ARCHETYPING TRADITIONAL

Urbanism and Design for Community and Social Conviviality in Zimbabwe:

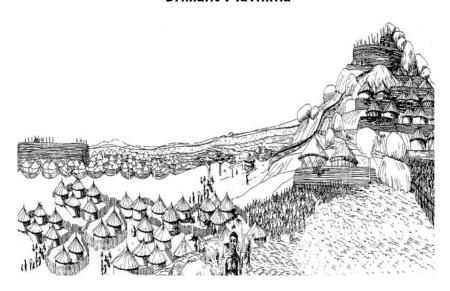
Lessons from the Great Zimbabwe and Old Bulawayo



Brilliant Mayhima

Archetyping Traditional Urbanism and Design for Community and Social Conviviality in Zimbabwe: Lessons from the Great Zimbabwe and Old Bulawayo

Brilliant Mavhima



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Book Synopsis

The purpose of this inquiry was to probe deeply into the concept of sense of community in urban design and draw aspects of pre-colonial urban settlements (Great Zimbabwe and Old Bulawayo) into current urban design and architecture. The study flows from the idea that environments can affect human behaviour as highlighted by the environmental determinism theoretical framework. Borrowing from the ideas of architectural determinism the study critically argues that urban design has been responsible for increasing individualism evidenced in current urban settlements in Zimbabwe. The study recognises that concepts like public space planning, street planning, walkability and combination of uses play a significant role in fostering sense of community in neighbourhoods. It pinpoints that legislation and design standards in Zimbabwe have been too general. This has undermined the development of sense of community in Zimbabwean cities. The study then posits that sense of community was higher in pre-colonial settlements than in current settlements. The central focus of this study is to identify and understand the primary sources of community cohesion within Zimbabwean settlements. By examining these key factors, the study aims to incorporate these insights into contemporary urban design practices, thereby fostering stronger, more connected communities in modern urban developments... To understand the sources of higher sense of community in precolonial settlements, the study employed qualitative research methods. Using the case study research design of the two areas. Great Zimbabwe and Old Bulawayo, the study used face-to-face interviews, cell phone interviews, open ended email questionnaires and observations from primary data and archival methods for secondary data. Data collected was analysed using thematic content analysis and narrative analysis. The Atlas Ti software was also important in data analysis. The study identifies that sense of community in precolonial society was linked to values, norms and beliefs that gravitated into design and settlement layouts. Beliefs of a circular world brought the idea of circular settlement patterns, relationships brought close clusters of related people, sacred perception of kings led to easy control of the people as one as the king was viewed as a god. The study identified that in current communities, design is guided by profiteering mind-sets, political will and government policies. The study recommends that there is need for peopleoriented designing, increase walkability, density and combination of uses. There is need for communities to be self-sufficient and compact as such people become familiar and sense of community is enhanced. The study informed the development of a design prototype of a neighbourhood that portrays sustainable sense of community.

Dedication

I dedicate this research to my God and my future wife.

Acknowledgements

I extend my utmost indebtedness and gratitude to Mr Manjeya who steadfastly supported and motivated me through the development of this dissertation. Next, I also wish to thank my classmates for supporting me and giving their opinions during the development of this dissertation. To my family I would like to say thank you for being the best family there is, I wouldn't ask for anything more.

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Acronyms

DPP Department of Physical Planning

UN United NationsAD Anno Domini

SDG's Sustainable Development Goals

CCP Cattle Central Pattern

RTCP Act Regional Town and Country Planning Act (Chapter 29:12

GZ Great Zimbabwe

Chapter 1: Sense of Community and Traditional Urbanism Contextualised

Being part of a societal group provides one sense of belonging and well-being as one would feel that he or she is a vital cog of the community's overall success. A sense of community is the sense of belonging brought about by common values, beliefs and practices which, when translated into design, allow people to identify with their neighbourhood. The kind of zoning and land uses in a neighbourhood then determines the level of interaction among the inhabitants. This presents a positive correlation between the success of cities and communities and the interaction among the inhabitants. Having a strong sense of community is thus, linked to more factors than just one's location as it involves sentiments. Boekamp (2012) avers that one can be part of the community physically but emotionally not being part of the town.

Neighbourhoods in Zimbabwean cities are designed after British standards that came as a result of colonisation (Davison, 2002). Products of such standards are focused more on infrastructure and housing provision and, as such, give less attention to social interaction and cohesion. Increased individualism has reduced the "sense of community" that community members ought to have for neighbourhoods to be sustainable. Schools of thought in urban design and humanities have come up with diverse conceptualisations of what constitutes "sense of community" (McMillan and Chavis, 1986; Chavis and Wandersman, 1990; Rovai, 2002). Attributes of 'sense of community' comprise of the sentiment of belonging, want to positively participate and being homogeneous within a community. Building from the conceptualisations, this study takes "sense of community" as the sentiment of belonging to a community that determines one's participation in a social group. The definition takes into consideration all the factors that circumscribe the concept of "sense of community".

In urban design, "sense of community" concept began to manifest in the twentieth century through various theories and concepts such as Garden City Concept, Neighbourhood Unit Concept, and the Geddesian triad among others (Hall and Porterfield, 2001). Plausible as the concepts maybe, they do not respond well to the Zimbabwean case [as evidenced by failure of British designs to develop highly cohesive and socially active cities]. As such, the original "sense of

community" that prevailed in the pre-colonial Zimbabwean cities [as seen in ancient cities like Great Zimbabwe, Ndebele State] has not been expressed in the Modern Zimbabwean cities. Failure of modern design standards and approaches to express the Zimbabwean sense of community presents a need for this study.

The issue of social cohesion in city planning is gaining global significance and purchase (Valle, 2008). There are two approaches to enhance sense of community in cities that are currently at the epitome of design. These include participatory urban design which engages people in the development of a design (Duany and Speck, 2013) and new urbanism which focuses on enhancing compactness and walkability in cities (Speck and Duany, 2016). Proponents of the participatory urban design (Kunze *et al.*. 2011) and new urbanist (Speck and Duany, 2016) approach argue that including certain design principles in community design enhances "sense of community". A study carried by Vale (2008) indicated that communities that are designed with the involvement of the public had the highest levels of cohesion, social networking, emotional safety and social interaction. Unge and Klandersman (1985) discovered that homogeneity in neighbourhoods is a source of sense of community. This relates to Gans (1967)'s study on friendship that noted that the basis of friendship was homogeneity.

Globalisation has also come to be a threat to local "sense of community" particularly in developing countries within the Global South situatedness. Western hegemony in movies, technology and politics has led to the admiration of western cultures at the expense of the local "sense of community". Beck (2000:57) argues that traditional systems of community beyond the family are beginning to dissolve and globalisation may result in the destruction of local communities. This is linked to the fact that the designs that are implemented under the neoliberal atmosphere have destroyed the "sense of community" (Speck and Duany, 2016). Designs in a neoliberal environment divide communities on financial grounds (Lund, 2002) and this has partially contributed to the formation of 'slums' for the groups that are not part of the elite community. This has led to social exclusion and reduced public participation in decision-making and increased social stratification leading to the loss of sense of community in cities.

Refocusing of urban planning towards a more context defined planning has led to re-orientation of planning as witnessed in the case of Aboriginal cultures and non-aboriginal cultures in the Canadian setup. Planning is largely done with the originals in the area to ensure continuance of the culture (Patel *et al.*. 2017). This

came as most planning practices in Canada had a detrimental effect on the traditional settlements. The new settlements led to the dispersion of patterns of community settlements, and this changed the form of the community into one with high a welfare dependency. A typical example is of the Grand Rapids Hydro Project that was done in the 1960's (Dean *et al.*. 2017). To improve on these, the Canadians through the MacKenzie Delta Beaufort Sea Regional Planning Commission introduced a new Aboriginal planning approach that included the sustainability and conservation approaches and cultural values. As such, an understanding of the culture led to the development of a successful community.

Urban design in Africa mostly derived from colonial design outlooks, principles and ideas. Most African cities have Anglo, Portuguese and French designs among other colonialist histories (Cooper, 1996). The exotic design standards have resulted in most African cities appearing as foreign cities and this has led to the loss of African "sense of community" (Collier and Gunning, 1998). The cities in Africa have been designed following sets of colonial standards that depicted the British "sense of community" which is anchored on the basis of income (Davison, 2002). Therefore, one has to fit into an income group or risk squatting and the products of these design principles are reflected by large African cities like Harare, Johannesburg, Maputo, and Lilongwe among others (Mkwandawire and Soludo, 1998). The exclusive nature of the cities has partially contributed to the formation of slums with Caledonia in Harare, Khayelitsha in South Africa, Kibera in Kenya among others (Desgroppes and Taupin, 2012, Marx and Charlton, 2003). The exclusivity of the modern cities did not exist in pre-colonial cities that allowed all members to participate in their own ways.

The trajectory taken by African countries have seen the design of cities for people without the people resulting in loss of ownership among the residents and therefore, loss of "sense of community" (McMillan and Chavis, 1986). African civilisations have been known to have their unique designs that were influenced by their culture (Bigon *et al.*. 2016). This was before colonisation which led to the development of undesirable Western urbanism (Amankwah-Ayeh (1996). From a study done by Amankwah-Ayeh (1996). it was identified that cities existed in Africa way before colonialism that were designed and planned under the influence of African ideologies that included Timbuktu, Djene, Kumasi, Gao, Thaba Bisiou.

Design principles in the pre-colonial period had circularity as the base of design, hence most African cities were circular in nature. Taking South Africa as an example, settlements in Broederstroom are dated to have existed between AD3350-AD600 and they were circular in form (Amankwah-Ayeh, 1996). This was largely an issue of tradition were people were settled around a hill, as families as such settled in circles for instance Yoruba in Nigeria Another typical example was of Dingane's community which was built in a circular format. As shown on Figure 1.2.

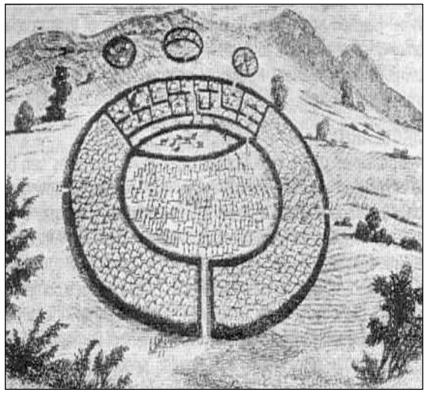


Figure 1. 1: Dingane's community (Amankwah-Ayeh, 1996)

The Bantu settlement pattern that was centred on cattle protection known as the cattle pattern of K2 also reflects circularity. Figure 1.3 is a sketch by Drake and Hall (1993) of the design of the cattle pattern.

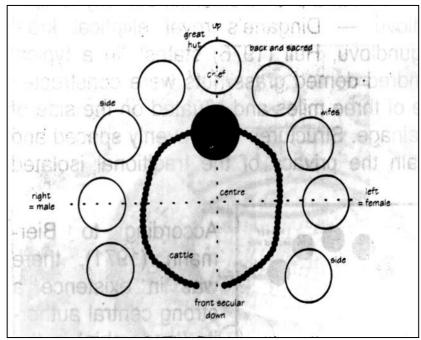


Figure 1. 2: Bantu cattle pattern (Drake and Hall, 1993)

Design of settlements in Zimbabwe in the pre-colonial era was guided by ubuntu/hunhu ethos, and Samkange (1980) defines hunhu as "a philosophy that inspires, permeates and radiates ... regulates our well-planned social and political organisations." This was a huge attribute of Zimbabwean communities as relayed by existing evidence. Organisation of land uses was designed based on its acceptability guided by the values, norms and dignity (Garlarke 1973). Consequently, the settlements designed had high levels of interaction and social cohesion. Colonisation of Zimbabwe saw the introduction of British design principles and laws (Chaeruka and Munzwa, 2009). Scholars like, Lynch (1960), Broady (1966) and Duany and Speck (2016) have applauded designs for creating more aesthetically pleasing cities, however, Pikirayi (2000) and Watson (2009) argue that they alienate the locals. The Shona and Ndebele people's history can be understood by looking at Great Zimbabwe and the Ndebele state. Great Zimbabwe's community has been applauded for beautiful designs that some scholars argue was not the work of Zimbabweans (Mauch, 1871, Pegado, 1531). For the Ndebele, there is need to look at the state and the organisation of their communities.

The Ndebele state was located on what is now Bulawayo which is 15km from the current Bulawayo centre. The Ndebele state was replaced by a grid iron design that is different from the layout of the centralised Ndebele state (Cobbing, 1988). "Sense of community" in the Ndebele communities were largely driven by power and culture (Ndlovu-Gatsheni, 2008). The people built their villages guided by defence mentality, as a result, an individual identifying to a community was the binding agent to the Ndebele "sense of community". One had to fall within the boundaries of a village, and participate to be part of a group (Ndlovu-Gatsheni, 2008).

The concept of sense of community has been of interest in the social sciences and humanities discipline (Watts, 2000, Amit and Rapport, 2002, Gusfield, 1975). Approaches to enhance sense of community have been brought forward mostly in the humanities (Durkheim, 1964, Ahlbrant and Cunningham, 1979, Peterson et al.. 2017, Ross and Searle, 2018). There exists a large pool of sociological interpretations of the phrase "sense of community" (MacMillan and Chavis, 1986, Vember, 1990, O'Connor et al.. 2015). In urban design, the concept of 'sense of community' is beginning to emerge as design scholars are gradually considering this aspect in neighbourhood urban design (Foster, 1953, Duany and Speck, 2013). Various models have been introduced with elements of sense of community, for instance, the Garden City concept, the Neighbourhood Unit concept and the Ideal city among others (Nasar, 2003). In Europe and America respectively, the models are working as they are contextually relevant (Duany and Speck, 2013). While these designs are working in Europe, the African 'sense of community' in design is still lagging (Onyedinma and Kanavo, 2013). Colonial urban design standards did not and have not vet addressed the needs of African "sense of community" (Njoh, 2009). In Zimbabwe, the British designs present a 'sense of community' that is exotic to the natives (Mafico, 1991) regardless of this, the designs have been adopted even in the post-colonial period. Principles and standards used to design residential layouts in Zimbabwe are largely focused on the economy and infrastructural development but overlooks the significance of designing for social cohesion. This has led to increased individualism in most urban communities evidenced by reduced participation in city design and planning (Mazonde and Carmichael, 2016). This study therefore, seeks to review historic Zimbabwean settlements [Great Zimbabwe and the Ndebele State] that had high levels of social cohesion and interaction. The study will borrow aspects of the settlements that affected "sense of community" and merge the aspects into current urban design. This will lead to the development of a model that portrays a Zimbabwean "sense of community".

The aim of the study is to identify and examine aspects of Zimbabwean "sense of community" from the ancient Zimbabwean cities that can be integrated into current design practices to develop a model neighbourhood that portrays a sustainable "sense of community". The study aims to identify and examine the design characteristics of traditional pre-colonial settlements in Zimbabwe that contributed to a strong "sense of community" and explore how these characteristics can be integrated into modern design practices. It also seeks to

evaluate current design practices in Zimbabwe, identifying aspects that need modification to enhance the "sense of community." By integrating pre-colonial characteristics with contemporary design principles and practices, the study endeavours to model an urban community that portrays a sustainable sense of community.

These study questions were rallying points of interrogation, these questions are framed below:

- What were the characteristics of traditional settlements in Zimbabwe that affected sense of community that can be integrated in modern design practices?
- What are the missing aspects in modern urban design practices that affect "sense of community"?
- How can characteristics that influenced sense of community in Zimbabwe's pre-colonial cities be integrated into modern design practices.
- How will a settlement with a strong and sustainable sense of community look like?

Overall, Urban design in Zimbabwe borrows its principles from British planning which came in with colonisation. (Mafico, 1991). The idea behind the colonial designs were to subjugate the natives and wipe away their cultural systems. This in turn would lead to the alienation of the Africans. The cities designed served the ideas and wiped off the central aspects of Zimbabwean 'sense of community' in city planning. Carrying out this study will result in the understanding of the qualities of pre-colonial cities of Zimbabwe, that had a strong influence on social ties and fuse these into current design approaches. This will improve the design approaches and the levels of community interaction and relationships.

The imposed "sense of community" in Zimbabwe has created urban design models that have led to the development of neighbourhoods that are individualistic in character. Designing in Zimbabwe has a bias towards creating communities based on financial and social classes [low density, medium density and high-density]. This form of financial sense of community has a neoliberal stance that orients people into some degree of financial selfishness. This contradicts the values of Zimbabwean sense of community which is hinged on hunhu/ubuntu and oneness and sharing. Therefore, developing a model that responds to the Zimbabwean "sense of community" will help in enhancing social cohesion in modern Zimbabwean cities. Furthermore, the model has the potential to become the future of urban design in Zimbabwe as it will be centred on Zimbabwe's heritage. Having this model may also improve understanding of urban societies in scholarly circles as it will affirm the concept of architectural determinism in the context of Zimbabwe.

Globally, guided by international institutions, the Sustainable Development Goals disc ourse has been gaining traction as a plausible indicator of development. Sustainable Development Goal 11 introduces the concept of inclusivity. Carrying out this study will result in the development of design models and principles that enhance human involvement. This is backed by McMillan and Chavis (1986) who argued that through enhancing sense of community, citizen participation will be enhanced. Having neighbourhoods that are designed with cognizance of the Zimbabwean values and norms will result in the inclusion of classes that had been side-lined. This will lead to the country achieving one of the Sustainable Development Goals (SDG's). The study, therefore, will be of huge importance for the country in its pursuit of meeting the Sustainable Development Goals.

Urban problems in Zimbabwe and across most developing countries tend to take a pattern of those of the colonial masters. This reflects the influence of urban plans and urban problems. As such borrowing planning from the Zimbabwean forefathers can help in dealing with some of the problems that have come about as a result of the British plans and planning processes. This process will lead to the development of plans that relate to the needs of the Zimbabwean environment and the cultures and comparison to the exotic planning principles currently operational.

The study focuses on two ancient cities in Zimbabwe, the Great Zimbabwe and the Ndebele State/ Khami Ruins. The two areas are situated in Masvingo and Matabeleland provinces respectively. The Great Zimbabwe represents the Shona culture while the Old Bulawayo site represents the Ndebele culture. The two study areas are no longer functional, however, the remnants of the settlements and the history that is found in the museums at the site can give an understanding of how the societies lived.

The History of the Shona people can be told by scrutiny of the history of the Great Zimbabwe state (Fontein, 2016). The Great Zimbabwe dates back from the 11th Century and is believed to have been built over 300 years. Debate still exists on the constructors of the Great Zimbabwe (Chirikure *et al.*. 2017). Scholars like Hartnack (2015), Muchemwa (2016), Ndlebe (2016) argue that the design of Great Zimbabwe is too sophisticated to have been built by the Shona people by the 11th century. However, there is no evidence to substantiate the claim that the Shona people did not build Great Zimbabwe due to its unique design (Mpofu, 2014). The conclusion is that the Shona people constructed Great Zimbabwe (Mtetwa and Lindahl, 2017).

Great Zimbabwe is estimated to have existed in flourishment between 1200 and 1500. The state is believed to have inhabited around 18, 000 inhabitants during its peak (Connah, 2015).and the area covered an area of between 160 and 320 kilometres (Fagan and Durrani, 2015). The area was designed into three distinct architectural groups that include the Hill Complex, the Valley Complex and the Great Enclosure. The Great Zimbabwe was a trade centre and the occupants traded with the Chinese, Portuguese and had a link to Kilwa (Ndoro, 2001). The

community was ruled by kings and had strong social ties. The Great Zimbabwe is estimated to have fallen around the fourteenth and the fifteenth century (Mpofu, 2014).



Figure 1. 3: Great Zimbabwe state (Marlowe, 2013)

To really comprehend the Ndebele culture there is need to look at the history of the Ndebele after Mfecane. After the defeat by Tshaka at Mosega, the Ndebele left under the leadership of Mzilikazi and they settled at four capitals namely Gibxhegu, Mahlohloko, Inyathi and Mhlahlandleia. After Lobengula gained power in the year 1870, they moved near Gibxhegu and renamed the area KoBulawayo derived from *bulawa* meaning to kill or persecute. The site was burnt down by Lobengula in 1881 and moved to the current location of Bulawayo. In 1998 a reconstruction was attempted but the site was unfortunate as it fell victim to a bush fire in the year 2018 sparing only the museums. The location of Old Bulawayo is approximately 27 kilometres from the current location of Bulawayo (20°18′10″ S 28°37′35″ E). The area was established as a new town in 1870 following the argument that lead to the death of Mzilikazi.

The Ndebele are descendants of the Khumalo people that moved out of South Africa during the times of Mfecane and the rise of Tshaka the Zulu (MacKenzie, 2017). The Ndebele came to Zimbabwe in 1883 settling in the area now Bulawayo

displacing Changamire Dombo. According to history, the Ndebele had an aggressive community as such the pillaged every community around them. The Ndebele state was divided into three strati, the *Zanzi* (the Rich), *Enhla* (Middle class workers) the *Holi* (lower class). These groups were converted into fighting regiments. The Ndebele community after wars began living in hamlets which were displaced villages called kraals (Ndlovu-Gatsheni, 2014). Figure 1.4 is a map of the Ndebele state.

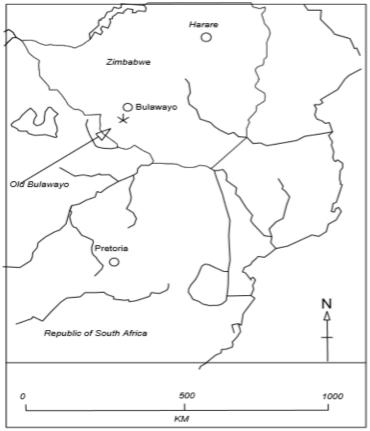


Figure 1. 4: Ndebele State (Makuvaza and Burret, 2011).

The study will focus on two tradition settlements to understand various components of Zimbabwe's civilisation and settlements before colonisation. Great Zimbabwe ruins and Old Bulawayo will be the main areas of focus as they bear

the history of Zimbabwean societies from the 12th Century-15th Century (Garlake, 1985). In delimiting conceptual matters, urban design is divided in two aspects, architecture which is focused on the private realm and town and regional planning which is focused on the public realm in a wider context (Erell, 2008). The study will focus on town and regional planning, this aspect of urban design entails planning at a larger context, using streets, blocks, zoning among other considerations.

Definitions of for the following key terms are provided as follows:

Urban Design-is concerned with the physical form of the public realm over a limited physical area of the city and that it therefore, lies between the two well-established design scales of architecture that is concerned with the physical form of the private realm of the individual building, and town and regional planning that is concerned with the organisation of the public realm in its wider context (Madanipour, 1996).

Community-An area where a group resides, a group with common interests (Lund, 2002).

Sense of Community- is a feeling that members belong to a place, matter in decisions of a group and share the faith that the needs of a group member can be met through committing to be together (McMillan and Chavis, 1986).

Society- a group of people living together (Chavis and Wandersman, 2002).

The book assumes the following structure:

Chapter one is about the introduction and general overview of the study. it outlines the problem statement, the aim of the study and the study questions, setting the general direction of the study. The chapter is preceded by chapter 2 which has the literature review that provides an overview of how scholars perceive sense of community in the design of settlements. Chapter 3 provides a full spectrum of the methodology that the study engages. From the methodology, the study presents the findings of the study in chapter four while the fifth chapter provides the discussion and recommendations of the study. The last chapter will present the model that the study generates, of a design that presents sustainable Zimbabwean sense of community.

Sense of community is a significant aspect in human lives. It is not simply affected by one's physical location but the emotional attachment. The sense of belonging is affected by various aspects that include but not limited to norms, values, social ties and other forms of homogeneity. All these translate into a design that makes one identify him/ herself to a particular community. The 'sense of community' aspect has been lacking in urban design in African countries, particularly Zimbabwe. This is hinged on the colonial design principles that were used to develop new urban centres. The drive behind this was to subjugate the African as such cities were of a neo-liberal nature. This calls for a look at the factors that affected sense of community in pre-colonial settlements like the Great Zimbabwe and the Ndebele state and fuse them into modern day urban design.

Chapter 2: Urban Design and Sense of Community: A Theoretical Review

This chapter chapter critically reviews existing literature on the issue of sense of community and urban design with a sense to identify a research gap or lacunae in the existing canon. It identifies the conceptual grids or and the theoretical framework in which the study is hinged. The concepts of urban design and sense of community are conceptualised in this chapter. From conceptualising the key concepts, the chapter identifies the loop holes in the existing urban design standards used in Zimbabwe. The chapter moves onto the study areas, the Great Zimbabwe and the Ndebele state giving background information.

The study is premised on the idea that "sense of community" that existed in the pre-colonial era is different from the one that exists in current Zimbabwean cities. Colonisation brought about design standards that replaced Zimbabwean cities that existed with a new type of cities that replicated the British life style. The design standards and approaches by the British have had a negative effect on the level of interaction in Zimbabwe.

Sense of community is evidenced by four basic principles as raised by Macmillan and Chavis (1986) which include the feeling of being a member of a group, shared emotional connection, degree of influence in community, responsibility and integration and fulfilment of one's needs. This sense is influenced by various aspects that include culture, policy, design, and location. Urban planning before the colonisation of Zimbabwe was done with aspects that fostered the sense of community. However, the coming of the colonial masters brought about a different kind of community that did not present the Zimbabwean sense of community. Issues like restrictions and urban ordinances and neo-liberal focus reduced the sense of belonging to the Zimbabwean people creating a new image of Zimbabwean cities (Forsyth, 2015). This however, led to the development of exclusive cities that reduced the sense of community. This presents a need for one to borrow concepts from pre-colonial Zimbabwean communities and merge them with certain aspects of current communities and develop a city with a sustainable Zimbabwean sense of community. Figure 2.1 is a conceptual framework presenting the complexities and inter linkages between sense of community, pre-colonial cities, current cities and the route to development of a city with a sustainable sense of community.'

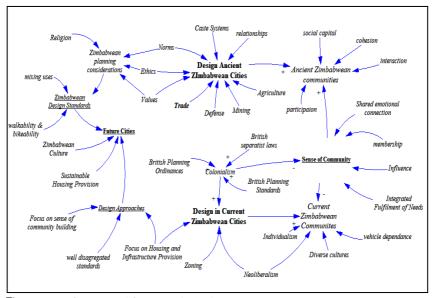


Figure 2. 1: Conceptual framework (Author, 2019)

The topic of sense of community in urban design has been discussed in various theoretical cycles. Sociologists, geographers, psychologists and urban designers have propounded various design theories and models in trying to understand human behaviour and its attribute to the society. The base theory behind sense of community in design is Environmental Determinism. Fredrick Ratzel propounded this theory in the 20th Century. The theory suggested that the climate of any particular environment stimulated the achievement, economic growth and efficiency of a community. This theory was later criticised by the theory of Environmental Possibilism that noted that through technology everything can change (Letterthwaite, 1966). Environmental Determinism theory justifies how humans are influenced by their surroundings. While the theory looked at how climate was linked to the level of hard work, it can be used to explain how the layout of community can be linked to interaction. As a result of the environment that one is in, one's level of hard work or laziness can be the determinant of one's community (Lazy people come from hot and coastal areas were one can get a banana while sleeping under a tree or one is hard working therefore comes from cold and rugged terrains that needs hard working people for survival). Being applied in this context, Frellich (1967) further developed the theory of architectural determinism which focuses more on how the design of a community influences the behaviour of human beings.

Architectural Determinism borrows its principles from the Environmental Determinism theory and this theory argues that the architecture design of an area determines the behaviour of the community (Frellich, 1967). Architectural Determinism explains that the design of buildings and the general form of an areas determines the behaviour of the inhabitants of the area. The relationships and social networks of an area are therefore, influenced by the architectural form of the area. This is a new urbanist approach with scholars like (Duany and Plater-Zyberk, 1991, Calthorpe, 1993, Langdon, 1994). Debate however, still exists on the issue of physical space and community creation. Talen (1999) argues that while space influences sense of community, its importance is over played. The argument is that other non-environmental factors can influence sense of community like age, income, and education years in residency (Gans, 1962; Kasarda and Janowitz, 1974; Fischer, 1976; Burkhart, 1981; Glynn, 1981; 1986, Haggery, 1982; Campbell and Lee, 1992; Talen, 1999). From the above theory, sense of community in neighbourhood design is influenced by the design of that neighbourhood and a design can kill or enhance the level of cohesiveness or oneness in a neighbourhood.

Sense of community is one of the most contested terms. There exists a plethora of possible definitions of sense of community. There seem to be no clear definition as there are no clear and measures of sense of community. In the context of urban design, there is a discrepancy between sense of community and neighbourhood characteristics.

Understanding what sense of community in design is entails defining the term community. The word community seem obvious at first glance but is rather complex. It diversifies from simply a group of people to issues including geography, homogeneity (Midgley et al.. 2018)). A community can be an area where a group resides, a group with common interests (Talib et al.. 2017). In urban design, community is defined in terms of space. McMillan and Chavis (1986) conceptualises this kind of community as a community of place. Community can also be defined in the context of relationship quality (Wagner and Bischoff, 2017). The definition provides a particular attention on individual relationships within a community. Fischer (1982) argues that communities of today are more complex to define with people having to have multiple affiliations with both the people and space. Watts (2000: 37) has described the term community as "an extraordinarily dense social object and ... rarely subject to critical scrutiny." This is despite overeat of the term in many contexts.

Amit and Rapport (2002) underscore its ambiguity and variability in applications evoking ranges of meaning, presumptions and images. Gold (2005) argues that the term community can be taken to mean a group of people who have something in common and are actively involved with each other in a benign fashion. In this regard, benevolence and goodwill are the pillars of community (Johnston et al.. 2018). Such values have induced Tonnies (1956) to divide the term into two: Gessellshaft and Gemeinschaft being German words for community. Gemeinschaft refers to a society with essential unity of purpose which is usually the hallmark of the identity of traditional rural communities. Gessellshaftis civil society being an urban society. The types of communities propounded by Tonnies (1956) defines the types of communities that exists in current rural and urban societies. Gusfield (1975) made a distinction between 'geographical community' and 'relational community'. Geographical community is related to issues of boundary demarcations while relational community signifies societies with strong social bond and interaction (Boyd and Nowell, 2018). Borrowing from Tonnies (1965), Gusfield (1975), and Durkheim (1964) observed and noted that Modern communities now develop around skills, and interests. Various other definitions of the term community exist but all amount to elements of identity, relationships and solidarity (MacMillan and Chavis, 1986). This study defines community as a group of people within the same geographical boundary, wanting to participate in community initiatives and having essential unity for purpose.

"Sense of community" is not easy to define and as ambiguous as the definition of community is, so is the definition of "sense of community". Ahlbrant and Cunningham (1979) underscore that ""sense of community" is an essential contributor of one's commitment to society and satisfaction with it. The term society has a variant range of definitions (Arronson, 1995). This study defines society borrowing a sociological definition that views society as a group of people living together (Arronson, 1995). Therefore, the term 'society' can be used to mean a village, town, city, province, region or even the world.

Ahlbrant and Cunningham (1979) posits that if one is satisfied with a neighbourhood, they are most likely to contribute and engage in community initiatives. "Sense of community" thus has four elements as propounded by MacMillan and Chavis (1986: 9). The four entail:

Membership – the feeling of belonging to a group and sense of having personal relations.

Influence – the feeling of usefulness, ability to make a difference in a group

Integration and fulfilment of needs – the feeling that one's needs will be satisfied as a benefit of their membership to a group.

Shared emotional connection – commitment and belief that members have similar history, experience, common places and have time together.

Building on the conceptualisation of sense of community by Chavis and McMillan, Chavis (2014) further argued that social community makes it more than just a community and as such creates the sense of community. From these indicators, "sense of community" is a feeling that members belong to a place, matter in decisions of a group and share the faith that the needs of a group member can be met through committing to be together. The definition of sense of community is in a broad context, as such there is need to narrow down to what constitute sense of community in Africa.

Before the coming of western civilisation, the sense of brotherhood and hospitality were some of the fundamental values of the African people (Onvedinma and Kanayo, 2013). The African human relationships were inseparably associated with culture (values and morals) and permeated the whole way of life. Sofala (1982) notes that African cultural value is a wholesome set of human relations that entail respect for elders, feeling of community fellowship, this is reflected through community land tenure and ownership, altruism and hospitality. Onyedinma and Kanayo, (2013) noted that duties like construction of a building for the elderly or the sick was a community responsibility that called for the help of many. To try and explain the importance of African philosophy of community, Ifemesia (1978) notes that interdependence is an essential attribute of African communities as a tree does not form a forest. Thus, the forms of African communities are characterised by empathy and compassion for other humans. Mbiti (1990) notes that for Africans, being human is indicated by one's community. This can be seen by participating in beliefs, festivals and ceremonies that gave the residents sense of belonging. The African communities where based more on obligation rather than rights and one's rights where exercised through carrying out their obligation, this resulted in relationship inter-linkages in the communities, thus rights where enjoyed through relationships (Onyedinma and Kanayo, 2013). The word relationship has been defined by Lussier (2008) as, "human relations are about you and how you get along with your family, friends, co-workers, and everyone else you interact with" (ibid p. 4).

To elaborate on the sense of African community, Davidson (1960) quotes an African proverb that runs, "Go the way that many people go, if you go alone, you will have reason to lament" (p.31). This clearly expresses the importance of collective decision making in African communities. He further notes that, in

Africa, the success of a person does not make a town rich. This also makes worthy the African belief that success was based on uniting and making collective success rather than individualism. In expressing the sense of community in Africa, Ifemesia (1976) brought about the importance of dialogue and conversations in Africa as they strengthened human relations. Therefore, through participation in decision making, strong social ties are formed. Biko (1978: 41) observes that, "Our society has always been centered around people. Westerners are often surprised by our capacity to converse not with the goal of reaching a specific conclusion, but simply to enjoy the act of communication itself. Intimacy is not limited to close friends; it extends to an entire group of people who come together, whether through work or residential arrangements. "The statement notes that communication and dialoguing is an essential aspect of the African sense of community.

The concept of sense of sense of community in the Zimbabwean community cannot be easily defined since the introduction of western Morden civilisation (Samkange and Samkange, 1980). The word community when brought up in the Zimbabwean community closely relates to unity and solidarity in all initiatives. Survival of one is highly depended on his/her society. Zimbabwean pre-civilisation communities had a central point or dare which is a Shona word for court and group decisions were made within. Another binding factor in Zimbabwean and Bantu societies was Ubuntu in Ndebele /hunhu in Shona (Anschwanden, 1982). The term 'hunhu' has been defined by Samkange and Samkange (1980:34) as a philosophy that inspires, permeates and radiates ... regulates our well-planned social and political organisations. The two further note that the term 'unhu/Ubuntu' could be easily identified but not easily defined. The word emanates from the term 'munhu' which is Shona for a person. There exists a vanhu" in Shona that " kuti unzi munhu phrase says, meaning for one to be a person one should be from a certain community.

Samkange and Samkange (1980) in explaining the issue of sense of community through *hunhu*, notes that the element of '*hunhu*' differentiates whites from blacks provides an example of how the Shona people state that "there is a person walking with a white man." (*hona munhu uyu arikufamba nomurungu*.). But is a white man not a person? The African community views the humanness as being a function of one's contact with one another through perseverance, empathy, helping one another, and solidarity among blacks (Samkange and Samkange, 1980:80). Thus, in a Shona community, unity was what made people community. Therefore, a white man does not possess *hunhu* and therefore, cannot be termed '*munhu*'. A paradox then comes into play when a person is describing as *munhu*

asiri munhu (a person who is not worthy) (Menkiti, 1984:122). Thus, for one to be a person in the Zimbabwean culture, they have to undergo an initiation of societal norms and values. Samkange and Samkange (1980) then points out that the concept of humanity in Zimbabwe was linked with kindness, courtesy, consideration and friendliness between the people, one's behaviour in a community. Therefore, from this discussion, sense of community in Zimbabwean society was centred on *hunhu* which connects strong social relations, respect and unity.

Conceptualising sense of community leads to the idea that in every community there are certain norms and values that ensure a manageable sense of social order (Talo et al.. 2014, Neal and Neal, 2014). Africa as a continent is facing various exogenous and endogenous forces that drive the reshaping of a community and threatening the manageability of the continent. The forces include colonisation and colonial ideologies, globalisation, civil wars, social exclusions, poverty, urbanisation among others (Talo et al.. 2014). Having all the forces acting against the sense of community in Africa becomes a very vulnerable component of the African community. Two cultures or senses of community exist, the first being the artificial which is created due to an external force. One becomes what he needs to be for him/her to survive in the new community. The second, includes the traditional sense of community. In explaining the significance of sense of community sustenance, Ekeh (1980) argues that the 'self' syndrome generated from the artificial sense of community is responsible for the poverty in Africa.

The African communities are ones with an almost similar design in terms of their settlements particularly those termed as urban (Amankwah-Ayeh, 1996). Designing and culture in Africa has always been hand in glove with each other. The African leaders had a culture of control and power as such everything was designed radiating from the focal point of control (Hull, 1976). As such most African centres had a circular design and the leader would stay at a powerful point with full control of the masses (Biermann, 1971). This explains the location of the kings' dwellings at the higher grounds in most African settlements. Furthermore, the same concept gravitated into the development of single dwelling units like the homestead that had the *dare* at the focal point of the homestead (Davidson, 1959). *The dare* was where the man seated and made important decisions of the family. The king was powerful in his community so were men in their homesteads (Huffman, 1986). This is evident during Tshaka the Zulu's reign, were the Nguni people were settled in a circular form. Figure 2.2 shows the settlement of the Nguni people.

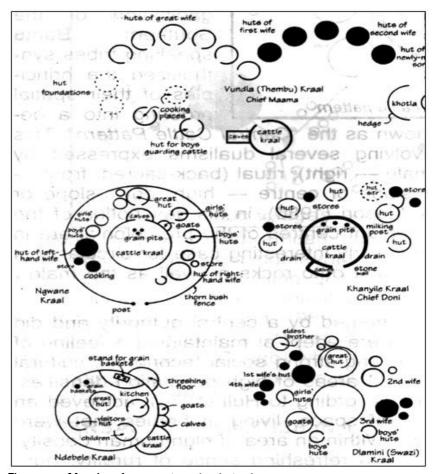


Figure 2. 2: Nguni settlements (Amankwah-Ayeh, 1996)

In a study conducted by Magobunje (1962), a premise was realised to the effect that cities in Yoruba were a symbol of the beliefs of the Ife people. The societies were settled in sets of four settlements located around the king's hill. This was because the Yoruba people believed in the form of a world that is round and circular in form. They also believed that the world had two roads cutting the world through the centre, one running North to South and the other running from East to West. As such they were circled around the hill in the world shape settling in four groups like the world is divided by the roads. The same idea of the

city being circular can also be seen by the beliefs of the Egyptians and their hieroglyph for city.

Furthermore, the Cattle Central Pattern design also dominated the Bantu communities and was influenced by the beliefs of the communities ranging from issues of the communities being patriarchal and presenting a dual community that existed (Summers, 1971). For instance, during settlement, it was identified that women were settled on the right and women on the left (Manson, 1986). In terms of rituals, the back was sacred and the front was circular and in terms of status, the upper class was at the centre, upper slope or high and the lower class was down slope or sides on lower grounds (Huffman, 1986). Figure 2 shows the K2 settlement pattern.

More so, centres that did not have issues of control in Africa did not grow into big cities, they were designed in a way that promoted the development of social, economic, cultural and physical linkages (Magobunje, 1968). The Igbo villages lived in small clusters that had linkages and well conserved spaces with strong social ties. Figure 2.3 shows the layout of Igbo Villages.

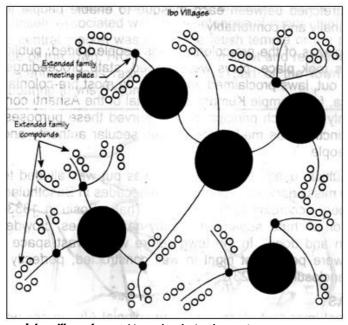


Figure 2. 3: Igbo villages layout (Amankwah-Ayeh, 1996)

Urban design and sense of community have been defined both in different contexts and in the same vein. This section seeks to come up with a conceptualisation of urban design and of sense of community in the context of urban design. It highlights urban design considerations that are significant in creating areas with a sustainable sense of community from a scholarly perspective.

Urban design is a famous term and has been used by various scholars in articulating issues, however, there is no agreed definition of what urban design is (Madanipour, 1996, Carmona and Tiesdell, 2007, Banerjee and Loukaitou-Sideris, 2011). There exists a good number of definitions for the term "urban design". Frey (1999:12) describes urban design as "a rather unfortunate term describing greatly confused responsibilities of people supposedly involved in the design of the city's public realm." In his definition, urban design is viewed as an art of shaping up the public space. The definition further points out that it is confused in the sense that there is not a clear distinction between the duty of a planner and the duty of an architect.

The distinction between architecture and urban design is then covered up by this definition of urban design:

It focuses on the physical form of the public realm within a specific area of the city, positioning itself between two established design scales: architecture, which deals with the physical form of individual buildings in the private realm, and town and regional planning, which addresses the organization of the public realm on a larger scale (Gosling and Maitland, 1984, p. 9).

The distinction between architecture and urban planning design is clarified in this definition. Gosling and Maitland however, do not clearly articulate what private and public realm is. Streets, squares that are designed are viewed as public squares but however, contain elements of private realm. The study adopts the definition by Gosling and Maitland (1984, p. 9) as it offers a more comprehensive definition of urban design.

Sense of community in urban design is becoming a significant topic. The question becomes, what is sense of community in the context of urban design? While the ideas behind sense of community in design are old, the issue of sense of community application is still new (Rishbeth *et al.*. 2018). Urban planning used has had a focus on sustainable cities, compact cities, liveable cities and smart cities among other planning trajectories (Zhou, 2018). While these ideas covered social planning, their focus still was on physical landscapes. In urban design, sense of community in urban design is the sense of place (Prestamburgo *et al.*. 2019). This process requires the nurturing of identity and connectivity within a community

(Gokce and Chen, 2018). This process entails issues of street signs and street walks (Heid, 1999). Another definition of sense of community in the context of urban design is the satisfaction that residents get linked is to the general quality of life (Notteboom, 2018). While these definitions try to explain what sense of community is in the urban design realm, it still remains incomplete and open for contention.

A definition by Wiesnefeld (1997) in the context of designing is that sense of community is that feeling of "we-ness" that people get within a community based on land uses that are provided. Hernandez (1998) provides another phrase to explain what sense of community entails, this is based on the feeling that "this is our place". Land uses that make people identify themselves with a place make that area their place and such improves sense of community (Hu and Chen, 2018). The aspects that are in a place that are different from any other place becomes the distinction between "us" and "them" (McMillan, 1996, Razack, 2018). In urban design, the substance of sense of community is largely social interaction (Wilkinson, 1991). Further defining sense of community in the built environment, Hummon (1992) proffers a definition of sense of community that perceives it as one's orientation towards space with regards to feelings fused within an environment and what it means to them. Anthropologists define the sense as place attachment (Malpas, 2018).

Designing for sense of community has been done in various ways in various cities. Montgomery in his book entitled *Happy Cities* points to issues of reduced car dependency as a source of 'sense of community' (Montgomery, 2013). The book argues that the more cities sprawl and cities are designed in a way that promotes the use of cars, the sense of community breaks. The more people drive, the more they become individualistic. The argument moves on to point to urban design considerations as having a huge influence on sense of community in urban design. This approach to design is emphasised by new urbanists or neo-traditionalists (Leccese and McCormick, 2000, Duany *et al.*. 2010, Duany and Talen, 2013). This group of scholars borrow their design ideas from a pre-motorist depended cities as such their considerations include walkability, public spaces, mixing uses, compact cities and proximity.

Walkability is a concept or design consideration that is gaining significance by day. Walkability developed as far back as the Radburn concept (Gilderbloom *et al.*. 2015). Recently, new urbanists have begun emphasising on the concept stating that cities should be designed with less dependence on cars (Adams *et al.*. 2015). Distance to service is one major consideration that is brought about in discussing

the concept of walkability. Services should be placed in central places and easily accessible to everyone in the neighbourhood (Litman, 2017). Walkability does not only include distance; it also focuses on street quality. What incentivises walking? Speck (2014) provides four aspects that incentivises walking which include; giving people reason to walk (balancing uses), Safe (Reality and Perception), Comfortable (Space and orientation) and interesting (Sign of Humanity). As such ideas like quality and width of walkways, safety in walkways, shade in walkways, building heights in relation to human scale and proper interaction between all forms of traffic (Forsyth, 2015). Incorporating this in a design increase walking (Litman, 2017). The concept of walkability entails narrower streets, use of parallel parking wherever possible and existence of various paths options. As people walk, they will interact, creating bonds and as such developing cities with high sense of cohesion and community (Adams et al.. 2015). Increasing the walkability of areas has been done in Oklahoma City in America. Oklahoma City had been voted the least pedestrian friendly place in America. This led to the mayor engaging a consultant (Speck) to increase walkability. This saw the reorientation of streets into walkable places from 4-6 lane roads to 2-4 lane systems adding biking and walking lanes. This has increased the levels of interaction between the residence as they spend more time together (Speck, 2014).

Developing communities with high levels of interaction entails quality public spaces (Ismail and Said, 2015). Public spaces are built or un-built areas that are within a neighbourhood, village, town, city that is not restricted to the public (Koohsari et al., 2015). These include but not limited to public parks, streets, among others. Some public spaces are semi-public [cinemas, stadiums, and cafés] which are owned by individuals. The public spaces create an interface for social exchange, making them an essential component for sense of community (Yung et al., 2016). Therefore, public spaces determine the level of interaction within a society. An example of how provision of public spaces improved interaction is of Central Park in New York City in America. The Central Park was designed by agriculturalist Frederick Law Olmsted (1822-1903) and British-born and trained architect Calvert Vaux (1824-1895). This was a design of a public space developed as an experiment of urban resilience. This was a place where the rich and the poor were supposed to interact as such creating a democratic space. From the operating day to date, the central park is a centre of attraction were various people meet and interact. Figure 2.4 is an image of central park in 1992 evidencing how people began to interact as a result of the new public space. Figure 2.4 shows a 2016 image of central park and how it's still bringing people together including tourists.



Figure 2. 4: Central Park 1902 (Library Congress)



Figure 2.5: Central Park: in 2016 https://www.ontravelmode.com/wp-content/uploads/2018/02/CentralPark Medium-1.jpeg

The concept of mixing uses is one that is gaining global significance (LeGates and Stout, 2015). Designers and urban planners advocate for mixing uses and avoiding Euclidean zoning systems. The combination of uses can be done in two different approaches. The first is having uses like industrial, commercial and institutional among others within the same block or region. The second approach is having various uses within the same building (Lang, 2017). The integration of uses entails creation of continuously vibrant zones. The continuous convergence of people within a zone will ultimately lead to increased interaction and as such developing social capital and with it sense of community. Combination of uses as an urban management strategy.

Another significant consideration in the development of communities with high levels of cohesion and advanced sense of community is compactness (Lang, 2017). The concept of compactness rounds up the other considerations discussed above. Compact neighbourhoods are communities that has all uses close together. All services are located within walkable distances and parks and public amenities located at convenient places (Rapoport, 2016). In the design of compact cities, issues of proximity to other homes and public facilities is also a significant consideration. Langdon (1970) proffers that by shear proximity, between streets and homes, social interaction is fostered.

Urban design in Zimbabwe is guided by the Regional Town and Country Planning Act [29:12] and the Urban Councils [29:15]. These two acts have led to the development of design standards that determine the design practices in Zimbabwe. Designs under the guidance of Circular N° 70 of 2004 for the design of settlements and the Model Building By-laws (1977) for the design of buildings. The design of settlements is also aided by the Layout Design Manual which is not a standard but a guideline of how to design in Zimbabwe.

Circular 70 of 2004 is a document that provides standard for the design of layout plans in Zimbabwe. The document succeeded circular No 3 of 1992. This document resembles the British separation planning having a focus on separation of land uses and having minimum stand size at 150m². The introduction of circular 70 brought about revised standards on minimum stand sizes with the minimum being 70m². The design standards on the preamble indicate a focus on cost reduction and affordability hence, reduced stand sizes.

"... components are designed to reduce costs and promote affordability and maximise on limited land and scarce resources. They are designed to cater for a wide variety of beneficiaries in different income groups and they also provide local authorities and other stakeholders in the housing sector with uniformity and

shared principles for planning and implementing housing schemes in their respective areas. On the whole, the standards are designed to enhance the housing delivery process throughout the country...Government shall not approve housing layout plans and proposed development schemes other than those that comply with the standards set out in this circular." Source. Circular No 70 of 2004.

The introduction of the standards evidences a focus on affordability and cost reduction in land delivery and nothing more, the issue of "sense of community" or social interaction not catered for in the design standard. Therefore, as the major town planning standard that is currently under enforcement, it can be used to argue that layout planning standards in Zimbabwe do not provide for sense of community in design. Thus, in the planning systems of Zimbabwe, sense of community is either not a factor or is assumed to be automatic. In current Zimbabwean cities, the nuisance of exclusion in cities (Dorman, 2016, Muchadenyika and Williams, 2017) and the reduced public participation in council gatherings (Dorman, 2016) evidence that "sense of community" is not automatic. Rather, for sense of community to exist, permitting standards have to be in place. The circular feeds onto council by-laws to ensure that they move the agenda of the government, in this case of reducing construction costs.

Building designs in urban Zimbabwe are guided by the Model Building By-laws of 1977. This document is a generic creation of British designs and as such the urban form that exist in some parts of Britain is present in urban Zimbabwe. The document provides for minimum standards on every aspect of a building. Looking at minimum British stands currently, it can be identified that there is slight difference because the British have updated the standards. Aspects like wall sizes, window sizes, roofing material and standards and even colour coding are the same (see Model Building By-Laws). As a result, urban design practices currently in Zimbabwe are native to British people than the Zimbabweans. Design of buildings following British standards led to development of buildings that have corners whiles the Zimbabwean buildings had a circular shape without corners (Pikirayi, 2006). This has affected the comfort associated with the Zimbabwean sense of community. Atypical example is of Lobengula who was given a square house as a gift by the missionaries, it had an entrance and exit door behind as he could not sleep in a house with corners as it was associated with evil spirits (Bozongwana, 1983). The component of sense of community (membership) is therefore, not fulfilled in these standards.

Urban layout design in Zimbabwe is done with the guidelines of the layout design manual that was developed by the Ministry of Local Government, Public Works and National Housing. It is in this document that all design standards are refined.

The design manual (Layout Design Manual of 1992) provides for road widths, services, sizes, acceptable land uses and the design patterns in town planning in Zimbabwe.

The first aspect about road design in the design manual is the issue of foot paths and tree pedestrian designs. The manual only provides for road reserves and not the layout of the final road. This has led to the development of roads that favour vehicles over pedestrians. The manual does not outline the percentage that is dedicated to vehicular traffic. This ultimately leads to the development of roads that favour vehicular traffic. In line with sense of community, this implies the development of exclusive streets that are not safe for pedestrians. Failure to create safety has an implication on walking. People cannot walk around if they do not have a feeling of security as such, it reduces interaction as the areas become more vehicle-oriented areas. The reduced walkability in the area implies less time for interaction therefore affecting the sense of community.

The design manual provides that in every layout design that is done, 5% of the planned area should be open spaces, both passive and active. The standard focuses more on land utilisation economy. Furthermore, the 5% include both passive and active open spaces. The other issue is the sufficiency.

In conclusion, the chapter identified that sense of community is not an easy word to define, rather it is one overeaten. The major issues behind definition of sense of community lie within the context dependency of the term. Sense of community differs within research fields, geographical areas, and culture among others. This chaptergave various definitions from the general to the context specific definitions like what sense of community is in urban design. After that the chapterdefined urban design and how sense of community can be enhanced in urban design giving examples. The chapter then gave an outline of existing legislation of urban design in Zimbabwe and how it is fostering or stifling sense of community in the urban areas that are under production in Zimbabwe. The next chapter will focus on the methodology that the study will engage in collection and analysis of data.

Chapter 3: Study Design and Methodology

The literature review furnished information on how sense of community is perceived and enhanced from a scholarly perspective. This chapter presents the research methodology. This section determines a study's acceptability within scholarly circles. It informs the conclusions and giving an overall assessment of whether the study is feasible or utopian. It is in the methodology that the researcher direction, costs and scope is further highlighted. This chapter outlines the research philosophy that the researcher is inclined to. From the epistemological inclination the study's methodology was developed. The section highlights how data was collected and analysed.

Just like the theoretical framework is to the literature review so is the research design to the study. The study perceives the world as one that needs objectivity for one to understand it properly and derive meanings and conclusions. This is so as the lifestyles and designs at the two ancient cities in Zimbabwe need interpretation of meanings from the researcher' perspective. This perception is inclined with a phenomenologist philosophical perspective (Gray, 2007). The study looked at the Great Zimbabwe community and the Ndebele cities and assessed each entity and derived meanings from the pre-colonial cities.

Informed by the research paradigm the study took up a representative case study research design. This entails a focus on a case study that represented the two major ethnical groups in Zimbabwe the Shona and the Ndebele. A research design is a structure that acts as a guidance to the execution of the research method and the analysis of data (Creswell, 2014). The case study research design has been applauded by Bryman (2012) as the best in investigating detailed complexities. This study focused on two cases, the Great Zimbabwe and the Ndebele cities. The data collection methods were qualitative. This involved key informant interviews with the national Museums and Monuments, archaeologists, sociologists' anthropologists, open ended questionnaires, observations and focus group discussions. For secondary data collection an archival method was engaged. To decipher meanings thematic content analysis was engaged. To enhance the validity and reliability the researcher properly designed the research instruments and engaged triangulation approach in data collection. The study ensured that no harm in any way was done to the informants.

The study intended to understand sense of community in the context of two ancient cities of Zimbabwe, the Great Zimbabwe and the Old Bulawayo cities. Such information of the cities is kept at the sites under the curatorship of the

National Museums and Monuments. The study also needed a scholarly opinion of the sites as such targeted Archaeologist, Anthropologists, Historians and Sociologists. The study also intended to understand the current planning practices as such it targeted two groups of professional in urban design in Zimbabwe, the architects and the spatial planners.

To select the respondents, non-probability sampling methods were engaged. Non-probability sampling is a set of all methods that are not guided by probability. To access information from the National Museums and Monuments, the researcher used purposive sampling as there was no other organisation that possessed such information. To get information from the place, the organisation gave the researcher three site professionals, an archaeologist, an anthropologist and sociologist. This was the same case for the two sites. This approach is inclined towards snow bowling (Brymann, 2012).

For other professional with historical data, a more practical approach was used. The researcher went through tonnes of research papers on the two sites. From the papers conveniently (convenience sampling) available to the researcher, the researcher chose progressive names (Names that had consistently published on the matter) and emailed or called the professionals (Purposive Sampling). However, the convenience was based on the response of the professional to the researcher's emails or phone calls. Furthermore, the researcher engaged professionals from the Faculty of Arts at the University of Zimbabwe where the researcher is based. For architects and spatial planners, convenience sampling was used. Being one of the professionals, the researcher was part of the social media groups where the professionals located across Zimbabwe were in.

Having figured out the data sources, the researcher went on to collect the data. Two kinds of data were collected. These included primary and Secondary data. Primary data has been defined as original data collected by the researcher (Miller and Brewer, 2007). On the other hand, secondary data as data that has been collected by other researchers (*ibid*). This part looks at the data collection methods and the related tools.

The researcher was informed by key informant interviews, open ended questions, observations and focus group discussions for primary data collection. During the processes, various data collection instruments were used, these involved, interview guides, open ended questionnaires, observation checklists and focus group guides. To verify and complement existing layouts and settlement patterns of the two sites, Google Earth Imagery was engaged.

Interview guides were used to collect data from the National Museums and Monuments. This was done in a face-to-face setup. The interview guides used were designed in an unstructured way (see appendix 1,3,5 and 6). This made it easy for the researcher to probe extra questions to the respondents in the quest to find relevant and more accurate data. The same interview guides were also used during cell phone interviews. These were done with key informant respondents that were not easy to access for a face-to-face interview like those based in South Africa.

For anthropologists, archaeologists, historians and sociologists that were not accessible for a face-to-face interview and a cell phone interview, open ended questionnaire was sent to their emails. The questionnaires were open-ended questions to permit the respondent to fully exhaust all the information that they had (see Appendix 2, 5). The design of the questionnaire was such that it provided pure qualitative data. For aspects that were not clear, the researcher sent follow up questions via the email to clarify the issues.

To understand aspects of current urban design practices in Zimbabwe, focus group discussions were done. These however were not conventional focus group discussions that are done on a face-to-face setup (Creswell, 2014). These discussions were done in a WhatsApp group. The researcher was guided by a focus group discussion guide (see appendix 8 and 9). This began with one question that was followed up by a related question and all questions were developed from one question and the theme of the study. The discussion therefore involved a series of question probing and follow up questions.

In the context of understanding settlements and their patterns relative to the issues of sense of community and design, pertinent observations were made. These were done using an observation checklist (see appendix 7). The researcher moved around the sites, observing existing structures and deriving possible meanings. The researcher was assisted by National Museums and Monuments tour guides who helped in interpreting phenomenon and navigating the sites. The data that was collected from observations was complemented by images that were taken by a high-resolution camera.

Data from maps, images and observations was complemented by Google Earth Imagery extracted data. This helped in understanding the settlement patterns and how the settlements have changed or maintained the patterns.

Secondary data is data that is second hand (Creswell, 2005). This is normally found in the form of written documents, maps, pictures and drawings (Trochim, 2006).

In collecting secondary data, an archival method was engaged. This involved going through archives of the two cities the Ndebele and the Great Zimbabwe settlements that is kept at the National Museums and Monuments. The researcher first visited the National Museum located in Harare where he collected data from texts that are kept at the museums. Informed by that the researcher went on to collect data from site museums in Masvingo and Bulawayo were details about the study areas are kept.

Another source of relevant secondary data was through document review. The researcher went through a series of history, sociology, anthropology and archaeology journals to understand how scholars perceived the Great Zimbabwe and the Old Bulawayo settlements. To help understand the themes that were coming out, the literature review was aided by a software called Atlas Ti. This software helped in grouping statements and quotations within the papers into themes making it easy to understand.

The data that was collected was analysed. Analysis of data is a process of interpreting and developing meanings from the data that is given (Gray, 2007). During the study, thematic content analysis was used. Themes were used to understand how the Great Zimbabwe and the Ndebele cities were organised. In this process quotation were made, vernacular language was kept as it is as supposed to be done during thematic content analysis (Bryman, 2012). Narrative analysis was also done in making sense out of the data that were given by the National Museums and Monuments officials. This involved listening to and understanding more about their opinion of the site. For secondary data analysis the Atlas Ti software was very instrumental. All data coded and grouped into themes was easy to explain and derive meanings from it.

During the data collection and analysis process, the researcher upheld all necessary principles to ensure that the data and conclusions that were made were valid and reliable. Validity can be defined as the acceptability of the data in relationship to its response to research questions and the research's field (Bryman, 2012). Reliability is the extent to which a research can be duplicated if all the constants are held (Creswell, 2014). To ensure validity of data collected, the researcher used well developed research instruments that respond to the research questions. Furthermore, the researcher also used triangulation of questions to ensure consistence in terms of the respondents' responses. No double-barrelled questions were used. To ensure that the conclusions made were valid, the researcher exercised reflexivity. This involved the researcher being objective and avoiding any experience or opinion to influence the conclusions.

For reliability during the research, the data sources were triangulated. The researcher collected data from four different professionals that had an opinion in the same field. As such data that was collected could be relied on. The tools used for different people of the same profession were the same making the tools reliable.

In collecting data, no false promises or incentives were employed to stimulate responses to uphold principles of ethical research (Gray, 2007). Data was collected from willing respondents thus increased data accuracy as the respondents were friendly and opened up to the researcher thereby creating a rapport. During the process of collection and dissemination of data, respondent protection was ensured. No names were used without the consent of the person. Furthermore, no pictures, voice recordings, or video recordings were taken without the consent of the person/persons being interviewed. Aliases were employed when names were needed to protect respondents in every possible way. No information collected from the organisations was used in any form of bad publicity or used to disadvantage the organisation or the persons involved. Any promise that the researcher made to any organisation were honoured. However, there was a case of an ethical dilemma. The research ethics dictates that no money should be paid for responses yet it is a legislative requirement for a researcher to pay a fee of \$20 to the National Museums and Monuments for any researcher. The researcher however paid the fee but avoided talking about having paid to reduce the feeling of obligations to respond on the interviewees.

Apart from time and resources that limits the potential of every study, bureaucracy is a potential threat. This was managed by applying to relevant authorities for permission to carry out the study the moment the study is allowed to proceed. The first application attempt was done through email; this was unsuccessful as the officials did not respond to the email. The researcher had to travel to Masvingo and Bulawayo to apply for permission to carry out the research. Other issues that came up was that of language barrier. This was largely because the researcher could not speak Ndebele as such, he travelled with a Ndebele fluent friend who assisted in interpreting some of the concepts. The other issue was through email questionnaires; one archaeologist could not respond to the questionnaire because he was "working on a project to reconstruct Great Zimbabwe as such it could be conflict of interest". Against all the adversities, the study carried on.

The chapter presented the research philosophy that the study is presumed on. It is from the philosophy that the methodology of the study is derived. The chapter identified the sample, sampling methods, data collection methods and data

analysis methods. The chapter also presented the limitations and the ethical considerations. The next chapter will focus on the results and findings of the study.

Chapter 4: Observing Analysing Pre-Colonial Settlements of Zimbabwe

This chapter seeks to present the findings of the study. It critically the identification of various factors that influence the development of cohesive settlements in the pre-colonial settlements of Zimbabwe. With the purpose of developing a model, the chapter focuses on the clear highlights of factors that influenced settlement formation and factors that influenced cohesion within the formed settlements. Interpretations are based on interviews, papers and observations by sociologists, anthropologists, archaeologists and historians.

Design of layouts and buildings in the Great Zimbabwe present a stunning form that has left most people with some level of scepticism of whether the Shona people were the designers of the structure. The Great Zimbabwe design also presents a huge city of that time making it an example of indigenous planning systems and oneness. The question then becomes, what elements led to such a design and the interaction and oneness within the Great Zimbabwe capital. This section presents the possible factors that led to cohesion and the design features within the Great Zimbabwe capital.

Politics play a significant role in the design and formation of any settlement. The same was right in the determination of the design and cohesion within the Great Zimbabwe State. The Great Zimbabwe State was a politically centralised state with the King having the sole decision over everything within the community. The king was believed to be linked to the gods and possessing mysterious powers. This made the people to take the King as a god. As such, decisions made by the King were sacred and respected. This made everyone to actively participate within the state. To show the power, the king built the walls and to parade his wealth (Chirikure *et al.* 2017). The king therefore dwelt in the Hill Complex in the Great Zimbabwe State. One sociologist from the Great Zimbabwe who was acting as a tour guide stated that,

"The inner section of the western enclosure proves to be a royal residency to the ancient kings. Supreme evidence of herringbone decorated spears which traditionally imply power, array of turrets, monoliths and its space is all credible witness that the place also had the dare function..."

Great Zimbabwe's political dominance spread across Zimbabwe way beyond the current location of the Great Zimbabwe Ruins. It is believed that the settlement had political dominance over most of the settlements in the area that is now called Zimbabwe. This was done through subjugation where the leaders of the

areas would pay tribute the Great Zimbabwe king. As such, Great Zimbabwe began to operate as the capital while other areas became the provincial and the local administrative offices for the collection of tribute. This can be evidenced by the claims made by Rasmussen and Rubert (1990) that, there exist a series of hundreds smaller but similar ruins. Around the settlement which could have been areas for local authoritie.

All the smaller settlements were called the madzimbahwe which is Shona for houses of stones. Looking at these settlements and the effects of politics in cohesion and the settlement form of the Great Zimbabwe. The king was so powerful such that there was no form of rebellion within the state. This created one nation that focused on their economic activities behind the king. The cohesion made it possible for the development of the magnificent Great Zimbabwe State walls. Furthermore, the power of the king made it possible for him to conquer other states that brought him tribute. In the context of this study, it is not the tribute that matters but how it was collected. The king had created various sub-regional offices with submissive kings as tribute collectors or local authorities. In town planning terms, this coincides with two concepts, walkability and centrality. The local authorities were located in central and walkable places around the area under the leadership of the Great Zimbabwe kings. While one can argue about the issue of walking as the only mode of transport by that time, the argument then moves to people centred planning. The Great Zimbabwe was planned to make life easier for the people within the society.

The Zimbabwe social systems are still subject to a lot of debate (Fontein, 2016). The early Iron Age societies are believed to have been egalitarian in nature. Garlake (1982) argues that, "There was no distinction of rank or wealth." This statement by Garlake (1982) presents a community that was all inclusive with a high level of community cohesion. This self-sufficient society that did not have any form of political system began to fragment in the 11th and 12th Century. The communities in the Great Zimbabwe region began to form regional identities. The next periods were marked by a series of social stratifications that became the social set-up of the Great Zimbabwe State.

The Great Zimbabwe state had three social groups, the royal family, the further relatives and the craftsman then the rest of the society. These groups were located in different places with the Royal family and the important traditional mediums being located in the Great enclosure, the specialised craftsman being located in the Western enclosure and the rest of the population living in dhaka/mud huts down in the valley. While this stratification could be a potential source of conflict among the Great Zimbabwe dwellers, the society remained

united. The Great Zimbabwe people were peaceable. Garlake (1982) sates that: "They were peaceable farmers, growing the indigenous millet and sorghum and keeping goats, sheep and a few cattle." Each person focused on his/her area of trade; farmers were happy settling away from the rocky areas into the agriculturally productive valleys. As such knowledge of one's place within the Great Zimbabwe community helped in maintenance of peace and cohesion within the society.

In an interview with one lady from the National Museums and Monuments Great Zimbabwe office, the society of the Great Zimbabwe society was said to have been bound by the following, Norms and Values, Dressing and Language and Food. She stated that,

"The Karanga people were bound by a set of values that made them one people. This was aided by language (Chikaranga) that unified the group of people as they were doing their chores.... To strengthen the argument, she gave an example of the bible when the descendants of Noah wanted to build the Tower of Babel to go to God... God just created disorder in terms of language and the tower was not constructed... [Genesis: 11]"

It is believed that through the Karanga language, the people could coordinate and come up with a significant development which can be evidenced by the dry-stone walls at Great Zimbabwe.

Furthermore, food was one of the significant factors that united the Great Zimbabwe people as one people. It was believed that every visitor should be given food within the Shona community. One official stated that,

"Food was a binding factor among the Shona people. *Ukama igasva hunozadzikiswa nekudya* (food is the essential missing piece of every relationship)."

As such food became a unifier among the Shona people. Looking at tradition, the Shona people became so involved in subsistence agriculture to be able to fulfil their food needs. This can also be explained in current Zimbabwean cities where urban agriculture became a common issue once the urban area was free for all.

Furthermore, social classifications played a significant role in the settlement of the Great Zimbabwe people. The Great Zimbabwe society had two types of classes, the royalty and the commoners. One's class determined where one settled. Another official at the Great Zimbabwe monuments stated that,

"The dry-stone walls were like a durawall (fencing wall) *ruzhowa* in Shona.... All the people that stayed within the wall were royal and commoners stayed outside the wall."

In an explanation of the settlement patterns, the official further stated that, "The Great Zimbabwe can be divided into three sections, the hill complex, the valley complex and the Great enclosures. The Hill complex is believed to have been the dwellings of the King and the spirit mediums. The Valley was a place for hama dzamambo (the King's relatives) and the traders and the Great enclosure was where the king's wives stayed ... The rest of the society stayed around the walls this was evidenced by round shaped floors found through excavations scattered all over the area covering approximately 720 ha around the Great Zimbabwe..."

Another aspect that bound the Great Zimbabwe community cohesion were family ties. People in the Great Zimbabwe settled around in what was called *Nzanga*. *Nzanga* was a group of people from the same tribe with same totem living close by. In some cases, the father would have a central house and the children built around the father's place in the *Nzanga*. The other binding agent to the Great Zimbabwe cohesion was polygamy. Great Zimbabwe community was a polygamous society. A man could marry many wives but from the same family from the surrounding areas (*rooranai vematongo*). The concept of marriage was also done in the context of marrying people with similar values and norms. As such people of the same origin of both the male origin and the women origin settled together as one.

Economic activities were significant factors in shaping the spatial layout and the location of the Great Zimbabwe state. The state was anchored by agriculture thereby settling at the edge of the Zimbabwean plateau. This allowed the inhabitants or the people of Great Zimbabwe access to good arable soils and good pastures for livestock. Besides agriculture, the Great Zimbabwe state also engaged in trade (both long distance and barter), pottery, basketry, weaving, iron smith and mining. While mining is part of the list, scholars argue that mining was too labour intensive and very few people desired engaging in mining, as such most people that engaged in mining only mined under the king's commission.

Agriculture was done at the current Great Zimbabwe location and in the surrounding areas. Evidence of fields was found in areas as far as the current location of Gokomere (Interview with anthropologist, 2019). This evidence that the Shona people already had the concept of Green Belts. Agriculture was done far away from intensively settled areas of the Great Zimbabwe city.

Blacksmithing was another significant aspect of the Great Zimbabwe city. As an Iron Age city, iron tools were essential in the day-to-day life of the Great Zimbabwe. This was done in blast furnaces made of dagga. Blacksmithing was done using wood that was burnt to smelt iron and copper. Gold Smelting was done at the king's compound. Furnaces were found at the Western side of the settlements to avoid pollution. As such the most concentration of industries was

found in Mashava area whose distance was similar from where the agricultural areas were located (Questionnaire respondent, 2019). This means that zoning was very essential particularly in locating certain land uses that could be detrimental to the Great Zimbabwe dwellers.

The economy of the Great Zimbabwe state created very important synergies between various people of various trades. The farmers exchanged goods with other people from other trades and these relationships were maintained through the people with special skills staying close to each other in the western enclosure to allow close interaction. The idea of staying together allowed for agglomeration economics thereby allowing the Great Zimbabwe to be one of the largest cities in ancient Sub-Saharan Africa.

Furthermore, the economic activities within Great Zimbabwe created a form of cohesion towards empowering the King. Tribute was one of the major sources of political power for the royal family and for the elite group.it was paid to show allegiance to the king through tribute, Great Zimbabwe continued to prosper as the people continued to respect the king. This process meant pooling of resources towards empowering the king. It is believed that it is through the riches that the king got from tribute that the Great enclosure was built. The enclosure became a sign of flamboyance as the king had power and resources evidenced through the tribute system.

Evidence has been found of settlements in areas around the Great Zimbabwe that were centres for tribute collection for the Great Zimbabwe King. These included areas like Chenga, Matuzu among others. These areas where governed by various chiefs and tribute was managed by the king's stewards known as *Nhaririredza Mambo*.

One major source of oneness within the Shona community was religion. It was the glue that bound the Great Zimbabwe community. Great Zimbabwe was ruled by the kings that were believed to be the Land and the Gods. They ruled through *mhondoro*. *Mhondoro* were the agents of communication to *vadzimu* who then communicated with *Mwari* (God) or *Musikvanhu*. The God would then respond through the *svikiro* who were the spirit mediums. The Great Zimbabwe state is believed to have been a sanctuary particularly the Hill complex and the Acropolis within the Great enclosure. Huffman (2017) believes that the Great Zimbabwe state was a religious centre. The location was an acropolis that had a cave under the hill. The Hill is believed to be the place where the priests would sit and perform rituals. It is believed that the acoustic properties of the cave made the

Mwari worshippers to think that the voice of the priest was of Mwari responding to their needs.

The *Mwari*-cult led to the development of settlement patterns that were influenced by two systems, The Mapungubwe pattern (K2) or the Cattle Central Pattern (CCP). Both patterns led to the development of sacred places that were not open to everyone but the King and then priest. In the front secular model, the rain making kraal was behind the homestead of the king. It is believed that the general rain making ceremonies were done from these private spaces which have been attributed to occur on hilltops. From the descriptions of Huffman *et al.* (2018), the rain making ceremonies (*doro remukwerera*) were done on inaccessible mountain tops which best suits the description of the Hill complex. The rain making ceremony therefore created a level of cohesion within the Great Zimbabwe community. Everyone participated in his or her own way. The girls had the duty to spread rain making medicine in the field, me were responsible for taking and burning cow-dung. This made religion central to the development and the cohesion in the Great Zimbabwe state. Through the *Mwari*-cult, the Karanga people were a cohesive unit.

However, this mode identifies a clear religious system, Beach (1988) argues otherwise. The discourse by Beach (1988: 17) notes that,

"The Great Zimbabwe state had no clear market spaces, public spaces or religious spaces.... Religion within the Karanga people was shown through compassion and love to one another."

This contradicts the two models by Huffman (1986) however this does not dismiss the fact that Great Zimbabwe religion was one of the major sources of cohesion. Fontein (2016) argues that religion was responsible for reduced disobedience among the Great Zimbabwe dwellers. This could be represented by the existences of an altar within every *Karanga* hut. The *Karanga* hut had a place called *chikuva*. This *chikuva* is an altar that whenever a person died one had to place on the sanctuary where he/she was appeased to *Mwari*.

The Great enclosure also had areas of religious significance where it is believed that the Shona people worshiped their Gods and did some religious ceremonies. The conical tower was pointed as the shrine (see plate 4.1). The major religious site however was the hill complex Eastern enclosure. On the site, one historian stated that.

"In the eastern section, here where we are (see plate 4.1) is a section of the religious arena where traditional rituals would be conducted. Evidence found on the eastern side of the Great Zimbabwe Hill Complex, plus the stretchy of terraced and bench also testify in Shona traditions how it could have been used a functional dare."

This places the Hill complex as one of the most significant points in the history and lifestyles of the Shona people.

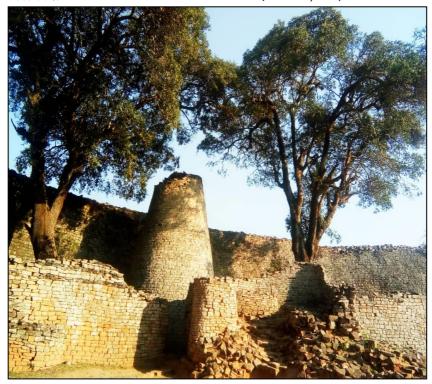


Plate 4. 1: Conical Tower in the Great Enclosure (Research, 2019)

Great Zimbabwe attributes are hereby explained in their context then linked in relationship to current town planning deriving meanings and possible implications.

The findings on Great Zimbabwe are reflections of a self-sustainable cohesive society driven norms, values and beliefs. The Great Zimbabwe is a magnificent community not only in terms of the dry-stone walls but also the remarkable planning. The past communities represent what present communities seek to achieve. These include walkability, inclusivity, intensive combination of uses, cohesion of community, environmental sustainability sustenance. These are reflected in many ways including the way of life, the location of land uses, the land uses and the history of the Karanga people.

The concept of walkability as indicated by the literature review entails the existence of infrastructure, incentives to walk and the walking distances. The Great Zimbabwe community was designed for walkers. The width of the routes that are believed to be the ancient routes to the king's palace can only accommodate a person who is walking than any other form of transport. This is also reflected by the widths of the routes between the walls in the Great enclosure. One can argue that the Great Zimbabwe had to be built with the human being at the centre of the considerations. Though this holds water, the development of subordinate places that were centres for tribute collection still support that the Great Zimbabwe's structure focused on ensuring walkability. Regardless of the rich cattle economy and the able iron smiths that could create some form of transport (Oxen drawn carts), Great Zimbabwe people ensured that they live in small sects (*Nzanga*) that had walkable access and self-sustenance.

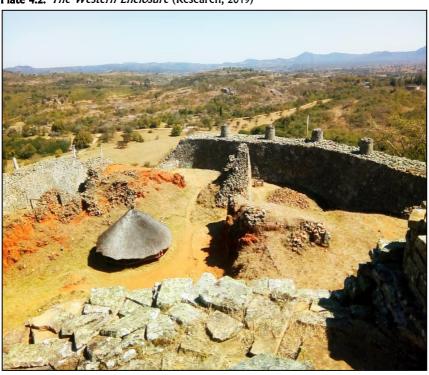
Sense of community in the Great Zimbabwe was largely pinned on participation in community traditions, beliefs and activities. The level of inclusion in the Great Zimbabwe was very high. Every person had a part to play in the community as such they managed to build the Great Zimbabwe walls. At rituals like rain making ceremonies that were of significance in Great Zimbabwe, everyone played a part. For instance, local girls who could be considered the least important in the patriarchal Great Zimbabwe community participated in the process of rain making (spreading rain making medicines). This applied in every aspect on the Great Zimbabwe community, everyone had a role to play. Everyone playing a part increases sense of ownership as such everyone participates within the community. It is through participation that cohesion was enhanced.

The Great Zimbabwe community was oriented towards intensive combination of land uses. There was no place designed for a single use within the Great Zimbabwe city. For instance, the King was believed to live in the Hill complex. This complex was divided into two, the eastern and the western enclosures. The eastern enclosure housed the Priest and it is believed that events like the rain making ceremonies were done in this place. In the western enclosure was the king's place. This place was characterised by king's dwelling, the *dare* where the king held his meetings to solve community issues. Gold smelting furnaces where also found in the western enclosure. Looking at these uses, and reinterpreting the uses in current town planning language, it can be explained in Table 4.1.

Table 4. 1: *The combination of uses on the Hill complex* (Author, 2019)

Land Use	Great Zimbabwe Use	Current Town Planning Use
Dare		Institutional (community halls, court)
Doro Remukwerera Sites	To do the rain making ceremonies, consecrate the king	Institutional (Church)
Muzinda Wamambo	The king's place of residence	Residential
Gold Furnaces	Smelting Gold for the King	Industrial

Plate 4.2: The Western Enclosure (Research, 2019)



From the Hill complex, land use mixing is be evidenced in the Great Enclosure. The Great enclosure was believed to be the queen's palace where the king's wives stayed and had a sense of security. This place was used as the residence of the queens and their children with the order of significance. Furthermore, cotton weaving was believed to have been done in the Great enclosure. Evidence of

sorghum traits also mean that the Great enclosure particularly at the conical tower could have been used for traditional rituals like the rain making ceremonies. Since the Queen mother (*Vahosi*) stayed in this place, pre-marital education is believed to have been taught in the Great enclosure. This is also intense combination of uses and in town planning language it can be represented like on table 4.2.

Table 4. 2: The combination of uses in the Great Enclosure (Author, 2019)

Land Use	Great Zimbabwe Use	Current Town Planning Use
Musha wavakunda vamambo	Residence for Kings wives	Residential
Cotton weaving	Cotton weaving	Industrial
Doro remukwerera	Rain making ceremonies	Institutional (religious centres)
Premarital education	Premarital education	Institutional (Education).

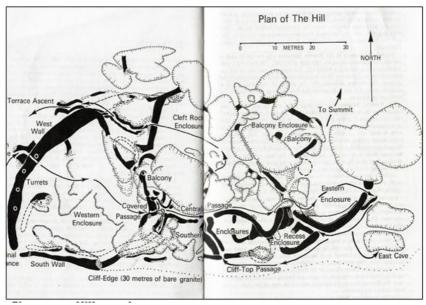


Figure 4. 1: Hill complex (Garlake, 1973)

From the royal sites to the common lands, evidence of combination of uses still remained. Every household within the Great Zimbabwe community had various characteristics. From the replica of the Kalanga home at the Great Zimbabwe site it could be noted that each homestead was self-sufficient on its own. Each homestead had the residential spaces where the people slept; gota sleeping for boys, nhanga sleeping for girls and a house for each wife. The same place had the dare place where family issues were discussed. In the round huts, there was a chikuva area which was a sanctuary at every house. The site also had the kraal areas which had the family cattle. Agricultural crops were kept in the dura for storage. At the homestead, there was the playing area which games like tsoro and nhodo were played. All these features made the place self-sufficient. To explain this kind of intensity of mixing uses in the Great Zimbabwe at home stead level, table 4.3 tries to convert the uses into conventional town planning colours.

Table 4. 3: *Mixed-use at commoners' areas* (Author, 2019)

Land Use	Current Town Planning Use
Nhanga, Gota, KwavaHosi, KwaNyachide and Other wives	Residential space
Chikuva area	Institutional, religious area)
Dare (family issues, production of tools (tsvimbo, miseve, mupini)	Industrial and Institutional
Play Area	Public Spaces\ Active open spaces
Kraals	Agricultural

The magnificent Great Zimbabwe area is evidence of community of cohesion. There is no way that a building of that nature could be built without community oneness. One such building that was constructed as influenced by cohesion was the Tower of Babel depicted in the bible that was built with the people as a result of cohesion (Genesis 11: 1-9). From that, walls like that of Great Zimbabwe's Hill Complex, Valley Enclosures and the Great Enclosures could only be built with a community that had one goal. Furthermore, the issue of living in the *Nzanga*, marrying from the local and family members living in close proximity meant that the Great Zimbabwe people maintained the cohesion as they were one family. The Great Zimbabwe people lived in family units. If a son married, the father would give the son his son a place to build his place close by. As such, the communities were clusters of related people (*Hungwes*).

Plate 4. 3: Eastern Enclosure (Research, 2019)



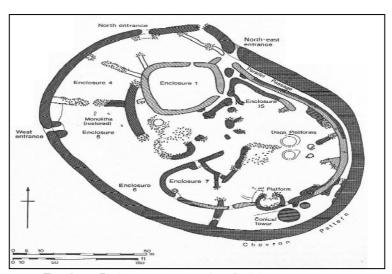


Figure 4.2 The Great Enclosure reconstruction (Garlake, 1973)

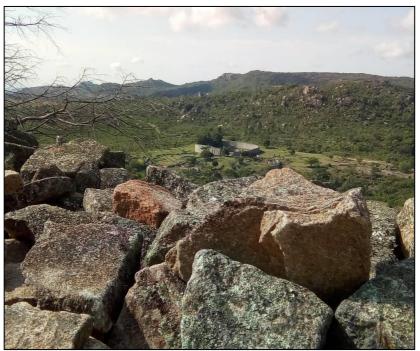


Figure 4.3 *Great Enclosure in Picture* (Research, 2019)

Furthermore, cohesion was also seen through the payment of tribute and contribution of small sub areas in the Great Zimbabwe communities. The Great Zimbabwe as the administrative centre was also supported by smaller other sub communities that were found around the settlement. These could only pay tribute if they were aligned with the king. Their continuous harmonious existence with the king meant that they were a part of the Great Zimbabwe community, driving towards the stipulated goals of the ruling king.

The Great Zimbabwe State had very high densities of people in one place. A simple translation of the estimated population of the Great Zimbabwe of 20,000 people on an area of 720 ha translates to a population density of 6, 897 people per square metre. As from January 2019, the average population of density per square metre in London was 5590 people while Hong Kong had an average of 6300 people per square metre. This evidence that Great Zimbabwe had a generally high level of density. During the iron age period, a community could only grow that big if they had a common goal and one voice bound by certain norms values and beliefs. These levels of densification could mean cohesion as the people were

so packed in one place making their relationships closer. The people that lived within the Great Zimbabwe lived in the Nzanga which were clusters of high-density communities. This allowed people to interact on a daily basis. The densification was also seen in the context of uses where Great Zimbabwe had agglomeration of industries for instance all Agriculture agglomerated at Gokomere and most of the mining agglomerated at Mashava.

From the Great Zimbabwe community, it can be identified that while it was an ancient community, its people-oriented nature made it a sustainable and cohesive society. The combination of uses, the walking-oriented designs, the high densities of settlers and the magnificent products of the Great Zimbabwe people reflect this. This being the background of cohesion within Shona communities, the study went on to look at the Ndebele communities.

Unlike the Shona people history that had many versions of the same story, the Ndebele history is one that is less argued about. The only discontent is on the nature of relations between the Shona and the Ndebele which is at the periphery of the scope of this study. This section provides an overall outline of the Ndebele communities' beliefs and cultures and how it influenced the lives and the designs of the pre-colonial Ndebele city. This section is presented in a mixed approach as the lives of the Ndebele were interlinked as such clearly distinguishing the social from the religion or the economy from the political will make the research less rich than it could be if look at in an integrated manner. As such politics and the economy will be looked at comprehensively while the religion and the society will also be combined.

The Ndebele, through their political methods of ruling and conquering earned them various titles including splendid despots, noble savages, martial spirit and blood thirsty savagery. The Ndebele have also been described as ones that were militaristic and authoritarian. Most scholars that wrote around the Ndebele's political systems described the Ndebele region as a violence terrain. Ndlovu-Gatsheni however clears the Ndebele system of politics by dividing it into two phases, the 1820-1840 period that was a violent moment during the movement after *Mfecane*. The other phase was between 1841 and 1893 when the Ndebele settled on the Zimbabwean plateau making it a more heterogeneous terrain. It is at this point that Beach argues that the Shona again began to reappear in terms of power. This period saw the Ndebele seeking for consensual governance and trying to rule together with everyone. The Ndebele was largely conquered by the institution of *Amabutho* which was civilianised during the second phase to meet the less aggressive and more cohesive system.

During this period, the office of the King was transformed ritualised and the Ndebele king assumed the duty of a rain maker, distribution of cattle, administering grain and as the cult head. In this period, the king was less of a tyrant and power in the state was based on meritocracy. From this political system, the power groups emerged, the *Abenhla* (those from the North), *AmaHole* and *Zansi* (those form the south). While this was the classifications of different systems, the Ndebele system of governance remained centralised around the king (*inkosi*). Figure 4.4 show how political power was distributed in the Ndebele state.

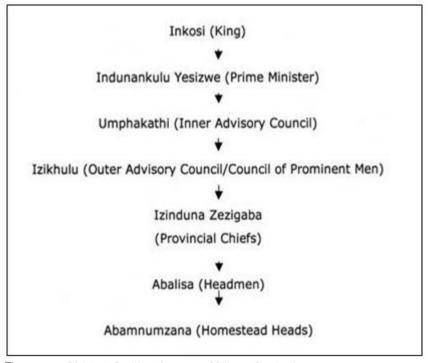


Figure 4. 4: *Ndebele Political Structure* (Ndlovu-Gatsheni, 2008:76)

While there are traits of democracy, politics in the Ndebele state was not open for competition. Kingship was hereditary and only people of the same blood could be kings. The argument was that power belonged to those who wielded it in this case, the Khumalo. The patriarchal ideology also played a significant role in the Ndebele state. As such there was adherence to the father-like figure whose actions were always right. The Ndebele king therefore was the father of all the

Ndebele people and the people showed respect by being his 'children'. Thus, the Ndebele political life was acted out as a chain of personal relations. From this, the Ndebele people considered themselves as one family (uMthwakazi). This system therefore, evidences a strong sense of community fostered by political relations. Though in some instances it was a result of fear, oneness among the Ndebele communities prevailed.

The other important aspect in ensuring sense of community within the Ndebele state was the role of the Chief. The chiefs played an advisory role to the king. In an interview with one historian on the issue of the Ndebele's, he argued that,

"The chiefs played an advisory role and presided over Amaxhiba (regiments), these were in an advisory council that was known as the Umphakhati, these chiefs also played a role in maintaining cohesive unit within the Ndebele state and could do anything with their power. An example is how Chief Lotshe got king Lobengula to execute the Induba chief."

This evidence another source of cohesion within the Ndebele community. The people were managed in sub communities by a chief who later reported to the king. Figure 4.5 is a reconstruction of a royal meeting.



Figure 4.5 Chief's meeting (Nyathi, 2016)

The Ndebele Economy was largely characterised by agriculture, raiding and mining. The major focus of the Ndebele was livestock farming that influenced the settlement of the Ndebele people. The location, the settlement pattern and the activities were centred on protection of the livestock. The Ndebele also focused on crop production that included the farming of crops like maize, sorghum, pumpkins among others. All these activities were complemented by the raids that the Ndebele people carried out on the Shona. The cattle economy that the Ndebele had was boosted by cattle raids that were dependant on the political prowess of the Ndebele.

The Ndebele social system was stratified into three distinct groups, The Zanzi, Abenhla and amaHole. The Zansi where the original group that had followed King Mzilikazi from Zululand. Whilst the population of this group was the least, they were the most powerful in the Ndebele society. Abenhla was the second group and the class comprised of people that had been conquered before the Ndebele got into present day Zimbabwe. These included the Venda, Sotho, and Tswana. The last class was the amaHole that had people that were conquered in Zimbabwe. These were either volunteers or the captives, they were the largest group. Over time of settlement, the democracy opened up and interclass marriages were permitted. The non-Nguni groups became socially significant.

The Ndebele owned cattle but the rule was that, the king owned all the cattle and the land was his. This implies that land use ordinances existed within the Ndebele state. Land was not free in this sense. There were two forms of cattle ownership in the Ndebele state (*inkomozamathanga*) personal cattle and (*inkomosenkosi*) communal cattle. The cattle had a huge role in determining one's social status. Cattle that were raided were taken to the king for distribution among the Ndebele people. The cattle distribution process meant that the king became popular among the Ndebele people and they rallied behind him cohesively. Furthermore, during times of famine, food was distributed by the king and the chiefs among their people.

The social systems of the Ndebele were on the basis of their culture. The king was believed to be the high priest who was closer to the Gods. Divergent of the Great Zimbabwe kings, the Ndebele King did not perform any rituals. The King only communicated with the Gods when there was a drought or a plague. The Ndebele believed in their God, *Unkulunkulu* and the wife of the god *Mvelengani* who was believed to be the source of wealth. The gods had children and came to earth in the form of snakes. There was no ritual for the gods as such the Ndebele had no clear worshipping space. The Ndebeles came in and adopted the Shona

traditions of *vadzimu* that were called *idlozi/ amadhlozi* who were believed to protect the Ndebele people.

The Ndebele people's perception of the world was that it was round. In an interviewer with one of the sociologists he stated that,

"The Ndebele were a superstitious group that believed that the world was round. As such their design and other elements essential to their community was round. For a Ndebele person to feel comfortable, he/she had to be in a round place that explains the settlement layouts, the court/ iguma, their huts. This can be seen from the fact that when one of the white visitors brought him a new design of corners, he was not comfortable as such opened an extra door to access his round hut..."

From this statement it is noted that sense of place in the Ndebele state was directly linked to beliefs and beliefs determined the settlement in the area. The circularity within the Ndebele community was not random but played an essential role in determining the sense of place. Figure 4.6 shows the home built for Lobengula that he used as a storage facility. Plate 4.4 shows a Ndebele Beehive hut reconstructed in 1998 but consumed by fire in 2010. Plate 4.4 is the site after fire consumed it.

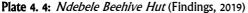




Plate 4.5: Beehive hut floor after fire (Research, 2019)





Figure 4. 6: Lobengula's modest home (Nyathi, 2018: 3)

One notable aspect of all Ndebele homes even rural homes of today is the *Iguma* of the court. This was a sitting place were all significant decisions of the family were made. The *Iguma* was an attribute of all Ndebele places and made the

Ndebele people feel at home. The place was designed in a circular way designating the equidistant central seating that was done by the Ndebele in a court see figure 4.6 where Lobengula sat with his people at his home. Like the Shona people's dare, the *iguma* was largely a sitting place for men and was a sign of patriarchy. Since the Ndebele community believed in one family under the father, the *iguma* played an essential role in fostering sense of community. One anthropologist said,

"The *iguma* to date is an essential feature of the Ndebele Home, it represents the power of males and represent unity in a family. It is at *iguma* that the family males discuss, talk about future developments in the family...During Lobengula's time all chiefs and the king sat at the *iguma* to discuss how the Ndebele State was run..."

This opinion from the archaeologist made it clear that *iguma* was one source of social cohesion within the Ndebele communities. Plate 4.6 Is an example of the Ndebele village home with a forecourt well designed.

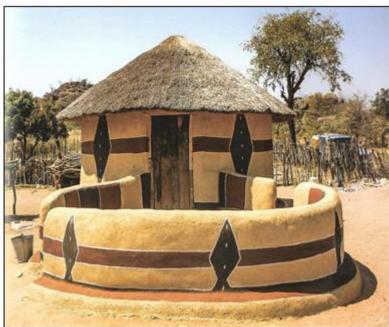


Plate 4. 6: Iguma at a modern hut (Tui and Nyati, 2019:103)

A description of the Ndebele city and its functionality particularly that of KoBulawayo sounds like that of the Great Zimbabwe community. From the Museum sites, narratives of how the Ndebele settled and lived highlights the aspects of gated community for the rich and the commoners lived outside the fence. The only difference is that the Ndebele community's fence was made of wood. An official at the site stated that,

"The Old Bulawayo during the time of king Lobengula had a huge wooden palisade that surrounded the area of approximately one mile in diameter. Inside lived the king and his important induna, his wives and the cattle that lived inside. As such it was largely a location for the Abezansi."

This indicates how the social systems played a significant role in the settlement of the Ndebele people. In an explanation of how the Ndebele people lived, one official stated that

"The KoBulawayo settlement had a dumpsite at the gate, wagon shade an inner wall that had cattle kraals, the public space at the centre for significant gatherings, the king's homes, his wives' huts, a kraal that had sacred goats that meant death if one entered..."

This explanation says a lot about how the Ndebele people settled. The significant aspects of the community were well kept. The king had a public open space at the centre that was meant for public ceremonies and interactions. This was the centre for Ndebele social cohesion under the king. For a general understanding of the Ndebele settlement setup, a reconstruction of the Ndebele setup was done and super imposed on the last location of the Ndebele settlement which is at the current statehouse. See figure 4.7.

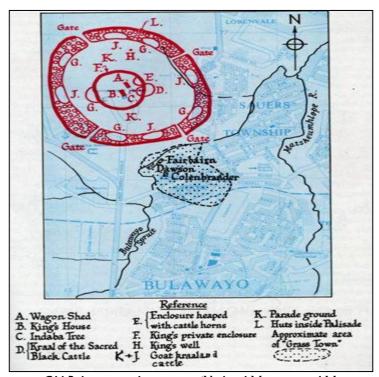


Figure 4. 7: Old Bulawayo settlement type (National Museums and Monuments)

Besides what was found at the museums, scholars in different but related fields had their own opinions of the Ndebele settlements. The Ndebele communities where believed to settle in a fan pattern. One historian stated that,

"Their settlements were believed to have been one with a large open space at the centre where the cattle stayed. This was to protect their most priced processions from attack or raid."

Gathering spaces were also at the centre of the Ndebele communities implying a significance on the public open spaces in the Ndebele community. The wives of the head of the settlement stayed at the centre together with the relatives. In the 1940's the Ndebele shifted from circular forms to more linear developments following contour lines (Diane, 1990). This was done to preserve agricultural interests within the Ndebele community. Plate 4.7 shows an aerial view of old Bulawayo before it was finally consumed by a wild fire in the year 2010 making it

a failed Museum Site that got National Museums and Monuments a \$500 fine from the Environmental Management Agency for failing to put fire guards.

Plate 4.7: Old Bulawayo / KoBulawayo Reconstruction 2009 (Makuvaza and Burret, 2011: 5).



From the issue of general settlement layout, planning in Ndebele communities can be seen through the home. In an interview with one of the Ndebele social anthropologists, he stated that,

The Ndebele homes were divided into two, the ekhaya which is a rural home that came as a result of the existence of colonial urban homes. The other home is the *umuzi* which was the original traditional Ndebele home.

The Ndebele home proved more intensity in terms of mixing uses than any component of the Ndebele community. This setup explains why the Ndebele community patterns never emphasised on other uses as each unit was compact.

Figure 4.8 shows a Ndebele community home layout. The components on the layout presents a self-content dwelling unit that can be presented as having all aspects.

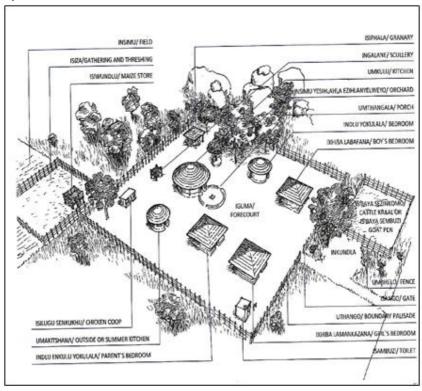


Figure 4. 8: Ndebele Homestead Layout (Tui and Nyathi, 2018:42)

The Ndebele people, unlike the Great Zimbabwe people, were very adaptive to various changes brought to them by different groups. The concepts in their planning was influenced mostly by principles of security which were caused by their troubled history in Zulu land and the need to protect their leaders and defence from raids. As such, developments in the Ndebele state began as circular developments but however turned to some linear developments due to agricultural needs. This implies that the Ndebele cities did not have fixed forms but were fluid areas with flexibility to change in case of need. This is an attribute that still lacks in cities as they grow and then fall without having to change their form. Furthermore, the Ndebele cities had other concepts like combination of

uses, walkability, defensibility of the area and unique urban forms developed by architectural aspects.

One unique character that most cities wish to achieve is fluidity which is the ability to change and meet the needs of the community and adjust to any changes without having to collapse. This was a clear character of the Ndebele settlements and this can be seen through the adjustment of the architecture. When the Ndebele people got to the Zimbabwean plateau, the kind of trees that produced smooth curved doom roofs where not there and as such they had to change their designs from domical to conical roofed buildings. Furthermore, the Zululand and Mzilikazi settlements were circular in nature as a defence strategy with the king being the centre and the order coming up due to significance. This was also characterised by cattle kraals that were more important and more protected than any other possessions, being located at the centre. The environment in Zimbabwe required the Ndebele people to start practicing agriculture and worshipping (borrowed from the Torwa people). All this led to a change in the form of the city into linear settlements guided by contour lines and the general terrain. To adopt to Zimbabwean situations, the king then settled at the highest position in the area. This ability to change due to circumstances made Ndebele cities to grow bigger and perpetual. The more the need rose, the more the cities changed.

Combination of uses is another attribute of the Ndebele communities. Like the Great Zimbabwe communities, the Ndebele state had all land uses in the areas within close range. The Mzilikazi settlement type of circular settlements had different land uses starting with cattle kraals at the centre, the king's house close by, his wives and other people as they moved out. Looking at these, it may seem like it was all residential, however, each person had his/ her trade within the Ndebele community. Therefore, every person practised their trades at their homes making the home area of each family a mixed-use development. Having those homes with a mixture of land uses made the whole settlement a chain of mixed-use dwellings making it a mixed-use settlement.

Walkability is one of the most obvious consideration that was made when Ndebele communities were developed. Cities of the Ndebele people were circular as such equidistant from the centre. The kings' place, the cattle kraals and where all important decisions were made was central. As such if the centre is to be considered as the current Central Business District, it is noted that the residents of the Ndebele communities lived within walkable spaces. This fostered social interaction as the people could walk and talk as such build sense of community and social capital.

As a warring community, the Ndebele people lived with a defence mentality. This meant that all the developments and organisation were done with close monitoring and surveillance. The people had to be residents of *Umthwakaz*i for them to live in the place. As such social networks built on the bases of class organised location of the people, *Zans*i at the centre, *Abenhla* in the middle and the amaHole on the outer part of the settlements. This meant that the King was the furthest from the point of entry of the enemy and on a higher ground. Figure 4.9 is a reconstruction by one of the missionaries (Robert Moffatt) of the home of Lobengula. From the reconstructions, it is noted that the Ndebele settlement was designed with defence in mind.

From the re-constructions of the old Bulawayo site, it is noted that public spaces were some of the most prominent and convenient land uses in the Ndebele settlements. This place was a centre for all important gatherings as such a major source of social cohesion. All traditional ceremonies were carried out here. The meetings, the negotiations with visitors, these were all at the central places see figure 4,7.

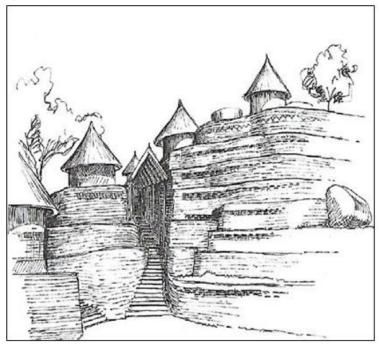


Figure 4.9: King Lobengula's palace (Tui and Nyathi, 2018: 16)

While urban planning in precolonial Zimbabwe was spectacular and fostered social interaction in many ways, it could not survive the changes that came with colonialism. In the year 1890, the Zimbabwean groups were subjugated by the British master first as the pioneer column. This brought about an era marred with British planning ordinances, standards and approaches in the way cities were to be organised. It is through this that land ownership rights, subdivisions, planning permits and planning boards and authorities were set. It is through this that planning practices that are currently being carried out were born. This part presents the various opinions of the planning and architectural practitioners in Zimbabwe in relationship to how planning has led to current communities and reduced interaction in a way.

In the context of urban planners, the focus was to look at how planning approaches in Zimbabwe have been affecting the quality of social networks that are developed in urban communities. For one urban planning practitioner, the main argument was that, planning practice did not have any influence on social cohesion. The planner argued that,

"Planning is about layout subdivisions which is all about creating stands and distribution of stands. In some cases, what we focus on is development control which again does not affect social interaction. The issue of cohesion and social network is relational, people with relationships like in rural areas are more connected... The planning we do has nothing to do with that..."

This comment from one of the experienced and current planners indicate an approach to current planning. Planning is no longer looked at as a process but a project to develop a product (layout plans). As such the consequences of plans or the proposed land uses is not a case.

Discussing on the issue of cohesion and urban plans another planner working with the City of Harare was of the opinion that planning is still peripheral when it comes to issues of cohesion in cities. The argument was pinned on the idea that while planning created open spaces and public areas, it did not guarantee any kind of interactions. The planner stated that,

"The kind of planning we do is more or less about zoning. We create land use zones and then we hope people use the areas. If not, they become white elephants."

This comment by the planner introduces issues of the attitude of planning authorities towards planning for cohesion. The planners still perceive themselves as not being fully part of the process of fostering interaction but rather as players that cannot be blamed if there is no interaction when planning is done.

In a discussion with a planner currently employed at the department of physical planning the issue of planning for social sustainability was also raised. The planner

stated that plans could foster or stifle social interaction in a way. In the argument, the planner argued that,

"Planning in Zimbabwe is aware of the need for socialising as such we give standards for opens spaces. If we allocate open spaces, we know people will interact in those areas and then social networks are made. Beyond that it is now the duty of sociologist (chuckled)."

Humorous as the statement was supposed to be, it gave a clear opinion of the attitude of planners in present day. Urban planning to them is all about following standards and not deviating in any way for sustainability. As long as the layout plan has 5% of the open spaces stipulated, their uses are not as important as their existence.

The study then moved away from public planners and looked for how planning was done in the private sector. In an interview with a planner working under a land developer in Harare, a different opinion as to the approach to Zimbabwean planning was identified. The planner argued that plans were now more about company profits than any other idealistic principles. In her comment, she argued that,

"Sense of community in design? What is that in the eyes of our bosses and clients? In the world we do our planning, it is idealistic, Utopia! Kkkk (chucked). When you do your layout plans for our bosses you have to create as many stands as possible. Things like open spaces, and street designs are a waste of space for stands as such we will be losing money. You just make your plan acceptable by the Department of Physical Planning then you are good to go."

This was another eye-opening statement from the private sector planner working in land developing companies. The statement highlights that planning is now done to make money without having to worry about the consequences of the plan to any other facet of the community. The plans are designed to satisfy the department of physical planning to avoid rejection then after than it's all about money and profiteering.

To further understand the issue of sense of community and social sustainability approach to designing in Zimbabwe, a group discussion was done on a WhatsApp group called "Zimbabwe Planners Forum" were issues of effects of planning on social sustainability were discussed. Tow patterns on planning emerged and in Zimbabwe, there exist two groups of planners who are the academic oriented (lecturers, students and recent graduates) and the practitioners. In the eyes of the academic planner, design can affect social interaction and society needs to be planned for. One planner stated that,

Yes, sense of community is an essential consideration in current planning practices. The planner needs to look at how his/ her plan will affect social dynamics. If you look at communities like Tynwald North and South, there is

more individualism than in areas like High Fields, Dzivarasekwa and Budiriro to mention a few. This is largely influenced by the fact that the areas were designed as communities that were compact and had places for interaction. *Taitotamba bhora ne gen'a rangu tichitozivana so chero ndiukamuwana aripi haandirase* (we used to play soccer in my community as such we created important social networks).

This opinion of the planning approach was more like an example that was not really informed by much practice but books as suggested by another planner in the same group. The argument was that while in the context of an educational environment it was the right thing to say, in the planning field it was different. Planning in Zimbabwe was informed by two things, planning policies and government policies. The planners' argument was that,

'You people are too ideal. In the world we do our planning, we are not given room to do any of the things you write about. Imagine in this age of "New Dispensation", our government is talking about command housing and you start talking about your sense of cohesion, haaa vanoti ndezvako zvemuclass (they will tell you, you are being bookish), what is needed is for you to create as many stands as possible and push the government agenda.'

This perspective by the planner in practice also brought about another issue which is on political influence and government agenda on planning. The plans that were being developed were not really weighed or done in a comprehensive way but to satisfy the needs and the agendas of those in power. This highlighted how current urban planning was being carried out in the opinion of urban planners.

The other group of practitioners that are involved in urban design in Zimbabwe are the architects. This group focus more on the design of the buildings in the urban spaces and in some cases rural space. Interviews were carried out to understand how their designs would make people feel at home and how the designs they were producing fostered sense of belonging. The first architect who responded to the question was also in a similar position with the first planner that the researcher had interviewed. The response was that architecture did not influence sense of belonging.

"We produce houses, you and your family make it a home, that why one can feel comfortable in a house that he is lodging (renting). '

The response made it clear that architecture in Zimbabwe was not informed by any kinds of culture neither did it intend to develop any sense of belonging rather it was just a building plan to build a house.

Another architect who was interviewed had a different approach to how he developed his plans. The argument was that when developing our plans, the architects follow the specifications of the owner nothing more. His argument was that,

"A client comes to me and say hey (Tin Tin) his Nickname i want this and this on my house here is your deposit. When can i collect it...?"

This was another opinion that brought about a different view. Buildings that will be produced in such areas will be very different and there is no uniformity. As such failure to match the buildings will imply that they do not offer any kind of relationship undermining the sense of belonging (one cannot identify himself with diverse kinds of design rather uniformity).

Sense of community in ancient Zimbabwe was derived from four aspects, beliefs. Norms, values and relations. It is from these aspects that ancient Zimbabwean communities were developed. The other aspect that can be identified as one determinant of communities was survival. Ancient civilisation did not have technology as such their survival was largely determined by their systems. This part will give an analysis of how the four aspects could have determined design of communities in the Ndebele and Great Zimbabwe state.

The Shona and the Ndebele people had beliefs that determined their ways of life. These included religious beliefs that of the world being round. This idea made them to design their settlement mimicking the shape of the earth. This idea meant that the Shona and the Ndebele felt comfortable in dwellings that were circular, as seen by their homes, the huts made of pole and *dhaka* in both the Shona and Ndebele settlements. This can also be seen through the circular settlement patterns reflected by fencing walls at Great Zimbabwe and the settlement layouts at Khami ruins. All these beliefs affected settlement and the way the ancient Zimbabwean cities were also designed.

In the context of norms and values, the Shona and Ndebele's settlements and communities were bound by inter marriages. This was based on the concept of *rooranai vematongo* in Shona communities. This meant that the Shona and the Ndebele married people they were familiar with. This was further cemented by the fact that the Shona people had a tendency of giving their children land as such they lived in small sects of interrelated people. The same concept applied in the Ndebele communities. They believed to be one family, *Umthwakazi* under the father ship of their king. This ensured a continuation of strong interrelationships within the Ndebele people. The relationships also determined the settlement of the Ndebele people.

Like a human body cell, so were the two settlements of the Ndebeles and the Shonas. An analysis of findings shows that all aspects that were needed for survival were found at every home, neighbourhood and the city. It could be noted that if one was to remove a homestead, or a neighbourhood, the city of

Great Zimbabwe or those under Ndebele would continue surviving. The neighbourhoods were self-sufficient and developed towards the prosperity of the Ndebele and Great Zimbabwe cities. While the prosperity of the city was dependent on this aspect, the survival was not. This is the missing aspect in current planning practices. The zoning that is currently done create very rich and anchor core of the city and other dormitory points of the city. This creates zonal dependency that affect prosperity of a city and reduces sense of community within the city.

Having looked at the two ancient practices that determined city development and the practices that are currently determining the development of cities, it becomes essential to try and decipher meanings from the discussions. The current planning practices are guided by planning laws, the need for housing driven by various policies and the profit-making ideology. It can be identified from the literature review and the findings that sense of community in current urban planning in Zimbabwe is yet to develop into a consideration. Another aspect that comes out is that currently most of the settlements do not have a focus on street design but on provision of roads. This has an implication on the quality of street spaces that are being designs, given the argument in chapter two that streets determine sense of community.

In ancient cities on the other hand, there was a persistent focus on human oriented development. This implies that the developments that were done gave people a sense of place. For instance, the *dare/iguma* made the fathers feel they had power while, the hut i*mba huru/Indlu* and gave women a sense of place. This orientation is one that is now being advocated for in current cities that have been designed with a focus on vehicles, money and allocating houses. This can be identified as a major attribute and difference between sense of place-oriented design and current urban design.

Combination of uses in ancient cities also played a crucial role in ensuring that the sense of place was maintained. The communities had various homesteads clustered together (Ndebele and Shona). Each homestead had every necessity for the people in place. There was a family field, the cattle kraals, the *dare/iguma*, the sleeping areas, the sanctuaries among other significant uses. With these close by, living close to relatives, people spent most of their times together thereby strengthening their relations. Figure 4.9 shows the generic Great Zimbabwe Layout plan. Figure 4.11 shows a current layout plan for a new settlement in Zimbabwe. The layouts indicate intensity in combination of uses in ancient cities than in current cities as such creating time for interaction and cohesion in ancient city settlements. On the other hand, current cities have created Euclidean zones

that reduce time for interaction as such cohesion is reduced making cities sad as highlighted by Montgomery (2013).

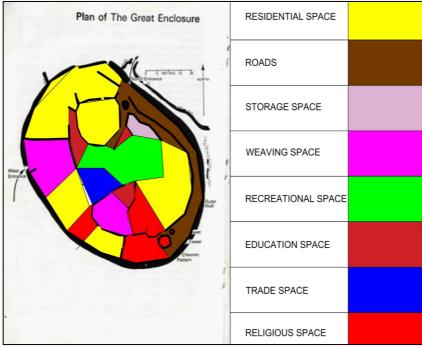


Figure 4. 10: *Great Enclosure in Urban Planning Colours* (Author, 2019)

Urban planning in Zimbabwe also has a weakness in terms of fostering sense of community. There exist various standards and actions that have some degree of enhancing sense of community but it is not emphasised on. The first is the issue of street designs. The laws and standards in Zimbabwe provide for road reserves but does not mandate planners to carry out street design. Since streets are essential in enhancing sense of place, this becomes a weakness.

Another issue that came in during the study is the lack of cohesion between urban design professionals. There is no interaction between the designers of the macro space and the designers of the micro spaces. As such there is no common goal of enhancing social cohesion and communities that are created are very different.

Plate 4.8: Layout of Masvingo (Masvingo City Council)



The two plans on figure 4.9 and plate 2.1 are two different planning and land use concepts. The Great Zimbabwe settlement layouts show a very small area with almost all the town planning colours. This highlights combination of uses implying that people spend most of their time close by interacting and getting to strengthen their social capital. On the other hand, the layout of Masvingo shows large tracts of single use zones. Where a person works, shops, recreates and stays are three different places. This mean that the people spend most of their time either working or travelling to different places. This reduces the level of cohesion and interaction developing a weakness in the current urban design approach in enhancing social cohesion.

The chapter intended to present the findings and give an analysis of the possible meanings that could be derived from the study. It identified that sense of community in Great Zimbabwe was determined by ethics, norms and values. This transformed into actions that determined the settlement of the people. From the findings, it could be noted that the ancient cities had high levels of density, intensive combination of uses, the cities were fluid and, in some aspects, defensible. All these ideas were driven by a sense of cohesion that existed in the Shona and Ndebele people. The Shona people believed in the *idya nehama* and *rooranai vematongo* (get married to people you are fully acquainted to) and the Ndebele where one family. All this gravitated towards settlement pattern. The study then looked at current design practices that proved to be separatist and driven by ordinances and neo-liberalist principles. All these traits have been baled by literature as aspects that foster individualism in communities. Informed by all this, the next chapter seeks to conclude and derive possible recommendations for this study.

Chapter 5: Borrowing from Ancient Cities of Great Zimbabwe and Old Bulawayo to Enhance Modern and Post-Modern Zimbabwean Cities

Sense of community in ancient cities was determined by a set of norms, values, normative ethos and beliefs that drove various designs and settlement patterns. On the other hand, settlement patterns in the current communities are driven by the urge for one to amass profits brought about by colonialist as evidenced in chapter 4. Chapter 5 intends to conclude the study beginning by a summary of the findings in chapter 4 and giving a conclusion of the study. The chapter then moves towards giving recommendations for the improvement of current design practices to enhance sense of community.

The study intended to look at sense of community in urban design with an intention to borrow from ancient cities of Great Zimbabwe and Old Bulawayo. The study focused on aspects that had an influence on sense of community and settlement patterns in the Great Zimbabwe and Ndebele settlements. The findings highlighted the political, social and religious factors that affected sense of community in Shona and Ndebele settlements.

Politics was the major determinant of settlement patterns in both the Great Zimbabwe and the Ndebele Settlements. In the Great Zimbabwe settlements, political power and influence determined one's location. The politically versatile were found within the dry stone-walls while the commoners settled outside the stone walls. This was also seen in the Ndebele communities where the politically astute were located closer to the king. As such politics determined how people settled and how they were aligned. Furthermore, in relation to sense of community, the king was the most powerful and was believed to be the father. Every person therefore was in support of the king and through politics for the king a sense of community was created.

The social fabric in the two ancient communities were strong. The Ndebele's social position also determined settlement. This could also be seen within the Great Zimbabwe community where societal values and norms drove a sense of cohesion. The Great Zimbabwe community was a Shona community that had relations based on totems. These relationships bound the communities and led to

some degree of social cohesion. The Ndebele had a cattle society and through societal ownership of cattle, the king was in control and a family spirit was maintained.

The economy also played a huge part in maintaining sense of cohesion. The Ndebele people where a cattle community as such they designed every aspect of their community around cattle ownership. Having a kraal at a house therefore was a norm in the Ndebele community that affected the way in which the Ndebele people operated. In the Great Zimbabwe State, the economy also played a role in shaping relations. While everyone had some degree of subsistence farming, they had to trade to get equipment like pots axes, speers, knobkerries among others. Through trade, they fostered interdependence, and it enhanced social capital that improved the sense of community and cohesion.

From the actors that affected settlements and sense of community in ancient communities, the chapter went on to look at attributes that are determining development of current cities. The study identified that politics, planning ordinances and policies affected the design and orientation of current cities in Zimbabwe.

Politics and political influence have been influencing the layout, location and settlement patterns in current Zimbabwean urban design. The political bigwigs have been seen to subdivide pieces of land that are meant for recreation and those that foster interaction in the name of infills. This has created communities that do not have social facilities as such undermining social cohesion. Furthermore, politics has fostered an element of land developers that only focus on making profits. As such these people develop plans that only respond to their money needs and overlook the importance of society. In such cases, issues like subdivision of vital open spaces for residential stands come into play.

The other issue raised is that current urban planning ordinances do not fully facilitate social cohesion. The planning legislation provide for spaces for interaction but does not fully specify the kind of uses that are to be placed on the open spaces and streets. As such, planners have a tendency of leaving all spaces that are expensive to develop as the open spaces. This creates open spaces that do not foster social cohesion but that satisfy the current planning ordinances. The other one is of street designing, legislation does not provide for the need to

develop streets as areas that foster social interaction but only permits for the planning of roads.

Another issue that was raised in chapter 4 was the focus on perusing government policies without having to check on their impacts on social interaction and effects on the end users. The study identifies that planning in government is all about pursuing what the government mantras emphasise on. This ignores sense of community and other aspects that place people in urban design as the major recipients of the design products. For instance, the government policy of developing many houses for many people led to the development of circular 70 of 2004 that was about making low cost housing developments even cheap. While the standards where increasing cheap housing supply, essential aspects of human settlements began to be pushed away as the emphasis was on developing many housing units. Street quality was further decreased to even less pedestrian friendly dust roads as the minimum standard.

Having discussed the findings and how the ancient cities were cohesive and factors that influenced it, the study went on to give an analysis of how ancient cities and current cities differ. It was highlighted that ancient cities developed with an orientation towards the user (people). As such everything was to scale. People could walk all distances. The cities were designed with a focus on the centre but with high-density settlements. This permitted people to interact and communicate as such develop a sense of place and oneness. It also identified that beliefs like that of circularity of the universe made people to believe that they had to settle like the universe mimicking the earth's structure. This affected sense of community.

The study also did an analysis of current planning and its focus. It was identified that current urban planning is driven by political needs, prevailing government policies and the need to maximise profits. With that, sense of community is a consideration that is peripheral in the process. Planning standards though they have a basic appreciation of sense of community, they do not foster it but they assume it is a given. This can be reflected by the absence of emphasised street design with existence of basic road designs.

The Great Zimbabwe and Ndebele community neighbourhoods were what most cities in present day wish to attain, self-sufficiency. This can be seen through the homestead feature; neighbourhood feature up to the whole settlement feature. It could be noted that the two settlements were developed with a spirit of survival.

If a settlement was not strong or well established enough, it could not survive against the issues of food security, weather and many adversities of that time.

To conclude, the study was guided by the need to identify and examine aspects of Zimbabwean "sense of community" from the ancient Zimbabwean cities that can be integrated into current design. This was done through an examination of two ancient cities, the Great Zimbabwe and the Ndebele communities. The study identified that the population densities of the two areas in relationship to the definition of cities currently make the cities. It identified that aspects like norms and values were the major drivers to the development of sense of place within the Great Zimbabwe and Ndebele communities. It identifies that from these norms, beliefs and values, the Great Zimbabwe and Ndebele settlements were developed. The way in which the settlements were developed made them sustainable and more than current cities. These current cities are developed following sets of standards and policies that are also driven by polices and money-based motives. As such, it presents a need that will be discussed and options proffered in the recommendations section.

Sense of community is a feeling that is determined by many aspects discussed in the previous four chapters. This feeling as discussed needs to be fostered by various aspects in the field of urban design. From a context of learning from the Zimbabwean forerunners, there are many aspects that foster sense of community that were identified in the Great Zimbabwe and the Ndebele State that can be borrowed and fused into current urban design. The following aspects can be used as the tools to enhance sense of community in Zimbabwean cities' design,

Intensive land use- The Great Zimbabwe and Ndebele communities were settlements comprised of small round pole and dhaka huts that were densely populated. This level of densification permitted more interaction time. As such in current urban design, there is need for increased land use densification. Design of neighbourhoods should be comprised of more high-density dwellings like attached dwelling units on 70m(10x7m) stands, semi-detached dwelling units, high rise flats and high cost high-density units. Low density units should largely be designed as small agricultural plots ranging between 2000-4000m. This will create cohesion and foster self-sufficiency.

Mixed Use Developments- An easement of the Great Zimbabwe and the Ndebele State proves that the two settlements were designed with high levels of combination of land uses. At every homestead one could find almost all land uses that an average person could need. This is an aspect that is missing in

Zimbabwean urban planning. With a focus on provision of housing, most layout designs are yellow (residential) yet they are supposed to be a clutter of colours. As such there is need to intensify the combination of land use zoning, moving away from the basic British Euclidean zoning to more compact mixed-use zones. Or even look into removing zoning regulations. This will mean people will have more time at one point as such increasing their time to interact and create social networks. The more the social networks the more a person gets a feeling of place and as such sense of community is created.

Street design- While the Ndebele and the Great Zimbabwe communities did not actually design their streets, literature suggests that in the modern age to achieve sense of community, communities need to be provided with well-designed streets. It reflects that roads that are normally designed are not sufficient. This presents the need for statute driven street designing. Figure 5.1 is a model of typical street design.

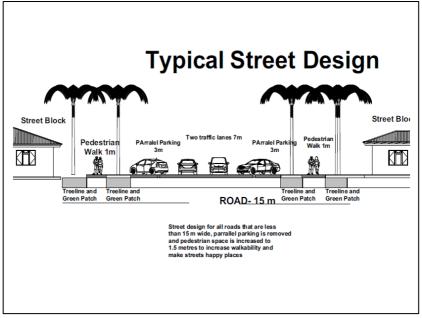


Figure 5. 1: Street Design (Author, 2019)

Fluid Neighbourhoods- Fluidity is the ability to change easily, in town planning language it can be referred to as robustness. The Ndebele communities at one point changed settlement patterns to linear following a change in economic focus (cattle focus to including subsistence cultivation). This is a survival feature of cities development that needs to be part of urban planning and design in Zimbabwe. To enhance fluidity, there is need to remove permanent land tenure (title deeds) and introduce lease holds to all land. Since a person requires land for a life time, there is need for life time leases and land reverts to local authorities. This permits the local authorities to regenerate and develop perpetual cities. These cities in turn respond to the needs of the current communities and become fashionable. This increases the sense of place as the neighbourhoods will be responding to the needs of the people

Self-Sustainable Neighbourhoods-Self sustainability is an essential element in city design. Great Zimbabwe and Ndebele homes and communities were self-content. This characteristic needs to be borrowed into current layout design. Content and self-sufficient neighbourhoods entail some degree of interdependency from the community dwellers as identified in the Great Zimbabwe and Ndebele trade. As people interact for benefits, they become acquainted to one another and as such foster a strong sense of cohesion.

People centred Developments- Development of ancient Zimbabwean cities was driven by the need to satisfy the needs of the people and this led to the development of people centred communities. This focus needs to be developed in the design of current urban centres. Settlements that respond to the needs of people will cover every recommendation discussed above. It is from this person orientation aspect that one becomes part of a community.

Informed by the study, the researcher developed a prototype of a city that depicts sustainable sense of community. This prototype can be used to inform current urban design and come up with cities that encompass all the recommended feature. Figure 5.1 is a 2-dimensional layout plan of the prototype developed of a community depicting sustainable sense of community.

Prototype 1: Community depicting sustainable sense of community (Author, 2019)

The proposed neighbourhood that depicts a sustainable sense of community rests on a (800mx1.2km) 0.960 sq. kilometres piece of land. The general hexagonal shape taken by the prototype was informed by the circularity principle that was central in precolonial designs. The hexagon came in as circles could both be related as neighbourhoods as such hexagons could create the intersections that the neighbourhoods needed. The area has 60 +/- 1 acre stands that would be used for residential agriculture. These small plots will be used as sources food and low

medium density residential

light industry

nome industry

high density residential

semi detached dwellings

attached dwelling

high rise

flats

recreation spaces

nstitutions

retail space

Office space

parking spaces

income housing units. The same plots will develop a neighbourhood buffer thereby containing sprawl and marking boundaries. Furthermore, having all the people contained within an area will foster relationships as they will depend on each other for services. The 1-acre stands will also act as the boundary walls adopted from the idea of the great walls at Great Zimbabwe and the wooden fence at Ndebele State. All in all, the stand has 490 detached stands, 106 semidetached 60 attached unit stands and 11 high rise flats stands. With a general population density of 4 people per family, the area has potential to house +/-3000 people in detached units and +/- 2000 in flats and attached units. This provides the area a potential population density of +/- 5000 dwellers within 0.96 sq. km. This level of densification can be related to the Great Zimbabwe densities. With that level of densification, interaction and cohesion will be promoted.

The general design of the prototype indicates that most services are central. The services have been located at a distance of 800m from the furthest resident. This makes the area walkable. Having services within walkable distances will promote walking thereby permitting the residence time to walk and talk. The services within walking distances have also been complemented by a mix of uses within the neighbourhood. The design has agricultural land (food), residential land (sleep), Commercial land (buy), Industrial and office land (work), public parks (leisure) and institutional (education, administration) among other uses. This mean that the neighbourhood can support its population and can allow one to be born and to grow up within the same community without having to outsource services, this nature promotes a sense of cohesion.

The other significant aspect is the mobility within the design. The most prominent aspect is the park at the centre that ends the major road and leads it into a car park. This design will reduce the negative impact of having a central highway that has potential to divide the neighbourhood into two parts. The park has been placed as a symbol to show that the place was designed with a people orientation. This idea of people-oriented designs was borrowed from the Great Zimbabwe and the Ndebele communities.

The major road in the area is a 15m road. This road will have two lanes, parallel parking lanes, treelines and pedestrian walks (see figure 5.1). While this is a major distributor, the design promotes walking either across or along the road as there will be two traffic lanes. The next road sizes are 12 metre roads. These will have two pedestrian walks on either side, two tree lines on either sides and two traffic lanes. The same will apply for all other road widths. This idea of enhancing walkability and confining traffic within its own lanes was borrowed from the

confined narrow passages of Great Zimbabwe state that evidenced some level of pedestrian orientation.

The public parks have been designed in a different manner compared to conventional park designs. The parks have been placed between buildings to promote surveillance. The central park is located between commercial spaces implying the area is defensible. The other public spaces are between residential flats and are located as quads giving them enough defensibility. Having such level of surveillance at the open spaces will give a sense of security to users making the spaces vibrant. This has been borrowed from the Great Zimbabwe and Ndebele concept of developing defensible spaces.

Having concluded the study, the research was not exhaustive of all the aspects that could be discussed in regards to urban design and ancient cities. As such there is a need to look at architecture as a field and how it can be influenced by ancient architecture to develop unique Zimbabwean city images. Furthermore, there is need to inquire into how vernacular building material adoption can assist in the development of sustainable urban cities in the face of adversities like climate change.

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Synopsis

The purpose of this inquiry was to probe deeply into the concept of sense of community in urban design and draw aspects of pre-colonial urban settlements (Great Zimbabwe and Old Bulawayo) into current urban design and architecture. The study flows from the idea that environments can affect human behaviour as highlighted by the environmental determinism theoretical framework. Borrowing from the ideas of architectural determinism the study critically argues that urban design has been responsible for increasing individualism evidenced in current urban settlements in Zimbabwe. The study recognises that concepts like public space planning, street planning, walkability and combination of uses play a significant role in fostering sense of community in neighbourhoods. It pinpoints that legislation and design standards in Zimbabwe have been too general. This has undermined the development of sense of community in Zimbabwean cities. The study then posits that sense of community was higher in pre-colonial settlements than in current settlements. The central focus of this study is to identify and understand the primary sources of community cohesion within Zimbabwean settlements. By examining these key factors, the study aims to incorporate these insights into contemporary urban design practices, thereby fostering stronger, more connected communities in modern urban developments.. To understand the sources of higher sense of community in precolonial settlements, the study employed qualitative research methods. Using the case study research design of the two areas, Great Zimbabwe and Old Bulawayo, the study used face-to-face interviews, cell phone interviews, open ended email questionnaires and observations from primary data and archival methods for secondary data. Data collected was analysed using thematic content analysis and narrative analysis. The Atlas Ti software was also important in data analysis. The study identifies that sense of community in precolonial society was linked to values, norms and beliefs that gravitated into design and settlement layouts. Beliefs of a circular world brought the idea of circular settlement patterns, relationships brought close clusters of related people, sacred perception of kings led to easy control of the people as one as the king was viewed as a god. The study identified that in current communities, design is guided by profiteering mind-sets, political will and government policies.

About the Author



Brilliant Mavhima is an accomplished spatial planner with six years of experience spanning both the private sector and academia. Holding dual master's degrees—one in Rural and Urban Planning and another in Data Science and Informatics—Brilliant brings a unique blend of technical expertise and analytical skills to urban development. Currently pursuing a PhD, he is deeply committed to advancing knowledge in his field. Brilliant has a robust publication record, with over 18 peer-reviewed articles to his name. His professional portfolio includes the successful completion of master plans, local plans, and layout plans, demonstrating his capacity to contribute to complex urban and regional planning projects. With a keen interest in leveraging data science to accelerate planning processes, Brilliant continues to push the boundaries of traditional planning methods, aiming to create sustainable and competitive urban environments.