Floor designs are made of a wet mix of mud and dung then applied onto the courtyard floor where patterns are made using fingers or the hand (Figure 28). When dried, the patterns look like engravings on the floor.

Figure 28: A woman creating designs on her courtyard floor using a watery mix of mud and dung.

Figure 29 is an illustration of painted designs using soils of different pigments. Ms R indicated that: "*to make the paint soils of preferred pigments would be mixed with water and a little bit of dung so it can stick to the walls."*

Figure 29: "*Lebanta*" (meaning belt) decoration around rondavels made using coloured soil.

The introduction of brick-and-mortar has also had an impact on the continued production of these decorations. When asked if the *lebanta* design could be done on surfaces plastered with cement, Ms T indicated that the preferred surface was one made of mud as the watery mix of mud and dung used in the making of decorations would not adhere very well to a cement surface: *"…brick and soil would not look nice together because the soil will not stick to cement..."* However, as shown in Figure 25, store-bought paint can be used to make painted designs on a surface plastered with mud and dung. Ms M.F.M attributed this to stylistic variation.

The participant indicated that decorations were used for various reasons (Figure 30). Ms K.M.T was among the 33% of participants that still make floor decorations because they had a symbolic meaning and an attachment to culture. This symbolic meaning was because these decorations could be used to communicate messages such as death or joyous occasions such as the birth of a child or a wedding. The most common floor design, *dikomkom* (Figure 27), was traditionally used to symbolize bereavement and/ or mourning, while painted designs using white pigment were used to communicate the birth of a child and black was used to communicate death.

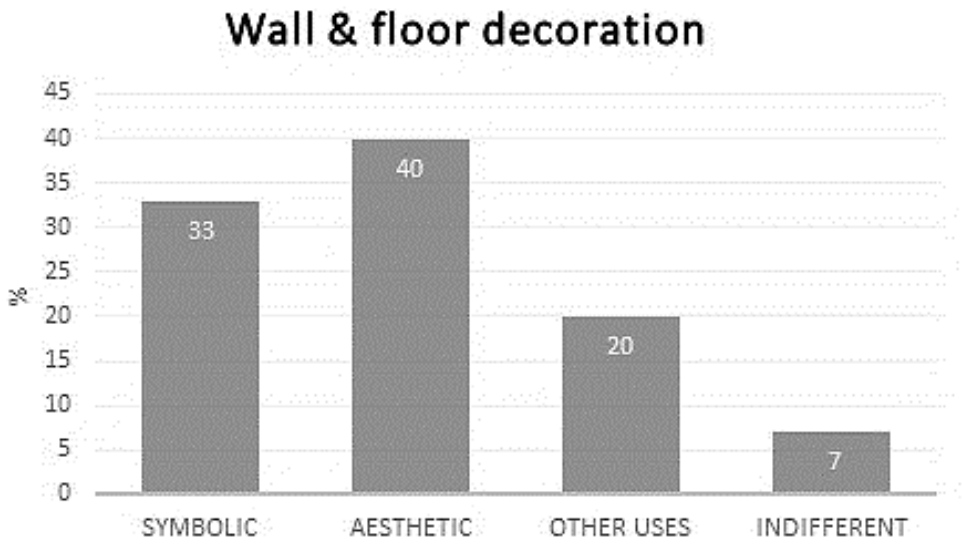

Figure 30: Graph depicting different uses of wall and floor decorations as indicated during the interview process.

Decorations were indicated as being for aesthetic purposes by 40% of participants. Participants indicated that designs were just an indication that a homestead was still occupied and was well kept. Floor designs were used by 20% of participants for other uses such as processing and threshing of grain crops like sorghum as the decorated floors provided a soft surface that did not damage the grains. The tradition of decorations was not practised by 7% of participants who indicated that it was an outdated practice.

Dr M.M agrees with the 33% of participants that indicated a spiritual connection with decorations. To illustrate this point, Dr M.M used the zigzag/ triangle motif as an example of designs that have different symbolic meanings depending on how they are placed (Figure 31). The zigzag motif can either symbolise water and/ or life, depending on the placement of the triangles.

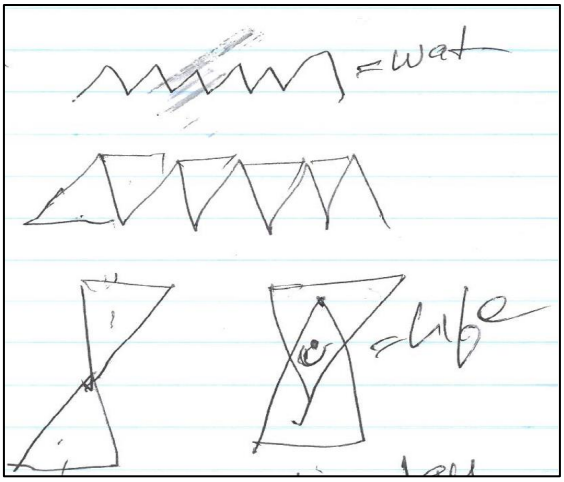

Figure 31: Origins of decorations (Dr M.M pers. comm. 2020)

Despite the knowledge of these decorations, participants could not explain their origins and how they came into use. Dr M.M connected the ancestral significance of decorations with the use of indigenous dwellings as a kitchen (fire matter). Van Wyk & Harry (1998: 38) also indicate that decorations found on the exterior walls, especially of indigenous Southern Sotho dwellings and courtyards were religious and were intended to call upon the ancestors. However, literature on the exact origins and meaning of these decorations is thin. I attribute this to the oral nature of African traditions that left no written records for present generations to refer to. Another reason is the way African history was portrayed by colonising powers. When African history was eventually written, it was distorted and reflected colonial misconceptions about Africa (Palsson 2012).

To understand decorations, and indeed the ancestral connection that indigenous dwellings have, I refer to the study of hermeneutics. According to Jones (1993: 210) hermeneutics help in the understanding of situations where meanings are hidden, especially with sacred architecture such as churches and pyramids and in the context of this research, indigenous dwellings. Hermeneutics can help in understanding that sacred architecture is a product of an interaction between the physical structure, the people that engage with it, and the ceremonies that bring the people to the structure (Jones 1993: 214). Hermeneutics is about meaning and understanding. When applied to architecture or the indigenous built environment, it deals with understanding that buildings acquire value from the experiences people associate with them (Seamon 2015).

Ancestral Plant

Along with decorations, the Bushman's poison plant *(Boophone disticha),* locally called *lekgwama* or *badimo* was associated with ancestral significance (Figure 33). This plant was present in the courtyards of 57% of homesteads that were interviewed, while 14% indicated that they do not have it because of their religious beliefs (Figure 32). Ms A.T and Ms F.M.M were among the respondents who indicated that the plant had no significance to them due to their religious beliefs. Indifference towards the plant was indicated by 29% of participants. The absence of *lekgwama* within their homestead was not an indication of belief or lack thereof.

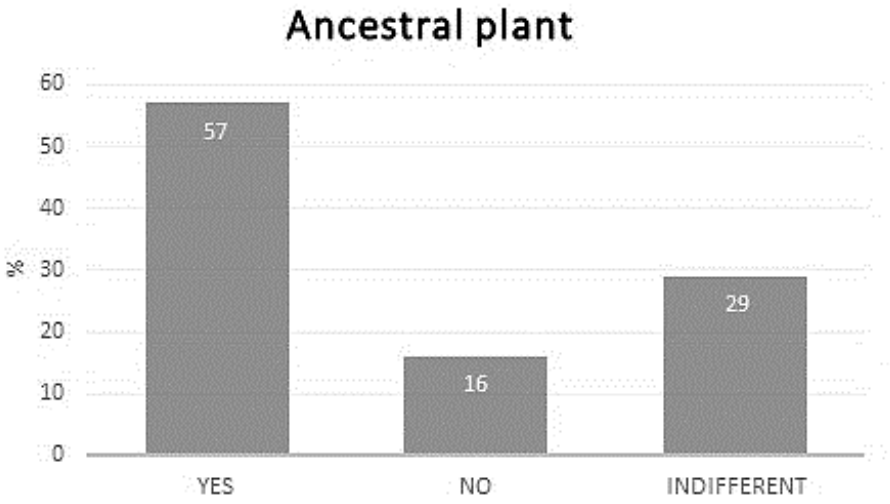

Figure 32: Representation of interviewed homesteads with *lekgwama.*

Participants who had this plant showed its significance by referring to it as *badimo,* ancestors. Ms M.T explained the significance by stating that: *"when an elderly person passes away, they want to live within the household of their children".* As such, *Lekgwama* represents ancestors and is also gendered. When representing a male ancestor, it is called *bakgalabje* and the female ancestor is called *bakgekolo*. Before placing and or removing this plant, participants indicated that a goat needs to be slaughtered and traditional beer brewed within the homestead. The number of plants is an indication of how many ancestors are being represented as indicated by Ms M.F.M: *"We have four in the yard. Two for males and two for females. To move them into*

the courtyard, we have to slaughter a male goat for the males and a female goat for the females and brew traditional beer."

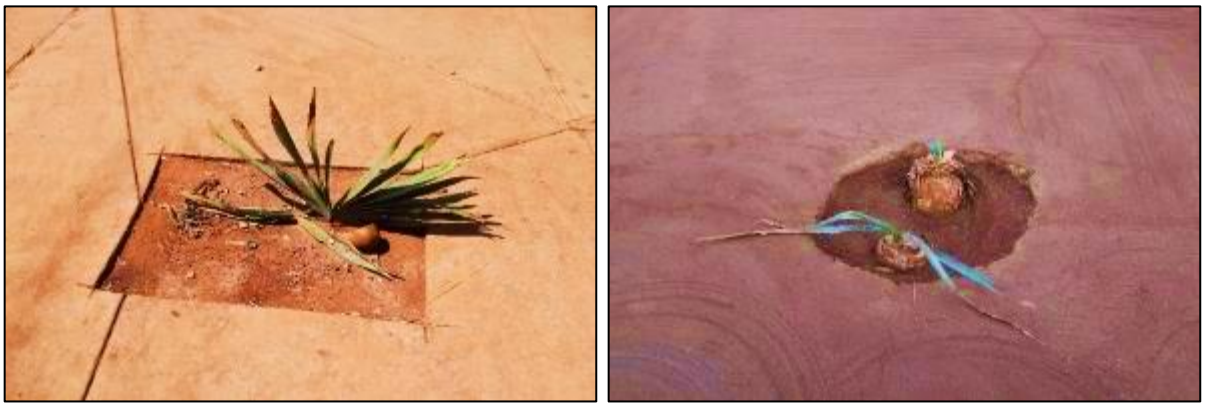

Figure 33: Ancestral plant (Bushman's poison) found in some interviewed homesteads. It is referred to as bakgalabje, badimo, bakgolokgolo or lekgwama.

The origins of the use of *lekgwama* in relation to ancestors were also again unclear. Reference can, however, be made to literature around the uses of this plant. Literature on the uses of this plant focuses mostly on its use as an arrow poison, with little being said about its use in connection with the ancestors. The San used the root/ bulb of *lekgwama* in a concoction with other plant juices and snake venom, to make arrow poison used in animal hunting (Schapera 1923). The root/ bulb of *lekgwama* is also known to have hallucinogenic properties (De Smet 1996). It is from these hallucinogenic properties of *lekgwama* that the ancestral significance and connection can be drawn.

Traditional healers use hallucinogenic plants to cure mental illnesses and to induce trance for religious and spiritual purposes. Nyazema (1984: 82) indicates cases in Zimbabwe where *lekgwama* was ingested to awaken the ancestors and people recorded episodes of hallucinating. The BaSotho are also known to use this plant at the beginning of initiation rituals where it is mixed with food given to initiates (De Smet 1996: 142). Despite tribal and shamanistic societies being known to use hallucinogenic plants for religious and healing purposes, research in southern Africa has generally overlooked these plants, focusing more on medicinal and food plants (Sobiecki 2002: 2).

Morale (Kitchen)

Indigenous dwellings, when used as a kitchen, are locally called *morale*. The use of these dwelling as kitchens was indicated by 93% of participants while the remaining 7% indicated that they used the dwelling for storage purposes. Households with more than one indigenous dwelling used one as a bedroom and the other as a kitchen as indicated by Mr P:

"We use one rondavel for cooking and the other for sleeping."

Cooking that takes place in the centre of a *morale* in a hollowed-out section on the floor as illustrated in Figure 34, was characteristic of all participant's *morale*. According to Ms M.T, the word *morale* means "place of fire" which resonates with its use as a kitchen. This name also corresponds to Dr M. M's idea of the *pyramaat* shape (rondavel) meaning a "fire-matter."

Ms L.M stated that she grew up cooking on the floor of a *morale,* hence she is used to it. Participants indicated that they continued to use the mud-and-wattle indigenous dwelling for cooking purposes despite having a brick-and-mortar dwelling as the latter did not have installed kitchens and buying kitchen equipment was too expensive:

"We do not cook in the corner house because it requires stoves and shelves while in the rondavel, we cook on the floor"- Mr P.

"There is a kitchen in the corner house, but it is used by my children. When I cook, I like to use the floor fireplace"- Ms K.M.T

Figure 34: Indigenous kitchens, also known as Morale, of various participants showing the fireplace on the floor.

Ms M.F.M indicated that a *morale* was also preferred for brewing traditional beer because of the associated ancestral connections it has. However when Ms N.N's *morale* burnt down, she converted a brick-and-mortar building with a corrugated-iron roof (Figure 35b), built for her by her sons, into a *morale* by cutting out a circular hole in the ground for the fireplace typical of a *morale* (Figure 35a). As a traditional healer, Ms N.N stated that a ceremony was performed where the ancestors were moved into the brick-and-mortar building so that she could communicate with them and receive messages to cure people.

a **b**

Figure 35: Illustration of a brick-and-mortar morale. a) A fireplace typical of a *morale* made from cutting a circle in the cement plastered floor. b) The brick-and-mortar building turned *morale*

Ms N.N indicated that this building was initially meant to serve as her bedroom. The modification of this structure from a bedroom to a kitchen drew my attention. According to Ms N.N this shift in functionality was coincidental and a matter of convenience. Despite this, I wondered if the ancestral connection and versatility of the indigenous dwellings to be used as either a bedroom or a kitchen as indicated earlier was also applicable to brick-and-mortar dwellings as well.

The position that indigenous dwellings play in connecting with the ancestors was discussed throughout this chapter. With this, one would expect that a traditional healer would maintain an indigenous dwelling to continue with their practice. Rather, the traditional healer's household presented a unique case of integration of indigenous values associated with mud-and-wattle dwellings with brick-and-mortar. Despite being unique, I posit that this case can be used as an example to reiterate the fluidity of heritage and the heritage-making process. My position is based on the notion addressed previously in section 3.5 Indigenous Knowledge Systems (IKS) and by Dr S.M that traditional healers and elders in a community are custodians of traditions and culture. This means they have the power and the ability to influence which and how traditions and cultures evolve and adapt or get phased out.

5.4 KEY FINDINGS

Key findings indicate that a Northern Sotho ancestral worldview plays a crucial role within the community of Makgabeng. This worldview is reflected in the community's retention of both architectural and spiritual values of its indigenous dwellings and in how these values have been incorporated with brick-and-mortar dwellings. It can therefore be argued that because an ancestral worldview informs the process of heritage-making, it can also inform the protection of said heritage and possibly the process of decolonising the indigenous built heritage discourse (see Adebayo 2001; Hodder 2010; Dei 2012; Vellinga 2013). This Northern Sotho ancestral worldview also informs the community's indigenous knowledge. Indigenous knowledge is evident in all aspects related to indigenous dwellings; from the use of construction material sourced from the environment, decorations made on indigenous dwellings, to the presence of *lekgwama* within homesteads.

The following section addresses the first two objectives of this research study. This it achieves by detailing how, through the guidance of a Northern Sotho worldview, the community of Makgabeng has retained indigenous values associated with its indigenous dwellings and how these values have been integrated into brick-and-mortar dwellings to retain these values.

First objective: Which indigenous values are taken into consideration during the construction of indigenous dwellings.

According to the Northern Sotho community of Makgabeng, both architectural and spiritual values are important and are taken into consideration in the construction of indigenous dwellings. Architectural values associated with construction of an indigenous dwelling are derived from a worldview based on respect for ancestors and the need to connect with them. Van Wyk & Harry (1998: 14) noted that construction materials used for indigenous dwellings inherit the ancestral value because they are sourced from the resting place of the ancestors. This supports the premise that the ancestral value of mud, wattle and thatching grass as construction materials is inherited by indigenous dwellings, permitting their use as mediums for communicating with ancestors. However, findings from this study indicate that this ancestral value is not limited to indigenous dwellings constructed from mud, wattle, and thatching grass. The Makgabeng community has indicated and displayed that ancestral value can also be ascribed to brick-and-mortar dwellings, despite these construction materials not being sourced from the environment. This is achieved by performing a ceremony where offerings in the form of slaughtering a goat and brewing traditional beer are made to the ancestors where they are asked to accept the brick-and-mortar structure as their new home.

Spiritual value is retained in wall and floor decorations, in ancestral plants that are placed by the entrance of a dwelling or of a courtyard and with the indigenous dwellings as either a *morale* or a bedroom. As a bedroom, an indigenous dwelling facilitates for the receival of messages from the ancestors through dreams. As a *morale*, it becomes a space where activities such as the brewing of traditional beer for traditional ceremonies take place. Cooking on the floor in a *morale* can easily be attributed to the prevalent use of firewood in the Makgabeng or as a continuation of how participants grew up cooking. However, the name *morale* given to a mud-and-wattle kitchen is an indication of the ancestral connection it has due to the fireplace on the

ground. Expert opinion on the connection between a *morale* and the ancestors presented an explanation of the importance of a place of fire within African spirituality.

Second objective: How have these values been retained and incorporated into brick-and-mortar dwellings within the Makgabeng?

The Northern Sotho of the Makgabeng have retained indigenous values of built heritage in two ways:

1. Integrating indigenous dwelling construction material (mud, wattle, and thatch-grass) with brick-and-mortar.
2. Integrating spiritual values associated with indigenous dwellings with brick-and-mortar houses.

The first integration is between indigenous construction material (mud, wattle, and thatching-grass) with brick-and-mortar. This integration was seen with the courtyard walls and with the brick-and-mortar rondavel that had a thatched roof discussed earlier in this chapter. The integration of brick-and-mortar with thatch roofing was, however, not surprising as it is already widely being practised and regulated. Architects, engineers, and builders are also turning back to the use of local construction resources to promote sustainable development and cultural continuity in the form of traditional thatching skills (Golden 2018).

Thatch-roofed brick-and-mortar rondavels have increasingly become a common sight as well, especially at holiday destinations due to the promotion of ecotourism by the tourism industry (Sierra-Huelsz & Kainer 2018: 3). As the Makgabeng tourism feasibility assessment and tourism development plan document indicates, the area is currently being developed as an attraction for heritage tourism due to its rich rock art. The brick-and-mortar rondavel with a thatch roof proves suitable for this type of development.

The second integration is a less documented and less common incorporation of intangible indigenous values of built heritage with brick-and-mortar. In this case, the ancestral value of indigenous built heritage is merged with brick-and-mortar buildings, enabling such buildings to be used like an indigenous *morale* (Figure 35). This is proof of what the community indicated, that, albeit it not being a preferred option, a brick-and-mortar building can be used for traditional

activities if the required ceremony is performed. Figure 36 below provides a summarised illustration of these integrations.

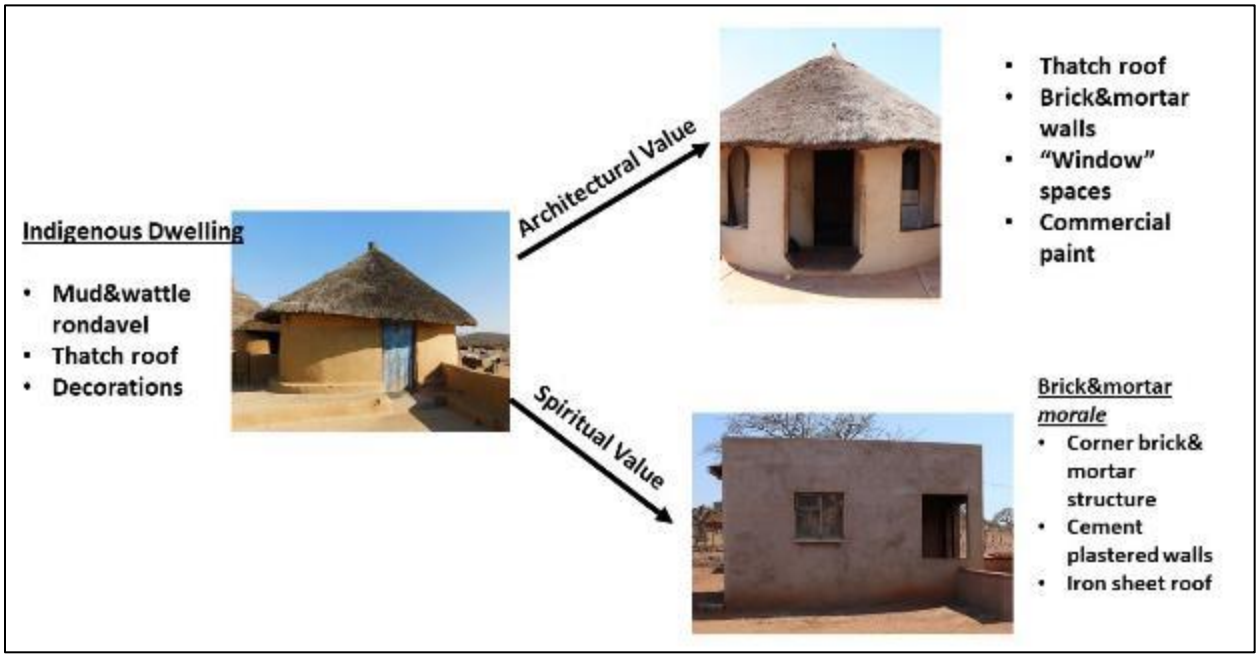

Figure 36: Examples of retention of indigenous values of built heritage

Based on the outcomes of these integrations and the ancestral worldview influence, I argue that the ultimate outcome is the retention of the spiritual value of indigenous built heritage. With the first merger, it becomes acceptable to use a brick-and-mortar for ancestral activities because they were used alongside indigenous construction materials that have ancestral value. In the second integration, yet again, spiritual value is attached to a brick-and-mortar building through the performance of ceremonies dedicated to the ancestors. As pointed out by respondents, these ceremonies are used to present brick-and-mortar houses to the ancestors and ask them to accept the buildings as their new home and a place to communicate with them. It is therefore evident that the community places importance on the ability to interact and connect with their ancestors. It is upon this foundation that a value-based framework is proposed and discussed in the next chapter.

5.5 SUMMARY

The data revealed that, though participants preferred indigenous dwellings constructed out of mud-and-wattle with thatch-roof over ones constructed out of brick-and-mortar with corrugated iron-sheet roofing, the ultimate choice to (dis)continue the production of indigenous dwellings was influenced by both their socio-economic and cultural factors. Socio-economic factors included an ageing female population, access to indigenous construction material, gendered nature of the construction process of indigenous dwellings, and financial access to both thatching grass and brick-and-mortar as an alternative construction material. The community also indicated that, socially, indigenous dwellings are synonymous with poverty while brick-and-mortar buildings symbolised wealth. Despite all of this, a preference for indigenous dwellings was driven by a Northern Sotho worldview that influenced the ancestral values that are linked with indigenous dwellings.

It would seem like the odds are stacked against the indigenous dwelling. These socio-economic and cultural factors all come together to influence the preference in dwelling type. An ageing female population has consequences not just on the collection of indigenous construction material, especially thatch grass, but also on the gendered nature of the construction process of indigenous dwellings. A possible solution of purchasing readily available thatching grass in hindered by availability of financial resources. The lack of financial resources and social perceptions on indigenous dwellings are what led to the reception of RDP housing within the community. The community did not show many affiliations to these RDP houses, but their presence within their homesteads was welcome because of the perception that brick-and-mortar dwellings symbolised of economic achievement. Indigenous dwellings were equated to poverty, therefore, a reluctance to continue utilising them was indicated. Notwithstanding all these factors that favour the discontinuation of the indigenous dwelling, the belief in an ancestral worldview seemed to have a greater influence on not just the choice of dwelling, but on the lives of the community. The Northern Sotho worldview not only dictated indigenous values that the community attribute to their dwellings, but also how to retain these values.

The community adapted these indigenous values of built heritage and used them to forge a way forward. Using these indigenous values, the community was able to reach a middle ground by

integrating them with brick-and-mortar. The results were a rondavel constructed out of brick-and-mortar that had a thatch roof, a brick-and-mortar wall that was plastered indigenously and had indigenous designs painted on it using store-bought paint. The most significant outcome of the integrations was the use of a brick-and-mortar building in the same way that an indigenous dwelling would be used. This brick-and-mortar building had ancestral value attached to it through performances of rituals and therefore, it became acceptable for it to be used as a *morale* and as a place to communicate with the ancestors. The implications of these integrations are discussed in more detail in chapter 6.

6. CHAPTER 6: CONCLUSION: RETAINING INDIGENOUS VALUES OF BUILT HERITAGE

6.1 INTRODUCTION

This research answered the question:

"*Drawing from the rural community of the Makgabeng Plateau in Limpopo as a case study, can the retention of indigenous values of built heritage into brick-and-mortar structures inform a value-based built heritage protection framework?"*

With objectives to:

- Identify which indigenous values are taken into consideration during the construction of indigenous dwellings within the Makgabeng.
- Establish how these indigenous values can or have been incorporated into brick-and-mortar dwellings within the Makgabeng area to encourage their retention, and
- Propose a value-based framework as an alternative to the current protection strategies of indigenous built heritage.

In line with these objectives, this chapter addresses the third and final research objective by proposing a value-based framework for the protection of indigenous built heritage. It also highlights the implications of this research, limitations to the study, and possibilities for future research on conservation of indigenous built heritage using indigenous values.

With this research, I have demonstrated that rural communities such as that of the Makgabeng place significance on ancestral value regarding their indigenous dwellings. This they do despite dealing with challenges brought about by socio-economic issues such as the perception on indigenous dwellings and the effects of globalisation. I have also demonstrated that the integration of indigenous values of built heritage, whether architectural or spiritual values, with brick-and-mortar is an African-centred and decolonised approach to heritage-making or invention of heritage as it uses indigenous knowledge/ values. The use of indigenous values and indigenous knowledge in the protection and conservation of indigenous heritage is a decolonised approach (Bhola 2002).

Decolonisation is about recognising that indigenous communities have a right to control their heritage (Hodder 2010). It is about adopting an African perspective when explaining African lived experiences, cultures, histories, and heritage (Dei 2012; Chawane 2016). This African perspective is what Asante (1980) defined as Afrocentricity. Unfortunately, despite this knowledge, the use of indigenous values to decolonise the heritage discourse is still a contentious issue.

6.2 A VALUE-BASED BUILT HERITAGE PROTECTION FRAMEWORK.

Consequently, the following framework focuses on spiritual value, as an identified indigenous value of built heritage. This means that aspects of architectural value that were identified as having spiritual significance are also be included in the framework. However, due to the interrelationship of subjects under architectural value illustrated in Figure 11, other subjects under architectural value are considered within the framework by association.

Third objective: Propose a value-based framework as an alternative to the current protection strategies of indigenous built heritage.

Drawing from the analysis of key findings, I propose a value-based framework anchored on key concepts emerging from the Northern Sotho worldview. It is based on the Makgabeng community's use of its indigenous knowledge to inform which and how indigenous values of built heritage are retained. I present this value-based framework as an African-centred built heritage protection approach as defined by Chawane (2016). An African-centred approach was defined as an approach to heritage protection that does not deny the influences of colonialism on indigenous values, but rather seeks to find ways that western values can be integrated with African values. It can, therefore, be said that the integration of indigenous values of built heritage with brick-and-mortar by the Makgabeng community is an African-centred approach that may be relevant and applicable to other areas that espouse its ethos.

The evolution of conservation theories to include value and meaning has turned conservation into a process of negotiation as it involves multiple overlapping values. Orbasli (2017: 163) indicates that the conservation of meaning and value is closely linked to identity. If built heritage conservation has become more about retention of value and meaning than the retention of

architectural authenticity, then identity linked with built heritage is also about meaning and value. The following framework serves to illustrate how, by using a Northern Sotho worldview, the Makgabeng community has retained the meaning and value of its indigenous built heritage, and as a result, has (re)defined its identity.

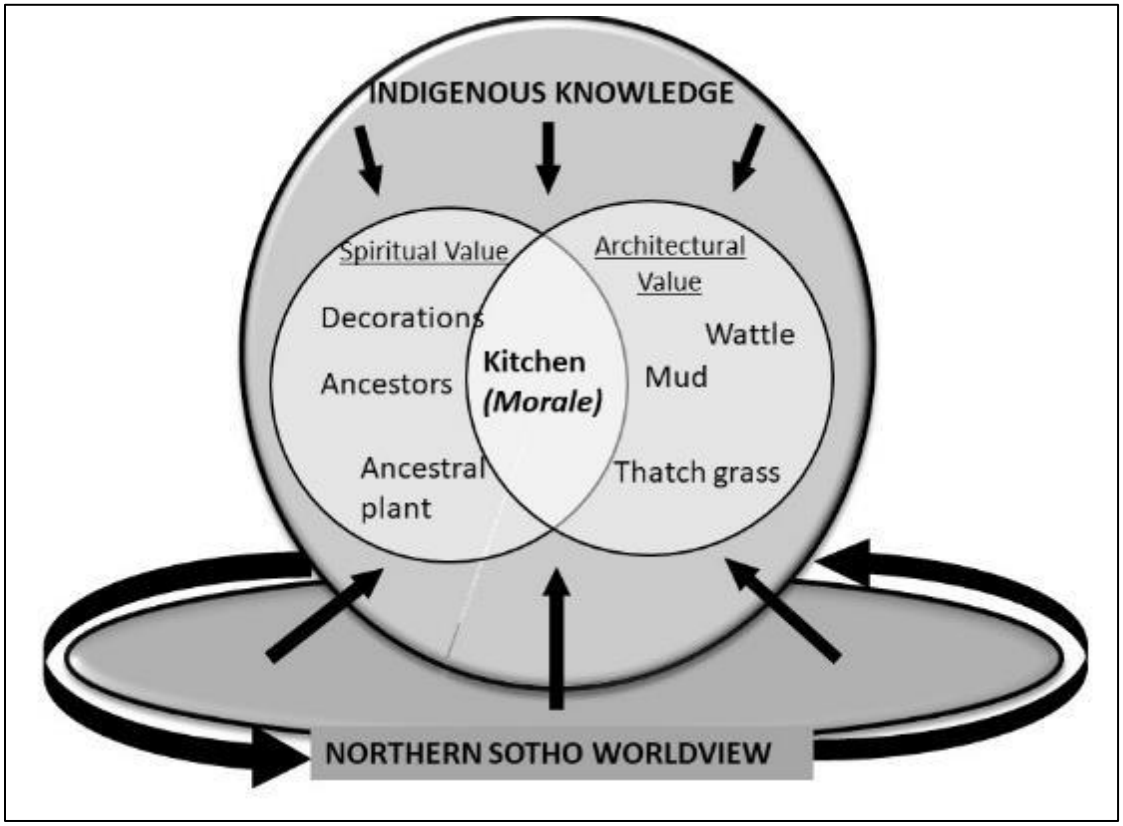

Figure 37: A values-based built heritage conservation model

As illustrated in Figure 37, indigenous knowledge of built heritage is anchored by a Northern Sotho worldview. This worldview influences indigenous knowledge, which in turn informs spiritual and architectural values indigenous dwellings, with special attention being given to ones used as a *morale*. A *morale* can be a product of the retention of architectural values and/or spiritual values or as illustrated with Figure 37, an integration of the two values. The Northern Sotho worldview also makes provision for the integration of these indigenous values with brick-and-mortar buildings, allowing these buildings to be used as a *morale.*

Figure 38 is a 3-dimensional depiction of the value-based framework. It uses the typical indigenous dwelling within the Makgabeng to illustrate the outcomes of how a Northern Sotho worldview influences indigenous knowledge which in-turn informs indigenous values of built heritage. It illustrates all the components that go into the retention of indigenous values of built heritage and the product of such retention. From the Northern Sotho worldview comes indigenous knowledge that informs the construction of an indigenous dwelling or a *morale* (represented with a fireplace). Indigenous values are depicted with wall and floor decoration, an ancestral plant, a mud-and-wattle wall, a thatch-grass roof, and a fireplace. In Figure 37, the *morale* is depicted as a product of the integration of these indigenous values (architectural and spiritual values). As shown in Figure 38, the fireplace is at the centre the *morale*, which can be viewed to symbolise the integration of both architectural and spiritual values.

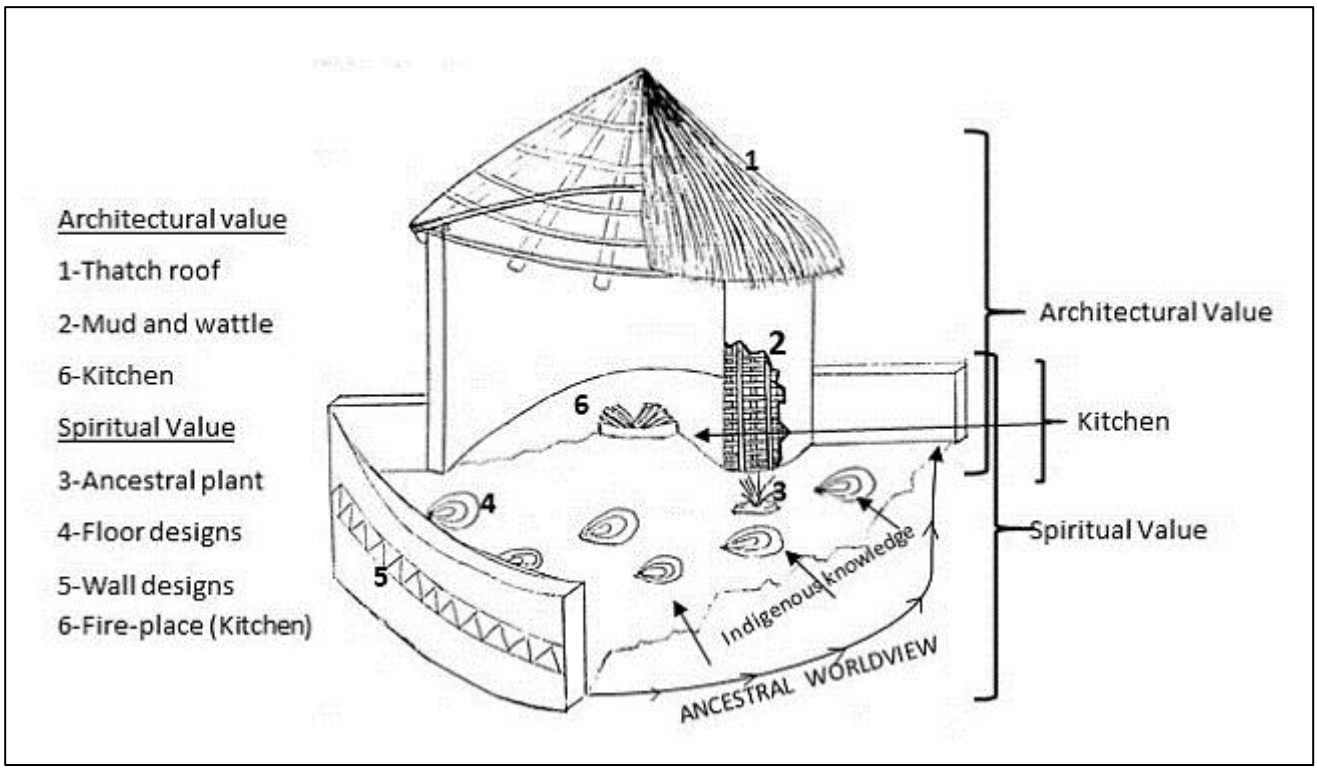

Figure 38: Rondavel depicting indigenous built heritage values. (After Naude 2007: 218)

By presenting multiple overlapping and contradicting indigenous values of built heritage, the community of the Makgabeng proved that conservation, as a process, is about negotiating

different values. These multiple differing views were based on what is and what is not acceptable when it came to the integration of indigenous values with brick-and-mortar. The assessment of the significance of these different values can be done by the MCDM approach employing the AH process.

Negotiations are evident with the way the community has altered their indigenous dwellings to integrate western elements. The use of commercial paint is one such an example. The community has retained meaning and values associated with decorations and are now using commercial paint instead of soils with different pigments to continue the practise of decoration.

A case of a decorated floor like that of the Makgabeng was identified in Lesotho (Figure 39). Unlike the typical engraved floor designs found within Makgabeng, this floor decoration was achieved by sweeping on soil, using a grass broom daily (author pers. obs 2016). Cases of floor decorations within both the Northern and Southern Sotho are no surprise as the origins of these ethnic groups was indicated. It can therefore be expected that similarities will exist between their indigenous values of built heritage.

Figure 39: Litema achieved by sweeping the ground in an urban area in Maseru, Lesotho.

I consider this case and that of the use of commercial paint as not just evidence of the continuation of decorations in a globalised brick-and-mortar built environment, but also the adaptability, and fluidity of indigenous knowledge and heritage. The meanings and value attached to decorations have remained, even though the methods used to achieve these decorations have changed. In the Makgabeng, the Northern Sotho worldview has not changed, therefore, meanings and values associated with it remain unchanged.

With this point of view, an assumption can be made that, had RDPs in the Makgabeng been aligned with the ancestral meaning and value associated with indigenous dwellings, they would have been better received. A bottom-up approach, through an exhaustive consultative process with the community, would have facilitated the sharing of information concerning these meanings and values of indigenous built heritage. During this process, the community would have revealed how these indigenous values can be retained and integrated within RDPs. The concept of a *morale* and its values could have applied to RDP housing. I support this assumption with Steyn's (2005) suggestion that architecture today can benefit from indigenous architectural technologies and ideas to resolve housing issues. Steyn (2005) goes further to suggest that the idea of compact living spaces is not uniquely a western concept. The courtyard settlement plan practised by most indigenous societies in Southern Africa is a form of compact living (Steyn 2005). Instead of architects following the western influenced high-rise buildings as a form of compact living arrangement, they should have rather taken a page out of indigenous architecture and settlement plan. This would have provided a better fit, decolonised, and Afrocentric solution to an African based problem.

Despite the merits of a value-based framework such as the one being proposed, the long-lasting effects of phenomena such as globalisation cannot be avoided. Western-based values are still the predominant measure of values associated with indigenous built environments. Decolonisation of the heritage discourse needs to be a social and political effort. For approaches such as Afrocentricity, CDA, and MCDM to be effective, they need to be supported by changes in legislation and changes in approaches employed by heritage practitioners, archaeologists, and all who work directly with heritage resources and local communities.

6.3 IMPLICATIONS OF THE STUDY

Within the rural landscape of the Makgabeng, brick-and-mortar have become the main construction material. The adaptive and fluid process of heritage-making is seen with the attachment of indigenous values to brick-and-mortar buildings, making those building significant to the present-day community (Milsson 2018). By so doing, the community has enabled brick-and-mortar housing to be used for ancestral ceremonies, allowing them to continue practising their rituals and traditions in and around it.

Hobsbawm (1983) calls this process of heritage-making the invention of tradition. An invented tradition is a set of practices that seek to teach certain values and norms from the past through repetition as a form of continuity (Hobsbawm 1983:1). Traditions are usually invented when a society goes through a rapid change that results in a breakdown of social patterns that old traditions are anchored on. The introduction of brick-and-mortar and corrugated iron-sheets to the indigenous built environment of the Makgabeng can be identified as this breakdown as it did not just affect the physical indigenous dwelling, but also how the community relates with the socio-cultural values associated with it.

According to Milsson's (2018: 37) definition of the heritagisation process, I posit that heritagisation can also be argued to be a process of inventing tradition that has been employed by the community of Makgabeng. Heritagisation is defined by Milsson (2018: 37) as a concept or a process of recycling old ideas and making them relevant so that they can be used to repossess the past in a way that supports the legacy of the present communities. The processes of heritagisation and invention of tradition are both based on repetition and recycling of values, norms, and old ideas from the past to make them relevant to present day communities. Galland *et al.* (2008: 153) support this view by indicating that indigenous values are persistent, regardless of political or social change. The Makgabeng presents a suitable case of an example of how the persistent, fluid, and adaptive nature of indigenous values can be exploited in the continuation of culture, regardless of political or social change.

The Makgabeng fluidity and addictiveness displayed by the community of Makgabeng also has implications for both heritage practitioners and heritage scholars. For heritage practitioners, the integrations displayed by the Makgabeng community can serve as an example of the outcome of

allowing communities to have an input in the protection of their heritage. The inclusion of community-based values has been argued to produce an inclusive holistic conservation strategy (Vellinga 2013). These integrations also serve as proof that both indigenous and western/European based heritage retention strategies can coexist without one being more relevant than the other as is argued by Chawane (2016:83). In this case, indigenous being represented by both spiritual and architectural values of built heritage, and western being represented by brick-and-mortar.

For scholars, an approach to the protection of indigenous built environments based on indigenous values of built heritage will change the current status quo of heritage conservation that is largely based on a Eurocentric education system. Interviews with experts in the academic environment revealed that built heritage conservation in academia is led by western scholars and that there is no indigenous conservation model to serve as a guideline for an African-centred approach. As Chawane (2016) indicates, an African-centred approach to education is one that is based on African indigenous knowledge. Based on this argument, I, therefore, posit that the use of indigenous values in the retention and protection of built heritage can provide possible guidelines for creating an African-centred approach to the of heritage discourse.

6.4 FUTURE RESEARCH

Although this research focused on the Makgabeng Plateau as a case study, its findings can be replicated in other parts of South Africa that espouse its culture. The research has provided a framework that has the potential impact on the current methods and future approaches to the study and the protection of indigenous values of built heritage. As a multidisciplinary topic, indigenous built heritage retention and protection offers numerous avenues for future research. I thus propose three potential research topics based in the fields of architecture, archaeology, and geography that could be explored for future research:

- Architecture: The influence of indigenous construction technologies on the design of future social housing.
- Archaeology: The use of indigenous values of built heritage to understand the socio-cultural dynamics of indigenous societies.

- Geography: The effects of a changing global climate on the availability, production, and distribution of thatching grass.

6.5 STUDY LIMITATIONS

The methodology used in this research has the potential to present geographical limitations for the application of the research results. A case study approach allows conclusions to be drawn based on evidence from primary sources of data (Tellis 1997), the Makgabeng in this context. As much as the research outcomes can be applied to other regions that espouse the Northern Sotho worldview as has been stated, they remain true only when applied within the study area. The proposed value-based framework only serves as a guideline and would to be adapted on a case-by-case basis to be context-appropriate, especially in non-Basotho regions.

6.6 SUMMARY

The aim and objectives of this research were to identify indigenous values of built heritage and how these values have been or can be retained in the context of brick-and-mortar buildings, and to propose a values-based framework that can be applied in future indigenous built heritage retention strategies.

Key findings indicated that the existence of indigenous dwellings in the form of the rondavel within the Makgabeng Plateau, along with the values associated with them was a result of the community's Northern Sotho worldview. This worldview not only played a crucial role in the construction, retention, and protection of indigenous dwellings, but also had a significant influence on how the community values them.

Examples were provided on how the values are applied in the process of heritagisation of brick-and-mortar buildings to make these buildings acceptable to the ancestors. It is also argued that the way the community has retained and incorporated indigenous values of built heritage with brick-and-mortar housing is a means of decolonisation, and that the same principle can be applied in decolonising the field of heritage conservation. The decolonisation of the heritage conservation field will in turn have implications on how heritage practitioners, scholars, and communities approach heritage in the future.

REFERENCES

Adebayo, A.A. 2001. Sustainable Construction in Africa. Paper presented at Agenda 21 for Sustainable Construction in Developing Countries. African Position Papers.

Adelzadehi, A. & Padajachee, V. 1994. The RDP White Paper: Reconstruction of a Development Vision. *Transformation* 25: 1–19.

Akheizner, G. 2012. Byzantine Karaism in the Eleventh to Fifteenth Century. In: Bonfil, R., Irshai, O., Stroumsa, G.G., Talgam, R. (eds) *Jews in Byzantium. Dialectics of Minority and Majority Cultures*: 723–758. Leiden, Boston: Brill.

Anton, C.E. & Lawrence, C. 2014. Home Is Where the Heart Is: The Effect of Place of Residence on Place Attachment and Community Participation. *Journal of Environmental Psychology* 40: 451–461.

Armitage, L.A. & Yau, Y. 2006. Heritage Protection in the Built Environment in Hong Kong and Queensland: A Cross-Cultural Comparison. In: Khadpeker, N.R. (ed.) *Urban Revitalisation- Perspectives and Initiatives*: 137–152. Hyderabad, India: Icfai University Press.

Aronson, J. 1994. A Pragmatic View of Thematic Analysis. *The Qualitative Report* 2 (1): 1–3.

Asante, M.K. 1980. *Afrocentricity: The Theory of Social Change*. Buffalo New York: Amulefi Publishing Co.

Azizi, N.Z.M., Razak, A.A., Din, M.A.M. & Nasir, N.M. 2016. Recurring Issues in Historic Building Conservation. *Social and Behavioral Science* 22: 587–595.

Bakker, K.A. & Matlou, A. 2003. The "Mamelodi Rondavels" as Place in the Formative Period of Bantu Education and Vlakfontein (Mamelodi West). *South African Journal of Cultural History* 17 (2): 1–22.

Baloyi, L. & Makobe-Rabothata, M. 2014. The African Conception of Death: A Cultural Implication. In: Jackson, L.T.B., Meiring, D., Van de Vijver, F.J.R., Indemoudia, E.S &

Gebrenya, W.K. (eds) *Towards Sustainable Development Through Nurturing Diversity*: 231– 243. Proceedings from 21st International Congress of the International Association for Cross-Cultural Psychology.

Baxter, P. & Jack, S. 2008. Qualitative Case Study Methodology: Study, Design and Implementation. *The Qualitative Report* 13 (4): 544–559.

Bhola, H.S. 2002. Reclaiming Old Heritage for Proclaiming Future History: The Heritage-for-Development Debate in African Context. *Africa Today* 49 (3): 3–21.

Bidandi, F. 2007. The effects of poor implementation of housing policy in Western Cape: A case study of Khayelitsha site C. Unpublished Masters thesis. Cape Town: University of the Western Cape.

Blouberg Municipality. 2020. *Blouberg Municipality IDP 2020/21. 4th Generation Integrated Development Plan 2016-2021.* Blouberg: Blouberg Municipality Local Government.

Boateng, F. 1983. African Traditional Education: A Method of Diseminating Cultural Values. *Journal of Black Studies* 13 (3): 321–336.

Bosman, G. 2015. The acceptability of earth constructed houses in central areas of South Africa. Unpublished PhD dissertation. Free State: University of the Free State.

Boven, K. & Morohashi, J. 2002. *Best Practice Using Indigenous Knowledge.* Paris: Nuffic, The Hague, The Netherlands and UNESCO/MOST.

Bradfield, J., Holt, S. & Sadr, K. 2009. The Last of the Late Stone Age on the Makgabeng Plateau, Limpopo province. *The South African Archaeological Bulleting* 64 (190): 176–183.

Breidlid, A. 2009. Culture, Indigenous Knowledge Systems and Sustainable Development. A Critical View of Education in an African Context. *International Journal of Educational Development* 29: 140–148.

Buckley, K. & Sullivan, S. 2014. Issues in Values-Based Management for Indigenous Cultural Heritage in Australia. *APT Bulleting: The Journal of Preservation Technology* 45 (4): 35–42.

Bumby, A.J. 2000. The geology of the Blouberg formation, Waterberg and Soutpansberg groups in the area of Blouberg mountain, Northern Province, South Africa. Unpublished PhD dissertation. Pretoria: University of Pretoria.

Chandel, S.S., Shama, V. & Marwah, B.M. 2016. Review of Energy Efficient Features in Vernacular Architecture for Improving Indoor Thermal Comfort Conditions. *Renewable and Sustainable Energy Review* 65: 459–479.

Chawane, M. 2016. The Development of Afrocentricity: A Historical Survey. *Yesterday & Today* 16: 78–99.

Chirikure, S. 2014. Where Angels Fear to Fret: Ethics, Commercial Archaeolgoy, and Extractive Industries in Southern Africa. *Azania: Archaeological Research in Africa* 49 (2): 218–231.

Comaroff, J. & Comaroff, J. 1997. *Of Revelation and Revolution: The Dialects of Modernity on a South African Frontier*. Chicago: University of Chicago Press.

Coolen, H. 2008. *The Meaning of Dwelling Features: Conceptual and Methodological Issues.* Amsterdam: IOS Press.

Coolen, H. & Meesters, J. 2012. House, Home and Dwelling. *House and the Built Environmennt* 27: 1–10.

Coombes, A. E. 2000. Translating the Past: Apartheid Monuments in Post-Apartheid South Africa. In: Brah, A. & Coombes, A. E. (eds) *Hybridity and its Discontents. Politics, Science, Culture:* 174– 197. Britain: Routledge London & New York.

Cuba, A.D. & Humman, L. 1993. A Place to Call Home: Identification with Dwelling, Community and Region. *The Sociology Quarterly*: 111–131.

Deacon, H., Dondolo, L., Mrubata, M. & Prosalendis, S. 2004. *The Subtle Power of Intangible Heritage*. Cape Town: HSRC Publishers.

Dei, G., Hall, B.L. & Rosenburg, D.G. 2000. Introduction. *Indigenous Knowledge in Global Contexts: Multiple Readings of Our World*. Toronto: University of Toronto Press.

Dei, G.S. 2012. Indigenous Anti-Colonial Knowledge as 'Heritage Knowledge' for Promoting Black/African Education in Diasporic Context. *Deconolization: Integrity, Education and Society* 1 (1): 102–119.

De la Torre, M. 2014. Values in Heritage Conservation: A Project of the Getty Conservation Institute. *APT Bulletin: The Journal of Preservation Technology* 45 (215): 19–24.

De Smet, P.A.G.M. 1996. Some Ethnographical Notes on African Hallucinogens. *Journal of Ethnopharmacology* 50: 141–146.

Du Plessis, D.J. 2014. A Critical Reflection in Urban Spatial Planning Practices and Outcome in Post-Apartheid South Africa. *Urban Forum* 25 (1): 69–88.

Du Plessis, H. 2005. The Integration of Design Research with Indigenous Knowledge Systems (IKS) and Science. International Conference on Design Education: Tradition and Modernity. Ahmedabad, India: National Institution of Design.

Du Plessis, H. 2017. Politics of Science Communication in South Africa. *Journal of Science Communication* 16 (3): 1–15.

Dul, J. & Hak, T. 2008. *Case-Study Methodology in Business Research*. Oxford: Elsevier Linacre House.

Eastwood, E.B. 2003. A Cross-Cultural Motif in San, Khoekhoe and Northern Sotho Rock Paintings of Central Limpopo Basin, Southern Africa. *The South African Archaeological Bulletin* 58 (177): 14–26.

Eastwood, E.B. & Eastwood, C. 2006. *Capturing the Spoor: An Exploration of Southern African Rock Art*. South Africa: New African Books (Pty) Ltd.

Eastwood, E.B. & Smith, B.W. 2005. Finger Prints of the Khoekhoen: Geometric and Hand Printed Rock Art in the Central Limpopo Basin, Southern Africa. *South African Archaeological Society Goodwin Series* 9: 63–76.

Eastwood, E.B., Van Schalkwyk, J. & Smith, B.W. 2002. Archaeology and Rock Art Survey of the Makgabeng Plateau, Central Limpopo Basin. *The Digging Stick* 9 (1): 1–12.

Ehret, C. 2008. The Early Livestock-Raisers of Southern Africa. *Southern African Humanities* 20: 7–35.

Esterhuysen, A. 2009. Undermining Heritage. *The South African Archaeological Bulletin* 64 (189): 1–3.

Fereday, J. & Muir-Cochrane, E. 2006. Demonstrating Rigour Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods* 5 (1): 80–92.

Fine, B. 1994. Politics and Economics in the ANC Economic Policy: An Alternative Assessment. *Transformation* 25: 19–35.

Forster, A.M. & Kayan, B. 2009. Maintenace for Historic Buildings: A Current Perspective. *Structural Survey* 27 (3): 210–229.

Fredheim, L. & Khalaf, M. 2016. Significance of Values: Heritage Value Typologies Re-Examined. *International Journal of Heritage Studies* 22 (6): 466–486.

Frescura, F. 1981. *Rural Shelter in Southern Africa*. Johannesburg: Raven Press.

Frecura, F. 2015a. The Great South African Heritage Disaster, viewed September 2020, from https://www.linkedin.com/pulse/great-south-african-heritage-disaster-franco-frescura/

Frescura, F. 2015b. Who Needs Monuments, viewed September 2020, from https://www.linkedin.com/pulse/who-needs-monuments-franco-frescura/

Frescura, F. 2015c. A Case of Hopeless Failure: The Role of Missionaries in the Transition of Southern Africa's Indigenous Architecture. *Journal of the Study of Religion* 22: 64–68.

Fuller Centre for Housing. 2014. Housing delivery in South Africa. Draft report: housing delivery. Unpublished report. Western Cape, South Africa.

Galland, O., Lemel, Y & Djezriri, S. 2008. Tradition vs Modernity: The Continuing Dichotomy of Values in European Society. *Revue Francaise de Sociologie* 49: 153–186.

Gee, J. P. 2011. *An Introduction to Discourse Analysis. Theory and Method.* New York & London: Routledge.

Giaccardi, E. & Palen, L. 2008. The Social Production of Heritage Through Cross-Media Interaction: Making Place for Place Making. *International Journal of Heritage Studies* 14 (3): 281–297.

Giannakopoulou, S. & Kaliampakos, D. 2016. Protection of Architectural Heritage: Attitudes of Local Residents and Visitors in Sirako, Greece. *Journal of Mountain Science* 13 (3): 424–443.

Golden, E.M. 2018. *Building from Tradition: Local Materials and Methods in Contemporary Architecture.* New York & London: Routledge.

Government Architects. 2019. *Better Placed Design Guide for Heritage: Implementing the Better Placed Policy for Heritage Buildings, Sites, and Precincts*. New South Wales: NSW Government.

Guelke, L. 1976. Frontier Settlement in Early Dutch South Africa. *Annals of the Association of American Geographers* 66 (1): 25–42.

Hall, S. & Smith, B.W. 2000. Empowering Places: Rock Shelters and Spiritual Control in Farmer-Forager Interactions in the Northern Province, South Africa. *South African Archaeological Society Goodwin Series* 8: 30–46.

Hammond, G.P. & Jones, C.J. 2008. Embodied Energy and Carbon in Construction Materials. *Energy* 161 (2): 87– 98.

Haswel, R.F. 1986 The Conservation of South Africa's Built Heritage: A Multi-Ethnic Challenge. *Journal of Social and Political Theory* 67: 45–52.

Heinich, N. 2011. The Making of Cultural Heritage. *Nordic Journal of Aesthetics* 40: 1–9.

Heness, E., Simpson, E.L., Bumby, A.J., Eriksson, K.A., Hilbert-Wolf, H.l., Okafor, O.J., Linnevel, S., Malenda, H.F. & Modungwa, T. 2014. The Geology of the Blouberg Formation. Waterberg and Soutpansberg Groups in the Area of Blouberg Mountain, Northern Province. *Palaeogeography, Palaeoclimatology, Palaeoecology* 409: 264–279.

Hernandes, M. & Verum, H. 2011. Adobe Construction in Portugal. There is a Future for Vernacular Architecture. ICOMOS 17th General Assembly, 27 November- 2 December, Paris, France.

Hobsbawm, E. 1983. Introduction: Inventing Traditions. In: Hobsbawm, E. & Ranger, T. (eds) *The Invention of Tradition*. Cambridge: Cambridge University Press.

Hodder, I. 2010. Cultural Heritage Right: From Ownership and Descent to Justice and Well-Being. *Anthropological Quarterly* 83 (4): 861–882.

Holt, S. 2009. The faunal remains from the Makgabeng Plateau, Limpopo province. Unpublished PhD dissertation. Johannesburg: University of the Witwatersrand.

Howard, P. 2003. *Heritage Management, Interpretation, Identity*. New York: Contimum.

Http://www.pza.sanbi.org/, viewed January 2020.

Huffman, T. 2001. The Central Cattle Pattern and Interpreting the Past. *South African Humanities* 13: 19–35.

Ichumbaki, E.B. 2016. A Historic Conservation of Built Heritage Sites of the Swahili Coast. *African Historical Review* 42 (2): 43–67.

Idegun, O.B. & Adedeji, Y.M.D. 2017. Review of Economic and Environmental Benefits of Earthen Material for Housing in Africa. *Frontier of Architectural Research* 6: 519–528.

Infield, M. 2001. Cultural Value: A Forgotten Strategy for Building Community Support for Protected Areas in Africa. *Conservation Biology* 15 (3): 800–802.

Jones, L. 1993. The Hermeneutics of Sacred Architecture. *History of Religions* 32 (3): 207–232.

Jones, S. 2017. Wrestling in the Social Values of Heritage: Problems, Dilemmas and Opportunities. *The Journal of Community Archaeology and Heritage* 4 (1): 27–37.

Judson, E.P. 2012. Reconciling Environmental Performance and Heritage Significance. *Historic Environment* 24 (2): 19–24.

Keefe. 2005. *Making with Earth. Earth Building Methods and Material. Repair and Conservation*. London: Taylor & Francis.

Kellner, D. 2002. Theorising Globalisation. *Sociological Theory* 20 (3): 285–305.

Khirfan, L. 2010. From Documentation to Policy-Making: Management of Built Heritage in Old Aleppo and Acre. *Traditional Dwellings and Settlements Review* 21 (1): 35–54.

Kneiter, D. 2014. Decolonising conservation? Co-management of natural resources in Bushbuckridge-Nature Reserve (BBR NR) South Africa. Unpublished Masters dissertation. Columbia: University of Missouri.

Krige, S. 2001. The Role of Universities in Capacity Building for Better Human Settlements in South Africa. *South African Geographical Journal* 83 (1): 8–17.

Labaree, R.V. 2009. Organising Your Social Sciences Research Paper: Types of Research Designs. University of Southern California: University of Southern California Libraries.

Lasker, D. 1992. Karaism in the 20th Century Spain. *The Journal of Jewish Thought and Philosophy* 1 (2): 179–195.

Larsson, A. & Larsson, V. 1984. *Traditional Tswana Housing. A Study in Four Villages in Eastern Botswana*. Stockholm: University of Lund.

Larsson, A. 1985. Traditional Tswana Housing. *Botswana Notes and Records* 17: 37–45.

Lipe, W.D. 1974. A Conservation Model for American Archaeology. *The Kiva* 39 (3-4): 213–245.

Lwongo, N.B. 2017. Factors Influencing Local Residents Intention to Conserve the Built Heritage in Tanzania. *Journal of Heritage Tourism* 12 (1): 394–409.

Lye, W.F. 1967. The Difaqane: The Mfecane in the Southern Sotho Area, 1822-24. *Journal of African History* 8 (2): 107–131.

Manomano, T., Tanga, P.T, & Tanyi, P. 2016. Housing Problems and Programes in South Africa: A Literature Review. *Journal of Sociology and Social Anthropology* 7 (2): 111–117.

Marmion, M.M. 2012. Understanding heritage: multiple meanings and values. Unpublished PhD dissertation. Dorset: Bournemouth University School of Tourism.

Mazama, A. 2001. The Afrocentric Paradigm. Contours and Definitions. *Journal of Black Studies* 31 (4): 387–405.

McGranaham, G. & Satterthwaite, D. 2014. Urbanisation Concepts and Trends. IIED Working Papers. London: IIED.

Merillas, F.O. & Gomez-Redondo, C. 2016. Heritage Education and Heritagization Process: SHEO Methodology for Educational Programs Evaluation. *Interchange* 47: 65–90.

Milsson, P. 2018. Impacts of Cultural Heritage on Tourism. The Heritagisation Process. *Athen Journal of Tourism* 5 (1): 35–54.

Mkabela, Q. 2005. Using Afrocentric Methods in Researching Indigenous African Culture. *The Qualitative Report* 10 (1): 178–189.

Mokorosi, S.A. 2017. *Basotho Traditions. Indigenous Architecture and Creativity*. Morija: Morija Printing Works.

Monnig, H.O. 1967. *The Pedi.* Pretoria: J. L. Van Schaik Limited.

Motshekga, M. 2018. *The Demystification of Racism, Patriachy, Tribalism, and Religious Intolerance*. Pretoria: Kara Books.

Musvoto, G.G. 2014. The Historical Evolution of Settlements and Trends of South Africa: Unlocking the Log-Jam of the Unsustainable Settlements Impase. *International Journal of African Renaissance Studies-Multi-Inter and Transdisciplinary* 9 (2): 154–172.

Namono, C. 2004. Dikgaatwane tsa basadi. A study of the link between girls' initiation and rock art in the Makgabeng Plateau, Limpopo province, South Africa. Unpublished Masters dissertation. Johannesburg: University of the Witwatersrand.

Namono, C. & Eastwood, E.B. 2005. Art, Authorship and Female Issues in a Northern Sotho Rock Painting Site. *South African Archaeological Bulletin Goodwin Series* 9: 77–85.

Namono, C. & Van Schalkwyk, J. 2020. Approaching Colonial Dress in the Rock Art of the Makgabeng Plateau, South Afric*a*. In: Wingfield, C., King, R., Giblin, J. (eds) *The Past and Presence of Art in South Africa: Technologies, Ontologies and Agents*: 103–123. Cambridge: McDonald Insititute.

National Heritage Resource Act No 25 of 1999. *Government Gazette* 19974. Pretoria: Government Printers.

Naude, M. 2007. A Legacy of Rondavels and Rondavel Houses in Northern Interior of South Africa. *South African Journal of Art History* 22 (2): 216–237.

Ndlovu, N. 2012. Archaeology and Development at Loggerheads: But Should They Be. *The South African Archaeological Bulletin* 67 (196): 262–264.

Ndlovu, N. 2014. Contract Archaeology in South Africa: Some Ethical Concerns. *Azania: Archaeological Research in Africa* 49 (2): 203–217.

Ndlovu, N. 2016. Fragmented Approach to Governance? Critical Review of the Role Played by Various Government Departments and Agencies in the Administration of Heritage Matters in South Africa. *Archaeologies* 12 (2): 281– 303.

Ndlovu, N. 2017. Bridging the Divide: Heritage Management and Development in the 21st Century. In: Gould, P.G. & Pyburn, K.A. (eds) *Collision or Collaboration. Archaeology Encounters Economic Development*: 103–116. Switzerland: Springer.

Ndoro, W., Chirikure, S. & Deacon, J. 2018. *Approaches and Trends in African Heritage Management and Conservation*. In: Ndoro, W., Chirikure, S. & Deacon, J. (eds) *Managing Heritage in Africa. Who Cares*: 1–21. New York: Routledge.

Ndoro, W. & Pwiti, G. 2001. Heritage Management in Southern Africa: Local, National and International Discourse. *Public Archaeology* 2 (1): 21–34.

Nemoy, L. 1950. Early Karaism (The Need for a New Approach). *The Jewish Quarterly Review* 40 (3): 307–315.

Niromoundi, H., Zain, M.F.M. & Jamil, M. 2013. Various Types of Earthen Buildings. *Procedia-Social and Behavioural Sciences* 89: 226–230.

Nyazema, N.Z. 1984. Poison Due to Traditional Remedies. *The Central African Journal of Medicine* 30 (5): 80–83.

Oliver, P. 2006. *Built to Meet Needs. Cultural Issues in Vernacular Architecture.* Oxford: Elsevier Ltd.

Oliver, E. & Oliver, W.H. 2017. The Colonisation of South Africa: A Unique Case. *HTS Teologiese Studies/ Theological Studies* 73 (3): 1–8.

Opuluwa, E., Obi, P. & Osasona, O. 2012. Sustainability in Traditional African Architecture: A Springboard for Sustainable Urbanism. Paper read at sustainable futures: Architecture and urbanism in the global South Kampala, Uganda. Kampala, Uganda.

Orbasli, A. 2009. Re-Using Existing Buildings Towards Sustainable Regeneration. School of Architecture: Place and Culture Identity Group Working Paper. Oxford: Oxford Brookes University.

Orbasli, A. 2017. Conservation Theory in the 21st Century: Slow Evolution or a Paradigm Shift? *Journal of Architectural Conservation* 23 (3): 157–170.

Palsson, G. 2012. These Are Not Old Ruins: A Heritage of the Hrum. *International Journal of Historical Archaeology* 16 (3): 559–576.

Parkinson, A., Scott, M. & Redmond, D. 2016. Competing Discourses of Built Heritage: Lay Values in Irish Conservation Planning. *International Journal of Heritage Studies* 22 (3): 261–273.

Pooley, S. 2009. Jan Van Riebeeck as Pioneer Explorer and Conservator of Natural Resources at the Cape of Good Hope. *Environment and History* 15 (1): 3–33.

Protection, Promotion, Development and Management of Indigenous Knowledge Act No 6 of 2019. *Government Gazette,* 650 (42647). Pretoria: Government Printers.

Rapoport, A. 1969. *House Form and Culture*. London: Prentice-Hall Inc.

Rapoport, A. 1980. *Human Aspects of Urban Form: Towards a Man-Environmental Approach to Urban Form and Design*. New York: Pergamon Press

Rapoport, A. 2005. Vernacular Architecture and Cultural Determinants of Form. In: King, A.D. (ed.) *Building and Society: Essays in the Social Development of Built Environment*: 158–172. London: Routledge and Kegan Paul.

Salman, M. 2018. *Sustainability and Vernacular Architecture: Rethinking What Identity Is*. Toronto: Intech Open.

Sandis, C. 2014. Culture, Heritage and Ethics: Between Theory and Practice. In: Sandis, C. (ed.) *Cultural Heritage Ethics*: 11–20. Cambridge: Open Book Publishers.

Sandre, B. 2017. RDP Housing: Success or Failure. Paper read at Southern African Catholic Bishop Conference. Parliamentary liaison office. 20 Years of participating in public policy. Cape Town, South Africa.

Sarah-Ashley, K., Osmani, M., Emmit, S., Mallinson, M. & Mallinson, H. 2015. Assessing Stakeholder's Perspective Towards the Conservation of the Built Heritage of Suakin, Sudan. *International Journal of Heritage Studies* 21 (7): 674–697.

Schapera, I. 1923. Bushman Arrow Poisons. *Bantu Studies* 2 (1): 199–214.

Seamon, D. 2015. Hermeneutics and Architecture: Building-in-Themselves and Interpretative Trustworthiness. In: Janz, B. (ed.) *Hermeneutics, Space and Place*: 347–360. New York: Springer Publishers.

Setumu, T. 2010. Communal identity creation among the Makgabeng rural people in Limpopo province. Unpublished Masters dissertation. Limpopo: University of Limpopo.

Setumu, T. 2015. Inclusion of Rural Communities in National Archival and Records System: A Case Study of Blouberg-Makgabeng-Senwabarwana Area. *Journal of the South African Society of Archivists* 48: 34– 44.

Sherma, V., Vinayak, H.K. & Marwaha, B.M. 2015. Enhancing Sustainability of Rural Adobe Houses of Hills by Addition of Vernacular Fiber Reinforcement. *International Journal of Sustainable Built Environment* 4: 348–358.

Shepherd, N. 2015. Contract Archaeology in South Africa: Travelling Theory, Local Memory and Global Design. *International Journal of Historical Archaeology* 19: 748–763.

Shukla, A., Tiwari, G.N. & Sodha, M.S. 2009. Embodied Energy Analysis of Adobe House. *Renewable Energy* 34: 755– 761.

Sillitoe, P. 1998. The Development of Indigenous Knowledge. A New Applied Anthropology. *Current Anthropology* 39 (2): 223–252.

Sierra-Huelsz, J.A & Kainer, K.A. 2018. Tourism Consumption of Biodiversity: A Global Exploration of Forest Product Use in Thatched Tropical Resort Architecture. *Geoforum* 94: 1–11.

Sjoholm, J. 2016. Heritagisation, re-heritagisation and de-heritagisation of built environment: the urban transformation of Kiruna, Sweden. Unpublished PhD dissertation. Sweden: Lulea University of Technology.

Smith, L. 2006. *Uses of Heritage*. London: Routledge Taylor & Francis Group.

Smith, B. & Van Schalkwyk, J.A. 2002. The White Camel of the Makgabeng. *The Journal of African History* 43: 235–255.

Sobiecki, J.F. 2002. A Preliminary Inventory of Plants Used for Psychoactive Purposes in Southern African Healing Traditions. *Transactions of the Royal Society of South Africa* 57 (1-2): 1–24.

South African National Standards. 2016. *SANS 10407 Thatching Roof Construction*. Edition 2.1. Pretoria: SABS Standard Division.

South Africa. 2017. *IKS Guidelines*. Department of Public Works. Pretoria.

Statistics of South Africa. 2011. Department of Statistics, viewed February 2020 from *http://www.statssa.gov.za*

Steyn, G. 2005. African Courtyard Architecture: Typology, Art, Science and Relevance. *Acta Structilia* 12 (2): 106–129.

Steyn, G. 2006. The Indigenous Rondavel- A Case for Conservation. *South African Journal of Architectural History* 21 (1): 21–38.

Tellis, W. 1997. Application of a Case Study Methodology. *The Qualitative Report* 3 (3): 1–19.

Tharakan, J. 2015. Indigenous Knowledge Systems- A Rich Appropriate Technology Resource. *African Journal of Science, Technology, Innovation and Development* 7 (1): 52–57.

The Burra Charter. 2013. *The Australian ICOMOS Charter for Places of Cultural Significance 2013.* Australia (ICOMOS). Australia: Australia/ICOMOS Peter Marquis- Kyle.

Thebede, D. 2008. The African Worldview as the Basis of Practices in the Helping Professions. *Social Work/Maatskaplike Werk* 44 (3): 233–245.

UNESCO. 2017. Local and Indigenous Knowledge Systems, viewed September 2020 from Http://www.unesco.org/links

Van Schalkwyk, J.A. & Moifatswane, S.M. 2012. The Siege of Leboho: South African Republic for Fortifications in the Blouberg, Northern Transvaal. *South African Military History Society* 8 (5): 1–13.

Van Schalkwyk, J.A. & Rock Art Research Institute (RARI). 2009. The Makgabeng/Blouberg heritage tourism management-conservation plan. Blouberg Municipality, Capricorn District, Limpopo province. Unpublished report. Blouberg: Limpopo.

Van Schalkwyk, J.A. & Smith, B. 2004. Insiders and Outsiders: Resources for Interpreting a Historical Event. In: Reid, A.M. & Lane, P.J. (eds) *African Historical Achaeologists*: 325- 346. London: Plenium Publishers.

Van Vuuren, C.J. 2007. Reconstructing the Ndebele Grass Dome House: An Integrated Heritage Initiative. *South African Journal of Art History* 22 (2): 179–184.

Van Wyk, B.E. & Gericke, N. 2007. *People's Plants. A Guide to Useful Plants of Southern Africa*. Pretoria: Briza Publications.

Van Wyk, G.N., Harry, N. & Van Wyk, R. 1998. *African Painted Houses. Basotho Dwellings of Southern Africa*. New York: Abrams Inc Publisher.

Varutti, M. 2015. Crafting Heritage: Artisans and the Making of Indigenous Heritage in Contemporary Taiwan. *International Studies of Heritage* 21 (10): 1036–1049.

Velasquez, M. & Hester, P.T. 2013. An Analysis of Multi-Criteria Decision Making Methods. *International Journal of Operational Research* 10 (2): 56–66.

Vellinga, M. 2013. The Noble Vernacular. *The Journal of Architecture* 18 (4): 570–590.

Vorster, L.P. 2001. Plants and the Concept of Maatla Among the Northern Sotho. *South African Journal of Ethnology* 24 (3): 75–80.

Walton, J. 1948. South African Peasant Architecture. Southern Sotho Folk Buildings. *African Studies* 7 (4): 139–145.

Walsh, K. 1992. *The Representation of the Past. Museums and Heritage in the Post-Modern.* London: Routledge London

Wane, N.N. 2005. African Indigenous Knowledge: Claiming, Writing, Storing and Sharing the Discourse. *Journal of Thoughts* 40 (2): 27–46.

Wang, J.J., Jin, Y.Y., Zhan, C.F. & Zhao, J.H. 2009. Review on Multi-Criteria Decision Analysis Aid in Sustainable Energy Decision-Making. *Renewable and Sustainable Energy Review* 13: 2263–2278.

Whelan, D. 2003. Decorated Architectecture as Material Culture: A Preliminary Look at the Vernacular Architecture of the Msinga Area. *South African Humanities* 15: 129–141.

White Paper on Reconstruction and Development Programe for South Africa. 1994. Notice 1958 of 1994. *Government Gazette,* 353 (16085). Pretoria: Government Printers.

Xypolia, I. 2016. Eurocentrism and Orientalism. In: Ray, S., Schwarz, H., Berlanga, J.L.V., Marieras, A. & Shemak, A. (eds). *The Encyclopedia of Post- Colonial Studies*: 1–6. Oxford: Blackwell Publishing.

Yau, Y. 2008. Multi-Criteria Decision Making for Urban Built Heritage Conservation: Application of the Analytic Hierarchy Process. *Journal of Building Appraisal* 4 (3): 191–205.

Yung, E.H.K. & Chan, H.W. 2011. Problem Issues of Public Participation in Built-Heritage Conservation. Two Controversial Cases in Hong Kong. *Habitat International* 35: 457–466.

Zwarteveen, B. n.d. Conservation and Change. Methodologies of Architectural Reuse- Final Essay, viewed September 2020 from http://www.academia.edu/conservation_and_change

APPENDIX 1: INFORMATION SHEET FOR PARTICIPANTS

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

PARTICIPANT INFORMATION SHEET

RETAINING INDIGENOUS VALUES OF BUILT HERITAGE: A CASE OF MAKGABENG, LIMPOPO, SOUTH AFRICA

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My name is Matseliso Moremoho. I am a Master of Science student at the University of the Witwatersrand in the School of Geography, Archaeology and Environmental studies. As part of my studies, I am undertaking a research project where I am investigating the topic of how you as the community of Makgabeng have been incorporated indigenous built heritage values in contemporary housing designs to ensure conservation and management of built heritage. The aim of this research project is to find out if built heritage values are retainable in the context of present day infrastructure development, especially here in Makgabeng

As part of the research project, I would like to invite you and request your consent to participate in this project. This process will be a once off, one on one interview with the aid of a translator where you will be asked question and you provide a verbally response and your answers will be written down for recording. The interview is estimated to last for approximately 30 minutes. With your permission, I would also like to audio record the interview using an audio recorder and take pictures of you and your household using a digital camera.

You will not receive any direct benefits from participating in this research, and there are no disadvantages or penalties for not participating. You may withdraw at any time or not answer any question if you do not want to. If you wish to remain anonymous, your anonymity during this interview process and during data processing will be guaranteed, as false names will be used to represent your participation in my final research report. The information you give to me will also be stored securely in a password-protected computer in the department of Archaeology, at the University of the Witwatersrand in Johannesburg and not disclosed to anyone else. If you have any questions at any time during the interview process about this research, feel free ask.
This study will be written up as a research report, which will be available online through the university library website.

If you have any concerns or complaints, please contact me or my supervisor on the contacts details provided.

APPENDIX 2: CONSENT FORM FOR AUDIO RECORDING

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

CONSENT FOR AUDIO TAPE

RETAINING INDIGENOUS VALUES OF BUILT HERITAGE: A CASE OF MAKGABENG, LIMPOPO, SOUTH AFRICA

Interview number: .....

Researcher: Matseliso Moremoholo, Wits University; (#378780)

Supervisors: Dr Catherine Namono and Dr Tsepang Leuta, Wits University.

contact: +27117176055: **Email address:** catherine.namono@wits.ac.za

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- I am requesting your consent to record your voice digitally to capture our discussion during the interview for research purposes.
- All issues related to confidentiality and anonymity including sharing and distribution of data will strictly be anonymous. As discussed in the participant information sheet data collected during this interview will be stored for five years and may be used anonymously bu other researchers during this time.

I ..... (name of participant) agree that the interview may be audio recorded.

Sign..... **Date**.....

****

APPENDIX 3: CONSENT FORM FOR PHOTOGRAPHY

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

CONSENT FOR PHOTOGRAPHY

RETAINING INDIGENOUS VALUES OF BUILT HERITAGE: A CASE OF MAKGABENG, LIMPOPO, SOUTH AFRICA

Interview number: .....

Researcher: Matseliso Moremoholo, Wits University; (#378780)

Supervisors: Dr Catherine Namono and Dr Tsepang Leuta, Wits University.

contact: +27117176055: **Email address:** catherine.namono@wits.ac.za

- I am requesting your consent to photograph you and your homestead the **study** RETAINING INDIGENOUS VALUES OF BUILT HERITAGE: A CASE OF MAKGABENG, Limpopo Province, South Africa.
- All issues related to confidentiality and anonymity including sharing and distribution of data will strictly be anonymous. Data collected during this interview will be stored for **five** years in a password protected computer in the Department of Archaeology, Wits University and may be used anonymously by other researchers during this time.

I ..... (name of participant) give consent that photographs of and/ or my household may be taken.

For persons who **WANT** their photograph(s) to be used for any other publication such as promotional material or academic paper relating to this project or related studies:

Sign _____ **Date**_____

For persons who **DO NOT** want their photograph(s) to be used for any other publication such as tourism promotional material or academic paper other than those relating to this project:

Sign _____ **Date**_____

APPENDIX 4: PARTICIPANT CONSENT FORM

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

PARTICIPANT CONSENT FORM

RETAINING INDIGENOUS VALUES OF BUILT HERITAGE: A CASE OF MAKGABENG, LIMPOPO, SOUTH AFRICA

Interview number: .....

Researcher: Matseliso Moremoholo, Wits University; (#378780)

Supervisors: Dr Catherine Namono and Dr Tsepang Leuta, Wits University.

contact: +27117176055: **Email address:** catherine.namono@wits.ac.za

Translator (*where applicable***):** **Contact:**

I the participant understand, that:

- I am under no obligation to participate in this research.
- Participation in this interview is completely voluntary and that I have a right not to respond to any question which I prefer not to.
- I may withdraw my participation from the study at any time.
- Any self-identifying information about me, including quotes will not be included in any publication and/ or responses unless I authorize that in writing.
- The interview material will be only shared with research partners (research partners are the community translators. Your anonymity will be guaranteed as the translators will sign a confidentiality form prior to the conducting of interviews); and information collected during interviews will be stored in a password protected computer in the department of Archaeology, Wits University.

I .....consent to being interviewed for the study **RETAINING INDIGENOUS VALUES OF BUILT HERITAGE: A CASE OF MAKGABENG.** I have read/ been read this consent form and information sheet and I have had the opportunity to ask questions about them.

For persons who WANT to remain anonymous:

Sign_____ Date _____

_____

For persons who DO WANT to remain anonymous:

Sign_____ Date _____

APPENDIX 5: INTERVIEW SCHEDULE

RETAINING INDIGENOUS VALUES OF BUILT HERITAGE: A CASE OF MAKGABENG, LIMPOPO, SOUTH AFRICA.

Date: _____ Village name: _____ Gender: Male
Name: _____ Age: ___ Female

Semi-structured interview schedule

General questions:

- How long have you been a resident of this village?
- (in case not born here) Why did you move here?
- Do you see any changes in the built environment of the area?

Give examples of these if any.

Mud-and-wattle Rondavel questions:

- When was the rondavel built?
- How was the rondavel constructed and what materials were used?
- Who is involved in building and maintaining the house?
- Are there any rituals performed before, during or after construction?
- Do you decorate the walls? If so, why? If not, why not?
- Do you use the rondavel for any spiritual activities?
- Do you construct and repair rondavels at any time throughout the year?
- (if the rondavel is abandoned) When and why did you move out of the rondavel?
- Why did you not destroy the rondavel?

Brick-and-mortar house:

- When did you build the brick-and-mortar house?
- Why did you build the brick house?
- Who is involved in building and maintain this house?
- Do you perform any rituals before or after construction?
- Are there any spiritual associations regarding this building?
- How does this house compare with the rondavel?
- Which is easier to construct – the brick-and-mortar or the rondavel?
- Which house do you prefer and why?
- what values do you consider when constructing a house?
- which of these values is/are incorporated in the current structures? Why is this so?

********** Thank you for your time **********

APPENDIX 6: CONFIDENTIALITY AGREEMENT FORM

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

CONFIDENTIALITY AGREEMENT FORM

RETAINING INDIGENOUS VALUES OF BUILT HERITAGE: A CASE OF MAKGABENG, LIMPOPO, SOUTH AFRICA

Researcher: Matseliso Moremoholo, Wits University; (#378780)

Supervisors: Dr Catherine Namono and Dr Tsepang Leuta, Wits University.

contact: +27117176055: **Email address:** catherine.namono@wits.ac.za

Confidentiality agreement between the researcher and the translator is as follows:

- I understand that for purposes of this interview and the interview process, I, the translator may not disclose confidential information obtained during interviews. Confidential information includes, but not limited to:
  - Names of interview participants
  - Information obtained during interviews.
  - Interview information that, if disclosed without authorization, could be detrimental to the wellbeing of the participant whether or not such information is identified as Confidential Information.
- I understand that "Confidential Information," as used in this agreement, means information disclosed by interview participant's in the course of the interview.
- I understand that confidential information includes all information concerning interviews, techniques, processes used and discoveries made during the interviews
- I understand that at all times during and after the interview and interview process, I will keep confidential and will not make use of or disclose to any third party the information obtained during this process.

I ..... (names of translator) have read, understood and agree to the terms stipulated in this confidentiality agreement form.

Sign..... **Date**.....