

KENYA CULTURAL CENTER:

A proposed architectural design symbolizing national identity.

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DEDICATION

To my main supporters in life: my family.

To my mom, Wania Monteiro de Arruda, my dad, Francisco Mario Monteiro Fortes and to my little brother, Diego Fortes. The ones that were always by my side, not always physically, but always encouraging me to go on with this Master's course and in this way fulfill my dreams.

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ABSTRACT

Kenyans were made different by history, tradition and territorial separation. Stereotypes were created during the colonial period and after independence they became stronger with tribalism in the political domain. Discussions and debates around national identity have been proposed to present a collective identity related to a nation-state. However, in Kenya this subject becomes a challenge since in this country there are very few similarities between the people and heterogeneity reigns. This thesis intends to discuss national identity in Kenya, having the capital city Nairobi as its shared ground.

The discussion is led towards architecture and design identity, in order, to find this national icon to create a Cultural Center to not only portray its people's image but also to protect the tangible and intangible cultures that have been lost during the process of modernization and showcase them to the rest of the world. Translating Kenyans with their richness in diversity and their shared bond as a nation.

The process of finding this national identity required discussions with experts and ordinary people about the subject, literature investigation and world architectural precedents that all provided the basis for each and every design decision in the Cultural Center concept and consequently present what the researcher could interpret from the studies in architecture and interior design guidelines.

Key words: cultural center, national identity, design identity, architecture icon, landmark, culture, tradition, Nairobi city, Kenya.

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CHAPTER ONE

1. INTRODUCTION

Discussion and debates about nationalism and national identity have been a major topic of various scientific studies as well professional fields around the world in the last century. Viewed from the prism of modernization, nationalism presupposes the image of a nation as a collective identity related to a nation-state (Arnason, 1990). In order to be collective, common characteristics need to be shared, such as culture, religion, language and history. This study then discusses the national identity building in Kenya and uses Nairobi, the capital city, as the epicenter of the debate and the image to be created. However in analyzing Kenya as a nation it is challenging to present anything homogeneous about the Kenyan people, their main connection being the land that makes up the country. In this case, it has been noted that Kenyans in general do not identify themselves as Kenyans first, but rather as people from different regions of origin. Peter Wekesa (2010)¹, has stated that in Kenya a lack of national pride prevails. This thesis author has observed that Kenyans' typical responses to a 'simple' identity question are: "I'm Kikuyu, I'm Luo, I'm Kamba..." The differences in the answers are surprising at first because visitors find it difficult to understand the meaning of the separate identities, whereas internationally responses to the identity question might be: "I'm Mexican, I'm Portuguese, and I'm American..." which indicates a clearly more nationalistic identity.

Given the assumption that nation-building is not an easy process, this thesis attempted to approach this subject as an architectural and design question, based on

¹Mr. Peter Wekesa, Lecturer, Department of History, Archeology and Political Studies, Kenyatta University.

discussions in different parts of the world that have also tried to address the issue. Capitals across the globe embody national identity and historical consciousness, be it the Mall in Washington D.C., the Kremlin in Moscow, or the Forbidden City in Beijing. The Mall in USA is a boulevard surrounded by monumental buildings that stretch from the Capitol to the Lincoln Memorial, it is the defining center of ceremonial and public space in Washington. According to James Cooper's foreword on "The National Mall" (2008), the Mall is a built environment, where buildings and monuments, landscapes and public gatherings – all bear witness to how intimately this space is linked to the nation's spiritual roots and history.

Like the Mall in the USA, the Kremlin is a historic fortified complex in the heart of Moscow, Russia; it includes four palaces, four cathedrals and the enclosing Kremlin wall with Kremlin towers and also the president's house. Quoting George Lowth (1868), Moscow's present charm is related to its past history and present life. The Kremlin became its symbol, as an urban environment built during a long period of time. The Forbidden City is an imperial palace situated in the center of Beijing, China. It is currently a touristic complex together with a museum but historically it represented political and economical power. Geremie Barme (2008) states that it was built to be far more than just a symbol of power or draw card for tourists, its very design was conceived to awe, inspire and instruct. In this sense capital cities' buildings and urban planning around the world have the power to awe, to alienate, to inspire, and intimidate (Wise, 1998). According to Serena Nanda (2004), historical buildings offer a unique vantage point for understanding the construction of national narratives and representations of a shared past that are essential in the process of nation building.

In order to find the "Kenyan" identity, there is need to appreciate the varied nature of the ethnic groups found in Kenya and their contribution to the question of

national identity. There is a need to find a balance between underscoring similarities and differences, and also consider them as strong building blocks for a common nationhood. It is in addressing this gap of national identity and seeking a meaningful architectural concept in a form of a cultural center complex that this document is situated. "There is need to adapt or upgrade traditional architecture in a blend with modern trends, to enable oncoming architectural ensembles suitable to the region's own socio-cultural, aesthetic, economic, functional needs and identity." (Birabi and Nawangwe, 2012).

Accordingly, the goal of this thesis is suggesting the translation of tribal elements and design patterns into a national design that Kenyan citizens can relate to and be proud of. Most of the elements were in conflict with each other, and this was resolved through the development of many drawings, sketches and discussions with various experts - educators, architects, designers and ordinary Kenyans and foreigners. An important point of the thesis is the suggested translation of culture, history and tradition into unique layouts to be seen by Kenyans and the rest of the world.

1.1 Background

Kenya's population is approximately 40 million people (CIA Factbook, 2012), and the country is made up of 42 ethnic groups, divided into three main linguistic groups: Bantu, Nilotes and Cushites. There are about 3 million people in Nairobi according to United Nations data (2009), drawn from all parts of the country, in search of employment, better living conditions and education. Nairobi was both created by western civilization and the industrial revolution. According to Robert Rukwaro² (2005), in the planning of the city elitism ruled and defined the presence of the African

² Prof. Robert Rukwaro, Associate Professor, Department of Architecture and Building Science, University of Nairobi.

in the city as transitory. They were meant to be in the city only as workers. In this way, services have been provided along the roads, contributing to an unequal urban development. Today Nairobi has an established urban pattern. However, Maringa (2005) concludes that segregation in Nairobi takes place along levels of income. Though one should add tribal affiliation as another contributing factor to segregation in the city's everyday life.

This ethnic segregation can be traced back to the colonial period, when the British colonial forces arrived in the 1880s and later divided the Kenya Colony (1920) into administrative boundaries to suit their own interests. According to Kakai Wanyonyi³ (2010) this separation brought, among other consequences, the denial of freedom of movement and association to the local people. These communities then could not even live close to each other, but kept to the category of jobs assigned to them: Kikuyu worked in the fields, the Luo labored around the homestead as domestic servants, and the Kipsigis took care of livestock and milking. In a way this practice contributed to the emergence of specific ethnic stereotypes and at the same time perpetuated interethnic exclusivity. This was an issue that became even more marked in people's minds after Kenya's independence and even during the reign of Kenya's first three presidents (Wanyonyi, 2010). During this time public offices were dominated by tribalism and not surprisingly led to many conflicts, among them, the violent implosion following the disputed 2007 presidential election. Elaborating on the Kenyan history Peter Wekesa (2010) pointed out that in the pursuit of political unity the tendency of many states has been to negate ethnic, regional and cultural diversities rather than recognize them as building blocks in the construction of a civil society.

³ Prof. Kakai Wanyonyi, Professor, Department of History, Archeology and Political Studies, Kenyatta University.

The tribal differences can be seen on a positive side, where each of the ethnic groups enriches the national culture and contributes in specific ways to the country. For instance, the Maasai heritage as a cultural attraction, long distance runners drawn mostly (90%)⁴ from the Kalenjin tribe, academics being predominantly from Luo and Luhya communities (60%)⁵, entrepreneurs coming from Kikuyu and so on. These links could result in social and political consequences for the country; one being the emergence of meritocracy, where one will be able to prove herself/himself by qualification and not ethnicity. The differences, if integrated to build one nation, will also foster patriotism and national pride, with similarities overriding differences, and inclusion dominating over exclusion in harmonious engagement.

To represent this sense of unity and nationhood, public buildings found in Nairobi that seek to portray the country's unity were analyzed and researched. The buildings identified were Bomas of Kenya, KICC (Kenyatta International Conference Centre) and Nairobi's National Museum of Kenya, which were conceived and designed with a view of portraying Kenya's identity, but fail in showcasing the diversity of Kenyan people. Analyses were done by the author of this thesis after site visits to the three buildings mentioned above. It was observed that: the first building, Bomas of Kenya, is hidden on a site with insufficient information and marketing regarding its location; few have access to it and its attempts in convening tribal environments, lacks resemblance to reality. On the other hand it is important to highlight that Bomas of Kenya receives around 300 people per day, including school trips to watch Kenyan dances and music, more than 47 different traditional dances, being important in promoting cultural accessibility to future generations.

⁴ Statistic based on the last 4 Olympics Games' (Sydney - 2000, Athens - 2004, Beijing - 2008 and London - 2012) gold medal runners.

⁵ Number based on a sample of 30 scholars from different Universities in Nairobi, based on chancellor, council and school headings professionals.

The second building, Kenyatta International Conference Centre (KICC), designed by Karl Henrik Nostvik, a European architect who was sent by the Norwegian development assistance to Kenya in 1965, was built in 1973. It is located in Nairobi's City Center. For its facade African texture has been used (brownish terra cotta materials with small motives defining the location of windows) and the amphitheatre was intended to represent African pitched houses (Rukwaro, 2005). However in contrast to Rukwaro's analytical point of view, the author's observation was that KICC's external appearance does not create a link with the local architecture and culture, and stands out for its height (28 floors). However, important questions emerged out of this analysis in order to establish a complete sense of identity: are brownish colours the real representation of Kenyan colours? Can all the tribes' households be represented by a conical shape? The answers to these questions showed the mismatch between KICC's architecture and Kenya's national identity. The place has become specialized as a venue for important international events dismissing the unique needs of the country in finding national design identity.

The last building analyzed, Nairobi's National Museum of Kenya, focuses on many different exhibition subjects, such as the human race history in Africa, Kenya's fauna and flora, and some aspects of Kenyan history and culture. Compared to the previous two buildings, its content best represents the tribal cultures, but its architectural appearance does not showcase the country's identity either. A clear connection between the building and its content is absent. Instead, the internal content is overly emphasized at the expense of the external form, which forces the researcher to wonder what this identity would be and if it does exist in the architectural and design context.

The researcher attempted to find a place in Nairobi where both the local and foreign population could draw on the riches of the country, understand the atmosphere and enjoy the experience. At a regional level, Kenyans lack a strong national identity and what prevails is a separatist and exclusivist vision, something that segregates the population. Furthermore, from a foreigners' point of view there is an absence of an appropriate place to understand the country's cultural diversity, which leads to the substitution of cultural exchange with the riches of Kenya's natural landscape.

Therefore the aim of this thesis was to suggest the creation of a place/space in which to reserve and maintain the country's culture and showcase it both internally and externally, for locals as well as for foreigners, in order to promote Kenya to the world as one nation despite its diversity. This was achieved through the translation of the three main tribal grouping's cultural heritage (Bantu, Nilotes and Cushites) within a building's concept in such a way that each tribe is represented as an integral part of a diverse yet united country.

1.2 Problem Statement

The identified problem is that in Nairobi, as concerns the preservation and integration of culture into daily reality, there is a lack of an appropriate place/space for showcasing the diversity of the Kenyan culture as represented by various tribes that make up the country while highlighting the country's common identity. According to Professor Robert Rukwaro (2005) most of the modern buildings in Nairobi lack a sense of the country's diverse culture. The ones studied, Bomas of Kenya, Kenyatta International Conference Centre and Nairobi's National Museum of Kenya, do not

symbolically portray Kenyan design patterns, and neither do they translate the traditional Kenyan architecture found in the rural areas (villages).

1.3 Objectives

- To use architectural features in a symbolic way in conveying a national identity building that would appropriately translate and celebrate Kenya's cultural diversity while simultaneously showing that the different ethnic groups brought together enrich the country's cultural heritage.

1.3.1 Specific Objectives

- To create architectural/interior design plans, layouts, sections and elevations of a cultural center complex based in Nairobi.
- To develop 3D images to present the building concept in response to the nation identity question.
- To explore identity issues in the context of Kenyan nationhood.

1.4 Research Questions

- How can architecture and design represent a nation identity?
- Is it possible to create Kenya's identity without reinforcing tribalism?
- How can all the three major tribal groups of Kenya enrich the country's identity on a design aspect?

1.5 Significance of the study

It is important to investigate the national identity issue in order to create in people curiosity and understanding of the subject, making them comprehend their differences and unite them upon their share ground. Consequently transform this identity in symbolism, and then using architecture and design brand the country to the world and its people rich culture and traditions, in order, to save and protect it for further generations to come.

1.6 Scope and Limitations of the Study

The scope of this study encompassed literature available on the topic of cultural identity, focusing primarily on the Kenyan situation in relation to its 42 tribes classified into three main linguistic groups. The discussion was centered on architecture and design, and it was informed by experts of other countries around the world that have already addressed the identity issue. The research was limited by the focus on design and architectural issues at the expense of comprehensive political, social, economic and cultural debates that would be necessary in a complete understanding of national identity.

This research included a comparative review of identity buildings in South Africa, Egypt, China and Norway with their different architectural concepts in response to the question of identity; the process the architects employed in creating a design response; and the opinions of critics. Literature on Kenya's history, discussion on ethnicity, tangible and intangible culture concepts and Kenya's art/design tradition were reviewed in order to create the link between the theoretical foundations and the design proposed.

The researcher encountered the lack of adequate literature on Kenyans' 42 tribes, which resulted in the focusing on the research around the three major ethnic groups: Bantu, Cushite and Nilotes into which most if not all of the 42 tribes fit. The initial idea was to translate the traditional identity of the 42 tribes into one national identity. This was, however, impossible because of the lack of literature on the design aspect of this topic. According to Wanguhu Nganga's analysis in his book about Kenya's ethnic communities (2006), in order to support the process of national integration that is the diverse communities becoming one national community; adequate information based on authentic historical facts needs to be made available. "It is pertinent to make it possible for people to know our origins, migration patterns into Kenya and settlement, all of which disclose our very extensive intermingling, assimilation and mutual dependence." (Nganga, 2006: xviii).

The literature review was centered on understanding the 42 tribes, its tradition, history and culture; so that later it could translate some of the cultural materials into the design concept of the Cultural Center. Specific studies in furnisher and construction materials were held afterwards and complemented the final internal and external design concept. It is important to point out that the researcher was limited to focus on the development of the architectural concept of the space, consequently leaving interior details for another subsequent work.

Another limitation was the need to select a few characteristics of the main ethnic groups as the basis for the creation of the identity design concept. This involved the choice between traditional architecture, artifacts, textiles, handicrafts, myths or ceremonies' meanings. One had to prevail over the others, and the selected construction materials were based on the analysis of other iconic buildings and architectural

processes of architects in various projects world-wide to achieve the proposed identity solution.

The researcher understood its limitations and the final project thesis presented is just to open discussion around the theme of national identity. Concepts were created based on literature review and design precedents found around the world. The final concept of the building pretends to image the country, although, its stands on the architectural and design level, which means, that further studies need to be done in order to the concept developed from the technical and theoretical realm into reality of its construction.

KENYA IDENTITY ISSUE

- Kenya's history
- Kenya's tribal and background
- Kenyan rationality

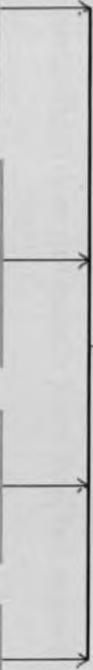
TRIBAL DESIGN ELEMENTS

- Traditional elements
- Design patterns
- Cultural artifacts

CULTURAL ICONIC BUILDINGS

- Local precedents
- International precedents

- Site selection
- Cultural building design and architectural characteristics



**DESIGN CONCEPT OF THE CULTURAL CENTER
COMPLEX**

- Layout plans
- Sections/Elevations
- 3D images

Architectural form and
interior design finishes



CHAPTER TWO

2. LITERATURE REVIEW

2.1 Formation of Kenya's people

2.1.1 Migration and Settlement

The pre-history of Kenya is contained in bones and stones, in scholarly conjectures and painstaking excavations. Man evolved, bipedal and erect, capable of reflection, skilled in the use of tools, and later on the techniques of their construction. The history of Kenya continues to live in its present peoples and culture (Fedders and Salvadori, 1979). In time of accelerating change it is important to perceive the essential past to understand what it is that makes peoples the way they are today. In hand with this investigation one can start seeking for answers beginning with the East Africa migration and settlement, which does not mean a fixed date, but rather a period of time.

According to Odhiambo et al. (1977), it was a slow process; people used to move in small groups, as clans or families rather than as tribes, moving from one settlement to the next. The pastoralist usually moved faster than the cultivators, in search of fresh grazing for their cattle. And during the course of migration there would be frequent meeting and mixing with other groups, not necessarily of the same stock. This could lead to the adoption of new ideas and customs, and in some cases even to the absorbing of one group by the other.

Adjacent to the past of hunting and gathering groups was the history of the Cushites, the ones who moved into East Africa were referred as the Southern Cushites. Okello (2002) states that it is estimated that the Cushites entered Kenya in about 1000 B.C., and they occupied the plains and highlands of Kenya and northern of Tanzania.

Fedders and Salvadori's (1979) research present them as food producers with a predominantly pastoral economy, they used to herd cattle, goats and sheep. Their system of political organization was based on the settlement level and lacked any centralization.

The Nilotes have different migration patterns, according to Okello (2002), they are believed to have originated from the southern border of the Ethiopia highlands at various times during the first millennium A.D. "It was there, somewhere to the north of Kenya, that the original Nilotic-speakers had divided into three linguistic groups: Highland, or Southern; Plains, or Eastern; and River-Lake, or Western." (Fedders and Salvadori, 1979).

The Bantu-speakers migration is believed to have started 2000 years ago when they moved towards the region that is today the Democratic Republic of Congo and from there they dispersed again. The Bantu entered East Africa from the west in around 1000 – 1500 A.D. (Okello, 2002). In western parts of East Africa, and around Lake Victoria, iron tools, their use and iron-working were introduced by these early Bantu-speaking settlers who cleared large tracts of land for their agricultural pursuits (Fedders and Salvadori, 1979).

Although the migration and the intermingling of the ethnic groups in Kenya, both among themselves and with others, may go back as far as two thousand years ago, and continued through the ensuing centuries, the actual histories of contemporary individuals groups did not begin to emerge until relatively recent times, so state Fedders and Salvadori (1979). All these migrants did not enter Kenya as tribes, but later as a result of assimilation and absorption they came to be the 42 different tribal groups of today under the three main linguistic groups: Bantu, Nilotes and Cushites.

The largest group of the three is the Bantu comprising 60% of the total population of Kenya that is according to the Census (2009) 38,610,097. The second most populous group is the Nilotes who make up almost 30% of the country's population. The Cushites represent 7% and the rest of the population, 5% consists of the Swahili, Arabs, Asians, Europeans and other people. This analysis is important in showing the importance of each and every ethnic group in Kenya's culture, economy, politics and social life.

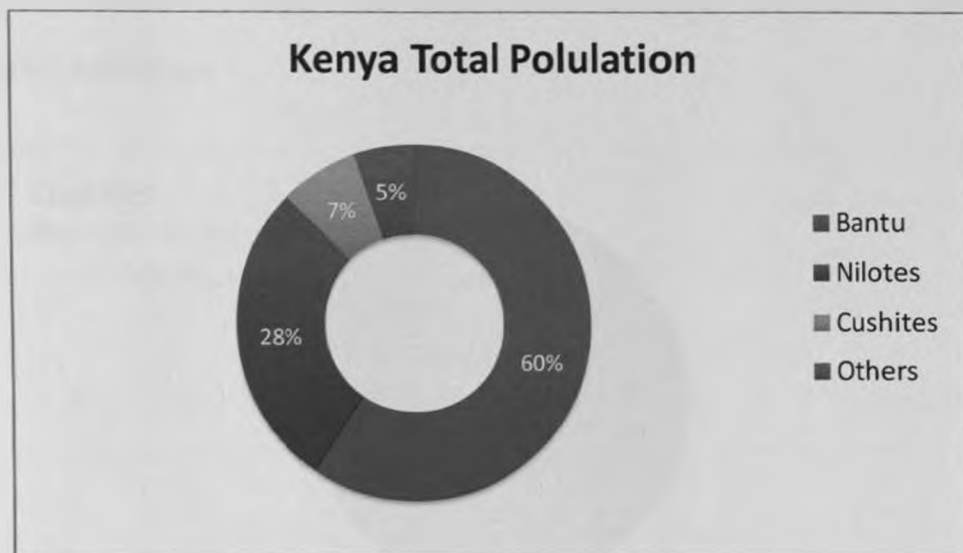


Chart 2.1 – Kenya total population divided in the three main linguistic groups' percentage. Source: Author (2013) based on the Kenya Census 2009.

2.1.2 The Cushites

As presented before the Southern Cushites came from southern Ethiopia into Kenya, and they introduced new languages as well as cultural innovations. They were food-producers and pastoralists. According to Fedders and Salvadori (1979) it is conceivable, though by no means yet confirmed, that the initial irrigation works, the systems of channels for agriculture, were constructed by the Cushites.

The Cushites subdivision still generates a lot of discussion between scholars and researchers. Nganga (2006) divides them into Oromo- (Galla) and Sam-speakers; the Kenya Census (2009) separates them into different tribal groups all individual to one another and the one that the researcher of this thesis will adopt as reference is the one given by Fedders and Salvadori (1979), mainly because the book is referenced in almost all the different books that came after it, including Nganga. So the Cushites in Kenya are divided into three main linguistic groups, sub-divided subsequently, they are: *Somali, Rendille and Galla*⁶. The Galla-speakers are known as the *Orna, Borana, Gabbra and Sakuye*.

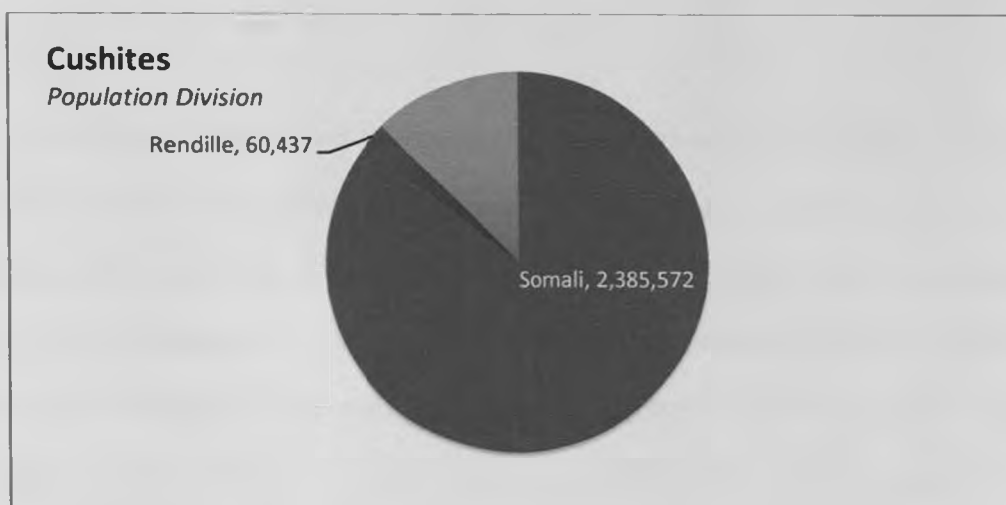


Chart 2.2– Cushites sub-division based on linguistic affiliation. Source: Author (2013) based on Kenya Census 2009.

According to the Kenya Census⁷ (2009) the total of Kenyan Somali population are 2,385,572, sub-divided into Gurreh (693,792), Ogaden (621,885), Degodia (515,948), Ajuran (177,855), Murile (176,821), Hawiyah (58,160) and “other Somali” (141,111). The *Somali* groups inhabit the vast desert north of the Tana, east of Lake Turkana and extending to the very coast, which comprises close to one half of the total

⁶ In the Kenya Census of 2009 the Galla are mentioned as an individual and separated tribal group, which will not be considered in this way in this paper.

⁷Kenya National Bureau of Statistics. Kenya Population and Housing Census – Ethnic Affiliation. 2009.

area of Kenya, yet contains less than one half of a million people, who are the Eastern Cushites (Fedders and Salvadori, 1979).

The name Somali is derived from an Arabic expression meaning possessors of wealth; in this case camels represent the wealth. The Somali are considered to be individualists and independents; which is basically a response to the inhospitable environment they live in. The physical environment determines the economic pursuit, which is pastoralist; camels are the main preoccupation and means of survival for the Somali people. Small stock, sheep and goats are also included in their economy, but cattle are rare.

According to Fedders and Salvadori (1979), as with all pastoral peoples, milk is the staple food and consumption of the meat of large stock is limited to ceremonial occasions and to times when very old animals need to be killed; they also practice blood-letting of their animals. They eat neither fish, nor poultry nor eggs. Their material culture is also related to their main economy, as pastoral nomads they cannot carry superfluous possessions. Even though the pastoral life-style limits the quantity of material possessions that the nomadic are able to pack, it does not necessarily limit or lower the quality of those possessions. What they commonly possess are wooden headrests, wooden combs, and wooden eating, drinking and storage utensils. Vegetable fibre and animal hair are used to create mats for various purposes.

Pastoral Somali peoples live in temporary settlements consisting of semi-circular or circular arrangement of houses erected around an open space. The settlement is protected by a thorn bush and branch enclosure. The houses are prefabricated and portable structures fast erected and dismantled. The houses are responsibilities of the women, whereas the men are responsible for the enclosure and the protection of the

stock. Their political structure is represented by a chief, chosen by a council of elders who are the heads of the different sections of the population. It is called chieftainship. Existing among the Somali population is a pervasive ethos unifying all the groups in a feeling referred to as Somali-hood (Fedders and Salvadori, 1979).

The *Rendille*, camel nomads live in the northern region of Kenya between Lake Turkana to the west and Mount Marsabit to the east. Their population according to the Kenya Census (2009) is 60,437. The Rendille culture revolves around camels, as the source of food and symbol of values. The Rendille also follow the Somali diet, so they value their camels because a female camel yields far greater quantities of milk than does a cow, which can be sufficient for a couple with their several children.

Rendille housing settlement follows the same pattern as the Somali, with portable houses constructed by the women, and the surrounding stockade and the small inner stock enclosures made by the men. In terms of cultural material, the Rendille personal adornment is a major outlet of creativity. Fedders and Salvadori (1979) mentioned that they are good looking people who enhance their good looks in a decorative manner, particularly with beadwork. Their social structure follows a seven-year cycles, forming a new age-set after seven years. Their politics is of consensus taken in each settlement.

The Galla-speaking people are sub-divided into four subgroups, the first one is the *Orma* and they live along the Tana River. They are 66,275 people (Kenya Census, 2009) and their name means "nation or race". Orma essential stock in pastoral life is cattle, despite the possession of camels, donkeys and small stock. The Orma houses are of two shapes, hemispherical and beehive. The latter shape is tall and has great proportions in its curves which ascend gradually towards the apex. In the arid areas, the

houses are semispherical in response to the climate, whereby, they tend to be flat (Rukwaro interview, 2013). The building materials are the same basic ones for both designs according to Fedders and Salvadori (1979). Pliable saplings, tied several to a bundle, are pushed into the ground, bent towards the centre and lashed together, which forms the skeletal frame. The frame is covered by palm leaf fibre or grass. The settlement is circular and its size is determined by the number of families living in it as well as the size of each family.

The *Borana* is the largest Galla-speaking group in Kenya, with a population of 161,399 (Kenya Census, 2009). They live in northern Kenya and their name means “free” in Galla (Fedders and Salvadori, 1979). The Borana have a strong sense of cultural identity which to a large extent is responsible for the perpetuation of their rich material culture. The Borana culture embodies many curious contradictions; they are a pastoral people possessing rich cultural material, and they have a strong sense of superiority over the other “inferior” cultures, a peaceful people among themselves and also known as a strong enemy to other communities. A people with a relatively loose social structure and yet perpetuating a complicated age-grouping system (Fedders and Salvadori, 1979). Such contrasts and many others make the Borana one of the most interesting people in Kenya.

The *Gabbara* are camel nomads who herd sheep and goats; they live in Marsabit District, with a population of 89,515 people (Kenya Census, 2009). They are very similar to the Borana in outward appearance, dress and hair-styles, and ornamentation. Aluminium beads form the bulk of both Gabbara and Borana women’s jewellery.

The *Sakuye* population according to the Kenya Census (2009) is 26,784 and they live in the region of Moyale, but they lack strict territorial demarcations. They are

pastoralists based on camels and goats. They are few and in the future they will tend to absorption or intermingling so that they can survive, and their cultural material might get lost in the process (Fedders and Salvadori. 1979).

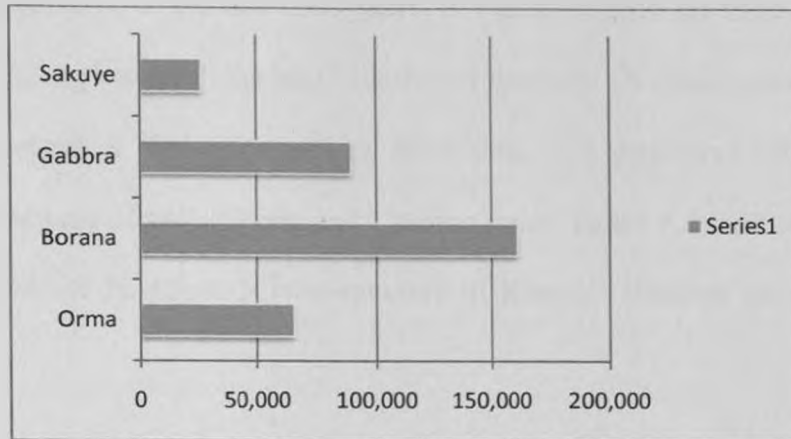


Chart 2.3 – Galla-speaking groups’ division of population. Source: Author (2013) based on Kenya Census 2009.

2.1.3 The Nilotes

The arrival of the Nilotic-speaking people in Kenya dates back 2000 years ago; they entered the country from the north and northeast, the region just above Lake Turkana. It was there that they subdivided into three main groups: Highland, Plains and River-Lake.

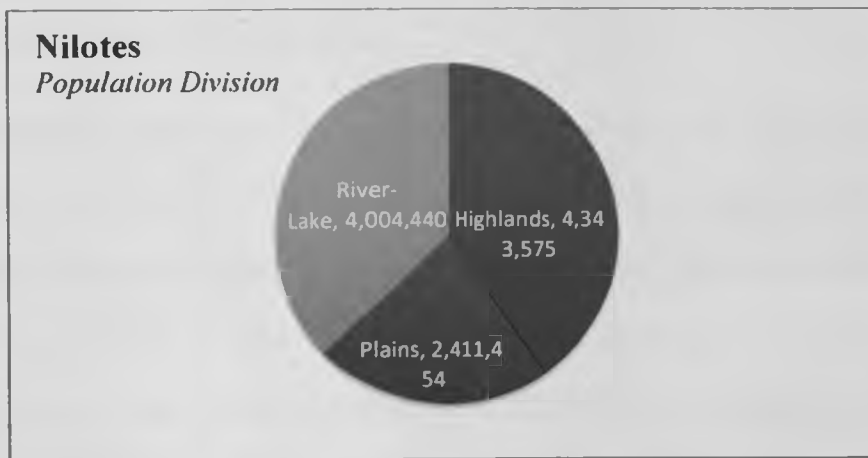


Chart 2.4- Nilotes division of population in to three groups. Source: Author (2013) based on Kenya Census 2009.

While in Kenya and due to intermingling with other groups, mainly Southern Cushites, a new population was born called *Kalenjin*. "The process of becoming Kalenjin occupied most of the last 1000 years. It was more than the mere process of genetic intermingling between Highland Nilotic and Southern Cushitic peoples; it was a gradual development, a distillation and an emanation, of a distinctive culture which incorporated elements of both Nilotic and Cushitic traits. Today Kalenjin are the only extant sub-branch of Highland Nilotic-speakers in Kenya." (Fedders and Salvadori, 1979).

Their total population is 4,967,328, according to the Kenya Census (2009). According to Nganga (2006), their land is bounded on the east by the steep Mau Escarpment and Lake Baringo and on the west by Mount Elgon. The Kalenjin consist of seven principal groups: Kipsigis, Nandi, Tugen, Pokot, Marakwet, Sabaot and Keiyo.

The term Kalenjin was adopted to describe the Highland Nilotic-speakers of western Kenya; it is unpretentiously artificial and political in its origins (Kipkorir, 2008). Although they consider themselves one people and this is generally accepted, it should not be assumed that they are a homogeneous group (Nganga, 2006). And that is why they are highlighted below separately.

According to the Kenya Census (2009), the *Kipsigis* are the largest group of Kalenjin, with a population of 1,916,317 people. They inhabit the highland in the south of the Nyando Valley, and their main town is called Kericho. They are cultivators; tea, pyrethrum and maize are the main crops that they grow. Although, cattle remain their main interest and means wealth. However, their place of living, watered highlands, facilitate the cultivation and not the pastoralist life. Each family life is focused around the homestead that is not agglomerated in a village, even though they are close to each

other. The house of the Kipsigis are round and of a good size, divided internally into 3 or 4 rooms with a grass thatched roof in a conical format. The homestead is generally situated either within or on the edge of its fields.

The second largest Kalenjin group is called *Nandi*, with a total population of 949,835 (Kenya Census, 2009). They used to be pastoralist with some experience in cultivation, now-a-days they are agriculturalists who practice pastoralism. Cattle have a material value, not only milk and grass but also cattle dung is considered sacred, meaning that possession of stock is almost a social essential. Their social life starts at the dispensed homestead that has to count with a granary, cattle enclosure, a main house and a boys' house.

In the region of Mount Elgon and the Kenya-Uganda border live the *Sabaot*, 240,886 in population (Kenya Census, 2009). They are primarily pastoral in economy but they also practice agriculture, which gained importance in recent times with maize, millets, beans, potatoes and tobacco as main crops. In the past they used to live in caves, but now-a-days it is common for them to live in a rectangular shaped house, with flat-topped and sod-roofed structure where the livestock share the accommodation (Fedders and Salvadori, 1979).

The next group is the *Tugen* of a total population of 109,906 according to the Kenya Census (2009). They occupy a strip of lowland in the east of the Kerio River and a range of hills above the Kerio River Valley. The Tugen county is divided in two parts: the northern part where the *Arror* people live (25,099 people – Kenya Census, 2009) and practice agriculture and when pastoralist having goats and sheep. The southern part where the *Samorr* habit in a population of 5,484 (Kenya Census, 2009) the economy is pastoralist with cattle and goats.

There are 313,925 *Keiyo* (Elgeyo), as pointed the Kenya Census (2009) living in the Kerio Valley at the top of Tambach escarpment. They are agricultures and they grown millet, maize, groundnuts, cow-peas, pawpaw and bananas. What can be highlighted in this group is their political practices, where they used to selected the advisor (leader) by a consensus council where women participate together with men, which is not very common in Kenyan tribes traditions.

Marakwet live in between valleys, the Kerio Valley and the Cherang'any Hills and they seem to have a special piece of land, with spectacular views of Tugen Hills and Mount Kenya. In a population of 180,149 (Kenya Census, 2009) subdivided in 6 groups. According to Fedders and Salvadori (1979) among the Marakwet girls are initiated into age-sets too, a practice not widespread in traditional Kenyan societies; and it is considered proper for a man to take his wife from his corresponding female age-set.

The *Pokot* are divided in two portions, the pastoralists and the cultivators. The first ones live in the valley bottoms and the latter inhabit the slopes of the northern portion of the Cherang'any Hills. Their total population consists of 632,557 (Kenya Census, 2009). The ones known as the corn people (cultivators) have cylindrical houses of a small circumference and with pitched conical roofs thatched with grass; the walls are constructed with posts and on the inside plastered with cow dung and mud. The pastoralists, known as the cattle people, live in a larger house as the cultivators; their houses are circular constructed with posts planted upright and saplings placed in the horizontal in between the posts. The roof is rounded rather than conical, constructed of posts covered by a first layer of branches, than covered by grass and then covered by earth (Fedders and Salvadori, 1979). Another interesting aspect of the Pokot is their body ornaments with intricate and creative visual creations, very rich and colourful. They are considered to be the link between the Highland Nilotes and the Plain Nilotes.

The Plain Nilotes *Turkana*, one of the largest groups of pastoralist in Kenya, being 988,592 people (Kenya Census, 2009) living in a semi-desert tract, containing a few forested mountains with pastures. It is bounded by Uganda to the west, South Sudan to the north and Lake Turkana to the east. They are traditionally pastoralists with cattle and camels, sheep and goats, and burden-bearing donkeys. However, the survival doesn't count only on pastoralist; they can eat anything including snakes and crocodiles, which make them hunters, gathers and fisher men.

The Turkana are nomadic people, they continue to move in their seasonal and perennial rounds, following the needs of their stock. A minority of them have settled on the western shore of Lake Turkana to practice fishing. According to Fedders and Salvadori (1979) the Turkana are aggressive and individualistic and among whom no one expects to discover a highly developed sense of the aesthetic and yet, the Turkana do possess such a sense and they display it in abundance. Except for weaving and the discontinuation of pottery, they practice all other crafts. They work with leather and metal, wood and beads, seeds and shells, horns and hoofs, bones and stones, tusks and gourds, and ligaments and plumes. They have an extensive material culture; their preoccupation with bodily ornaments also stands out with clothing and jewelry, and more over the men's hair style that used to be shaped and styled with blue clay.

Following the same linguistic branch are the *Iteso*, referred to by the Kenya Census (2009) as Teso with a population of 338,833. They traditionally engaged in agriculture, but later also practiced pastoralism. They are located in Busia District of Western Province and their dialect is the most difficult to comprehend. Their agricultural pursuits are mainly sorghum and millet, expansion of agriculture pursuits affected the role of women and men in their traditions. Agriculture brought men and women to work together in the field, men cleaning and opening new areas while women

were planting. They are very independent and self-sufficient, however, in contrast to the Turkana; they have few artisans and limited of cultural material.

The most famous Plain Nilotes are the *Maasai*, named after their particular speech Maa. According to Nganga (2006) the majority of them remain attached to their old tradition of animal husbandry, mainly pastoralist with cattle for blood and milk, hides and skins and meat. They also keep goats and sheep for meat and donkeys for transportation.

The Maa-speaking Maasai inhabit Kenya and Tanzania, their population in Kenya is 841,622 (Kenya Census, 2009) and they live in Maasailand. Well-known by the public, now-a-days they are tourist attractions mainly in Maasai Mara and Samburu region, where lots of foreigners come to visit the landscape and the animals' safari. Fedders and Salvadori (1979) defend the Maasai happiness in life by saying: "To the Maasai life is a celebration. From birth up to – but not including – death, every event other than the everyday one, each significant change in each individual life, which therefore inevitably affects the community also, is cause and welcome excuse for celebration. The life-cycle of a typical Maasai is a round of celebrations in which the entire community participates."

They are also known for their body adornments, which include the use of red ochre on their bodies, the long hair worn by their warriors, the coils of wire on the limbs of the women and the bead work on their jewelry and hats. They live in a family unit settlement in a circular shape in an agglomeration of small sized and short statured houses with a flat roof. Their lives are ruled by their stock, especially their cattle where their diet supply comes from: blood, milk and meat. Their pastoralist life is not easy,

which occupies most of their time. However, all the leisure time was developed into an art of celebration and happiness.

Similar to them are the *Samburu*, their northern neighbors, who live in Samburu District that starts to the south and southeast of Lake Turkana. They are 237,179 in total according to the Kenya Census (2009). Fedders and Salvadori (1979) postulated that no people in Kenya know how to exploit the scenic aspect of their environment as the Samburu. Every settlement has seemingly been constructed with the view in mind, their location affording the best perspectives of whatever panoramas present them.

Traditionally pastoralists, which reflect in their diet; milk is the staple and meat is often consumed, but every animal is stock to be eventually eaten. Their warrior age-set is very important to their social structure, because the warriors are protectors of livestock and people. They are also well-known by the public, mainly because of their rituals and ways of presenting themselves with clothing and ornaments. Their warriors are very decorative with triangular designs drawn down their backs and chests, some designs applied around the eye with colours and their hair style; mainly used plaited which allows it to hang long down their shoulders or used in a styled bun.

The *Njemps* inhabit the area to the south and east of Lake Baringo, with a population of 5,228 (Kenya Census, 2009). They are agriculturalists and fishing people. The first was a success during the nineteenth century while the caravans used to pass by Baringo and stop there for supply of the Njemps cultivation. They even created an irrigation system to stimulate the growth of their crops, and today they still use the same system together with the modern schemes. The latter is another important economic pursuit, where they apply poles to fish as well as special boats made out of ambatch that

in its lightness is similar to balsa. They are very similar to the Maasai in their age-setting structure, body and hair decoration and some of their songs and dances.

The last group to be analyzed is the River-Lake Nilotes *Luo*, originally pastoralists and latter agriculturalists. They have formed a total population of 4,044,440 (Kenya Census, 2009) inhabiting in the central and south of Nyanza Province that lie astride the Equator around the Winam Gulf of Lake Victoria (Nganga, 2006). Conventionally the Luo homesteads were surrounded by circular mud walls. A tall and thick euphorbia hedge was planted outside the walls. The houses are placed in the periphery of the homestead and in the center can be found the stock enclosure. Houses are traditionally large, solid and gracefully finished structures (Fedders and Salvadori, 1979).

They are considered to be skilled artisans that make a wide variety of pots, kitchen utensils, basketry and blacksmithing. They used to have outstanding dresses, very decorative, however, they cannot be seen anymore expect for paintings and photographs. The Luo culture has been in constant transformation, because they have adapted to the changes and contributed in large proportion to the evolution of the contemporary Kenya. They continue with their traditional economic pursuits. However they have also entered politics, education, business and other avenues of the current Kenyan society.

The situation with the Luo is an exemplification of what might happen to tribal culture after their adaptation to the new nation structure. Lots of cultural material will be lost and the new generation will forget about their main languages and customs, and it is in trying to avert such a situation that this thesis suggests a strategy for saving the tangible and intangible culture of Kenyan people.

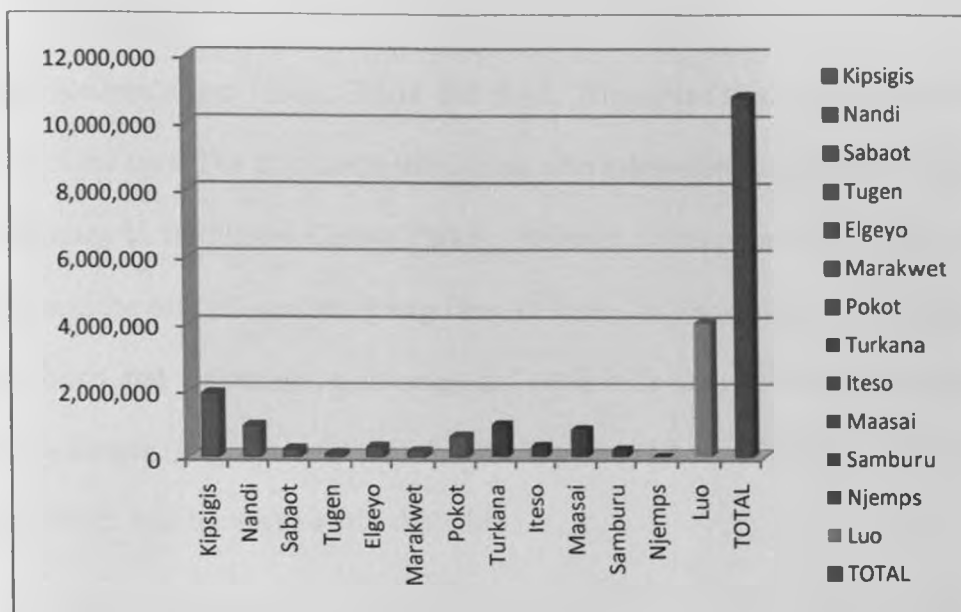


Chart 2.5 – The population number of the Nilotes sub-division of groups. the colours follow Chart 3 (page 27).
 Source: Author (2013) based on Kenya Census 2009.

2.1.4 The Bantu

The first Bantu-speakers settled in Kenya approximately the first millennium A.D. around Lake Victoria. Today, after their migratory movements and intermingling with their own and others, they came to be the largest linguistic ethnic subgroup in Kenya (see Chat 2.1, page 14). They are also divided into three main groups following their location in the country's territory: Western, Central or Eastern, and Coastal.

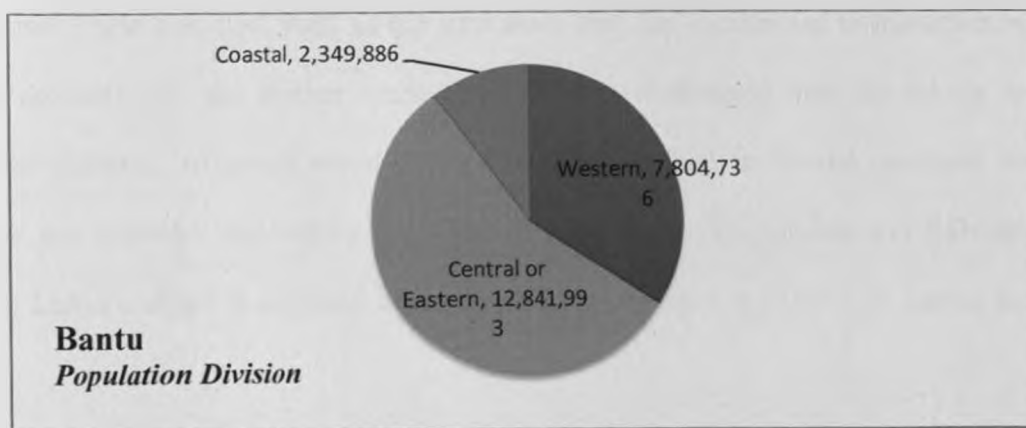


Chart 2.6 – The subdivision of the Bantu population in Kenya. Source: Author (2013) based on Kenya Census 2009.

The Western's are: Luhya, Kuria and Kisii. They were analyzed separately in this section of the text. The first one is the *Luyha*, also subdivided in at least 18 smaller groups according to the Kenya Census (2009), however, scholars and researchers still did not agree in the official number, going from 15 up to 18. They live in three Districts: Bungoma, Busia and Kakamega; a savanna and small hills area containing Kakamega and Bunyala forests. They are a total of 5,338,666 people (Kenya Census, 2009) living in villages, which was the focus of the daily life.

The Luhya houses are round walls and conical roofs, differentiating depending on the grouping influence appear on the thatching technique. Some evidence the terraced type of thatching and others use a flusher type. They are agricultural people, who grow millet, sweet potatoes, peas, sesame, nuts and bananas. Maize is a cash crop and also important staple. As cash crops they also cultivate cotton and sugar cane. However, it is important to note that for the Luhya the livestock has social value, mainly because they are sacrificed in different rituals and also because they are used as bride wealth.

Today most of the Luhya cultural material has been lost. The practice of traditional crafts has died, such as the iron work that has succumbed to manufactured metal products and the leather work that has been exchanged with the textile and garment industry. Although wood carving is still practiced in limited products, and pottery and basketry are widely practiced between them. To Fedders and Salvadori (1979) Luhya culture is a hybrid culture of a hybrid people, symbolic of Kenya as a whole.

Kuria has linguistic relations with the Luhya, they inhabit the southeastern most corner of Nyanza and as the Luhya they also are a hybrid community with influences of

the Kisii and the Nilotec Maasai and Luo. According to the Kenya Census (2009) they are 260,401 people. Traditional architecture has survived the time and they still live in round houses, with mud-plastered walls and grass thatched roofs. Between the homesteads are the family gardens, fields and pasture. They were pastoralists and with time they changed to the agricultural economy. Cattle still have their value, mainly social importance, but also as nourishment for families with milk and meat. They cultivate millet, maize, bananas and tobacco.

The Kuria were very decorative people, something that has been lost in time. One of their decorative feature was the enlargement of pierced earlobes that they used to stretch up to 4 or more inches in diameter and then to insert and carry cylindrical pieces of wood. Their ornaments and clothing was very distinct and colourful, visually rich.

The next Western Bantu are the *Kisii* living 50 kilometers from Lake Victoria on the so called Kisii Highlands, a formation of hills. With a total population of 2,205,669 (Kenya Census, 2009), the Kisii pursue livestock and cultivation as their main economic activities. Their agricultural products are pyrethrum and tea, millet, maize, cassava, bananas and much else.

According to Fedders and Salvadori (1979) the Kisii have undergone great economical, environmental and other changes in the course of their cultural evolution. Yet certain traits from the past remain, such as basketry and pottery, crafts of making lyres and musical instruments. However, their well known products are the carved soap stones and the Kisii stool, on the seat of which are embedded creatively coloured beads.

The central Bantu group called *Kamba* settled north up to Machakos Hills and back south up to Kilungu Hills. They are established traders who also practice cultivation, pastoral pursuits and hunting. They are now a total of 3,893,157 (Kenya

Census, 2009). In the past, before the prohibition of the ivory commerce, their most important trading commodity was ivory that they used to trade for goods in the coast. They were well known for their great ability to hunt elephants of the Athi River region using poisoned arrows. Now trade and agriculture continue to be the primary economic pursuits. Like most of the Bantu culture the Kamba also have also been undergoing changes and adaptations to the new era. They used to live in rounded houses thatched to the ground, however, today their houses are generally of bricks and metal roof, and sometimes they keep the thatched roof.

Even though their architecture and land use have been changing, their crafts remain important not only for themselves but also as a commercial attraction. Their wood carved kitchen utensils, such, as spoons and pots, are very lucrative. But still the most peculiar cultural manifestation of the Kamba is their traditional dance, which is characterized by jumps, acrobatic movements and flips. This can be seen in special ceremonies or in touristic events.

Fedders and Salvadori (1979) stated that the most successful recent cultural adaptation of all the peoples of Kenya has been that displayed by the *Kikuyu*. They are the largest ethnic group in Kenya with 6,622,576 people representing 17% of the country's total population (Kenya Census, 2009), followed by Luhya (14%), Kalenjin (13%) and Luo (10%).

They occupy the central highlands which extend from Mount Kenya in the north towards Nairobi. They were and still are the group most largely responsible for Kenya's political and social development. They were responsible for the country's independence and later for its first presidential period. Their influence in politics, government, and

commerce surpasses that of any other group. And their numerical population also affirms their importance on social and political decisions in today's Kenya.

They settled in an environment ideal for agriculture and they have exploited it to the utmost, producing food far beyond their local consumption, which helped them later to supply the European and Swahili caravans and expeditions. They were also good traders, exchanging their production for other goods. They are well known by their basically equalitarian and democratic political system, and economical productivity, which they explore today in different fields.

As the Kikuyu, the *Embu* people are also from several derivations. In total they are 324,092 (Kenya Census, 2009) living in Mount Kenya region, in the Eastern Province. They are originally hunting-gathering people that after a period of time changed to agriculture growing millets, sorghum, root crops, and periodically produced peas and nuts. Their main cash crops are maize, beans, cabbage, carrots and tomatoes. Therefore they also produce coffee, tea and pyrethrum for commercial purpose. They traditionally used to live in round houses with thatched roof and walls stuffed with leaves, which later turned to be mud plastered walls, and now-a-days they inhabit bricks houses with metal roofs.

Mbere are a pastoral people living in Embu District, which turned to be pastoral because of their environmental difficulties. They represent 168,155 populations (Kenya Census, 2009) that depend on cattle and goats, and also practice bee-keeping. As most of the Bantu groups Mbere also passed through many changes and adaptations. What still survives from their traditional cultural material are the round houses with conical thatched roofs and their peculiar dances accompanied by large drums held between the

legs replacing the traditional tambourines. Both the dances and the drums are influences of the Kamba.

The next group live in isolation near the Tana Valley, they are the *Tharaka* with 175,905 people (Kenya Census, 2009). They are mainly pastoralists with cultivation activities. They have distinguished themselves by their dressing manners; women wore designed goatskin, girls dressed with the same type of leather mini-skirts as Mbere girls; while men wore wild animal skins and plumes as adornment. And they used to live in round houses with conical thatched roof, as traditional central Bantu architecture.

In the past *Meru* was described as a territorial division rather than a group name, but in the colonialism period they were acknowledged as a political and social unit. Currently they live in the Meru District around Mount Kenya, with a total population of 1,658,108 (Kenya Census, 2009). Meru are cultivators with pastoral activities, they produce coffee, potatoes and wheat as cash crops; maize as staple and miraa as an uncommon cash crop consumed basically by the Swahili (Fedders and Salvadori, 1979).

The Central Bantu cluster occupies central Kenya around Mount Kenya. The Western cluster inhabits the area in between the Rift Valley and Lake Victoria, while the Coastal lives on the Tana Valley in the area that extends from the coast into North-Eastern Kenya, along the Tana River (Nganga, 2006).

The first Coastal people analyzed are the *Pokomo*. They dwell in the banks of the Lower Tana, from the coast on up towards the Garissa. They are listed in the Kenya Census (2009) with 94,965 people under the division of the Mijikenda, which will not be considered as so in this paper, following the references of Nganga (2006) and Fedders and Salvadori (1979). They live in villages from 10 to 50 houses each, the houses are hemispherical or beehive shaped constructed of grass thatched over a bound

saplings. Their economy is based in agriculture and fishing. They have created a crop distribution pattern where they plant sugar cane along the river banks rice, in the lowlands behind the banks and behind the rice they plant beans, maize and other crops.

The *Mijikenda* live north of the Galana River down to the Tanzanian border. They are composed by 13 groups according to the Kenya Census (2009) and excluding the Pokomo. Although the culture of the 13 groups is similar, there exists lots of differentiation in between them, one being their dialects even though they share a common language. In total they are 1,960,574 people with an agricultural economic based on coconut palm, which turned to be an all purpose plant oil from the meat, wine from the shoots, mats and baskets and roofing from the fronds. They also produce millets, sorghum, maize, cassava, yams, sweet potatoes and beans as staples and cash crops. Dances and their traditional architecture, bread loaf shaped houses of grass thatched with a curved ridge roof, remain as their extant cultural material; little else is left.

Taita Hills are inhabited by 27,351 (Kenya Census, 2009) *Taita* people. They are agricultural people based on millet and maize. Another crop that is part of the Taita diet is sugar cane, bananas, cassava and beans. Tobacco is produced as a cash crop. They were well known by their iron working, hunting and fighting weapons and agricultural implements. Now they no longer forge iron and most of their traditions were adapted into modern times and some even lost.

The last group analyzed is the *Taveta* group, which shares Taita Province with the Taita with Voi as their central administrative town. Their population according to the Kenya Census (2009) is 20,828. They have a mixed economy based on cultivation, livestock and fishing, with fishing as their main activity and supply. Fedders and

Salvadori (1979) state that: "The Taveta represents a cultural grouping which has been unfortunately too little considered from the point of view of an interesting people the elements of whose culture are becoming irretrievably lost or altered."

The Bantu-speaking groups are the most affected by globalization, development and modernism. Most of them have passed through an adaptation and transformation period of time, where some traditional culture were left behind or reinterpreted in the new terms of living. Some cultural material will never be restored again, others can still be seen in old pictures and documents, and it is in trying to contain this disappearing culture lost that this thesis proposes a building space to preserve the tangible and intangible culture for future generations.

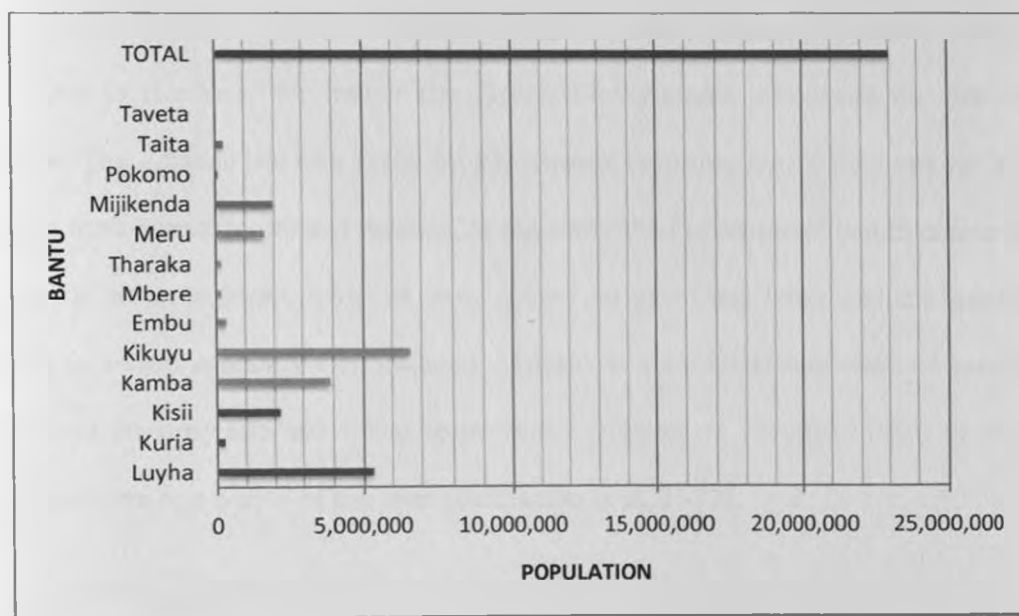


Chart 2.7 – Bantu population divided in groups based on the colour separation of Chart 2.6. Source: Author (2013) based on the Kenya Census 2009.

The study of the ethnic groups and its sub divisions demonstrates the diversity of the tribes found in Kenya and how vulnerable the cultures are to modernization, development processes and other changes, hence the importance of a Cultural Center that seeks to conserve them for further generations and present their riches to the world.

2.1.5 Kenya process of Independence and later Presidency

In July 1895 Kenya was declared a British protectorate, partly because the British wanted to secure a safe route to Uganda, which later with the railway became a turning point to the Kenyan economic development. In 1902 the government started to grant and lease unoccupied land to the white settlers that would come to Kenya for a great deal of land to cultivate and by trial and error produce cash crops. Okello (2002) pointed out that the white settlers conducted experiments on wheat and potatoes, which became very important to the colony. Coffee, introduced by the Roman Catholic missionaries in 1899 was first grown on large scale by the white settlers.

Conflicts started to appear around the year 1906, because of white settlers' arrival. Due to the need for labour the British Government introduced the Servant Ordinance. The African life was based on subsistence economy where they saw no gain in leaving their homes to work outside. Consequently the Government had to create the Poll Tax in order to make Africans earn money to pay their taxes and the general transition to a cash economy also induced Africans to seek additional ways of earning money. Thus the only alternative was to become a squatter on European farms or work away from home one period of the year (Odhiambo et al, 1977).

Another aggravating issue started in 1920 with a regulation that required all male Africans over 16 to carry 'a Kipande', an identity card contained in a metal box. Those without it were punished. The idea behind it was to make it more difficult for labourers to quit on their employers. However, for the Africans it became a badge of servitude and major dissatisfaction. And according to Odhiambo et al (1977) another problem raised was about land. To Africans land was traditionally owned by the tribe or clan and could not be disposed without their consent, on the other hand, to the European land was a matter of individual ownership with right to sell or dispose as pleased.

It was in this context that political consciousness was awoken, with each racial community playing their part in the development of political movements and leadership in Kenya. The white settlers were the first to organize their association in 1911, Okello (2002) remarked that the European aim was simply to make Kenya a settler-dominated self-governing colony. They wouldn't accept equality with other races and they objected to Africans' participation in cash crop production.

The Asians also created their own cultural and social organizations, one significant Indian leader was Jeevanjee and they aimed for political and economic equality with the white settlers. They were not very much supported nor by Africans nor by Europeans.

In 1920 the Kikuyu Association was formed by chiefs and headmen. In the subsequent year, a mostly younger and militant group called Young Kikuyu Association was created. They wanted the end of the Kipande, reduction of poll tax, better labour conditions and the return of Kikuyu land. The movement was strong in its beginning but lost strength over time. Most of the political activity was centered on Kikuyu land because they were the ones directly involved in land issues and they were the ones closest to Nairobi with most European influence (Okello, 2002).

Nairobi and Mombasa were expanding rapidly, but work was not always easy to find, while wages were low with bad living conditions. It was in this condition and together with the return of soldiers after the Second World War that the political movement strengthened (Odhiambo et al, 1977). In 1944 the Kenya African Union (KAU) was formed with the aim to set up a country wide organization. In the next year James Gichuru became its president, and with the return of Jomo Kenyatta from an exile of 15 years in Britain in 1946 he assumed leadership of KAU in 1947 as president. But

even though Africans occupied important posts within KAU it remained mostly a Kikuyu movement.

According to Odhiambo et al (1977) since 1946 a group of extremists within KAU including a number of ex-soldiers had formed an underground movement in Nairobi; which in 1950 became known as the Mau Mau movement that aimed to remove and send away the white settlers from their land (Okello, 2002). Acts of violence against white settlers started in 1950, which called for action from the Colonial Government and in 1951 the Mau Mau was declared an unlawful society. Armed force was brought to Kenya from Britain, and action was taken, one of them was the imprisonment of Jomo Kenyatta and other leaders of KAU charged with organizing and supporting the wave of violence.

Life was difficult in Kenya Central Province during this time, not only for the white settlers directly threatened, but also for the tribal men that were faithful and loyal to their masters. Okello wrote (2002) that many lives were taken and the Mau Mau fighters were only weakened when their topmost leaders, General China and Dedan Kimathi, were arrested. And in 1960 the State of Emergency was lifted. The Mau Mau period taught the British Government to respect the opinion of the African leaders; as a result the power was shifted from the hands of the white settlers to the Africans.

After the constitutional conference in London in 1960, two parties were formed: the Kenya African National Union (KANU) and the Kenya African Democratic Union (KADU). The first party was formed mainly by the two largest ethnic groups of Kenya, Kikuyu and Luo, the other one was a union of other tribes fighting against Kikuyu-Luo political domination.

“To the Africans Kenyatta was now their accepted leader and indispensable to their cause. To the Europeans he represented a threat to security and barrier to any further agreement.” (Odhiambo et al, 1977). Jomo Kenyatta was finally released from jail in 1961 and therefore became president of KANU. Consequently in June 1963 Kenya achieved self-government called “Madaraka” and Kenyatta became the first Prime Minister, then in December 1963 Kenya became independent under the presidency of Jomo Kenyatta.

The contents adopted by the majimbo constitution on the eve of independence provided room for political conflict between KANU, formed by major ethnic groups, and KADU, minority of ethnic groups (Oyugi, 1998). This situation resulted in denial of funds for regional governments in the KADU areas, which later brought conflict of these groups against Kikuyu and Luo communities that were well funded. According to Wanyonyi (2010) this could be interpreted to mean that Kenyatta’s years in office helped to reinforce the colonial legacy of divide and rule instead of creating national unity.

Kenyatta died in 1978 and his Vice President Daniel arap Moi assumed power until elections in 1979. Moi became the second President of Kenya, he came from the Kalenjin ethnic group and gradually he turned the Kenyatta structure of government into his own. He brought to his cabinet members of other communities such as Maasai, Somali and Kalenjin. Moi wanted only one ethnic group known as Kenya, however, he did not accomplish this goal and he also promoted ethnic segregation in his own government.

After a period of adaptation and of formation of numerous party coalitions in 2002, Mwai Kibaki became the third President of Kenya. Following his own speeches

during election time, he managed to appoint his cabinet members from all 8 provinces of Kenya (Wanyonyi, 2010). However, after two years of Government he abandoned this political strategy and also brought his own people to his cabinet reinforcing the ethnic segregation and peoples' feeling of injustice.

The general elections in 2007 turned out to be the explosion of minority over majority. According to Wanyonyi (2010) what climaxed into the December 2007/January 2008 violence had been as a result of gradual build-up of inter-ethnic resentment. The Rift Valley province that exploded into inter-ethnic violence after the announcement of 2007 presidential election results has a long history. "Unlike in other provinces where when white settlers occupying indigenous communities' land departed on the eve of independence and gave room for indigenous people to settle, in the Rift Valley the case was different. Here, the vacated land did not directly revert to the indigenous Maasai and Kalenjin communities. Instead, Kenyatta's regime enabled other communities especially Kikuyu, Luo, Luhya and Kisii to acquire land either through private purchases or political handouts" (Wanyonyi, 2000). This history resulted in tribal or ethnic hatred against compatriots and many people were butchered, displaced, injured and thousands had their property destroyed in what one can call an infernal period in Kenya's political history.

After the international intervention in Kenya's political scene, Kibaki reassumed power having Raila Odinga as his Prime Minister with a power-sharing agreement that was reached in late February 2008, and a coalition government, with an equal number of ministers of each of their parties. The same instilled in Kenya for the 2012 general elections that the elections results would be manipulated and turned into violence afterwards. The preparation for the election had international guidance and the first

presidential televised debate with 8 candidates including Raila Odinga and Kenyatta's son Uhuru Kenyatta.

Elections in Kenya still raise a very tricky discussion between their people and their politicians. As a result of the 2012 elections Uhuru Kenyatta became president in March 2012 with a peaceful acceptance of the people. "The history of independent Kenya is replete with examples on how the state used its power to construct a national community and curtail any attempts towards alternative thought systems." (Wekesa, 2010).

Concluding that Kenya's political history both pre – and post – colonial period has been characterized by ethnic divisions and marginalization of some tribes to the benefit of majority of tribes, thus failing to foster cohesive national identity.

2.2 Kenya's Identity

The thesis' main question is: what is Kenyan identity? Can Kenya be seen as one country by its own people? The possible answers are still subject to debate countrywide by politicians, scholars, media and citizens. Peter Wekesa (2010) pointed out that as an ethical and philosophical doctrine Kenyaness can indeed inspire the citizenry in particular positive ways in attempts to fulfill certain goals. Definitions of identity produced by the state must entertain the fact that Kenyan citizens, whatever their similarities, have differences that can never be wished away, instead should be seen as building blocks for Kenyan common nationhood.

Kenyans were made different by history, tradition and territorial separation. Stereotypes were created during the colonial period and after independence they became

stronger with tribalism in the political domain. Kimani Njogu⁸ (2010) argues: “Where does the solution lie? It lies in the recognition and celebration of the plurality of our identities and the anchoring of structures that all citizens get a sense of belonging, irrespective of their territorial location. Our shared humanity is immensely tested and challenged when our differences are reduced into one system of categorization, defined ethnically”. The discussion around the Kenya identity topic is still open, although the researcher intends to use it to show the present gap in relation to the design/architectural aspect and not only Kenyan nationhood.

National identities are constructed and historically situated from shared memories and values of ethnic communities. Even in the context of extensive globalization uniformity of culture is impossible because peoples are products of history and culture (Njogu, 2010). In this regard Robert Rukwaro (2005) states that values and norms of the people are their ideology that governs their social, economic and political system. He continues to say that architects must internalize the values and norms of the society they design for. And in every moment the designers should seek the values that are unifying the African society.

Architectural identity or iconic building projects are developed to give urban culture a qualitative lift through a combination of different programs that are expected to further creativity and artistic exertion. They are also expected to help promote fellowship and understanding between many different cultural groups in the city/country (Marling et al, 2009).

⁸ Prof. Kimani Njogu attained the Ph.D. (1993) in linguistics. He is Director of Twaweza Communications and is an independent scholar in the areas of language, media and governance with a particular interest in dialogic approaches to social change. He has received the Pan-Africa Noma Award for Publishing in Africa.

2.3 Cultural / Design / Architectural Identity

“No culture can invalidate another, though it may often be able to enrich it by new concepts, categories and insights.” Mr. Javier Pérez de Cuéllar, former Secretary-General of the United Nations, headed the independent World Commission on Culture and Development, in an interview given in 1996. According to UNESCO (1996) some, in the North, simply regard culture as instrument against others in the search for profit or as a corrective to certain excesses of the system of production. Others, in the South, use culture as an emblem of identity which can be brandished against Western ways of life. This research will be focused on addressing the need for an appropriate architectural space in Kenya that would showcase the country’s cultural heritage and diverse ethnic traditions.

In many parts of the world traditional urban and architectural environments are being continuously replaced by unfamiliar design (Saleh, 1998). The author of this thesis supports the concern for a search for traditional symbols/patterns that may influence the architectural identity during the design process of new or transformed physical environment. A place that has consistent themes in its form, materials, arrangements and symbolism will be more likely to produce positive user experiences than the one with no identity (Steele, 1981). In order to actualize this experience new cultural buildings are being conceived to enhance city image, build national identity, develop tourism, encourage wider participation, develop urban economies and regenerate urban spaces (Smith & Strand, 2011).

Recent literature has noted that there is a tendency towards emblematic projects that capture a segment of the city and turn it into the symbol of the new restructured/revitalized metropolis (Swyngedouw et al., 2002). Gitte Marling et al (2009) argue that architectural icons, urban renewal and performative urban spaces are

used as a tool for city/country branding. Although many have examined the economic imperatives and impact of iconic architectural projects, social scientists have just begun to explore the linkage between nationalism, political identity, and construction of architectural projects under conditions of globalization (Ren, 2008).

City branding provides, on one hand, the basis for development policy to pursue economic development and, at the same time; it serves as a conduit for city residents to identify with their city (Kavaratzis, 2004). Smith & Strand (2011) point out that iconic buildings are sometimes seen as the contemporary equivalents of monuments and landmarks. They state that in addition to the obvious place-making benefits, the advantage of giving cultural institutions a distinctive design is that they may appeal to a wider audience. There is also a possibility that the interest in the building may stimulate interest in the cultural content showed inside.

Iconic buildings refer to those cultural projects that distinctly distinguish themselves from the architectonic context and which by their form constitutes a landmark or a focal point (Marling et al., 2009). Generally, they have a large symbolic value to the city/country as a whole and strengthen the status and image of the local site of its implementation. The edifice might work as a driving force in the national-building identity process. As an incentive towards culture exchange and cultural identity UNESCO has created a project called "The Creative Cities Network" that argues that cities are playing a vital role in enriching creativity for social-economic development and dialogue within and between societies (UNESCO promotional video, 2004).

According to Birabe and Nawangwe (2012) globalization has amplified the fight between two value systems: the liberty presented by universal, cosmopolitan culture, against the stability of time-honored regional, national and local culture. Saleh (1998)

stated about the international style regarding architecture and design that the new buildings should not be designed in a globalized style instead they should be built according to the local architectural design guidelines. And by composing modern building concepts and technology with traditional styles and forms, opportunities can be made for the new architecture to co-exist with the old. To Rukwaro (2012) the culture of a society should be the basis of a more contextual metaphor to architects. The contemporary architecture of Kenya should have empathy with Kenyan culture.

The world is currently witnessing the appearance of many different projects related to culture, sports and art. The new buildings are being conceived to enhance city image, build national identity, develop tourism, encourage wider participation, develop urban economies and regenerate urban spaces (Smith & Strand, 2011). So in order to comprehend the concept behind the iconic building creation there is the need to analyze some important design precedents, they are 4 selected buildings constructed in the last 10 years. The researcher found a particular interest in Oslo Opera House (2008), Alexandria Library (2002), Johannesburg Soccer City Stadium (2010) and Beijing Olympics Stadium (2008). These analyses were carried out so that the researcher could relate some design concepts of these precedents with the search for inspiration that would guide the design to the specific interpretation of the Kenya culture into an iconic building.

2.3.1 Oslo Opera House – Norway

The Opera House in Oslo, capital city of Norway, became one of this research's references because of its response to the national identity question raised in Norway in the latest years. It was built in 2008 in the waterside borough of Bjørvika and designed

by SnØhetta architects. The main vision of the Opera House project presented by the Department of Culture and Church of Norway, was to facilitate the production and communication of opera and ballet of a high international level to a broad audience for generations to come; and to develop a building that both portrays Norway as a cultural nation and the Norwegian Opera's significance in the nation's culture and society (Smith & Strand, 2011).

Government authorities have increasingly emphasized new buildings to act as place symbols. Smith (2005) states that destination icons act as part of a city but represents it as a whole. In agreement, Wessel (2005) says that the Norwegian state is highly globalized and hence vulnerable to external trends. In this way the movement in Norway towards a less state is not commercially driven but a desire to strengthen local civil society.

The SnØhetta architects explained the complex process involved in creating a sloping roof for an institution where height is needed: the building extends under the water to produce the desired sound quality (Smith & Strand, 2011). According to the Norwegian government the sloping roof represents democratic principles because it promotes accessibility. The building is generally interpreted as an iceberg in the water. Norway has been seen by other countries as cold and iced nation, in this sense, "the project became a symbol of Norway being a modern nation; it is more than ice, snow, oil and polar bears" (SnØhetta in an interview given to Smith & Strand, 2011). Its innovative design means that the new building functions as both marketing symbol and visitor attraction.

The importance of this project to this thesis is that the Oslo Opera House was not intended to be a focal point by using vertical expansion, however, it drew attention by

its horizontal design that allows the visitors to travel through the building, following the levels and discovering it little by little. It is this race of discovery that intrigues the audience and calls upon them to participate in the environment. Another important aspect is that the design became an icon, unintentionally. The Norwegian government addressed the new design identity of the country portrayed by the modern building much later in the design process. According to Smith and Strand (2011) the Opera House was created to promote and represent Norwegian culture, but also to unite and develop the nation, reinforcing identity and contributing to citizens' self-esteem.

Statsbygg brochure of 2005 describes the Opera House project, it starts by saying that the intension was to convert the Oslo waterfront, called Bjørvika, into a vibrant and attractive area for commercial use, dwellings and cultural activities. The building has 1100 rooms grouped in a number of sections. These are: the public area, stage area, production area and roof landscape. The *public area* begins with a foyer; the main auditorium with seating for up to 1350; scene 2 with seating for up to 400; and a rehearsal room that seats 200. The main auditorium is capable of catering for the whole range of classic and modern opera and ballet, as well as concerts and musicals. The foyer area includes cloakrooms and toilets, ticket sales rooms, information and arrangements centre, exhibits of coming attractions, an opera shop, restaurant, cafe and bars.

The *stage area* has one of the most modern and technologically advanced opera stages in the world. Covering a large surface area of 256 square meters (16x16m), and in addition to the main stage, there are side stages, back stages and an under stage allowing nine meter high scenery sets to be prepared under the main stage and elevated during performances. Located above the main stage is the 35 meter high stage tower, where complicated theatre technical solutions are located (Statsbygg, 2005).

The *production area* is where the workshops, stores, rehearsal rooms, cloakrooms, offices and audition rooms are located, all facilities that are necessary for the production of an opera or ballet; all placed in a 4 storage building with a basement. The *roof landscape* is open to the public. The horizontal and sloping roofs express monumentality, and give the building a dramatically different appearance that stands out in the surroundings. The expression of openness and accessibility both indoors and out resulted in the building appealing to a wide range of users (Statsbygg, 2005).



Figure 2. 1 – The Oslo's Opera House. Source: Flickr/Bernt Rostad, 2012.



Figure 2. 2 – The sloping roof of the Opera House. Source: Statsbygg, 2005.



Figure 2. 3 – The interiors of the Opera House. Source: Statsbygg, 2005.



Figure 2. 4 – The Opera's Auditorium. Source: Statsbygg, 2005.

2.3.2 Bibliotheca Alexandrina – Egypt

The Alexandria Library in Egypt is located on a superb site on the historic eastern harbor of Alexandria, almost exactly where the old library and the royal palace of the Ptolemies once stood. It was an UNESCO initiative, together with the Egyptian Government and international partners. "UNESCO's support had been crucial to the realization of the Project, whether in its first steps of feasibility studies or during the

“Appeal” for the support of the International Community, during the Campaign fundraising, for the construction of the building, and the purchase of equipment, training of staff, and in supporting the idea to pave the way for the constitution of a global system of information and informatics networking level.” (Zahran, 2007).

UNESCO then proposed an international competition for the Library’s design, the competition was launched in 1988 and it attracted many architects and companies from the entire world, and the prizes were divided into the first three most voted projects by a specialized jury and some merits and mentions. The results were given in 1989, first place went to SnØhetta architects from Norway, second to Manfredi Nicoletti from Italy and the third to Fernando Ramaz from Brazil.

In this way the final design created by the Norwegian SnØhetta architects, was built from 1995 until its opening in 2002. Mohsen Zahran (2007) recognized that Egypt, as one of the world’s most ancient civilizations is aware of its cultural role and the duties imposed upon it by its geographic location, historical background and cultural heritage. “The achievements realized in this Project testify to the fact that Egypt, a developing country facing its more than usual burden of problems of socio-economic and cultural development, was dedicated to rebuilding the New Bibliotheca Alexandrina. The basic objective was not only the direct benefit for its exploding population, but also for the welfare of people in the region and around the world.” (Zahran, 2007).

According to Serageldin (2007) the Institution is making an impact in many different domains. It is not only recapturing the spirit of the Ancient Library of Alexandria, but also becoming a place of freedom, a meeting place for the dialogue of peoples and cultures. It is a place dedicated to upholding the values of rationality,

learning, pluralism and understanding. "It is a university without walls or registration, without formal certificates or structured courses" (Serageldin, 2007).

The most important analysis of this project is related to its architectural concepts, which will be discussed below. The Library became a landmark building, with its circular shape representing the rising sun, and according to Ismail Serageldin (2006) the sun disc has many echoes in Ancient Egyptian mythology. The symbolism refers to the emergence of a new learning era. Another important aspect of the structure is the shifting of the building on the ground level by tilting it into the ground. The glass wall reflects the idea of mirroring the forces below the surface above the ground, the reflected image of sun on the wall is that of a fusion of sun, water and earth as essential forces of nature becoming static with the constructions of mankind (Zahran, 2007). On the other side one may find that the building's curve is covered with the beautiful gray granite wall that displays letters from the alphabets of some 120 languages (Serageldin, 2006).

To access the Library building one has to cross a slender bridge leads into the plaza or pass through one of the courts on either side of the building. Zahran (2007) described the place saying that on the plaza, a large sphere hovers within the ground. The drama of the object is matched only by the contents within. Along the route, one would receive glimpses of the textured exterior wall of the Library. After crossing the entry doors of the Library, one enters a spacious glass-lined hall. This hall extends over three different levels and within this enclosure are exhibition and performance spaces, a bookshop and a Children's Library acting as a window onto the plaza. A cafeteria is found on the second floor, its broad balcony provides a panoramic view of both the plaza and the open horizon of the sea.

To get to the other side of the Library one has to pass through a gathering area, which people use for discussions and teaching and learning as a space. Then detailed stairs lead to the heart of building, the Library itself. Zahran (2007) describes this new discovery saying: "The visitors pass through a massive wall and enter onto an internal balcony. From this balcony one would enjoy the first view of the Library's dynamic and inspiring space. The vast curving wall of the Library's exterior is shown once again, this time as an enclosure. The space has 160 meter wide and 80 meter deep terraces along seven primary and fourteen secondary levels which creates a flowing space with books cascading around and above, making the Library truly unique."

The Library gets more divisions, a special place for manuscripts and an acoustic area for musical and audio visual materials are separated. Another part of the building is dedicated to the administration area, where also hierarchy is represented in its architectural separation, where the director has a terrace looking the sea area. Within a proper lighting circulation is the book management, which means that the books need proper care, movement, cleaning and they have gained an appropriate space inside the building with adequate communication to the external area.

The thesis researcher's perspective on this iconic building is its presence on the ground and its meaning as a learning center. The Library project calls attention from the outside and visitors come inside to discover this place, and there they meet culture, art, education and more. The building was designed on different scales. The visitor understands its greatness as he/she moves, while the building unveils itself gradually. It is important to point out that the iconic image is the primary attraction of the building; however its interior design makes one desire the understanding of its meaning and seeks it through the entire building. The exterior speaks as loud as the interior without conflict. The two areas speak the same language hence conveying equal importance to

both aspects hence the visitor is not forced into a choice between the inside and outside, but rather gains understanding from both facets. The combination of interior design and architecture is considered to be the most significant learning lesson from this example.



Figure 2. 5 - The Library's plaza and the Planetarium. Source: Renard Teipelke, 2012.



Figure 2. 6 – The Library's interiors. Source: Serageldin, 2006.



Figure 2. 7 – The library on its site context. Source: Zahran, 2007.



Figure 2. 8 – Interior of the Library. Source: Zahran, 2007.



Figure 2. 9 – The glass wall that reflects the sun light. Source: Zahran, 2007.



Figure 2. 10 – The curve wall with its 120 different letters. Source: Renard Teipelke, 2012.

2.3.3 Johannesburg Soccer City Stadium – South Africa

Serena Nanda (2004) states that with the demise of apartheid, South Africa faces the difficult challenge of creating a new national identity that incorporates an

examination of past oppression yet leaves the way open for building a national identity that incorporates all its diverse groups. Envisioning itself as the rainbow nation, the new South African government has made a strong commitment to building an inclusive national identity.

It is in this direction that the Soccer City Stadium concept was created. It was built after the implosion of the FNB Stadium and little of the old stadium was kept. The history of the place remains, 1990 Nelson Mandela was welcomed home in this place and 1993 the funeral of Chris Hani the Communist Party leader was held there as well (Official Website of the city of Johannesburg, 2010). So it was designed as a World Cup Stadium for the 2010 FIFA Football World Cup in Johannesburg, to fulfill the FIFA standards and requirements, but its architecture goes beyond its function. The project was designed by the senior architect Bob van Bebbler and his partners; he is South African and graduated from the University of Witwatersrand in Johannesburg.

The main aspects of this project are aesthetic and design ideas, the meaning behind the building and people's real history told on its walls. The principal idea was a massive calabash, one of the symbols of rural African life, rising from the ground on the border of Soweto, outflanking the long, surrounding mine dumps. According to the architect the calabash was selected from a number of designs as being "the most recognizable object to represent what would automatically be associated with the African continent and not any other". His hopes were that the calabash shape would be "recognized instantly by spectators in every corner of the world" (Interview given to the Official Website of the city of Johannesburg, 2010).

The Stadium's rounded shape is created by means of thousands of glass-fiber concrete panels in eight different earthy colors, fitted together in a patchwork, and

curving around into the cantilevered roof. Van Bebber also said that for him the design of the calabash has special meaning: "It symbolizes people coming together, a melting pot of cultures, sharing and passing around the calabash". And the world is sharing from that calabash (Official Website of the city of Johannesburg, 2010). According to Lanxess brochure (2010) there are nine vertical openings in the façade face toward the other World Cup stadiums in South Africa. A tenth opening points in the direction of the Olympic Stadium in Berlin, where the final of the 2006 World Cup was played. These openings symbolize the path to the final.

The three-tier stadium soars 60 meters into the air, and stretches across 300 meters (Official Website of the city of Johannesburg, 2010). The imposing arena has space for 88,958 spectators to cheer on their teams from the ultra-modern tiered seating. A selection of bars and restaurants and 190 special boxes with 7,466 business seats ensure comfort of the very highest standard (Lanxess, 2010). It initiated a new era for soccer stadiums with new patterns in technology and aesthetic to be reached.

The importance of this architecture project to South Africa is noteworthy, the South Africans were so proud of their culture, beauty and history that they were showing it to the rest of the world. A meaningful image of this place was the FIFA World Cup opening ceremony in June 2010 when all could see black and white Africans coming together to celebrate their continent and their happiness to be Africans, this was the observation made by the researcher of this thesis during a visit to Johannesburg during the World Cup event. It was from this personal experience in South Africa that the inspiration to create a design identity in Kenya developed; the researcher in person witnessed the victory of humanity over ethnic stereotypes and understood the meaning of an "icon" to a country's people.



Figure 2. 11 – The Soccer City Stadium façade. Source: Lanxess, 2010.



Figure 2. 12 – The stadium under construction. Source: Author, 2009.



Figure 2. 13 – The glass-fiber concrete wall view from the inside. Source: Lanxess, 2010.



Figure 2. 14 – The Soccer City Stadium internal view. Source: Fujitsu, 2010.



Figure 2. 15 – The Stadium concrete columns. Source: Official Website of the city of Johannesburg, 2010.



Figure 2. 16 – The Stadium under construction. Source: Official Website of the city of Johannesburg, 2010.

2.3.4 National Stadium of Beijing (Bird Nest Stadium) – China

The background of the 2008 Olympics in Beijing was the intension to present China to the world as a rising new global power, backed by a dynamic national economy and consolidated under the rule of the Communist Party. Hosting the Olympics brought many benefits to the city, such as sale revenues from broadcasting rights and corporate sponsorship, large domestic banks and corporations to finance infrastructure projects, investments that improve the transportation and telecommunication systems, and urban development as a whole. In addition to these

significant benefits, the event built a new image of Beijing as a modern and international metropolis (Ren, 2008).

Ren (2008) pointed out that as part of the preparation for this major event, the Government separated a site in north of Beijing for the Olympic Park. It is situated on the extension of central axis of the city and this central axis starts at Yongding Gate in the south and goes 7.8 kilometers until Bell Tower in the north. All the important structures, such as the Forbidden City (mentioned in the Introduction of this thesis) and Tian'anmen Square are located on this axis. This site that was later called Olympic Green has an area of 1135 hectares and it contains 3 sport facilities: the National Stadium, National Gymnasium and the National Swimming Center.

The project of the National Stadium passed through a competition process; the board of jury launched the competition in 2002 saying: "the stadium design shall embody the new image of urban development in Beijing, and fully reflect the idea of Great Olympics – New Beijing." (Beijing Municipal City Planning Commission, 2004 apud Ren, 2008). The results were given in 2003, the Swiss architects Herzog and de Meuron won the first prize and the rights to design the National Stadium with an unusually exposed structure that mimics a bird's nest, the design delivered the most shocking impact among all the proposals (Ren, 2008).

The design resembling a bird's nest was inspired from the art of Chinese ceramics, which the architects fully studied to create a link between culture and image. So the shape was created to express something related to the Chinese traditions and culture; its circular form represents Heaven while the adjacent square resembles the Chinese symbol for Earth. In this way, the stadium consists of two independent

structures, standing 50 feet apart from each other, a red concrete seating bowl and the outer steel frame around it (Homesthetics Architecture Art&Design, 2012).

The unique design makes this project stand out as a genuine structure that takes its inspiration from traditional sources, a fact which turns this concept into a proper, 21st century building that combines contemporary architecture and technology with local beliefs and ideas (Homesthetics Architecture Art&Design, 2012). Ren (2008) pointed out that in China the nationalism is rising along with global consumerist ideology, which consequently has driven the production of architectural mega projects. And he concludes saying that the paradox of nationalism and the impulse to embrace international architects well illustrate the changing relationship between architecture and nation building under conditions of globalization. Global architecture has become the national expression.

To this thesis this project became important not only for its design appearance that certainly draws attention, but mainly for its cultural contradiction. It is based in China, under a Communist Government, where tradition and culture reigns and still the architects and their partners managed to create a highly technological building with meaningful design. The local public could relate to it and the international visitors were thrilled by it. And then it became one of the most symbolic architecture in the world and once one discusses iconography and symbolism in architecture this project has to be included and analyzed.



Figure 2. 17 – The National Stadium in Beijing. Source: Homesthetics Architecture Art & Design/Arup Ben McMillan, 2012.



Figure 2. 18 – The Stadium in its surroundings. Source: Homesthetics Architecture Art & Design/Arup Ben McMillan, 2012.

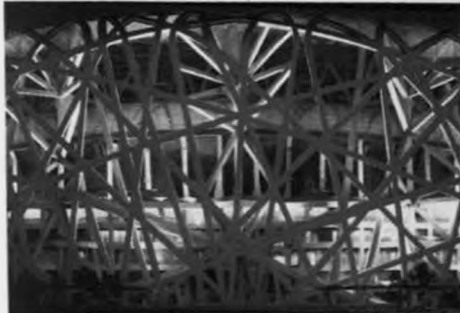


Figure 2. 19 – The steel structure and the red concrete seating area. Source: Homesthetics Architecture Art & Design/Arup Ben McMillan, 2012.



Figure 2. 20 – The Stadium view at night. Source: Homesthetics Architecture Art & Design/Arup Ben McMillan, 2012.

To conclude Rukwaro (2012) proposes that to reach architectonic identity the architects should understand the community they are designing for since the identity of each community depends on its locality, climatic conditions, economic activity, traditions and beliefs, religion and its way of life. So the architects of these 4 buildings analyzed in the sections above, drew their inspirations from natural and cultural forms in their architectural form-making.

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

This thesis was aimed at a discussion of Kenya's national identity from an architectural and design perspective, rather than a broader analysis around social, political and economic issues. The project's main goal is to propose an appropriate design concept translated into an edifice that expresses the traditional design elements of the three major ethnic linguistic groups of Kenya. To accomplish its aim the project's research design was primarily case study analysis of international precedents and local attempts at the creation of national identity.

This was achieved through secondary (desk) research and primary research. The secondary research was based on available sources dealing with the identity topic concerning other countries' experiences as well as the Kenyan nation-building process. Research of worldwide examples of iconic architecture and their corresponding solutions of the identity question was undertaken. These sources formed the foundation of the study and a record of past justifications in similar design projects. Later in the process the analysis of Kenyan ethnic design elements, patterns and forms was carried out in order to justify the decision making on the cultural center design concept.

The primary research involved interviews, in the form of discussions, with Kenyan architecture and design experts, who were selected for their experience in analyzing architecture and design aspects with regard to Kenya's national identity. The interviews were undertaken separately with each expert according to their own time and their interest on the theme. All the interviews were completed in the course of 2 weeks. The first one interviewed was Professor Rukwaro from the Department of Architecture

and Building Science of the University of Nairobi, the interview was done in his office at Architecture, Design and Development building (ADD) off State House Road. It took approximately one hour and he was very helpful even providing the researcher with literature.

The second interviewees were Professor Odoch and Professor Donna Pido, the discussion was undertaken outside of the University environment and it took approximately one and a half hours. Both are very interesting personalities and they contradicted and disagreed with one another about the topic during the entire conversation. Even though both are not Kenyans, the first is Ugandan and the second North American; they have lived and made their educational lives in Kenya studying the tribes, the design tradition and culture; and their opinions on the subject were very useful and appreciated by the researcher.

The last one interviewed was Mr. Mayenga in his own office at the Architecture Design and Development building (ADD). He is a lecturer in the School of the Arts and Design of the University of Nairobi. The conversation took approximately one and a half hours and covered Kenyan culture, tradition and his own specialty, textiles. It was also very interesting to talk about the Kenya National Dress Committee, that consulted him but on which he did not participate. The National Dress was proposed, but it was not well accepted by the public.

Questionnaires were also developed to collect data. They were administered on first year design students of the School of the Arts and Design at the University of Nairobi, in order to understand their views on the subject, from their fresh perspectives. The researcher counted on the class representative to manage the application of the questionnaires and later report them back. This process took approximately two weeks

to complete, mainly because of the examinations period that the students were in. Although the process took longer than expected, the final result did not suffer any modification.

Descriptive research methods were also used. Descriptive research is a method used to obtain information relating to the current status of the issues of the analysis in order to describe "what exists" within the variables or conditions of the situation. In this document both observation and surveys were used. Observations were made of key buildings relevant to the research topic in Nairobi, and global examples were analyzed. The local buildings visited and observed were Bomas of Kenya, Nairobi National Museum of Kenya and Kenyatta International Conference Centre.

More than one visit was paid to each of these 3 buildings on different occasions and with different perspectives on the survey side. In Bomas of Kenya the researcher was able to talk with tourists and employees on several visits. In Nairobi National Museum of Kenya the researcher interviewed the Exhibition Designer for about 30 minutes and also accompanied a group of Design students from the University of Nairobi on their visit to the place. And out of this experience the researcher observed not only the place itself, but also the public reaction to it, specialized public and tourists. KICC was the most visited site, mainly because of its importance for its people and also because of its tourist attraction. The users' experiences of these current spaces were analyzed through surveys, in order to enlighten the development of the architectural design concept of a Cultural Center project.

3.1 Site Selection and Description

The ideal site was selected on the basis of characteristics derived from the architectural precedents in the literature review. Two of the three precedents reviewed were built on brownfield development, which is described as the redevelopment of land that has previously been developed (UN-Habitat, 2011). These two are the Oslo Opera House and the Alexandria Library, both created as part of waterfront redevelopment urban projects. The latter two, Soccer city Stadium in Johannesburg and the National Stadium in Beijing, were built on an urban node development as conceptualized by UN-Habitat (2011), which refers to urban development at accessible locations such as nodal interchanges and intersection of public transport routes. It is also described as development along corridors that connect main nodes or centres; in the South African case, the corridor was connecting Johannesburg to Soweto (a low income development). And in the Chinese example it was developed on a touristic route where the main important buildings are located.

Aside from accessibility, another characteristic observed is visibility; all the four sites were well located and visible from a distance. The four were created to bring improvement, together with the urbanization, to the project areas. According to Statsbygg's brochure (2005), the Opera House is now seen as a "cornerstone" in the development of the waterside area. It is located in Oslo, the capital city of Norway, on a waterfront area and one of the main goals of the developers was to open the city towards the sea (Smith & Strand, 2011).

The Bibliotheca Alexandrina is located on a site in the historic eastern harbor of Alexandria. It has been planned as a focal point for tourism and for that purpose, the Library complex is an important magnet and an "anchor" for the visitors (Serageldin, 2007). The area is completely developed, but the new urban redevelopment plan is not

yet implemented, so in its urban design plan proper attention to the traffic and access aspects, including parking needs for cars and buses, must also be included, as pointed out by Ismail Serageldin, the Director of the Library of Alexandria and professor at Wageningen University in the Netherlands (2007).

The Soccer City Stadium project, which was designed and built for the 2010 FIFA World Cup had to be, from the perspective of Johannesburg, world-class to amplify the city's communications theme of: "Johannesburg, a world-class African city" (FUJITSU, 2010). It was built on top of the imploded old FNB (First National Bank) stadium. In this case improvements were done along the site, and one of them was a new BRT (Bus Rapid Transit) system that was created to connect Johannesburg and Soweto passing by the stadium.

The National Stadium in Beijing was developed in a territorial location along the main axis of the city. The site was entirely urbanized for the 2008 Olympic Games following the International Olympics Committee (IOC) pattern and requirements. In the new area other important buildings were constructed such as the National Gymnasium and National Swimming Center together with the Olympics' villages and training and entertainment centre.

Based on the characteristics of each precedent site reviewed above, the researcher explored potential sites within Nairobi that primarily met similar standards. These are presented below (figures 3.1, 3.2 and 3.3):



Figure 3. 1 – Site 1, Langata Road. Source: Google Earth, 2012.



Figure 3. 2 – Site 2, Mombasa Road. Source: Google Earth, 2012.



Figure 3. 3 – Site 3, Thika Road. Source: Google Earth, 2012.

SITE I

- Located along Langata Road on a public site, in between Langata Barracks and the Wilson Airport.
- Surrounded by mixed-income areas, as Kibera (north), South C (east), and Karen C (west) neighborhoods.
- Situated in between important touristic destinations: Animal Orphanage, Bomas of Kenya, Galleria Mall, Carnivore Restaurant, Nairobi National Park.

SITE II

- Located along Mombasa Road, the major connection between Nairobi City Center and Jomo Kenyatta Airport.
- Surrounded by middle-income areas, such as South B (north), Imara Daima (southeast) neighborhoods.
- Situated in between commercial and office buildings, encircled by hotels and restaurants, which ensure mobility and visibility.

SITE III

- Located along the new Thika superhighway that connects Eastern Nairobi to the CBD.
- In between mixed-income areas: Muthaiga (north), Mathare (south), Baloz Estate (east) and Pangani (west) neighborhoods.
- Surrounded by colleges and universities' campus. Hotels and recreation centers can also be found in the area.

3.1.1 Justification of Selection

The patterns: accessibility, visibility, public transport connection, infill and brownfield development were taken into consideration for the selection of these potential project sites. The decision to select a new and undeveloped site for the construction of the cultural center complex instead of using an existing building and

proposing changes for it was based on the researcher's observation that a proper place in Nairobi that portrays Kenyan design identity is not yet available.

The final site selection was made based on topography, location, visibility, connection (see section 3.1.2), city urbanization and neighborhood target population (see 3.1.3) as well as characteristics derived from the precedents' examples.

3.1.2 Geographical location and physical characteristics

The ideal site must be located on an important transit avenue in order to facilitate accessibility and visibility; both important aspects to the branding process of the Cultural Center edifice. The ideal should also be close to public transport. In Nairobi public transport consists of mini-vans (matatus) and buses that run the length of the entire city on low prices. However research envisions a new public transport system, supported by Vision 2030, which would include the implementation of a BRT (Bus Rapid Transport) system as well as a network of trains⁹. The proximity of a potential site to such a proposed transportation system would be an important geographical consideration in the site selection.

Analyzing the Transport Project for Nairobi one can see that major metropolitan centralities will be connected through a network of commuter trains, also the BRT complementary routes and bus feeding routes. The Project started in 2012 and it has a final completion goal of 2030. This will facilitate the mobility inside the city and will connect it to the main towns around it, such as Thika, Kikuyu, Juja and Limuru. These projections were also considered in the selection of the final site (see figures 3.4 and 3.5).

⁹ The Nairobi Commuter Train Regional Development. Land-Use – Transport Integration NamSIP Project. World Bank. 2012.



Figure 3. 4 – Rail Network and Metropolitan urban centralities. Source: The Nairobi Commuter Train Regional Development Presentation, 2012.



Caption:

- Trains' Network
- BRT system
- Bus feeding routes

Figure 3. 5 – Main Bus feeding routes and BRT complementary route. Source: The Nairobi Commuter Train Regional Development Presentation, 2012.

Topographical characteristics were also considered for site selection. The precedent sites were analyzed to determine the ideal topographical characteristics to be considered in the final appropriate site to be chosen by the researcher. However, the topographical characteristic was not a strong determinant to the final selection, because topography is intrinsic to the site and it can be modeled in different ways according to the design proposed.

3.1.3 Demographic and social characteristics

The site selection also entailed the consideration of socio-economic factors of the target population and the diversity of the neighborhoods in which it is located. The proposed Cultural Center is intended to serve a diverse population. Nairobi's residents, including university students and school children are targeted as the main audience for the Cultural Center (see section 3.2.1). Thus the site survey investigated the proximity of schools, universities and high density neighborhoods in the potential site area.

The Cultural Center intends to serve different socio-economic groups. Therefore, an investigation was carried out to determine the location of residents with various levels of income with the aim of ensuring the inclusiveness of the access and location of the site. The architects of the Oslo Opera House justified the design via the sense of togetherness; joint ownership, easy and open access for all. "We wished to make the opera accessible in the widest possible sense" (SnØhetta, on interviewed given to Smith & Strand, 2011).

3.2 Data Collection

Multiple research tools were used in the data collection. These included observation, interviews, focus group and questionnaires as mentioned before. Observations happened at the three local sites in Nairobi with cultural significance, they are: Bomas of Kenya, Kenyatta International Conference Centre (KICC) and Nairobi's National Museum of Kenya. During the observations, visitors' reactions and comments, beside vast photographic material, were undertaken.

Face-to-face interviews were conducted with architects and designers that in some way have been involved with national identity projects in Kenya. A focus group

discussion was undertaken with first year architecture students from the University of Nairobi. This included a brief presentation of the topic followed by a discussion to gather information on perceptions of national identity and physical ways to symbolically represent it in Kenya. Questionnaires were prepared and given to first year undergraduate students of the School of the Arts and Design at the University of Nairobi, in order to get their fresh, untainted and idealistic opinions about the symbolism of a building and its implications (view table 3.1).

Table 3.1 – Interviews – Questionnaires – Focus Group

Name	Position	Expertise	Quantity/Time
Prof. Odoch Pido	Professor at the Technical University of Kenya	Expert in African Design	1/ 1:00 hour
Dr. Donna Pido	Professor at the Technical University of Kenya	Expert in African Design	1/ 1:00 hour
Prof. Robert Rukwaro	Professor at the University of Nairobi	Expert in African architecture	1/ 1:00 hour
Mr. Stevens Mayienga	Senior lecturer at the University of Nairobi	Expert in African textile	1/ 1:00 hour
Observation / Interviews (discussion)	Nairobi National Museum of Kenya	Exhibition Designer	1 person/ 30 minutes
Focus group	First year architecture students at University of Nairobi	New architecture students	10 people/ 45 – 1:00 hour
Questionnaire	First year design students University of Nairobi	New design students	35 people/ 2 weeks
TOTAL			50 p./ 5:30 hours / 2 weeks

3.2.1 Population and Sampling

The project's target population in a broad sense is represented by Kenyan citizens and foreign visitors (tourists). However in order to symbolize this larger audience, smaller representative samples were selected. These included: Nairobi residents together with foreigners, tourists, university students and school children. The

first group of Nairobi residents is justified by being cosmopolitans from different parts of the country and representing various tribes and together with foreigners creates a heterogeneous group. University students and school children are also targeted due to the project's interest in tribal heritage and its educational component. This was considered in terms of showcasing to the next generation the importance of its past history and traditions, as well as educating and celebrating the past in order to invest in the future. Tourists are targeted in this project mainly because of the intention of enhancing Kenya's image and brand worldwide, through symbolic representation.

3.2.2 Sample Size

For a focus group it is important to keep the number small, in order to have all the students commenting and discussing the topic. Direction was necessary and undertaken by the researcher who led the conversation and paid attention to all the details and opinions around the topic and its implication. So first year undergraduate architecture students from the University of Nairobi were selected randomly after the analysis of the students name list selecting after every sixth name, and gathered in the studio class for this section supervised also by an architecture lecturer. The total number of students in the first year is 70 and for this segment only 10 (15%) were chosen, in order to match the ideal size of a focus group that is between 7 to 12 persons, smaller groups tend to be dominated by one or two people and larger groups inhibit the participation by some members (Sherraden, 2001).

The questionnaires were administered to first year design students from the University of Nairobi. From a class total number of 70 students, 35 (50%) of them were randomly selected, with researcher ensuring that the 50% of the population is

representative of the distribution of male/female students, which would allow the sample analysis results to be generalizable through the entire first year design class. To achieve this balance between female and male students, the researcher got the class name list and divided them in female and male students using colours selecting after every third name on the class list, and after doing so, the researcher presented the list to the class representative and she followed the random division of students to be interviewed. The final sample size was 50 people and was analyzed using different research tools, which included 5 face-to-face interviews. The researcher interviewed 4 experts in the African design context and 1 exhibition designer of a main local precedent.

3.2.3 Procedure of Respondent selection

The respondents were selected according to the research objectives of this thesis. The interviewees were selected by their field of expertise and their importance as senior lectures involved with Kenya's design identity issues. A field study was undertaken at Nairobi National Museum of Kenya. Data was collected via interviews (discussions) with its exhibition designer, tour guides and visitors. This was done in order to understand the Museum's functionality, public attraction, quality as a cultural place in Nairobi, positive and negative impressions on visitors and ability to document Kenyan cultural heritage. In addition, observations and surveys were also conducted on cultural public places in Nairobi; mainly on Kenyatta International Conference Centre and Bomas of Kenya.

Also selected, were respondents from the first year design and architecture students from the University of Nairobi. The questionnaire respondents were selected

by picking the third person on the class list after dividing the list into male and female students using colours. The focus group involved the picking randomly of 10 students from the architecture first year class and it was also conducted with the collaboration of an architecture lecturer.

3.3 Data Processing and Analysis

After selecting the methodology of the data collection, the organization of the collected data was done according to each instrument/method used/applied. The questionnaires were processed by measures of central tendency, such as mean, mode and median, which are considered to be quantitative descriptive analysis. Qualitative narrative analysis was used on the interviews, observations and surveys. It required literal description of what the researcher had observed from the interviewees and from public reaction at the places visited. The researcher used transcription of sound recordings of each and every interview to facilitate analysis of what was discussed.

3.4 Expected Output

The final result of this thesis was the conceptual design of the Cultural Center building in response to the issue of creating a physical symbol of national identity, with the view to combining architecture and interior design on a cultural edifice that would represent Kenyans symbolically and celebrate the country's enriching differences. Using the data collection and analysis the researcher was able to get the input on the decision making of the project itself. The contribution of discussions with different segments of the population drove the process that led to the creation of the final design of the proposed Cultural Center.

CHAPTER FOUR

4. DATA ANALYSIS

4.1 Kenya National Identity

An architectural national identity must be created by the fusion of local culture and natural built forms, which people from all over the country can identify themselves and be united. History, language, artifacts, food, architecture, nature and others, are all driving forces towards national identity through differences and commonalities. In Kenya 42 tribes coexist and in order to uncover their common ground, the researcher interviewed not only common people, but also experts and students to obtain their view on the issue.

Professor Rukwaro in his interview (2013) stated that Kenya has 42 tribes and each and every one of them has something unique and that is why they are tribes by nature. Showing that diversity is part of the Kenyan everyday life and changes are taking place. He also pointed out that the issue of national identity, and architectural identity is also a problem, when he said: "We don't have a place where all the values converge and create something that is an expression of Kenya." When one observes the majority of built forms in the city of Nairobi they are more of an expression of Western culture than Kenyan culture. The individual perception of reality of Kenyan culture and nature are not well symbolized in most of the built forms (Rukwaro, 2012).

To Mr. Mayienga there is a problem of identity and it should be addressed in a multidimensional and holistic way. He said in his interview (2013) that "Kenyans are free and diversity reigns among them". Professor Odoch stated during his interview (2013): "Even if one doesn't like this thing called Kenyan and one knows that it doesn't

exist, it is still desirable to be Kenyans.” He explained that he thinks that it is desirable to have a national icon that is deliberately developed as a national icon and not developed for something else and then appropriated to become a national icon by default as has happened.

In a contrary sense of what is or isn't Kenyan, Dr. Donna Pido's opinion leans strongly towards what different people see from what is African. She said in her interview (2013) that the drum, cone, clay pot, and grass roof house, are symbols of African culture that the “wazungus” (white people) identify not Africans. She concluded by saying that there is much more to African culture and to African identity than those material product manifestations. This view adds value to the discussion and challenges Africans to think and decide if these artifacts/cultural products have more meaning than just the image or if they are really just an empty symbolism created by the Westerners. In the former regard, Mr. Mayienga (2013) remarked that African artifacts or cultural material are not simply art, but are designs, which serve a function and have a meaning and their production serve their function. His argument does not entirely disagree with Dr. Donna Pido; it shows that if the proper meaning is given to the proper image then it can create a symbolism, and an expression that speaks to people and links them with the building.

A pattern that emerged in the analysis is that experts by having the experience and the acquired knowledge could point out the issue and justify it, showing their appreciation and interest in the topic. However, discussions with students from architecture and design departments of the University of Nairobi revealed that they were less concerned with the identity issue and some of them didn't even see the issue at all. They could easily point out buildings in Nairobi that in their view represent Kenya and the African culture and some of them did not see the need of constructing a new facility

to showcase Kenya and its culture. They got confused about finding a unique expression that would represent Kenya as a country, and they could not decide if it is possible to design this building or not (view chart 8).

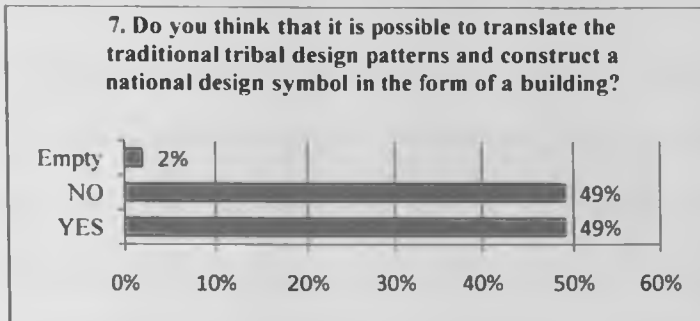


Chart 4.1 - Design students' questionnaire, question 7. Source: Author's collected data, 2013.

Based on the responses to question 7 the researcher noted that for students the identity issue is distant and for them symbolism is not yet totally explained and processed. The researcher observed from the data that half of the students were concerned with the analysis of the issue and they even gave some important ideas on how to develop such a concept. But the other half could not relate to the problem and thought that there was no need to develop such a building. One of them wrote: "It can be achieved (cultural building with Kenyan identity) through studying different cultural traditions and piecing together different patterns and coming up with a beautiful piece of architecture showing Kenyan heritage."

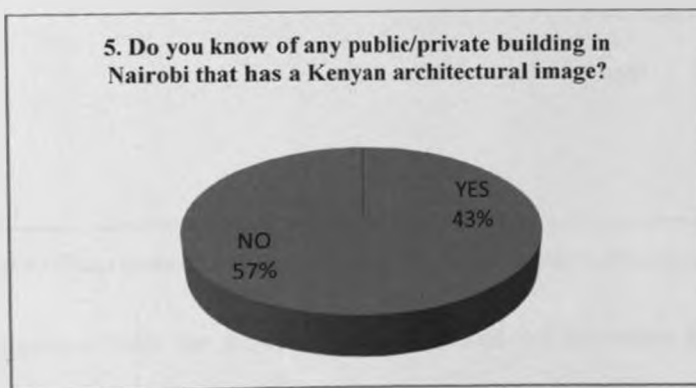


Chart 4.2 - Design students' questionnaire, question 5. Source: Author's collected data, 2013.

With question 5 the researcher discovered that 57% of the students understood the design identity issue and they could not find in Nairobi a building that could represent the country. However, 43% of the 35 students questioned found some buildings that bore the country's image. This question was important in revealing the proper understanding and comprehension of the issue. The buildings presented by the students were Bomas of Kenya, Kenyatta International Conference Centre (KICC), Safari Park Hotel and more (see chart 4.3). Most of the buildings cited bear some African characteristics, but are lacking one part of the ideal building, i.e. the external appearance (national identity) or the internal content (cultural center).

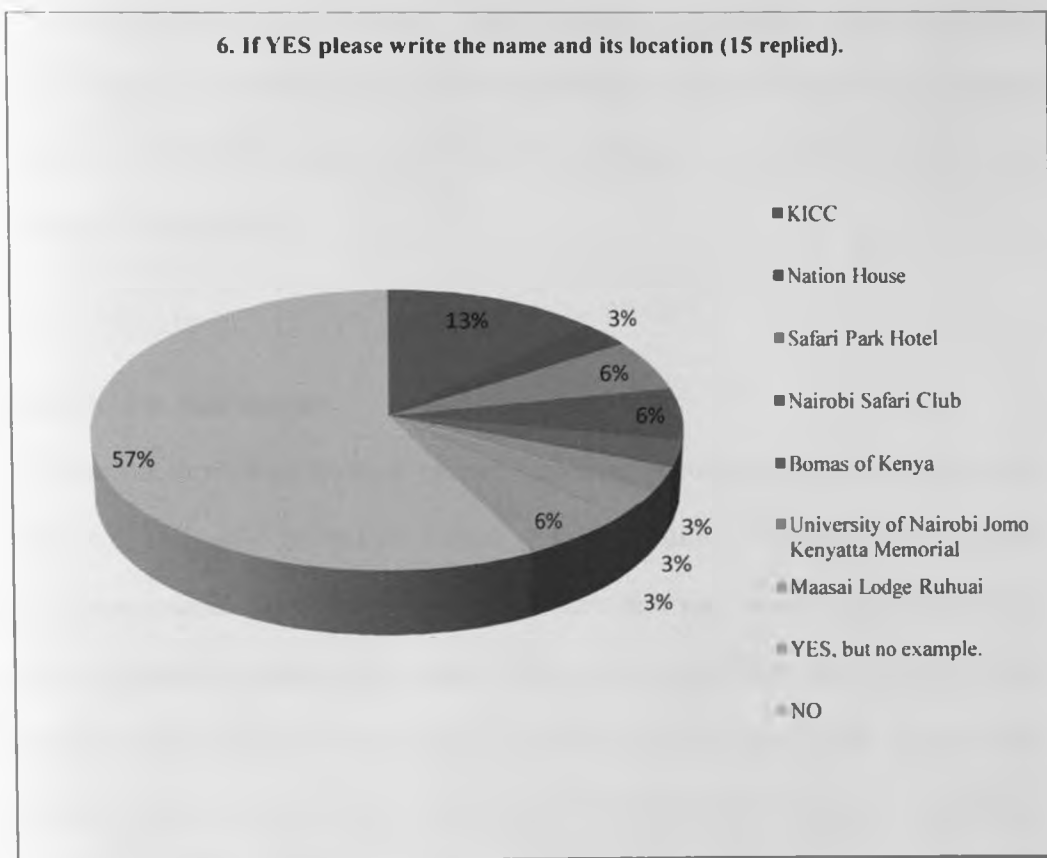


Chart 4.3 - Design students' questionnaire, question 6. Source: Author's collected data, 2013.

The situation with the students was attributed by Professor Rukwaro in his interview (2013), to the Western scholastic materials that exist today, the curriculum

that is taught is also Western, and requires students to learn the evolution of architecture especially in the Western world, where it emphasizes Western concepts and conveys the idea that it is the Western world which creates standards for architecture. So the background of good architecture seems to be based on Western culture. Consequently, students do not search for regionalism or symbolism in their architecture and in what they see in their city. Professor Rukwaro (2012) wrote that the main reason Kenyan architects do not use the 42 ethnic groups traditional architecture as bases of their design is a weak data base and poor documentation of the same. This is a limitation the researcher encountered in not finding the right sources and publications about the ethnic groups of Kenya thus delaying the process of finding the proper image of the country, but it gave the researcher more ground to talk to people and get involved with their perspectives of the situation.

4.2 Nairobi's case studies

There are three main cultural-related buildings in Nairobi that were analyzed by the researcher, they are: Bomas of Kenya, Nairobi National Museum of Kenya and Kenyatta International Conference Centre. The first one was created to attract tourists; the place is divided into three main areas: the big hall where Kenyan dances and music are presented; the food court where mainly Kenyan food for instance nyama choma (barbecue) is served; and the bomas (houses) area, where tribal houses are displayed in an effort to recreate tribal living environments.

Nairobi National Museum of Kenya is also divided into many different areas; however, the most important part for this research is the main building where the museum actually is and its architectural image as a whole is represented. The Museum

was moved to its current site in the early 90s and has undergone some modifications and extensions. Then Kenyatta International Conference Centre, known simply as KICC is a building that is basically divided into three areas: the principal plaza that courts people to the building; the office tower; and the amphitheatre that serves like a conference meeting place.

These three buildings communicate strongly with Kenyan people. They were chosen because of their image and importance to Kenyans. The experts were asked about the meaning of the three, and they were also discussed in-depth with students. With experts the goal was to understand the history behind the buildings and the process that elevated them to their current importance. Students were divided in their opinions about the three buildings and the discussion provoked them to question whether the buildings are an adequate reflection of Kenya's image or whether there is more to Kenya's image that they lack. An architecture student in the focus group discussion (2013), displayed his preoccupation with the topic by suggesting that Kenyans lack exposure that would allow collaborative thinking to generate local ideas. Instead, the norm is that a commissioned professional comes up with ideas, calls them Kenyan and then later they become acceptable to the population.

The researcher decided that the analysis would be better comprehended by separating the analysis of the three buildings. Therefore, they will be presented separately and each one of them will be accorded due importance in the process.

4.2.1 Bomas of Kenya

Bomas of Kenya, as presented earlier, is part of Kenya Tourist Development Corporation, a government initiative whose vision is to portray Kenyan culture, as a

tourist attraction (Bomas of Kenya Official Website, 2013). One of its main attractions is an exhibition area where tribal houses are displayed in small villages; the visitor can walk through it and imagine how life is in the villages. But for Kenyans what captures their attention most is the food court with nyama choma and the dances. School children are taken to Bomas to learn more about each others' tribes and traditions, in order to engender in them the respect and appreciation of the richness of each other. Bomas of Kenya also plays an important role as government space for important meetings and recently it was the national tallying center for the 2013 General Elections.

Bomas is located along Langata Road, close to the new Galleria Mall and other tourist destinations such as the Animal Orphanage, Mamba Village, Nairobi National Park and Giraffe Center. However, its location is hidden on a side street and the site is poorly advertised making it difficult for members of the public to address it. The internal and external form will be discussed in a later part of this analysis. However, it is important to present them as a starting point for the creation of a cultural space that merges the interior and exterior in a tentative manner to create dialogue with the public; showcasing the country's history and identity.



Figure 4. 1 – Bomas of Kenya site. Source: Google Maps, 2013.

According to the responses of the design students to question one (1) in the questionnaire, the most representative of the three buildings studied is actually Bomas of Kenya (see chart 11). However, the same students negate that the building itself represents Kenya as a country in terms of architecture and design image (see chart 12). One of the students wrote in the questionnaire that Bomas of Kenya represents the country through the ethnic traditional homesteads, cultural dances, etc. but does not convey the country's architectural image.

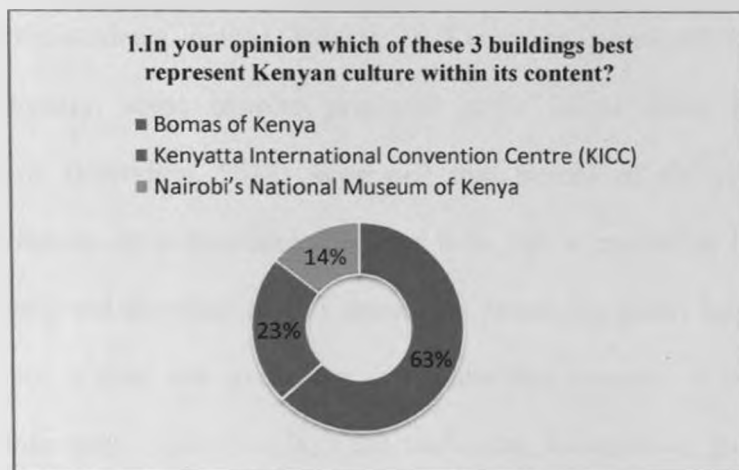


Chart 4.4 - Design students' questionnaire, question 1. Source: Author's collected data, 2013.

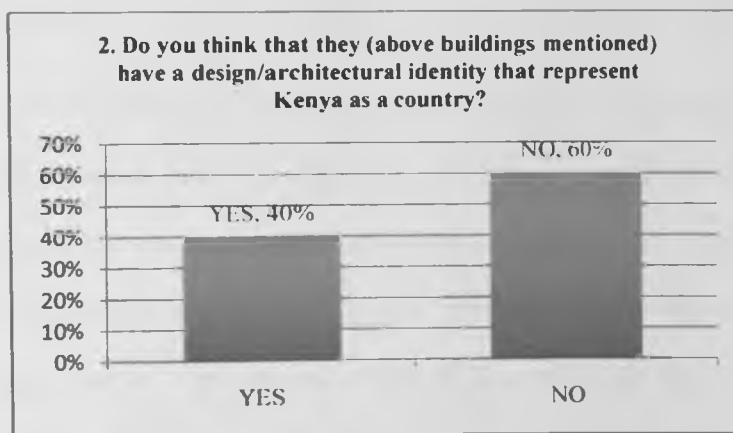


Chart 4.5 - Design students' questionnaire, question 2. Source: Author's collected data, 2013.

To one of the architecture students Bomas may be the closest building that shows unity in Kenya; it has different sections to show different things in Kenya, as

many communities as they can have in the same area (Focus group, 2013). In her honest opinion she admitted that she does not believe that one can come up with one thing to show such divergent beliefs, religions and so much from the different cultures in Kenya. To a design student Bomas represents the country in terms of design because it displays African traditional architecture by using Kenyan ideas incorporated in the design as well as using traditional materials in its construction (Questionnaire: question 3, 2013).

While some students defend Bomas of Kenya as a cultural building that represents the country, some experts presented some issues about the building: Professor Rukwaro (Interview, 2013) suggested that Bomas of Kenya has a very rudimentary expression of architecture, because it is just a traditional house with a decking (food court) and the platform for music and dance. He added that it was done well for music, but it does not go further to explore this constant of the traditional architecture. In this way it only displays the traditional architecture, but it does not incorporate it in the design of the building itself, showing that the focus was to present the bomas not having them as part of the architecture or the identity of the place.

Professor Odoch (Interview, 2013) elucidated that Bomas of Kenya was built to represent a certain function that one could easily relate to tourism, and the cultural activities shown there are a representation of a section of the country not the country as a whole. But for him if one looks at the villages, which are at the Bomas one will be hard pressed to see them as a true representation of even the labels that they carry. He questioned the traditional housing presented that has no one living in it wondering how it could be representational. He concluded by saying that the place is just an image with no sense of reality.

The conclusion about Bomas of Kenya's architectural representation goes far beyond its territorial division. It shows that the place has no face, and although it has content, it is still missing the identity. One cannot arrive there and with a holistic view understand what the place is about. One has to walk around first and then decide where to go and what to see. The lack of identity does not bring the content under one roof, on the contrary, it divides and mixes the image of the country leaving people to choose what can be or not be Kenyan.



Figure 4.2 – Food court. Source: Author, 2013.



Figure 4.3 – Deck, food court. Source: Author, 2013.



Figure 4.4 – Big Hall's roofing. Source: Author, 2013.



Figure 4.5 – Big Hall, space for dance and music presentations. Source: Renard Teipelke, 2013.



Figure 4.6 – Taita village, one of Kenyan ethnic groups. Source: Author, 2011.



Figure 4.7 – Kamba village, their traditional housing. Source: Author, 2011.

4.2.2 Nairobi National Museum of Kenya

In search of a proper place to showcase Kenyan culture and architecture, the researcher came across some important buildings in the city of Nairobi: one of them is Nairobi National Museum of Kenya (NNMK), whose purpose is to present Kenyan culture, traditions, history and nature to visitors. This place became an important case study, and several visits were made to properly investigate the place and the visitors' reactions to it.



Figure 4.8 – Nairobi National Museum of Kenya site location. Source: Google Maps, 2013.

The researcher accompanied a college students' tour through the Museum, together with a lecturer and a university staff member. The tour took two hours through the museum's seven different thematic areas and art gallery. The researcher paid attention to the students' comments, reactions and points of view, and also to some scattered visitors found around the place. They were few but very attentive to the internal content. The main point of this analysis is to understand the communication of the interior content and the outside appearance of the place: mainly the architecture and the interior design and to point out the missing link between them.

In 1929 the colonial government provided land to build the new building for the National Museum, at the time named Coryndon Museum, and it opened in 1930. After independence it became the National Museum and in 2005 it was closed to undergo renovations and expansion (National Museums of Kenya Official Website, 2013). In 2008 it reopened with the new modern area joined to the 1929 building (Exhibition Designer interview, 2013). This modernization emphasized the building itself and attracted more visitors. In the remodel, the architects and designers included a dining area, coffee area, plazas, an arena and an amphitheater. Sculptures are located all over the site; they allude to Kenyan culture, history and image, using Kenyan elements and colours. However the place still does not portray Kenyan architecture or the image of the 42 tribes, the architecture itself maintains its classical appearance and to modernize it pillars and mosaics were added to the structure, which keeps the same language of the old building with a more up-to-date look. The Museum exhibition designer (2013) pointed out in her interview that: "The appearance of the building outside did not represent Kenya as a country because it was a colonial building. It was built by the colonial masters, so it represents their interests at that time. So in fact, we had to build this other side, the new one and we had to match it with the old part, then we thought to bring Kenyan elements to it with the glass wall and some mosaic using Kenyan motifs. But this is basically not Kenyan architecture. The new building is modern and it tries to match with the colonial part."

According to Professor Rukwaro (Interview, 2013), Museum has failed completely: "Museum is neo-classical architecture and one can see a lot of Western characteristics, columns, pillars, the scale and the rest. It is not quite expressive of the local though a Museum should be more contextual, because the building itself is allowed to represent a museum. So when one goes there one can actually see our

understanding of how a built form is as an artifact in a museum. The building itself should be an artifact for us to go and see. But for them (NNMK), they have done the traditional housing down the site somewhere, instead of the building itself being part of what one is going to see. But one can understand it because it was done 1900's or something, by the British. The building is neo-classical architecture per se, where actually it is defining Roman architecture in one way or another."

Architecture and interior design students identified with the content of this building, one of them wrote that it contains a lot of African (Kenyan) art and artifact. On this basis, many perceived its architecture as being symbolic of their culture. Chart 4.4 (page 78) summarizes their opinion and one can clearly see that the least representational building is Nairobi National Museum of Kenya with only 14% of the interviewees seeing it as representational.

It is important to note that Nairobi National Museum of Kenya has its own architectural language that is inviting, but it still does not portray the Kenyan identity as a nation. Mosaics, glass walls, conic roofs joined with the neo-classical colonial building give it some interesting perspectives, but does not communicate with the public by showing Kenyan architecture. The interior speaks louder than the exterior as to what is Kenya. However, the analysis indicated that there is an important point missing; that is, one has first to be attracted externally before gaining the interest to go in and explore. The researcher's intention is to point out that even though it is an interesting building with its colonial area connected to a contemporary side, it still lacks the country's image and identity.



Figure 4. 9 – Nairobi National Museum of Kenya façade. Source: Author, 2013.



Figure 4. 10 – Museum plaza. Source: Author, 2013.



Figure 4. 11 – Neo-classical building joined through the glass mosaic wall to the new modern part. Source: Author, 2013.



Figure 4. 12 – Restaurant and coffee shop area. Source: Author, 2013.

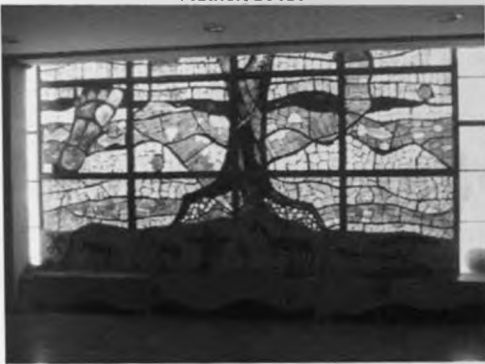


Figure 4. 13 – The glass wall seen from the inside. Source: Author, 2013.



Figure 4. 14 – The calabashes representing Kenya as a whole. Source: Author, 2013.



Figure 4. 15 – The amphitheatre. Source: Author, 2013.



Figure 4. 16 – The open garden. Source: Author, 2013.

4.2.3 Kenyatta International Conference Centre

This building is located in downtown Nairobi. It was idealized in 1967 during the Jomo Kenyatta presidency and it was finalized in 1973 and given back to the state in 2003 (Kiplagat, 2008). Kenyatta International Conference Centre was built to host important national and international events, and it has served its purpose successfully until now. This building is the tallest (28 floors tower) of the three case studies and its location helps it to stand out in the crowded city center and its image also creates a contrast in between tall buildings, which gives KICC the importance that it has today as the most iconic building in Nairobi.



Figure 4. 17 – Kenyatta International Conference Centre location in downtown Nairobi. Source: Google maps, 2013.

According to Professor Rukwaro (2012) the KICC built form was inspired by Kenyan traditional aesthetics through brownish colours and conical roof in the tower and the amphitheatre. The amphitheatre and the tower represent the man's and the woman's traditional houses respectively. This symbolizes a Kenyan homestead for some cultures. A student at the focus group (2013) pointed out that KICC tower represents the male huts and the amphitheatre represents the female, and if one looks at Kenyan type of architecture anywhere the father's hut was bigger – taller than the rest. Another student (Focus group, 2013) said that KICC can be recognized as Kenyan

because with the circular form it represents the traditional housing of most of the tribes, mainly of the Bantu descendants.

Professor Rukwaro in his interview (2013) said that in his view KICC express Kenya with the traditional built forms, within the context of regionalism, whereby, the architect took the international style and was able to interpret that within the context of traditional architecture. The colours used are the national colours, such as brown. He added that when one looks at the forms used, the circle and the polygon, one can see that there is a relationship between the traditional built forms and the buildings that are KICC. He also pointed out that KICC's architect was ingenious in terms of understanding the forms and being able to come up with a design that is international in terms of components and materials and at the same time traditional.

An important observation about KICC as a landmark was made by an architecture student (Focus group, 2013) who claimed that the building is iconic because in terms of financing every citizen contributed 100 Kenyan shillings towards the building of KICC and politicians gave 1000 Kenyan shillings. This is another reason why Kenyans relate to KICC as being their architectural image. To reinforce this idea, another student (Focus group, 2013) displayed the back of the 100 Kenyan shilling bill where the figure of KICC is printed.

In an effort to understand the building as a landmark in Kenya, the researcher asked the Nairobi National Museum exhibition designer (Interview, 2013) about KICC and its image as perceived by Kenyans. She stated: "Sometimes what happens is: a place becomes a landmark and people really own it and they like it, like KICC. This one we all know it, own it and we are like that as Kenyans. So it became, maybe at the beginning it was not, but over time it acquired that status and it became a symbol of

Nairobi, of Kenya. For most of the students or people who come from upcountry, one of the buildings that they want to see when they arrive in Nairobi is KICC”.

In this case the mixture of the image itself together with the creation of ownership gave the building its status and its meaning. That was the strategy the first President of Kenya, Jomo Kenyatta, used to create the country’s architectonic symbol and he believed in the design and the power of ownership in order to create symbolism and nationalism. One can see that the KICC built form truly represents African tribes. The shapes, the colours and the meanings show that the architect designed it to be representative and to be recognized by Kenyans. However, the researcher raised doubts by questioning the colour set and the shapes: Is brown the only or the main representational Kenyan colour? Is it only Kenyan or is it African? Is the conic shape Kenyan or African? Is it the Western image of Africa or is it the locals’ image of their own architecture?

Some of these questions were addressed and interpreted by the interviewees. Architecture students (Focus group, 2013) believe that there are more colours that could also represent Kenya, and they pointed that earthy colours can also be seen as African colours. To them important and meaningful colours are red, brown, white, black, green and yellow. According to Professor Odoch and Dr. Donna Pido (Interview, 2013) spiritual ideals tend to influence colours, in this case white suggests the ghostly image that is not very acceptable. They also said that green is not a major colour. To the Bantus, Nilotes and Cushites the main colours are blue, yellow and red range. This showed that Kenyan colours can be more than just the brownish range and can be more vivid and expressive.

One of the students in the focus group (2013) expresses his view that one can commission as many architects as one wants, but most of them will be too African, based on the idea that things should be one way, should have the conic shape and the earthy colours; mainly the hut influence. However, things do not need to be that way, things can be changed and this happens because everyone thinks that this is how Africans want to be seen and no one steps up against this approach to bring something new to Kenya and to Africa.

Professor Odoch (Interview, 2013) stated that: “There are buildings in Nairobi that are now assumed to be a national representation, they have become a sort of icon that is more of an assumption and even forced representation than cordially, friendly, purposely or deliberately developed like that. KICC is one representation. KICC just might be the only one that assumed the responsibility, but I don’t think it was designed with national identity in mind or the overall pattern of the national identity”.

The conclusion of the KICC analysis is that the building is a landmark owned by Kenyans, representational of Kenyan architecture and well used for its intended purposes. However, it is important to point out that even with KICC as a landmark; Kenya still lacks a place with a design symbolism attuned to Kenya’s heritage and culture, serving not only tourism purposes but also the preservation of local traditions.



Figure 4. 18 – KICC tower and amphitheatre. Source: Author, 2013.



Figure 4. 19 – Entrance plaza. Source: Author, 2012.



Figure 4. 20 – KICC main entrance. Source: Author, 2012.



Figure 4. 21 – KICC complex: plaza, tower and amphitheatre. Source: Author, 2013.

4.3 Concepts to create iconic architecture in Kenya

Architecture is a major vehicle employed by territorial elites to negotiate identity and express national ambitions (Ren, 2008). In the past, local elites searched for a national form that incorporated indigenous architectural elements to express distinctive national identities (Xue, 2006). However, with the era of globalization, state politicians have increasingly adopted a global architectural language to brand their cities and countries. Modern African cities follow that pattern with tall glass buildings spread throughout them, and according to Birabi¹⁰ and Nawangwe (2012) cities like Nairobi and Kampala have now to bear with the negative impact of this concept whereby there is no longer a proper fit between a building as an artifact on one hand, and the local culture, form and context on the other.

Birabi and Nawangwe (2012) concluded that apparently there is a need to adapt or upgrade traditional architecture in a blend with modern trends, to enable oncoming architectural ensembles suitable to the region's own socio-cultural, aesthetic, economic, functional needs and identity. In this conclusion they brought attention to the concept of

¹⁰ Allan Birabi, lecturer of the Department of Architecture and Physical Planning at Makerere University in Kampala, Uganda.

rocentricity” that is simply a historical, cultural and intellectual perspective derived from the centrality of African humanism.

Along the same line, Professor Rukwaro, in his interview (2013), advised the researcher on the need to first identify the heritage that people can relate with, then define within the heritage what physical forms the people have seen as constantly symbolizing it. As a result when one looks at the building one is able to read it with references to oneself, so that the representation of the symbol in creating the expression or form is related to the observer. Professor Rukwaro continued: “Whatever you pick the challenge is: if there is a heritage, first you have to see if it is embedded in the people’s knowledge, the next thing is which is the most appropriate way to present this architecture, to symbolize it to the meaning that it is read and understood.”

So in the search for the symbolism and the relationship between traditional and modern architecture, the researcher prompted the interviewees to think about the topic, to find this identity in their cultural material and translate it into architecture. Many different ideas came through these brainstorming sessions. Experts revealed their views that led to the concretization of this study; students talked freely about mixing modern materials with traditional structures, they created hypothesis and imagined the building they could design if the task were theirs. The researcher analyzed some of the ideas. The most common and creative ones are highlighted below:

From the gathered information the researcher came across different lines of thought. One that stood out was the figure of the *calabash* and the *drum*. Almost all the experts mentioned these figures. Architecture and design students also touched on these ideas. One of the students in the focus group (2013) stated that almost all the 42 tribes can relate to the calabashes. So the architect can incorporate glass in the form of a

calabash, and for ornamentation use many different colours like those in the beadwork of the Maasai and the Turkana. Thus the architect could add beauty and symbols to the structure (calabash shape). Another student (Focus group, 2013) defended the calabash figure saying that it is very sacred for most of the people, because it is where they store their milk and water, and also what they use for gruel and brewing of beer. According to her there is no community in Kenya that cannot relate to it.

Professor Odoch (Interview, 2013) mentioned that the calabash and the basket are representative of 80% to 90% of Kenyans. They are common and thoughtful. He said that these artifacts would make sense to the majority of the people in Kenya, and they tend to cover almost everyone. When talking about the drum Professor Odoch said that practically 90% of the communities in Kenya use drums regardless of their religion, lineage (Nilotes, Cushites, Bantus), or level of education. Drums are used directly to make music and indirectly to consume the product of that music. Following the same line of thought, Professor Rukwaro (Interview, 2013) took the drum as an example saying that it is one element that is strongly tied up with traditions and one can use it to emphasize music and drama with people sitting together and rejoicing. In contrast with these ideas, one of the architecture students (Focus group, 2013) stated that these elements are not mainly Kenyan but African. Reinforcing the contrast Dr. Donna Pido (Interview, 2013) suggested that there is much more to African culture and to African identity than those material product manifestations.



Figure 4. 22 – Kenyan calabashes. Source: Author, 2013.



Figure 4. 23 – African drum. Source: <http://blog.africaimports.com>, accessed in 2013.

All the experts interviewed pointed out to the Tanzanian experience and their way of seeing their unity. Mr. Mayienga (Interview, 2013) showed that in Tanzania there are 121 tribes, and according to him what brought them together was the unification of language. Most of the Tanzanians speak Swahili, and it has made the 121 tribes come together to create a national identity. He added that if one wants to pursue a matter of identity then one wants to find something common to a nation; with a unifying language one can unify people. Language disseminates culture, and once people can understand each other they can also understand and respect each other's cultures. And it is by telling stories that people spread culture and cultural traditions.

Arusha Cultural Centre emerged as an example in the conversation with Professor Rukwaro (2013) who identified it as a case in which the architects have been able to see the culture and incorporate it structurally into architecture. The entrance bears the figures of the shield and the spear to protect the place, which generated attention. To Professor Odoch (Interview, 2013) the image of the Arusha building represents a drum, and it was not picked from a specific community but it was a selection of something representational of many Tanzanians as the total majority. He presented this building as an example that it is possible to create something symbolic architectonically speaking, even though the building in particular did not inspire total agreement or happiness with the Tanzanians.



Figure 4. 24 – Arusha Cultural Centre. Source: <http://www.flyladylori.com>, accessed in 2013.



Figure 4. 25 – Arusha Cultural Centre. Source: Flickr/thebobrows, 2010.

Professor Odoch raised a good question: “Thus the cultural center has to be for everything, every aspect of culture? Or could it be for some or one thing?” In this way the conversation started towards other examples, like Sidney Opera House specialized in music and dance. This is the same case with Oslo Opera House, different from Alexandria Library in this case driven towards literature and knowledge. So according to the conversation with Professor Odoch and Dr. Donna Pido (Interview, 2013), a cultural centre needs places to eat, drink, perform, exhibit and discuss. And they stated at the end that if one looks at many communities throughout this region a cultural center is not defined by many activities. However it is possible to achieve a building with all this separate functions. The question then is: Is it desirable to have more than one activity or not?

To Dr. Donna Pido (Interview, 2013), in Africa it is not traditional to centralize the whole function, but the idea of centralization is interesting. And according to Professor Odoch (Interview, 2013) it is a wonderful concept that things were dispersed and were taking place in different areas, and in smaller social units. So one could borrow from that concept and create a space where lots of activities can take place in small units, or even divide the ethnic groups and bring them together afterwards in a common centralized place.

Professor Rukwaro (Interview, 2013) raised another point: “Is an architect or a designer able to use his ingenuity to go beyond the conventional, to be more innovative, and to improvise more?” According to him people are mimicking anything today to create the building so at the end of the day it is the architect’s challenge to give a meaningful expression of what people are inspired from. And he concluded his interview (2013) by saying: “The information that you are picking is important and you will be able to bring it together, you have done your best within the short time you have

been here (Kenya) and you have been able to collect data either from an interview like this, or from observations, or from reading, but still so much is not anywhere.” This brings one back to one of the issues raised that little information is made available in order to come up with a national architectural identity, but swimming against the current the researcher proposed the design concept.

4.4 Sites' Analysis

4.4.1 Site I: Langata Road

Site I is located along Langata road past Wilson Airport and before Langata Barracks. The site is located on a tourist route that has attractions such as Carnivore restaurant, Bomas of Kenya, Galleria Mall, Elephant Orphanage and Giraffe Center. The site is surrounded by mixed-income neighborhoods that include Kibera to the north, South C in the east and Karen C on the west. Kibera is considered to be one of the largest slums in the world, and is currently undergoing a process of urbanization and slum upgrading. South C is a middle income neighborhood with a close connection with Nairobi CBD, formed mainly by workers' family from that region. Karen is a high income neighborhood in which people own large tracts of land with mansions. Close to site I, one can also find urban services such as hospitals, supermarkets, primary schools, universities and more. All these characteristics make this site an ideal location.



Figure 4. 26 – Site I (red) neighborhoods and surroundings. Source: Author based on Google Earth, 2013.

The main criteria employed to analyze the sites including site I were site visibility, accessibility, geographical and physical location, demographic and social characteristics. Site I has great visibility made possible by its surrounding neighboring plots, which are the Wilson Airport with flat buildings and runways. These enhance the site's importance and enable it to stand out easily from a great distance.



Figure 4. 27 – Site I (red) visibility: buildings flat and plan plots next to it. Source: Author based Google Earth, 2013.

The site is situated along Langata road, one of the main roads in Nairobi that connects the CBD (Nairobi town) with the far west of the city. The road was designed as a dual carriageway and is currently undergoing expansion in line with Vision 2030

master plan that envisioned a transit network with public rapid transport (BRT¹¹ and LRT¹²) along the road (read section 4.5). The site is accessible through Langata road and a secondary road projected to become the Southern bypass of Nairobi passes by its west side, and can potentially become the location of its main entrance in order to avoid adding to the congestion on Langata road.



Figure 4. 28 – Site I accessibility: Langata road and Southern bypass. Source: Author based Google Maps, 2013.

Another important consideration was the topography of the site. Site I has a minor variation in gradient with only a 5 meter difference between the highest point, where Langata road and the secondary road intersect (0.0m), and the lowest point, where the eastern border is situated (-4.0m). This topography increases the possibilities for the potential building because it does not present any significant challenges to solve. This will afford the researcher creatively to explore different architectural solutions with the main concern only being the creation of the building itself.

¹¹ Bus rapid transport

¹² Light rail transport



Figure 4. 29 – Site I topography with a 5 meter gradient differential. Source: Author based on Google Earth, 2013.

The site has an area of 20,183.85 square meters. The front side along Langata road, which will make up the northern façade, has length of 160 meters. The south edge is around 158.50 meters long, the eastern side is approximately 87 meters long and the western side along the Southern bypass is 159 meters long. The Cultural Center project will also be influenced by government regulations for the built environment as well as parking and green area percentage requirements.



Figure 4. 30 – Site I area and edges. Source: Author based on Google Earth, 2013.

Site visits were conducted by the researcher and investigation via photography undertaken. In walking along the plot area, the researcher was able to properly

understand the location and its main characteristics thus envisioning the ideal architectural project for the site, in contrast to the other two options discussed below.



Figure 4.31 – View of the western edge along the Southern bypass. Source: Author, 2013.



Figure 4.32 – Plot view from the Southern bypass. Source: Author, 2013.



Figure 4.33 – View of front edge along Langata road. Source: Author, 2013.



Figure 4.34 – View of Langata road and Southern bypass junction. Source: Author, 2013.



Figure 4.35 – View inside the plot. Source: Author, 2013.



Figure 4.36 – View from inside the area. Source: Author, 2013.

4.4.2 Site II: Mombasa Road

Site II was chosen mainly because of its accessibility and connectivity facilitated by Mombasa road, one of the main highways of Nairobi that connects the Jomo Kenyatta International Airport and the far south with the city center (CBD). Along this

avenue many businesses were developed in the area, such as commercial and office buildings, hotels and restaurants, industries and more. The site is situated in between this mixed-use area along Mombasa road, where one can find commercial and business premises together with residential buildings. Two important neighborhoods border the area: South B on the northwest side of the plot and Imara Daima on the southeast side. These two are middle-income neighborhoods, and Mukuru slum is located north of the site.



Figure 4. 37 – Site II location and neighboring areas. Source: Author based on Google Earth, 2013.

This site's importance to the research is due to its main road with easy accessibility and visibility. Mombasa road is one of the most important routes in Nairobi. Tourists coming to the city will arrive either from the airport or from the coast using the highway. Local residents also use this road to come in and go out of the capital. Thus, the site stands out for its accessibility to the highway users. Therefore, a Cultural Center located here would be in a strategic location, served by hotels, restaurants, shopping mall, commercial buildings (tourists' facilities) and still belonging to a residential neighborhood (sense of humanity).



Figure 4. 38 – Site II accessible through Mombasa road and its main surrounding buildings. Source: Author based on Google Earth, 2013.

The site is 32.017.30 square meters in area. Its north façade is approximately 309 meters long, southeast side is 197 meters long and the southwest side is 227 meters long. One feature of the site is the presence of a slip road that cuts through the site, crossing Likoni road and rejoining Mombasa road, right by the Southern bypass. The slip road consumes 5.446.60 m² of the site leaving a final total of 26,570.70 m² of usable area.



Figure 4. 39 – Site II area and façades. Source: Author based on Google Earth, 2013.

Topographical analysis of the site, as shown in figure 40, indicates a 6 meter height difference. The highest point is 5 meters higher than Likoni road level (0.0 m)

and the lowest point is 1 meter lower than the road level. The central part of the site is flat (+3.0 m) and descends on its east side. This topography makes the site an interesting possibility for the proposed cultural center because it allows for different levels to be used in the creation of the spaces that will make up the center.



Figure 4.40 – Site II topographical analysis. Source: Author based on Google Earth, 2013.

Site visits were conducted by the researcher to better understand the site and its issues. One issue, already pointed out, is the presence of the slip road on the site that takes up some area. The construction of the road created another problem on the site, that is, the movement of land, which altered the existing topography and created the one already described. Consequently, in order to work with this site the researcher will have to choose one level to work on and then move and compact land again. However, these issues are not significant enough to make the site unviable for the proposed center (see figures 4.41 to 4.44).



Figure 4.41 – View of the Likoni road and Mombasa road junction, front corner of site III. Source: Author, 2013.



Figure 4.42 – Site III west side facade and the slip road on its last stage of construction. Source: Author, 2013.



Figure 4.43 – Slip road already on use and still under construction. Area taken from site III. Source: Author, 2013.



Figure 4.44 – Site III central area view, now used as construction site. Source: Author, 2013.

4.4.3 Site III: Thika Road

Site III is situated along Thika superhighway that connects Nairobi CBD with the far east of the country. The project for the highway was approved in 2007 and construction began in 2009 ending in 2012. It consists of 8 lanes with 4 in each direction and it also connects with the Northern bypass that is under construction. It is one of the most important projects in Vision 2030 and it also aims to provide rapid public transport (African Development Bank Group, 2012). Located along the highway are important neighborhoods, universities, colleges and hospitals. Site III is located between Utalii Hotel and Mathare Mental Hospital, opposite Muthaiga Dam.

The site mainly serves the surrounding neighborhoods, which are: Mathare informal settlement in the southern area; Muthaiga in the west; and Nairobi Pipeline Estate in the northeast. Mathare slum is one of the oldest informal settlements in the city

and is located on government-owned public land. Its population is estimated to be 600,000 and 800,000 (COHRE, 2008 apud Darkey & Kariuki, 2013), however the discussion around its population is long and there is no agreement on its final number. What is agreed is that Mathare's population is lower than Kibera's, which is estimated at around 1 million inhabitants, whereas Mukuru's population stands at an estimated 75,000 dwellers (Amnesty International, 2009).



Figure 4. 45 – Site III location and neighborhoods study. Source: Author based on Google Earth, 2013.

Thika superhighway was projected to connect Nairobi with Thika, a nearby small city, and its final destination is Ethiopia. This highway is the main access to site III, and its service lanes on either side join the highway with the surrounding neighborhoods. In terms of the site, there is a service lane passing through its northern corner of that can be used to access the Cultural Center. It is a two-way lane. In order to also create a service access to the site, it would be necessary to pave the earthen street on the west side of the site and make the connection to the informal settlement.

This is a positive aspect of the site where there can be a clear connection between the center and the slum-dwellers thus immersing them in the cultural

environment, thereby contributing to future solutions. According to UNESCO¹³, cultural heritage, sustainable cultural tourism, and cultural infrastructure generate substantial revenues, notably in developing countries, helping them combat poverty and unemployment. And Irina Bokova¹⁴ in the same event said: “Culture is what makes us who we are, it gives us strength, and it provides answers to many of the challenges we face today.”



Figure 4. 46 – Site III accessibility and connectivity analysis. Source: Author based on Google Earth, 2013.

After site visits and photographic analysis the researcher studied the plot's topography and detected the difficulty of working with the existing unevenness (see figures 4.49 to 4.52). There are 7 meter level differences, starting from the road level (0.0m) to the lowest level where a small river existed (-2.0m) and going up 5 meters to the highest level (+5.0m) divided into three different corners. One can observe the unevenness on the southern edge, where two small hills are located, one in the southwest and the other in the southeast corner. The southwest hill has a 5 meter unevenness and rises more abruptly than the southeast one, making the former higher than the latter one. This topography will be difficult to work with and the researcher

¹³ UNESCO congress entitled: “Culture: Key to Sustainable Development” in China, 2013. UN News Centre.

¹⁴ Irina Bokova, the Director-General of UNESCO.

would have to choose one level to work on thus creating a landfill. This could increase the cost of the project on the long term basis.



Figure 4. 47 – Site III topographical analysis. Source: Author based on Google Earth, 2013.

The total area of site III is 70,302.05 square meters. The northern boundary along Thika road is approximately 214 meters long, the east edge is 256 meters long and the southeast side is 149 meters long, the south edge is 326 meters long and west side is 137 meters long. The proposed Cultural Center will not use up the entire site, most of the area would be used for green space and parking.



Figure 4. 48 – Site III total area and boundaries. Source: Author based on Google Earth, 2013.



Figure 4.49 – Site III view from Thika road to the south edge. Source: Author, 2013.



Figure 4.50 – Site III southwest hill. Source: Author, 2013.



Figure 4.51 – Site III North boundary along Thika road. Source: Author, 2013.



Figure 4.52 – Site III internal view and the southern hills. Source: Author, 2013.

4.5 Final Decision on the Site Selection

From the three chosen sites explained above, the researcher decided to use Site I as the Cultural Center territorial location. All the main strategies related to this selection will be explained below using the international and national references and guidelines:

The Cultural Center project is intended to be considered as a public domain. Hajer and Reijndorp (2001) explain that these are places for social and cultural exchange between lifestyle groups with different values and worldviews. Marling et al (2009) follows saying that these are projects driven towards a public urban life that does not merely encompass the well-off and the well-educated parts of the population, but projects that have the potential to include and activate newcomers to the society, the young ones, the old ones, the not so adapted ones and more.

In this way, the Cultural Center project is intended to include a broader audience of different users, which consequently means that the location of the site has to be well-served and accommodate a large group of different income neighborhoods. In comparison with the three sites, site I stands out in this regard, serving three major and influential neighborhoods: Karen (high income), South C (middle) and Kibera slum (low). They already coexist and the project intends to mingle and promote interaction and understanding between them.

To reinforce the selection of site I it is necessary to understand the real conditions of Kibera and what the installation of a Cultural Center close by could do for its development. According to COHRE (2008) half of the population of Nairobi lives in informal settlements. Nairobi's slums are characterized by inadequate housing, unemployment, delinquency and crime, a lack of clean water, insufficient drainage, poor sanitation, a lack of adequate public transport, and environmental degradation. Kibera accommodates the highest population density of any slum in Nairobi, 2500 people live per hectare (or 10,000 square meters) of land. That is, on average, 1 person per every 4 square meters, which is too far below being adequate and it is in these conditions that hope is just a meaningless word.

UNESCO (2012) supports cultural development and presents its relevant contribution to the economy and poverty alleviation. "Investment in culture and creativity has proven an excellent means of revitalizing the economy of cities. Today, many cities use cultural heritage and cultural events to improve their image, stimulate urban development, and attract visitors as well as investments. Culture-led development also includes a range of non-monetized benefits, such as greater social inclusiveness and rootedness, resilience, innovation, creativity and entrepreneurship for individuals and communities, and the use of local resources, skills, and knowledge. Cultural factors also

influence lifestyles, individual behavior, consumption patterns, and our interaction with the natural environment.”

How Culture Contributes to Development

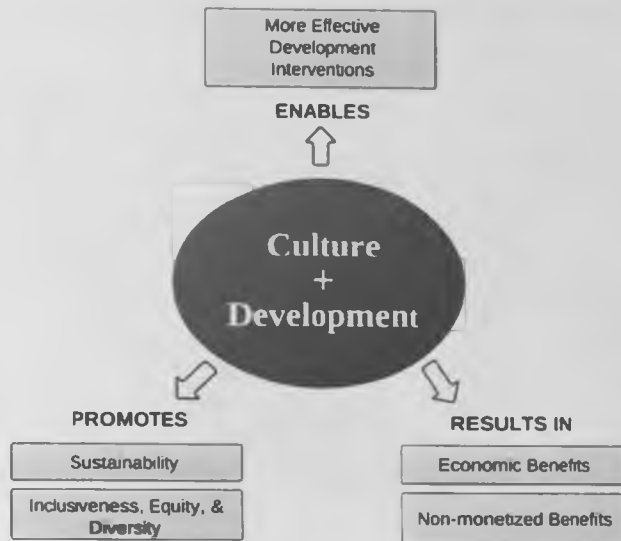


Illustration 4. 1 – How Culture contributes to development. Source: UNESCO, 2012.

Another point that favors the choice of site I in line with UNESCO is this cultural development, which calls for a place where accessibility is facilitated. All of the three sites are placed in Nairobi’s main avenues, however, site I is not only on a main avenue but also in a touristic route, which will also attract this public category and at the same time brand the country and the city. “City branding provides, on the one hand, the basis for developing policy to pursue economic development, at the same time it serves as a conduit for city residents to identify with their city.” (Kavaratzis, 2004).

In the context of accessibility it is important to indicate that site I will connect with a Bus feeding route passing through Langata road that will connect with LRT and BRT in other major roads, one of this connections will be at Ngong Road and another one in the CBD. Looking at figure 4.53 one will understand these connections of the

public transportation network, which is being implemented and is scheduled to be completed in 2030. Figure 4.53 shows the red line that is the LRT network, the blue dashed line that represents BRT lanes and the green dashed lines that is the Bus feeding routes. The implementation of this public transport network necessitates the selection of site I, since it will be reached by the new public transportation system.



Figure 4. 53 – Main Bus feeding routes (green dashed lines). Source: The Nairobi Commuter Train Regional Development Presentation, 2012.

And the final point that determined this decision was the topography of the site, being the easiest one to work with having only a 5 meter difference. This consequently makes the focus of the design of the Cultural Center project its architectural language with less concern for topographic challenges. This also meant that the site's internal accessibility would be facilitated, with the use of ramps with gentle inclinations made feasible to allow any person to travel easily on the site. The focus on design is in accordance with advice from interviews with Prof. Rukwaro and Prof. Odoch (2013): the former advised rationalizing every idea based on its context (Kenyan culture and identity) and the latter surmised that if one was to design a cultural center it would be more pleasant and more desirable to have it sit properly in the context in which it belongs.

CHAPTER FIVE

5. CONCLUSIONS AND RECOMMENDATIONS: CULTURAL CENTER DESIGN

5.1 Design Guidelines – Iconic buildings

The Cultural Center project is in line with landmark, flagship and iconic buildings where the identity of the place is conveyed by its structure and attracts by its architecture and interior contents. According to Marling et al (2009) a hybrid cultural project is the conscious combination between learning and playing, between public and private and between artistic quality and popular activity. Consequently iconic architecture can be understood as the creator of user experience, where the place itself is intended to create emotional connections with its audience and thus create meaning. "This orientation towards experience seen as an act of individual stimulation relates to the way urban spaces and architecture is less about the formal properties of the object and more about the effects it generates for the subject." (Klingmann, 2007).

Marling et al (2009) continues explaining that "icon" refers to those cultural projects that distinctly distinguish themselves from the architectonic context and which by their form constitutes a landmark or a focal point. Generally, they have a large symbolic branding value to the city as a whole and strengthen the status and image of the local site of its placement. The "icon" may work as a driving force in the physical transformation of the city.

Consequently, this means that architectural forms that are symbolic must demonstrate the unity of consciousness and an objective synthesis of realities on which architecture is being created and exists (Rukwaro, 2012). This thesis supports the

interest in the search for historic and traditional symbols which may influence the architectural identity and the quality of the perceived environment during the design process of new physical environments.

In order to come up with the design concept of the Cultural Center the researcher went through an extensive process of research and discovery, and the findings will be discussed below and divided into the different parts of the entire context in which the Culture Center is situated.

5.1.1 Design Concept – The process of finding the final design

The researcher had in mind the three main branches of Kenya's population, which are Bantu, Nilotes and Cushites. This was one of the main driving forces in finding a proper and comprehensive design that would create a connection with Kenyan people's identity and bring them under one roof. The idea of unity and unification was another central point in the research, together with the idea of creating a public domain where people from different tribal groups, incomes, education, ages and more could come together and celebrate their cultural heritage. As explained earlier in this text, accessibility and mobility were also important in this process, the site selection depended mainly on these two points. The researcher came up with three different concepts and from the three selected the last one developed.

Given the knowledge of ethnic divisions, the first design concept was intended to divide the center in three main areas covered by three wood curvilinear shells, these shells would separately represent each one of the three major groups and on its structure words and expressions of the three languages would be carved. The three shells would then converge into one central point where the unity of the place would stand, and

where people would come together to discuss culture, talk about each other and respect one another. This concept would consist of three sectors: exhibition building, education building and amphitheatre building converging at an open stage where different presentations could take place. A parking and a sports areas were created. This concept was not developed because of its abstract idea; people would take some time to understand the three divisions and comprehend that that would mean their own separation in different ethnic lineages. Rukwaro in his interview (2013) advised the researcher saying: “If you go for abstraction or just expressive architecture then you will be doing something wrong. So you have to lift up the context to your rationalization, so that anything innovative is given meaning within the context. Then you cannot go wrong!”



Illustration 5.1 – Design concept 1 drawings: plans, views and perspective. Source: Author, 2013.

The second concept created was based on two important artifacts found in almost all the tribal groups, which are the bead necklaces and the shield. These two figures would create covers over the central area of the project. The idea of the beadwork would be used on a lateral cover that would top the two main buildings, one for exhibition and the other for education. And the shield concept would be used on a cape that would go from the ground on the site's southeastern part to the ground on the northwestern part. The buildings would be in a semicircular shape facing the center where an open stage with a plaza would be placed. This concept did not go through mainly because of its appearance and similarities with a stadium; something the researcher wanted to avoid since the central idea is to attract people for a cultural purpose.



Illustration 5.2 – Design concept 2 drawings: plans and perspective. Source: Author, 2013.

The last concept, as explained before, was the one developed. It is also based on two strong figures that are: the beadwork and the shield, but with another strategy to

present them. It was created with two main covers in a shape of a shield and different materials create the image of the beadwork on the side of the shells. The project was then divided in four buildings facing the plaza and the open stage area in the center. The four buildings are: Exhibition, Amphitheater, Education and Entertaining centers. A parking area was designed on the site's southeastern side, in order to access the parking a local street was created coming from the Southern bypass. A sports area was also placed on the site's east side with a playground and a multisport court. This concept will be explained in detail in the next sections of this text.



Illustration 5.3 – Design concept 3 drawings: plans, views and perspective. Source: Author, 2013.

In order to understand better this last concept the researcher decided to study its volumetric shape, to see how mobility, accessibility, lighting and ventilation would process in this project. And also comprehend heights and vein. The modeling was done using soft molding dough that is easily molded and as a preliminary study work perfectly suited for its function. Photography was taken after the modeling and the use

of different colours for each structure helped the researcher to study each part separately as well as each volumetric concept (see figures 5.1 to 5.6).



Figure 5.1 – Beginning of the volumetric study with only the buildings (yellow) and the metallic arcs on one side (orange). Source: Author, 2013.



Figure 5.2 – Understanding of the metallic structure, in orange, that will support and sustain the shell. Source: Author, 2013.



Figure 5.3 – The structure of the metallic arcs on each side of the project (orange). Source: Author, 2013.



Figure 5.4 – The understanding of the shell (green) and the vein in between the structures. Source: Author, 2013.



Figure 5.5 – The cover will function as a roof to the buildings and the central plaza. Source: Author, 2013.



Figure 5.6 – Understanding the cover's design relation with the pedestrian level and how the comprehension of it will work. Source: Author, 2013.

5.2 Design Concept of the Cultural Center

5.2.1 The Shells (Covers)

The idea of the shells was based on two different tribal artifacts, which are the shield and the beadwork found in lots of cultural material decoration such as jewelry, pots, baskets, masks, calabashes, drums and more. The intention to use these two strong figures were based on finding identity on the 42 tribes in Kenya, instead of choosing one cultural material that would represent all, the researcher after some survey observed that is very difficult to find one figure that would represent all, and a combination of figures would make a better link with the national identity. So then the researcher came to the question of which combination would be appropriated and would cover all of the tribes, the choice came down to these two: shield and beadwork.

Margaret Trowell (1966) wrote about the beadwork in West, East and South Africa. She said that much of the design has a symbolic significance, and complete appreciation of it would need knowledge and understanding of local traditions and symbolism. However, superficially the technique lends itself best to the making of geometrical motifs such as triangles, zigzags, and interlacing pattern, with strong and bright colours. And she also covered the shields, saying that they are done in hides or in wood. The hide ones are painted with earthen colours, usually red, black and white and according to Margaret (1966) they are striking. The wood ones are carved and sometimes painted in chalk and earthen colours, and the resulting irregular geometrical design is most attractive.

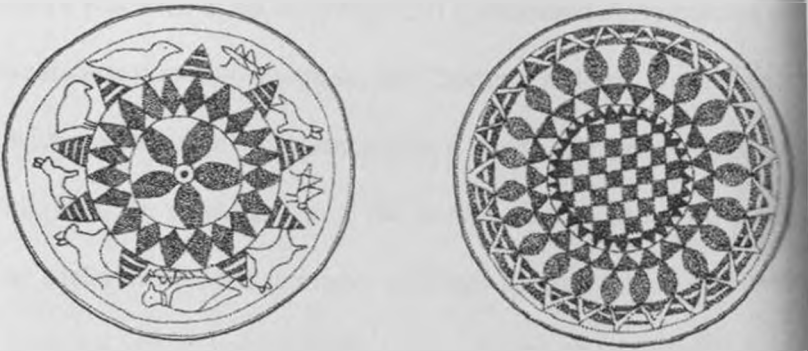


Figure 5. 7 – Wood stools decorated with bead. made by Luo tribe. Source: Jewell, 1994.



Figure 5. 8 – Samburu girl wearing some bead necklaces that are gifts from warrior boyfriends. Source: Pavitt, 1991.



Figure 5. 9 – Samburu warrior wearing bead necklaces together with some modern materials. Source: Pavitt, 1991.

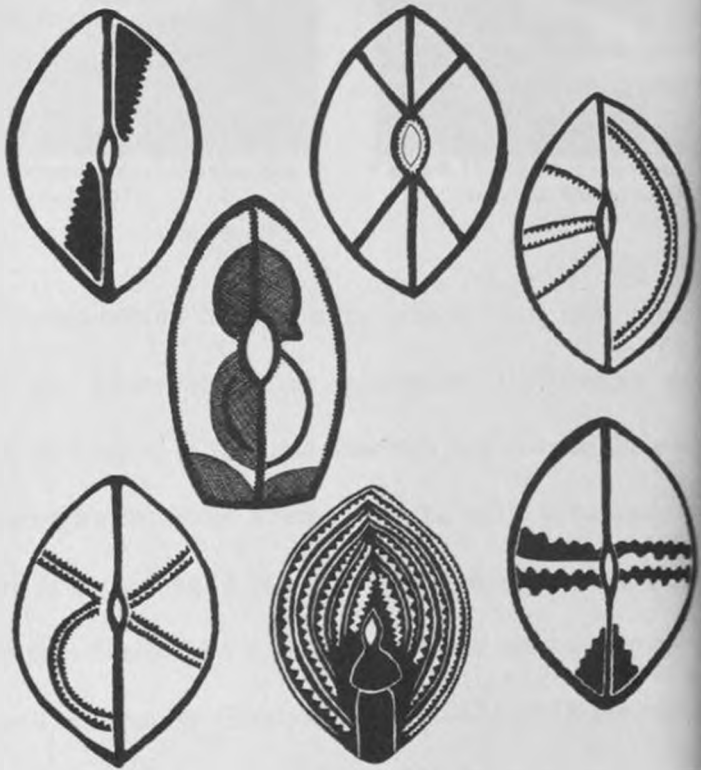


Figure 5. 10 – Shields pattern from the Kikuyu people. Source: Jewell, 1994.

Professor Rukwaro in his interview (2013) reassured the researcher on the use of shields or spears as a symbolic image saying: "Spear or a shield, are elements that are so passionate with traditions and you emphasize a theme like protection or security." In hand with his idea, the researcher used the combination of these two figures to create two identical shells that topped the main buildings and the central plaza of the project. The shells have the idea imbedded in the visual concept of bringing all the tribes under one roof, one structure that would mean their unity and togetherness. This concept wants to create in Kenyans the sense of belonging and of unification, presenting their rich differences under a protective shell, which in this case would be the nation building.



Figure 5.11 – Hands in reference to protection. Source: Author, 2013.



Figure 5.12 – Hands in reference to unity, gather and inclusion. Source: Author, 2013.

Another image behind the shell is the tribal housing roof, in most of the tribes independent of their economic activity (pastoralist or cultivator), the houses were designed with a roof (most of the time thatched) that covered their walls but would basically be apart from the house structure. Or the house is basically the roof, which means that there is no walling, it is all one thing. And it seems to have the idea of protection over their heads. The roofs stand out and are the part of the house that everyone can easily distinguish. Observing figures 5.13 to 5.18, one can understand that in all of the tribal lineages (Bantu, Nilotes and Cushites) there is the presence of the

structurally separate roof or the “coming down roof” on their traditional houses in the villages. This was also a major motivating force towards the shell (cover) concept that wants to be this roof on top of the Kenyans’ head, bringing them together and securing them their future as a nation.



Figure 5. 13 – Mijikenda typical house, first wife hut (Bantu). Source: Author, 2011.



Figure 5. 14 – Taita traditional village (Bantu). Source: Author, 2011.



Figure 5. 15 - Luo first wife typical house (Nilotes). Source: Author, 2011.



Figure 5. 16 – Iteso first wife typical house (Nilotes). Source: Author, 2011.



Figure 5. 17 – Rendille typical house (Cushites). Source: Lea, 2012.



Figure 5. 18 – Gabra thatched typical house (Cushites). Source: Kwekudee, 2013.

So the shell has its driving concepts that were developed on its shape and on its coating. The two covers are sustained by 7 metallic arcs on each side of the structure

with its highest point being 20 meters off the ground, and it does not touch the ground being elevated 4 meters above the ground at its lowest point, which will allow air and light to go through; in this way providing better ventilation and illumination to the buildings. The coating materials are different and they are joined to form the shield shape of the shells, they are glass-fiber and ceramic tiles in different colours turning into the shells' final image. These materials were chosen mainly because of their flexibility and ability to create different designs. The glass-fiber is the same used on the precedent Soccer City Stadium, and it has the ability to be shaped and it is translucent, allowing the colours to be shadowed on the ground level, which also will be an interesting effect for the public frequenting the place. Ceramic tiles were used on the Saint Catherine Market's roof¹⁵ in Barcelona, also a roof that was created with a wave format and consisted of different colours of ceramic to create the image of vegetables and fruits sold inside the Market.



Figure 5.19 – Colourful roof of the Saint Catherine Market in Barcelona. Source: Author, 2013.



Figure 5.20 – The interesting mixture of the old classical building with the new roofing. Source: Author, 2013.

The image created on the shells as explained before is a mixture of beadwork and shield's traditional patterns, using traditional colours. According to Professor Odoch and Dr. Donna Pido (Interview, 2013) important colours are blue, yellow and red. Green is not a major colour and white has spiritual meaning. For the architecture

¹⁵ Saint Catherine Market in Barcelona. architect Eric Miralles' project inaugurated in 2005.

The final result can be seen in the site plan and in the sections/elevations drawings (Appendix 1/12 and 11/12) and in the illustrations below (5.5, 5.6 and 5.7), where one can observe the shell's layout plan with its materials, a section of the central metallic arc looking north and the site plan and an elevation of the west side of the project.

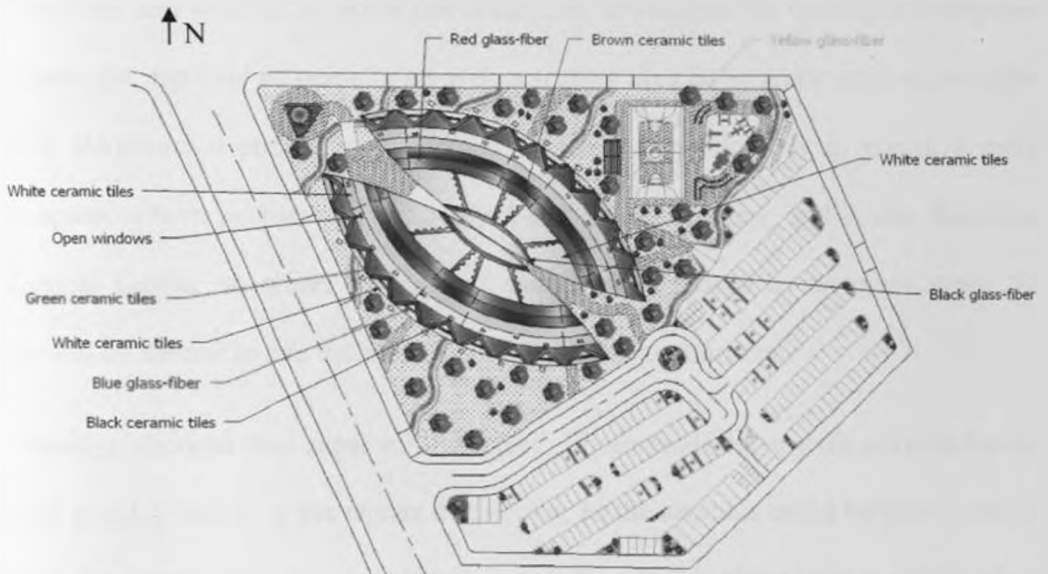


Illustration 5. 5 – Shells' layout with materials on a site plan. Source: Author. 2013.

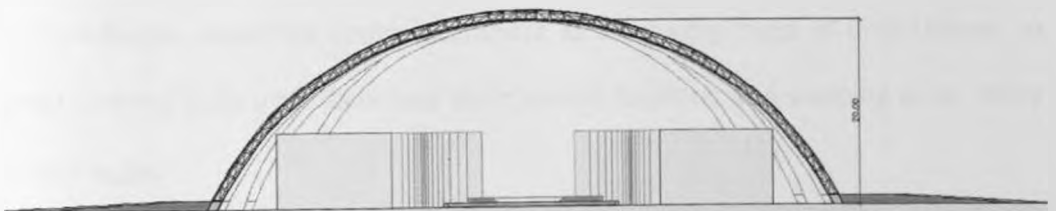


Illustration 5. 6 – Section through the central part of the project viewing the site's north. Source: Author. 2013.

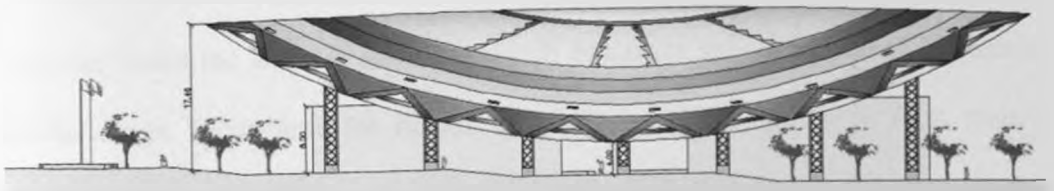


Illustration 5. 7 – Project's west view. Source: Author. 2013.

5.2.2 Site plan and Division of areas

According to Birabi and Nawangwe (2012) the use of circular designs is pivotal to most African cultures because circles symbolize community, togetherness and continuity. Circle also denotes the coexistence between the physical and spiritual realms. Bearing this concept in mind the researcher developed the concept of a central plaza, where one can find an open stage with a seating area in an arena style surrounded by natural elements, a pond and gardens. The use of the pond is to create a more intimate space, where people can seat around and enjoy the view, and it also functions as a physical barrier so when the central plaza will be used as an open stage the audience will be forced to use the seating area and not stand around.

Surveys showed that most of the tribes' homesteads have with several houses around the granary that is in the center of the plot, so the animals could be taken care of. And when the community is agricultural based the houses also create a circle where there is a communal space for sharing and discussing things. Most of the people that still live in villages, have this communal space as the living room of their houses, so they spend most of their time there and their houses function as a sleeping area, where they go to at night.

Consequently the plaza is the focal point of the project; the buildings are around it and facing it. So after the creation of the central plaza and its surrounding buildings, the researcher faced the issue of deciding which functions should be placed in each of the four buildings. First came the decision of splitting the buildings in four, mainly because the number represents symmetry and equality, which means that there is no one better than the other or more special than the other. Then one can ask and say that the Kenyan people are divided in three major tribal lineages, why create four buildings? The answer is simple, there are three main groups but this excludes the whites, the

Arabic, the Swahili, the Indians, the Chinese and others that came to Kenya at an early stage and now belong to the country.

After the concept of the four buildings came the process of developing their functions. Dr. Donna Pido (Interview, 2013) discussed about the functionality of the Cultural Center, and she pointed out four major functions that would be: eat and drink, perform, exhibit and discuss. She added: “you can make it possible to do all of those things in a space that you defined structurally so it lends itself to all of the above functions. Even though in Africa it is not traditional to centralize the whole function, but the idea of centralization is interesting.”

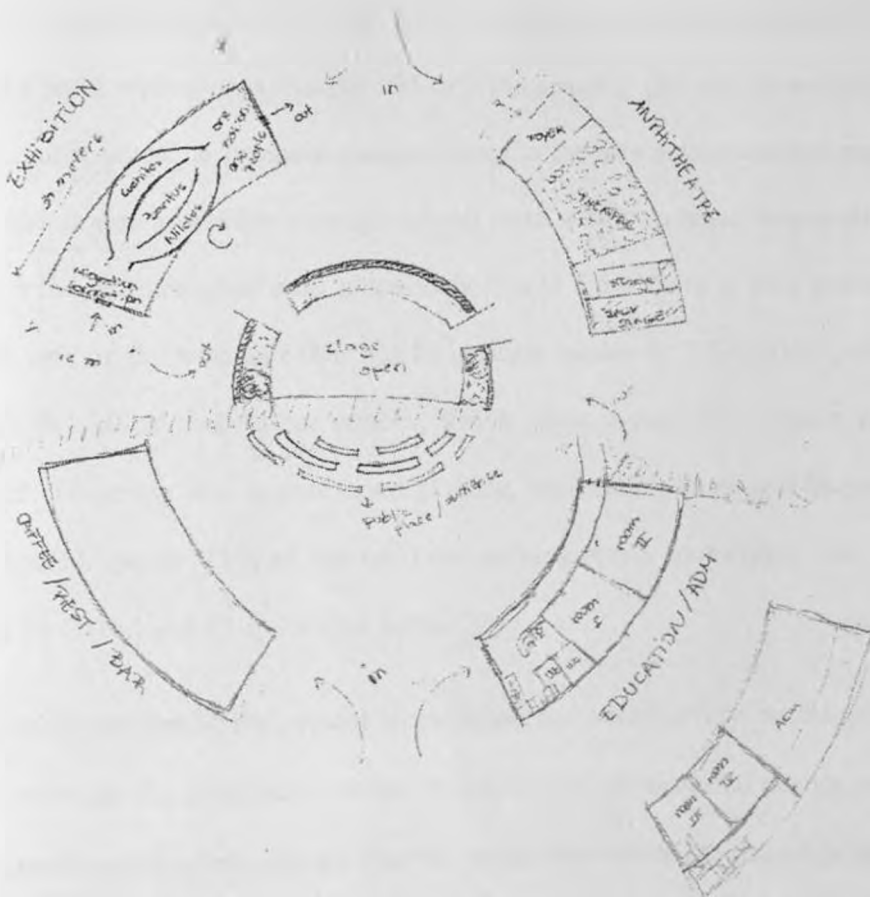


Illustration 5. 8 – The concept of the plaza and the four buildings surrounding it. Source: Author, 2013.

This resulted in the creation of four centres: Exhibition, Amphitheatre, Education and Restaurant. The first one will function as an exhibition and museum area, the second as a space for performing and discussing, the third for educational purpose with classrooms and an administrative area, and the last one for eating and drinking. All of them will be discussed in this text in a later point. Each of the buildings have 656.84 m² of area, divided in two floors, the different one in this regard is the Amphitheatre with 383.86 m², because its first floor does not use the entire slab. The central plaza has an area of approximately 315.00 m² divided into the stage area with 226 m² and the audience area with 53.75 m² fitting 63 people seating.

The site also has a sport area with a playground, multisport court and seating places, with a total area of 1,204.85 m². In the roads' junction corner there is a flagpole area inside a pond with approximately 195 m², this space is not only to welcome people to the side, but it is also to promote nationalism. On the site's southeastern part one can find the parking area accessible through a local road with two lanes, one each side. The street enters the site and goes until a roundabout and from there to two sections of the parking lot, one on the west side that has 54 parking spaces in 2,596.60 m²; and the east side with 3,441.80 m² and 96 car spaces, which gives a total of 150 cars parking on 6,038.40 m². There are also special need parking, motorbike, buses and bicycle spaces. The first has 20 spaces (13% of the total car parking area), motorbikes has 25 (16%), buses with 16 (10%) and 55 spaces for bikes (36%).

Another concept of the project is inclusion and accessibility, so the entire site is accessible through 8% inclination ramps, which is part of universal design patterns for mobility. Another important concept that the researcher wanted to prioritize is the green space, so people can also be attracted to the site because of its green area designed with a local landscape with lots of local trees and scrubs. The paths are done with interlocked

flooring which allow water penetration and it is also considered sustainable. The green area has 10.153,07 m² (approximately 51% of the total site area) and the paths have 2.475 m² (12%). these percentages mean that the project follows the sustainable design patterns.

The concept behind the paths are the idea of centralization, all the paths lead to the central plaza, it does not matter where the pedestrian enters the site they will all be led to the focal point and then from there they can decide where to go or what to see. The site has 4 different levels, starting from the roads' junction corner on the same level of the roads (0.0m) and going down one meter on each level, ending in the east parking area at -4.0m level (see Appendix 2/12 – Site plan).

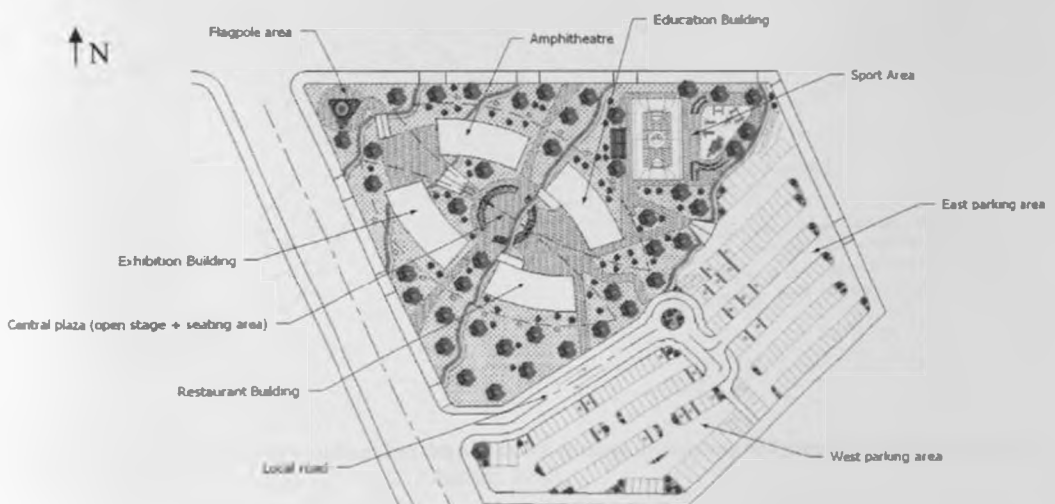


Illustration 5. 9 – Site plan and its division. Source: Author. 2013.

5.2.3 Exhibition Building

The researcher decided to create this building with its layout to showcase Kenyan culture and its history, showing each of the major groups (Bantu, Nilotes and Cushites), then the process of Independence, the Presidents and Kenya of today. According to Nanda (2004) museums also offer a unique vantage point for

understanding the construction of natural narratives and representations of a shared past that are essential in the processes of nation building.” Following this other concept of Museums, the researcher intends to present the Kenyan history since the migration process until today, so people can not only appreciate their own past but also understand their growth and their path in becoming one nation.

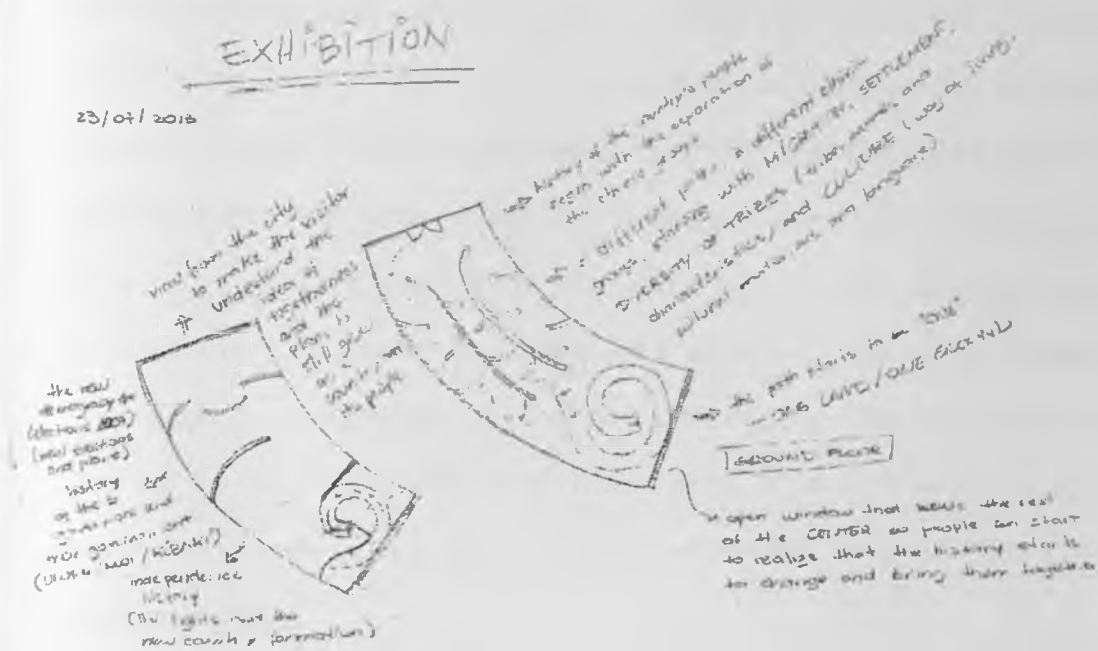


Illustration 5. 10 – The Exhibition building first draft with the concept of creating and presenting history. Source: Author, 2013.

So the building has its entrance on its north side, where one can find a small reception desk, if there will be a need of buying tickets or registrations. From there the observer will find 3 different paths that will start at level -1.0m, the entrance level, and will slowly slide down 45cm with an inclination of 3%. The 3 paths will be developed in 3 different sections one for each of the major ethnic groups of Kenya: Bantu, Nilotes and Cushites. The observer will have to choose one path and walk through it, in each path there are wall doors which one will be able to use to access the other path. Each path was designed with 4 curvilinear walls where different subjects will be shown. The

first curvilinear wall will be for migration patterns, the next for economical activities, and the next for cultural materials and the latter for presenting the smaller groups, their names and their population inside the largest ethnic group. The public will be able to move in between the wall doors to change their path, but also they can go until the end and come back through the other path and in this way visit the 3 of them.

After that the observer will arrive at the Kenyan landscape area, where the main subject is to present Kenya's territory with its mountains, hills, lakes, rivers, land and all. In this area the public will be able to rest from history telling and only appreciate images of the country. The ponds were designed with the same shape of Kenyan lakes, the first one seen is the Lake Turkana north of Kenya, and then Lake Victoria the part that enters Kenya on the west side, and other smaller lakes were also represented in the landscape area. Here one will find toilets and a spiral ramp with 8% of inclination (accessibility patterns) leading to the first floor of the building 2.80m above. The ramp itself is a trip through Kenya nature and beauty, where figures could be coming down the roof and surprising the observer. And this encompasses the ground floor of the Exhibition building.

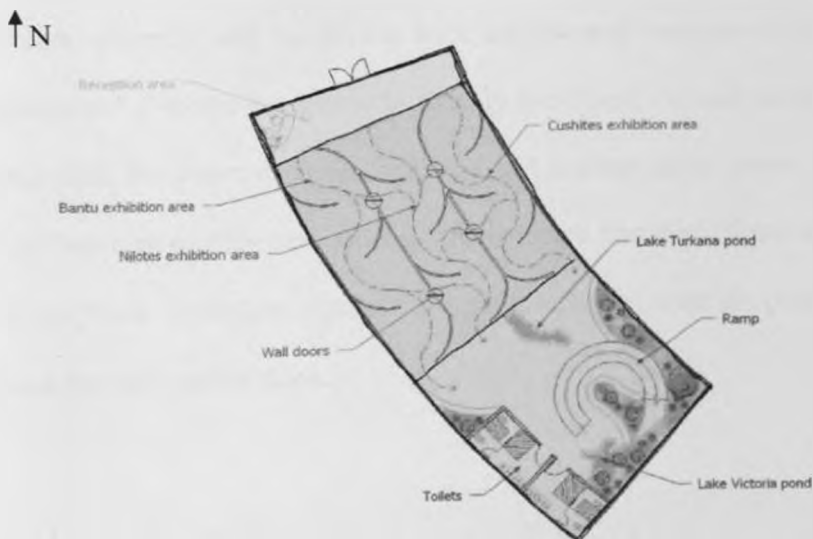


Illustration 5. 11 – Exhibition building ground floor layout. Reception area (yellow), ethnic groups' exhibition area (blue) and Kenya landscape area (green). Source: Author, 2013.

Going up the ramp will lead to the building's first floor, where one will arrive at the "Process of Independence" exhibition section. Here one will observe the path that led to independence, the Mau Mau movement, and the leaders that were arrested during this period of time, and the politicians that were fighting for independence and the Independence in 1963. Passing through this area one will be guided to the next section where the exhibition will show the nation building during the first 3 Presidents of Kenya period: Jomo Kenyatta, Daniel arap Moi and Mwai Kibaki. This area consists of 3 curvilinear walls, one for each period and its history.

Then one finally arrives at the last stage of the exhibition that is "Kenya of today", where one will find the process of the new constitution, today's President Uhuru Kenyatta, and the current process of nation development including Vision 2030. And it is in this section that the observer will find a big glass wall in front of him with a view of the city outside; one will see Langata road and its surrounding including Kibera area. This was designed so that the final goal of the exhibition is to make the observer think about the environment, the development and the nation building. Here one will be in front of a window where he will be able to look outside and analyze where he is now, where he is going and if where he is now is already good or it can still be improved. So the entire route that the observer took until the last section is to create in them the appreciation of their past so they can construct their future and think about what that can be and how to get there. The glass window is a perspective of what the past led them to and from there what else can be done.

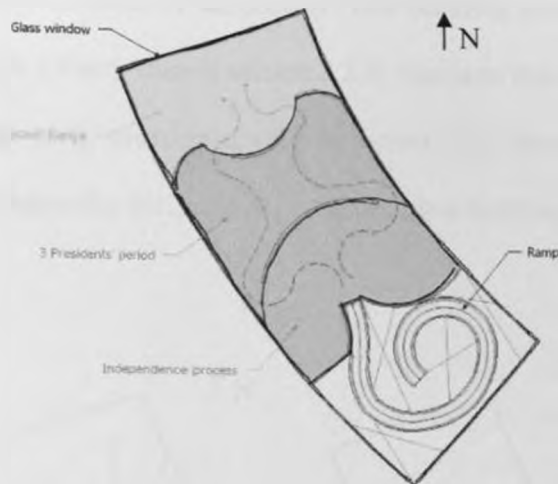


Illustration 5. 12 – Exhibition building first floor layout. The three major sections and the glass wall. Source: Author, 2013.

The exhibition itself was not designed here, only its concept was created, mainly because the exhibition design would need another project alone. But ideas of using visual and audio materials and the concept of user experience are the important factors in this concept. Creating spaces where the public can be surprised and developing in them the impulse of discovery. The route is intended to create in the public first the understanding that they are different from each other but yet they coexist (3 ethnic groups' history telling paths), then the appreciation for its communal territory and the riches of the land (Kenya landscape area), and then create the idea of unity, of becoming one nation through the Independence process, the 3 Presidents and the today's development with the new constitution, new President and Vision 2030. And finally develop in them the curiosity about the future and the desire to become a nation rich in past culture and traditions and united for better living conditions for all in the future (glass wall).

The entire design of the Exhibition building was based on spiral and concentric circles, the meaning of which was explained in the former section (5.2.2). Dr. Donna Pido also covered this subject in her interview (2013) saying that those are the African

symbols and universal symbols of unification. This building also borrowed the main concept of Alexandria Library (thesis section 2.3.2) that is to draw attention from both external and internal parts, creating a very important link between architecture and interior design (see Appendix 3/12 and 4/12 – Exhibition building layout and technical plan).

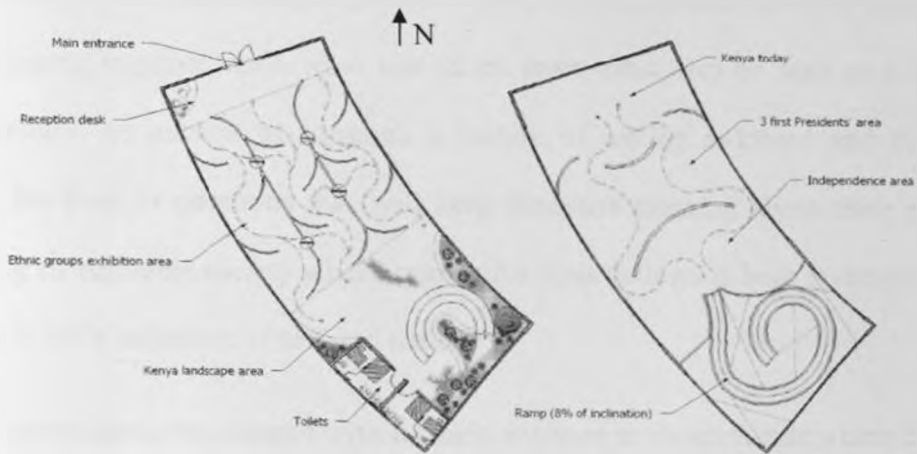


Illustration 5.13 – Exhibition building design layout, ground and first floors' plan. Source: Author, 2013.

5.2.4 Amphitheatre Building

This building was driven by the discussions of nationhood and of the need of finding a place where discussions around this subject and others could take place. Interesting spaces for open discussions found in Nairobi are: Nairobi National Museum of Kenya using its amphitheatre, Goethe-Institute of Kenya, Alliance Française of Kenya and sometimes at some universities' spaces. The creation of the Cultural Center amphitheatre was mainly for this practice of discussions and speeches; however, the same space could also be used for performing arts.

The idea of creating a space for further discussions about culture, tradition, nationhood, nation building, national identity and other subjects around urban planning

and development; was the main intention of this building, a space offered to the society to hold open discussions and debates. Nyairo and Hossfeld (2010) on the event held by Ford Foundation and Goethe Institute of Kenya in 2008 to discuss Kenya identity, culture and freedom around the 2007 post election said: “This endeavor to remember – looking at Kenya from historical perspective – and at the same time to try to contribute towards bringing together again what has fallen apart must also be seen as a space-clearing gesture; an attempt to entrench a culture of asking awkward and difficult questions, the kind of questions that will keep Kenyans thinking about their role in constructing an equitable society where respect for their fellows is both instinctive and paramount to their definition of self and nation.”

So the building was created with its main entrance in its north side where there is the foyer, with a reception desk and toilets. Then one will find the sliding doors for the amphitheatre itself consisting of 11 rows with 15 seats in each one of them and the 12th with 5 seats and 9 wheel chairs seats (5% of the 170 seats). The amphitheatre has capacity to accommodate 179 people in the audience with a big stage of 53m². The rows are accessed by a ramp on its two sides with 8% of inclination. The seats have cantilevered support following the dimensions given by Metric Handbook (1968: last edition 2008) chapter 33 – Auditoria. Also based on the Metric Handbook, an emergency exit door has been created on the east side with a width of 2.20m.

Total exit widths required by legislation	
Numbers of people	Minimum total exit width (m)
up to 200	2.2
201-300	2.4
301-400	2.8
401-500	3.2
501-750	4.8
751-1000	6.4
1001-2000	14.4
2001-3000	20.8

Table 5.1 – Total exit widths in an Auditorium required by legislation. Source: Metric Handbook, 2008.

The backstage area has 2 changing rooms with toilets, and storage for scenarios in case of the use for performing arts such as theatres, musicals, dances and others. The first floor of this building is dedicated for staging technical support, in this case related with acoustics, sound and lighting. This floor can be accessed via a spiral staircase in the reception area; the use of the stairs is specific of the technical support team consisting of 8 to 10 people. Up the stairs one will first reach the sound and acoustic space, after which there are 3 translation cabins to be used when debates and lectures require, and then at the end there is the lighting technical area, all of which made up the whole amphitheatre area (see Appendix 5/12 and 6/12 – Amphitheatre layout and technical plans).

The concept of the amphitheatre was basically related with public debates and discussions. The idea of having performing arts held in this place came later, so the interior design would be necessary to be developed in another phase of the Cultural Center project having in mind acoustic and lightening and that is also why this building does not have openings (windows) on its west and east side where the amphitheatre itself take place so it would not interfere with interior design of the space. The openings (windows) are located only in the foyer, the backstage and the upstage areas.

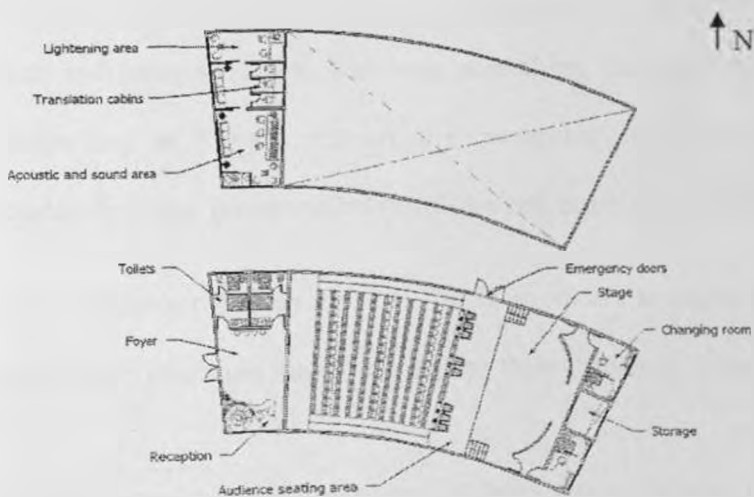


Illustration 5. 14 – Amphitheatre building layout plans, ground and first floor. Source: Author, 2013.

5.2.5 Education Building

In the process of globalization and modernization many traditional and cultural material of Kenyan people have been lost. One of the main purposes of creating this Cultural Center was to preserve and honor the culture of the Kenyan ethnic groups and, in line with many scholars' opinions, the project is intended to preserve through the educational system, teaching people many aspects of their culture such as dance, music, craft, history and language.

Nganga (2006) stated that much of the tangible and intangible culture of Kenya has now considerably changed with new circumstances which required that all ethnic communities be incorporated into the new Kenyan nation with its structures of representation, defense, economic, social and political integration as well as centralized administration of the country. In other words, the country is in the process of modeling itself into one national Kenya entity. This is a natural occurrence, and many other cultures around the world pass through it, however, the researcher¹⁶ was driven by her own experience in Brazil where in the beginning many indigenous people existed and now they have all mixed and intermingled with other people and most of their traditions and cultural materials lost in the process. And an example of this lost material is that in Brazil no one speaks dialects just some small groups in rural areas that still live according to their indigenous culture. This was something that the researcher did not want to see happening in Kenya, instead, the researcher would like to create an environment conducive to the preservation of culture and enriching of knowledge.

To Professor Rukwaro (Interview, 2013) it is important to encourage students to have empathy with their literature and to document their culture in whichever form, so

¹⁶ The researcher home country is Brazil, central-west of Brazil where still some indigenous people preserve their land and culture.

people start learning and understanding more about it. In order to preserve culture it needs to be taught and appreciated by its own people and according to Mr. Mayenga in his interview (2013) language is the mother of all cultures, and by learning each other's languages culture can be spread, understood and respected.

And it was on this basis that the Education building was created. It was divided in two floors with different classrooms and also an administration center to manage not only the Education building but the entire Cultural Center complex. The idea was to create classrooms for music, dance, craft, language and history that later can be managed in different ways, with temporary or seasonal classes on different schedules where people could go for short or even long periods. This part of management will not take place in this thesis; it would also need another program to be done appropriately and according to what people are looking for to learn.

EDUCATION - ADM

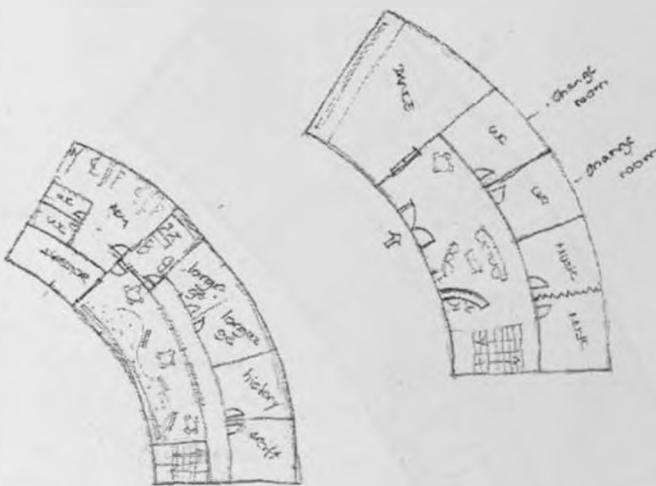


Illustration 5. 15 – Education building draft and creation of spaces. Source: Author, 2013.

After the concept of what would be needed in this building the researcher also included a small specialized Kenyan library into the framework. So the entrance of the

building is located on its west side leading to a reception area on the ground floor. Right beside the reception desk there are two changing rooms and the library on the other side. The library was created just with bookshelves, in order, to force the public to search for their books and after finding them move to another location in the site area to read, and after doing so return the book to the reception desk. The library will be open, so anyone can go in and borrow books for the day period of time only, and the outside area also invites people to seat or lay around to enjoy reading a book. This is the concept of the library; however, the management of the place would need more detailed studies and preparation that will not be done in this thesis.

On the other side of the library there is the dance classroom with approximately 42m² that can be divided using a folding wall in the middle and then function as two different classrooms. In front of the sliding entrance doors of this room, there is a small stage which one might need to use to teach the class and observe the students. The changing rooms next to it will be used for showers and storage.

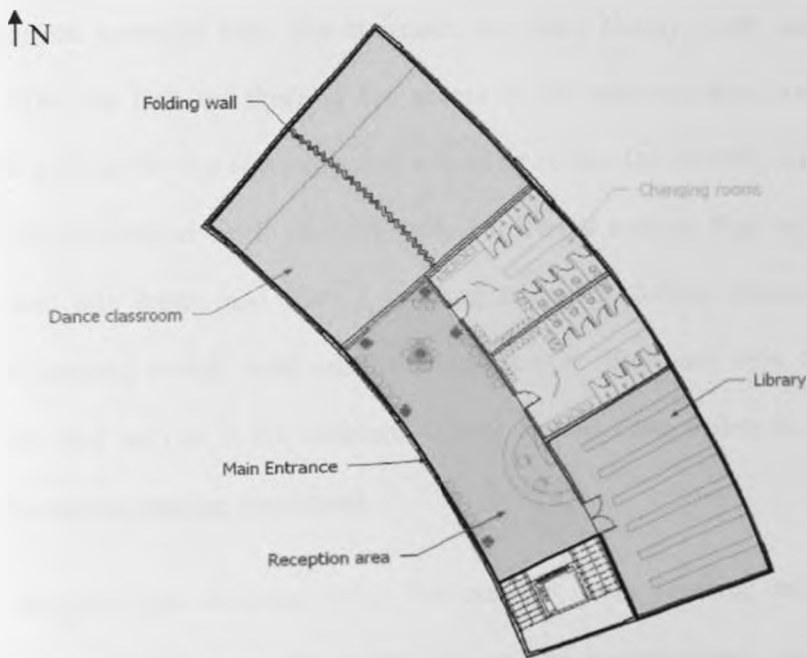


Illustration 5. 16 – Education building ground floor layout. Source: Author, 2013.

This is the only building in the entire complex that uses stairs and elevator to access its first floor. This type of accessibility wasn't the ideal for the Cultural Center, since every building only has two floors and the use of elevators would economically enhance the project. So the researcher used this option on this building mainly because this will be one of the most visited one, and young and elderly people are the main target here, since they have more free time to enjoy extracurricular activities. The stairs were developed in two stages going up 1.50 meters each reaching the next floor up 3 meters. The elevator was designed in between the staircase and it has capacity for 6 people at a time. The use of the elevator was to provide accessibility to all groups targeted including the public with special needs (universal design pattern).

First floor was designed for comfort of the users, having classrooms on the east side, and a veranda/terrace on the west side. The classrooms have different areas and different furniture according to their purpose. The classrooms were divided into: music, the first classroom accessed after the staircase, and then history, craft, and language classrooms. After the last one there is the access to the administration area, first the reception with a place for the secretary and a waiting room. On entering a sliding door there are the administration work stations, with 7 different stations that can be divided by building and site areas, and also a meeting table for further discussions about programs and special events held in the complex. On the other side there is the director's room and next to it the cafeteria. There are also two toilets in this area to better serve the administration personnel.

The veranda was designed with the concept of a relaxing and enjoyable environment, where after some class one can go for conversations and discussion around the subject learned or even just entertainment. The veranda will overlook the central plaza, and the green environment provides the comfort intended. The garden

design was created as a physical barrier so the students will be able to see down, but won't be able to go close to the edge that was also protected with a handrail. The place setting consists of round tables and chairs and is separated from the classrooms' corridor through a glass wall with two sliding door entrances, one close to the elevator and the other close to the administration area.



Illustration 5.17 – Education building first floor layout plan and its divisions. Source: Author, 2013.

Illustration 5.17 shows the different layouts of the classrooms according to their function, it is important to notice that the music and craft classrooms have different configurations and furniture. The concept of the classroom settings serves its function, music and craft do not need fixed furniture or layout, it can be arranged according to the students' needs. Tables can be moved around and shifted, circles can be created or even formal settings can be done. The two subjects are free and the ability to create new configurations also awakens students' creativities. The students are arranged in doubles the same way as the other two classrooms; history and language. The difference is that in the latter two the furniture is fixed and formal.

History and language classrooms fit 15 students and one teacher in a formal setting with a blackboard, the craft classroom fits 16 students and one teacher in an informal setting with a blackboard and the music classroom serves 20 attendants including the teacher (see Appendix 7/12 and 8/12 – Education Building layout and technical plans). The discussion about the different furniture will be seen in section 5.3.

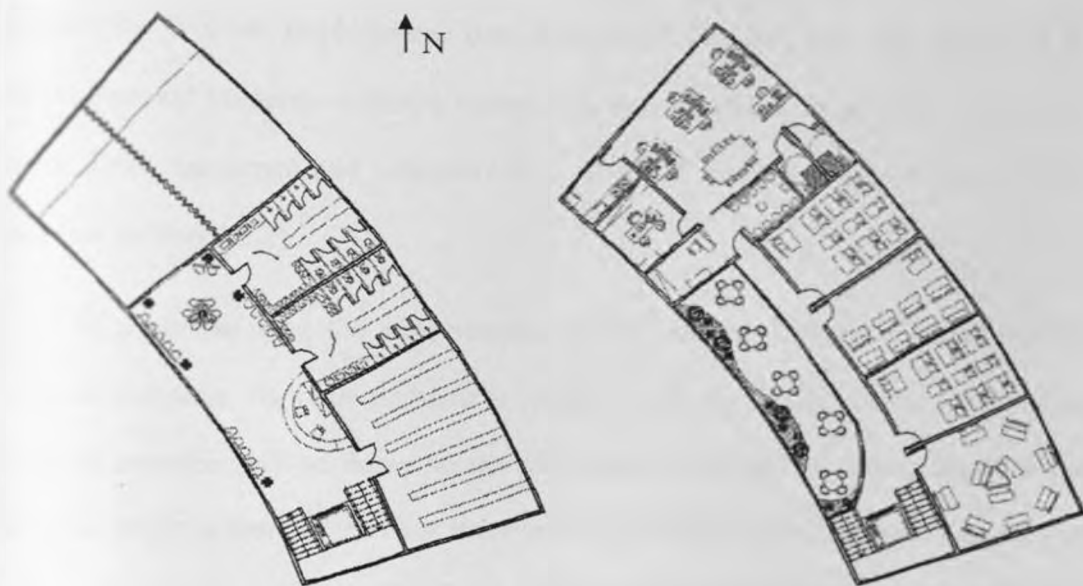


Illustration 5.18 - Education building ground and first floor layout plans. Source: Author, 2013.

5.2.6 Restaurant Building

Another important characteristic of the Kenyans independent of their ethnic groups is their appreciation of eating and drinking. Most of their ceremonies are related to eating and drinking, and also communal discussions touch this matter. Dr. Donna Fido talked about this subject in her interview (2013), she reported that she was involved with a cultural center project in Maasailand around 20 years ago, and while they (the experts that were going to design the center) wanted libraries, exhibition space and performing area, the Maasai people for whom the center would be created, wanted

nyama choma (barbecue) joined with bottles of beer. That was and still is their concept of gathering together to spend time and also discuss issues.

After visiting Bomas of Kenya on a weekend the researcher also understood the Kenyan appreciation for eating and drinking. Bomas received most of its public on a weekend because they promote a nyama choma lunch and after that dance and music presentations in their amphitheatre (see section 4.2.1). This also was observed in Nairobi National Museum of Kenya where after renovation the designers and architects created a new restaurant and cafeterias as a matter of inviting people to frequent the place (see section 4.2.2).

In a similar way the last building created in the Cultural Center was the restaurant building. Its main entrance is located on its north side. Beyond the sliding doors the attention will be drawn to the curvilinear ramp and its surrounding gardens and pond. Right in front of the door there is a small cashier and immediately an array of tables and booths (see section 5.3). The booths are designed to accommodate 3 different settings: for 4, 6 or 8 people. There are 15 booths of 4, 6 booths of 6 and 2 of 8. The total number of public served by the main restaurant is 112 people at ago. The restaurant can work with an a la carte menu, or even as self service where the table placed against the kitchen wall can be used. The restaurant can also work with event and catering services.

There is, on the ground floor, the kitchen area, where there are two entrances/exits. The one on the north side enters a hall that leads to a cloak room, and then enters the corridor where there are first the food storage, in front of the cold chamber and additionally, the utensils storage. Then there are two doors, one that leads to the preparation kitchen and the other to the cleaning kitchen. These two are separated

and the only connection is made possible by a small window, where one will pass the dirty utensils used in the preparation of food to the cleaning area. The cleaning kitchen is also accessed from the outside of the building, and this opening will be used for supplying the restaurant kitchen. There is another corridor accessed from the restaurant area on its south side, which will be used as a dirty path that means that all the dirty materials in the restaurant will enter this side and go directly to the cleaning kitchen. The preparation kitchen has two sides, one for cooking and the other for preparing the plates, this part can be accessed from the hall and from there leads directly to the customer place (clean path).

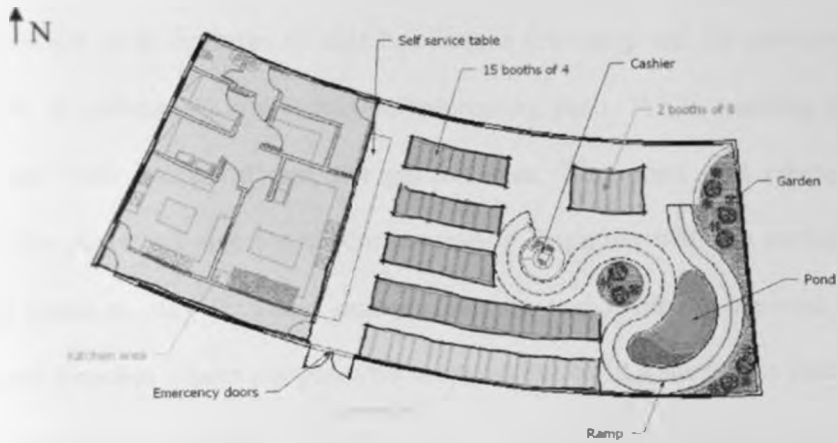


Illustration 5. 19 – Restaurant building ground floor layout plan. Source: Author, 2013.



Illustration 5. 20 – Kitchen layout plan. Source: Author, 2013.

Arriving on the first floor there is the seating area of the coffee shop, placed on the northeast corner. The coffee shop has a serving area and a small kitchen for preparation of sandwiches, salads and fast dishes. It serves 12 round booths of 4 people each, for a total of 48 people served at once (see section 5.3). In front of the coffee shop there are toilets and right next to it, there are two cultural material shops, for selling of products produced in the Cultural Center. The shops have glass wall facades and swinging door entrances. The building is surrounded by glass walls, big windows where the public can view the outside and interact with it.

One of the main features of this building is the ramp and its surroundings. The ramp has 8% of inclination and it has an interesting path. While walking through the ramp one can view the pond and the garden area. The pond was created to bring humidity to the place and also for aesthetic reasons. Together with the garden it forms a comfortable place to stay in while enjoying eating and drinking. Around the garden were designed benches where people who are working or in a hurry can seat to wait for take away food (see Appendix 9/12 and 10/12 – Restaurant Building layout plan and technical plan).

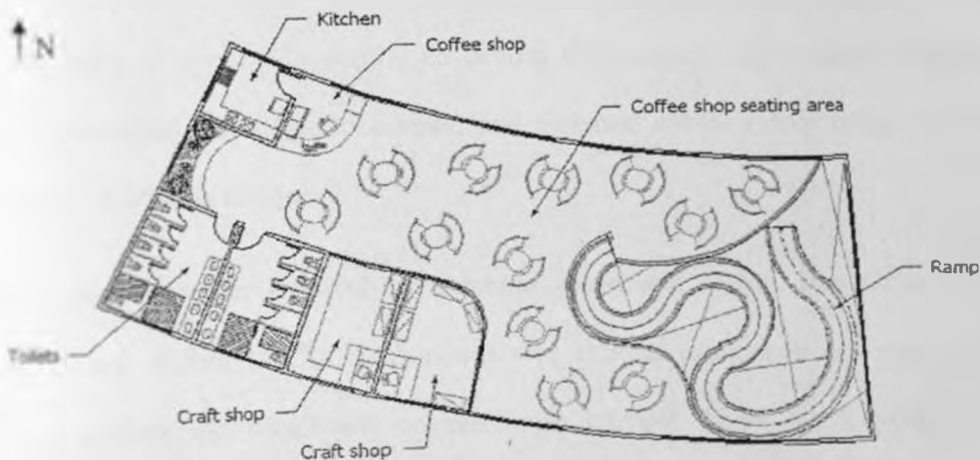


Illustration 5. 21 – Restaurant building first floor layout plan. Source: Author, 2013.

5.3 Furniture Design

In order to create furniture and avoid the obvious selection and redesign of existing tribal furniture pieces, the researcher main idea was to bring attention to another important activity and cultural material seen in Kenya, and that is the cotton made textile. It was not treated anywhere else, so the researcher decided to use it on the furniture. The colourful textile produced in Kenya and worn by their people are called *khanga* and *kitenge*, the first most used by Muslim women and the latter most used by Africans. According to Mangieri (2006) *khanga* is characterized by a border on each side of the cloth and the inclusion of text printed in a narrow box in the bottom third of the fabric. The text, which may include a proverb, insult, flirtation, or political slogan, was printed in Arabic on the earliest *khangas* of the late nineteenth century and appears most often in Swahili today. *Kitenge*, by contrast, is the East African version of wax cloth sold throughout sub-Saharan Africa. It is traditionally made by batik technique and its prints sometimes have meaning and slogans.

The architecture lecturer who was supporting the researcher in the focus group (2013) also touched on this subject. He said that in his tradition *kitenge* is used for men and *khanga* for women and the latter comes in long clothing so one can cut and use to make any type of dress. He continued saying that *kitenge* has organic shapes and *khanga* geometrical and organic shapes, and finished assuring that these have now become part of what is Kenyan.

So the researcher decided to combine wood and textile, two abundant raw materials found in Kenya. The combination was created using seats and structures of wood and pillows and backboard covered with *kitenge*. There are 5 types of seat developed by the researcher and they are for different functions and follow the same main idea but in different designs.

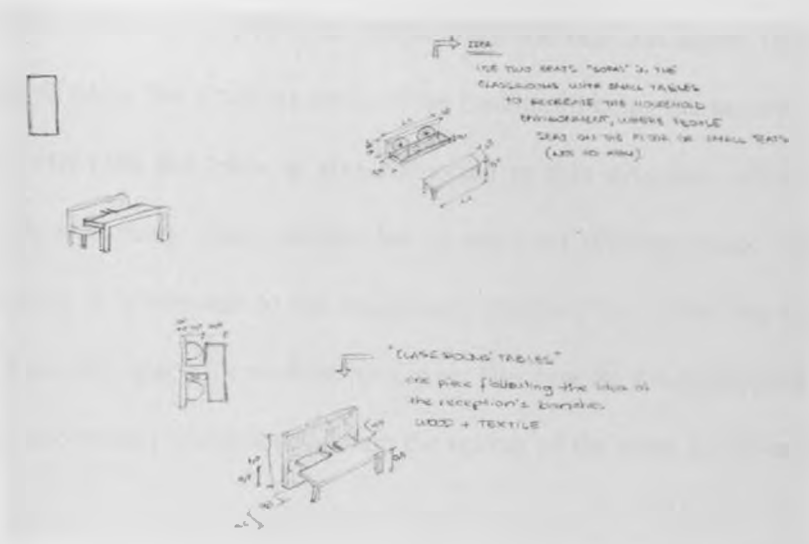


Illustration 5. 22 – Classrooms’ furniture drafts. Source: Author, 2013.

The first one developed was the receptions’ areas benches; the backboard was also used as the structure that sustains the benches, these ones are made of wood with pillows in wooden colours. The benches are separated from each other functioning as stools. The backboard is covered by kitenge and draws attention as it stands in contrast with the neutral painted walls. The interesting part of these benches is that they can arrange as many seats as needed, from a minimal of 2 up to 5 and they can be played around with in the room and set in different layouts (see Appendix 7/12 – Education Building ground floor layout).



Illustration 5. 23 – Reception’s benches with its measurement. Source: Author, 2013.

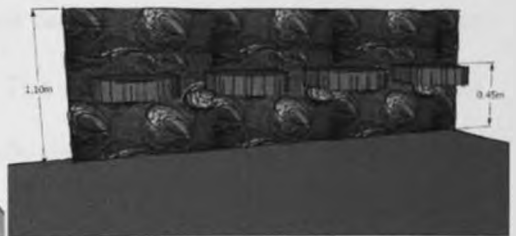


Illustration 5. 24 – Reception’s benches front elevation. Source: Author, 2013.

The second created was the classrooms’ furniture in two different typologies. One is for formal settings inside the classroom, which means that this one is fixed and

not rearranged. It was developed with double seats and one seat alone. They followed the main idea of using the wood structure of the backboard being the same to sustain the seats and in this case the table is also connected to this structure, which leaves the furniture with two sides, each student has to enter on different sides. The table as explained before is connected to the backboard structure but it also has its two front legs, leaving enough space for students to slip in. This typology was designed to be used by language and history classrooms where the setting of the room has to be formal and straight.

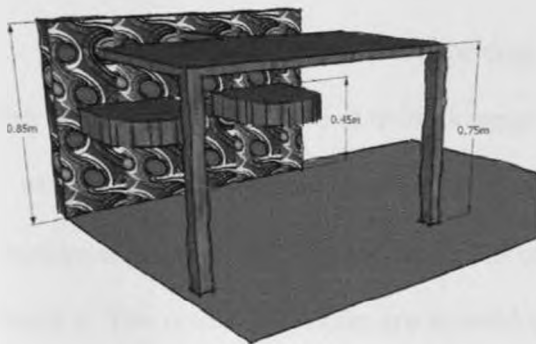


Illustration 5. 25 – Fixed furniture used in language and history classrooms. Source: Author, 2013.

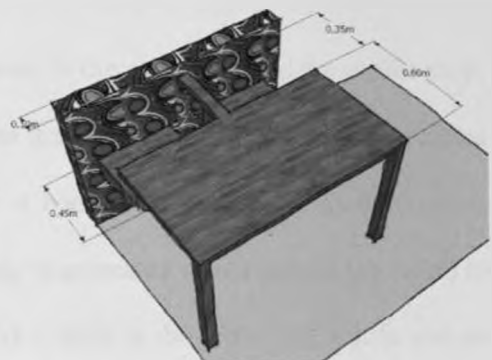


Illustration 5. 26 - Fixed furniture and its dimensions. Source: Author, 2013.

The other typology was created to be used in the music and craft classroom where there is no need to be formal, and creativity can also be applied in the room's arrangement. The furniture was developed based on the idea of mats, which is another important cultural material found in Kenya. The different ethnicities that use mats usually use them for the seating area where gathering of people occurs. They are used directly on the floor and sometimes they can be used as mattresses as well. Inspired by this idea the researcher designed the furniture as a mat on the floor, so the first wood structure mimics a mat with pillows covered by kitenge. Then there is the backboard

also done with wood structure and with pillows in kitenge. The short wood four-legged table is not fixed and can be arranged the way the students want.

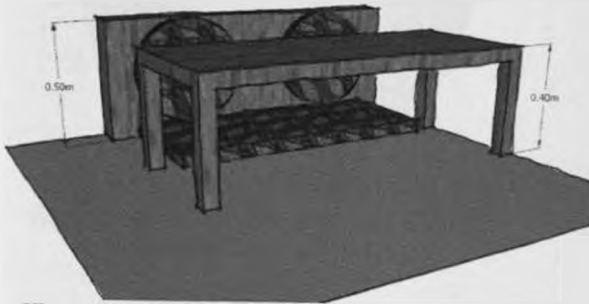


Illustration 5.27 – Music and Craft classrooms' furniture. Source: Author, 2013.

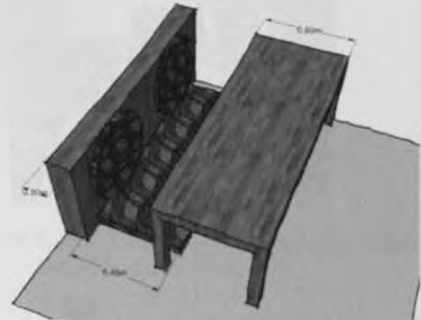


Illustration 5.28 – The mat inspiration and the idea of mobility. Source: Author, 2013.

The last ones developed were the ones used in the restaurant and the coffee shop. They follow the central idea of using kitenge on the backboard and the seats and tables in wood. In this case the backboards create a booth, and one backboard structure functions to sustain both sides of seats. The table is separated with a central leg (wall) to sustain it. The restaurant booths are squared with a table in the center and a sofa seat on the table's right and left sides. There are 3 typologies used by the restaurant, one for 2 persons on each side, meaning table for 4; the other for 6 persons, 3 each side; and the last one for 8 people.

The coffee shop furniture was designed also to create these intimate booths, however, the shape is rounded. The 1 leg table in the center and surrounded on both sides by seats for 2 persons each, producing in this way booths of four people. There is no other typology. The interesting point of this furniture is its round shape that can be placed in different arrangements, and the seat's entrance can be facing different parts of the building. It is also done with a backboard structure in wood and covered by kitenge and wood seats with wooden colour pillow, and the central wood table.

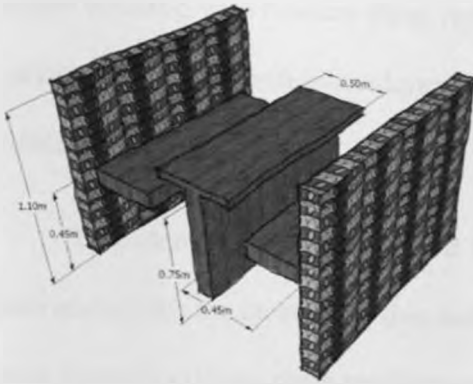


Illustration 5.29 – Restaurant furniture creating intimate booths. Source: Author, 2013.

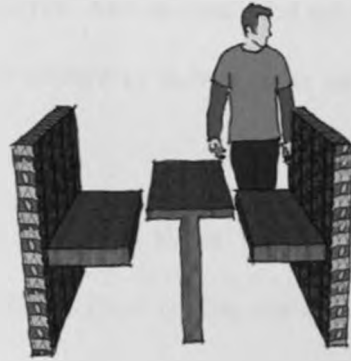


Illustration 5.30 – The restaurant furniture and human scale. Source: Author, 2013.

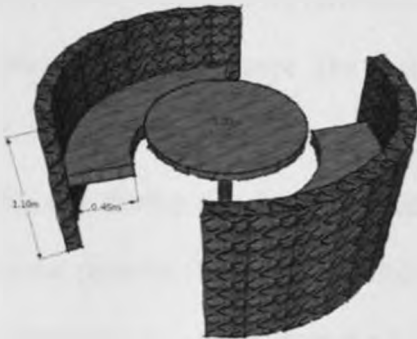


Illustration 5.31 – Coffee shop round booths. Source: Author, 2013.



Illustration 5.32 – Coffee shop furniture and human scale. Source: Author, 2013.

5.4 External Wood Wall

After the creation of the shield shells, the researcher found the need to design something closer to the public eyes; something that the children could play with and adults could be inspired or just curious about. After some research related with user experience and design of interaction, and some architectural precedents the researcher created what was called an external wood wall.

Alexandria Library (thesis section 2.3.2) used letters and words in different languages on its external wall. The words were carved and the public can touch them and feel their marks on the wall. One student in the focus group (2013) got impressed by this wall, and said that the letters on the wall show different cultures of the world, which makes the Library not a building similar to the Egyptians' pyramids, but actually a

modern building with modern ideas representing Egypt. And he concluded advising the researcher to use something unique from Kenyan culture to show aspects of Kenyan architecture and tribes.

Precedents from China World Expo 2010 and South Korea World Expo 2012 were studied for the creation of this concept. The World Expo is a big world fair, where many countries design their pavilion to draw attention of the public and later brand the country to the visitors. Two references were taken from these fairs as inspiration for the external wood wall concept. The first was the Poland Pavilion in Shanghai World Expo 2010, the building looked like a box that had parts cut out of it by hand (Maxiewawa, 2010), and during the day the exhibition hall was filled with light filtering through paper-cut patterns (Shanghai – Cultural China, 2010). And in Yeosu World Expo 2012, the inspiration was taken from the Lithuania Pavilion, the idea behind this pavilion was to put the visitors inside of a large bead of amber. Amber is referred to as the gold of the Baltics, and it is an inseparable part of the Lithuanian culture (Exhibitor Magazine, 2012). The façade of the pavilion was treated with the word “Lithuania” in different languages and printed in different fonts.



Figure 5. 21 – Poland paper-cutting patterns’ pavilion in China World Expo. Source: Shanghai – Cultural China, 2010.



Figure 5. 22 – Poland World Expo pavilion illuminated during the night. Source: Shanghai – Cultural China, 2010.



Figure 5.23 – Lithuania pavilion main entrance.
Source: Exhibitor Magazine, 2012.



Figure 5.24 – Lithuania pavilion in South Korea World Expo 2012. Source: Exhibitor Magazine, 2012.

After seeing these references, the researcher created an external wood wall placed in all the buildings on its larger sides. The main intention behind these walls was to create a structure which people can relate to and even play around, maybe by taking pictures or exploring the structure heights. There are 4 buildings in the Cultural Center complex, each one of the buildings consists of 2 external wood walls on its largest sides, one with the names of the sub-tribes and the other with some random words in the tribes' dialects and languages. The words will be mingled with the curvilinear wood structures of the wall, which will complicate its reading at first sight and which will instigate and increase curiosity of the user.

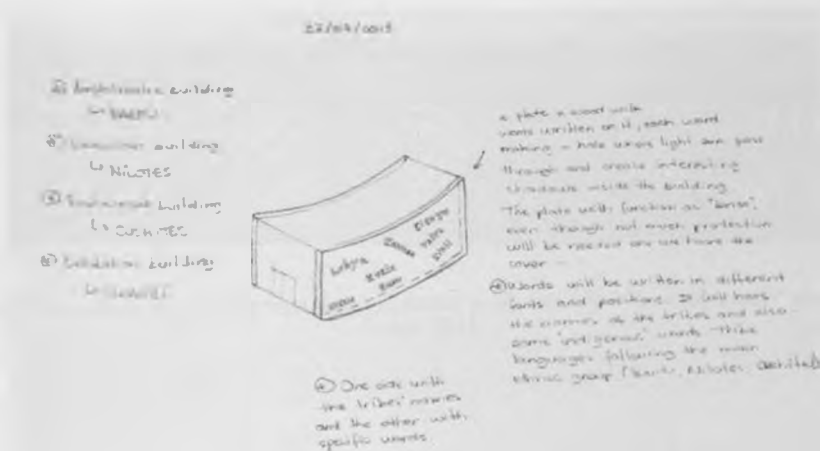


Illustration 5.33 – External walls conceptualization and draft. Source: Author, 2013.

The walls that are turned to the external area of the site will have the tribal groups' names, and the ones turned to the central plaza will have random words in each of the languages. The one facing the plaza will have different configurations, mainly because of the entrances of the buildings that ask for creative solutions of the wood wall, as the one from the Education Building that will become a handrail at some height (see illustration 5.35).

So the division of the words on the walls was done following the circle of the buildings. The Exhibition Building was designed with written words and sub groups' names of the Nilotes. The Amphitheatre Building with Cushites names and words and the Education Building was written with Bantu names and words. The final building the Restaurant was also designed with these external walls, however, the words and names here will be done in the languages of the other people that live in Kenya who contribute to this country's identity; some are Arabic, Indians, Europeans, Swahili and more. In these walls tourists will be able to identify words and their meanings, in contrast, with the other 3 buildings' walls where foreigners will have to interact with residents to understand their meanings.



Illustration 5. 34 – Exhibition building west facade. External wood wall with Nilotes sub-groups' names. Source: Author, 2013.

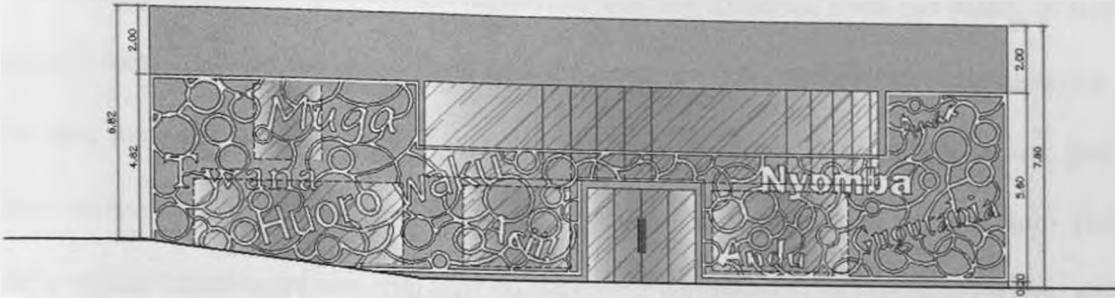


Illustration 5. 35 – Education building main facade facing the central plaza. Source: Author, 2013.

Another point for the use of the external walls, mainly on its outward sides, was to function as a sun barrier and protection joining the other concepts of interaction and aesthetics. The material used is abundantly available in Kenya that is reforested wood. So the researcher developed the concept of the external wall, but only special cases will be shown in drawings (see Appendix 12/12 – Elevations).

5.5 Cultural Center Materials

Some of the materials used in the structure of the Cultural Center were already explained and studied. The buildings were done with ceramic bricks, glass walls (openings), plaster internal finishing and metallic roof. Flooring was done with wooden finishing and wet areas with porcelain paving and walling. These materials are locally available and easily worked with.

Concrete benches were used on the external areas of the Cultural Center, the ones in the central plaza and in the sport area. The external paving was done with interlocked blocks and the garden with grass, bushes and trees. The ponds are done in concrete with different colours of tiles to create its designs. Materials also abundantly found in Kenya. The ones used in the composition of the shells (project thesis section 5.2.1), are colourful glass-fibers, colourful ceramic tiles and metallic arc' structures to sustain the shells.

It is important to present the materials that are different from the usual, in this project's case they are the glass-fiber and the ceramic tiles used in the shells covering. The first that was studied came from the Soccer City Stadium in Johannesburg (see thesis section 2.3.3) and its flexibility and conformability helped in its selection. The shells needed translucent material that could create geometrical and organic images and could also be done in different colours to complement the design.

Lanxess (2010) said that the Soccer City Stadium has the most outstanding feature with its innovative and intelligent façade concept that impresses on both a technical and aesthetic level. "It was possible to make this unconventional design a reality thanks to the input of German/Austrian company Rieder Smart Elements, which supplied fibreC elements for the 28,000m² outer cladding of Soccer City. In total, 2,100 modules each consisting of 16 fibreC panels were used to construct the façade." The glass-fiber used in the Cultural Center project would need to be translucent with glass property in this regard. The colours used were red, yellow, black and blue pigmented in the fiber.



Figure 5. 25 – Soccer City Stadium coloured glass-fiber façade. Source: Lanxess (2010).

The ceramic tiles were used on the covering of the Saint Catherine Market in Barcelona, Spain. It was conceptualized by Eric Miralles in 1995, and completed in 2005. The use of coloured ceramic tiles for the restoration of the market roof drew

attention of not only the local public but also of the architecture professionals all over the world. The roof was done with different waves and cladding with ceramic tiles in different colours creating images of fruits and vegetables. According to Vacca and Avellaneda (2010): “this example of a roof is a unique case of restoration. It is a multi-laminated, curved, wooden roof clad with a mosaic (pixels) of gleaming hexagonal, extruded stoneware tiles glazed in 67 colours. Seen from the air it is a true work of art right in the old part of Barcelona.”

In Miralles' project the ceramic was personalized and pierced together in order to create the proper image. In the Cultural Center project the ideal would be to work in the same way, with personalized ceramic pieces placed together in a puzzle creating the final image of the shells. This material was also used because of its flexibility, dynamic shapes and modeling aspect. The proper size and shape would need further study; however, the colours were already selected: white, black, green and brown.

The selection of ceramic goes beyond its plastic values and reinforces sustainability and high technology following Vacca and Avellaneda (2010) analysis that contemporary architectural tendencies seem to be reincorporating the values of the external covering, of the language of architectural expression interpreted by the outer layer of buildings and special care will have to be taken so that artistic and plastic values can be fully integrated with the new high technology products which express the language of architectural ceramics.



Figure 5. 26 – Saint Catherine Market roof project.
Source: Eric Miralles, 2005.

5.6 Conclusion

“Architects should create a unique Kenyan aesthetic value in the colour, form, textures, shape, patterns and proportions to develop the cultural constants of Kenyan architecture. It is these encompassing qualities that communicate the Kenyan culture and nature through symbolism in the built forms.” (Rukwaro, 2012). After all the concept explanations the researcher created the landmark of the Cultural Center having in mind the Kenyan culture and traditional principles. A lot of symbolism and meanings were added to the structure with a strong connection with Kenyan people.

As shown before every detail was based and founded on Kenyan traditions. The researcher intended to find the national design identity, and in a humble way the final result of the Cultural Center intends to bear this responsibility. However, the ones to approve or disapprove the built form concepts created are the Kenyans. The researcher embedded herself in Kenyan culture and after the entire process came up with the image of this Cultural Center, but the questions still remains: what is the Kenyan national identity? Has the researcher arrived at a symbolic representation of what can be seen as Kenya?



Illustration 5. 36 – Aerial view of the Cultural Center. Source: Author, 2013.

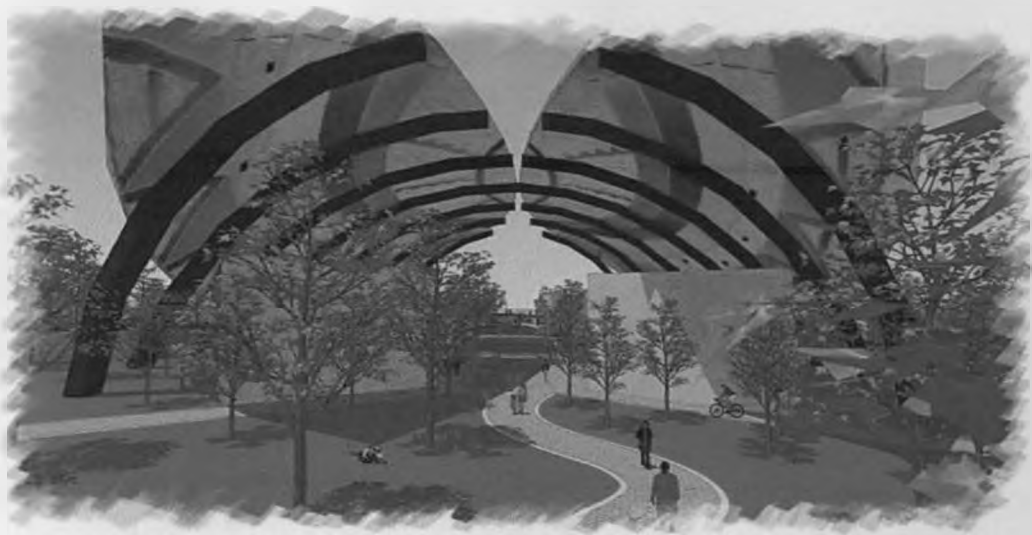


Illustration 5. 37 – View from south looking north. Source: Author, 2013.



Illustration 5. 38 – View from the southwest parking area. Source: Author, 2013.

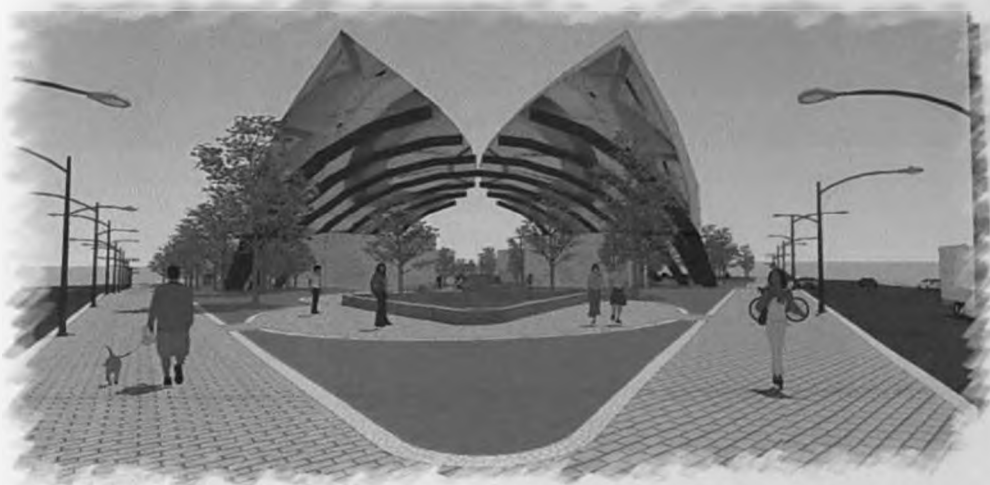


Illustration 5. 39 – View from the roads' junction. Source: Author, 2013.



Illustration 5. 40 – View from the children playground, the sports area. Source: Author, 2013.

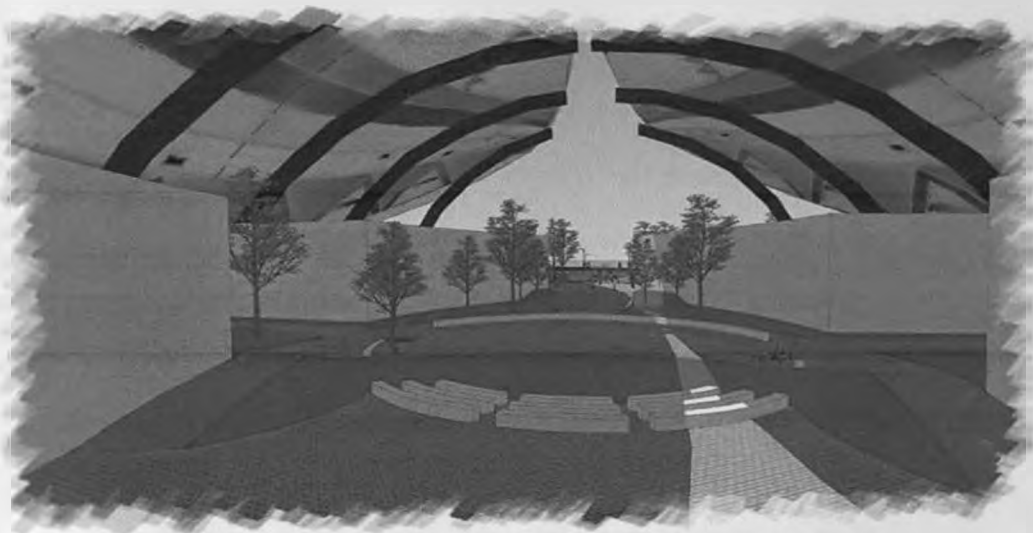


Illustration 5. 41 – Central plaza view. Source: Author, 2013.

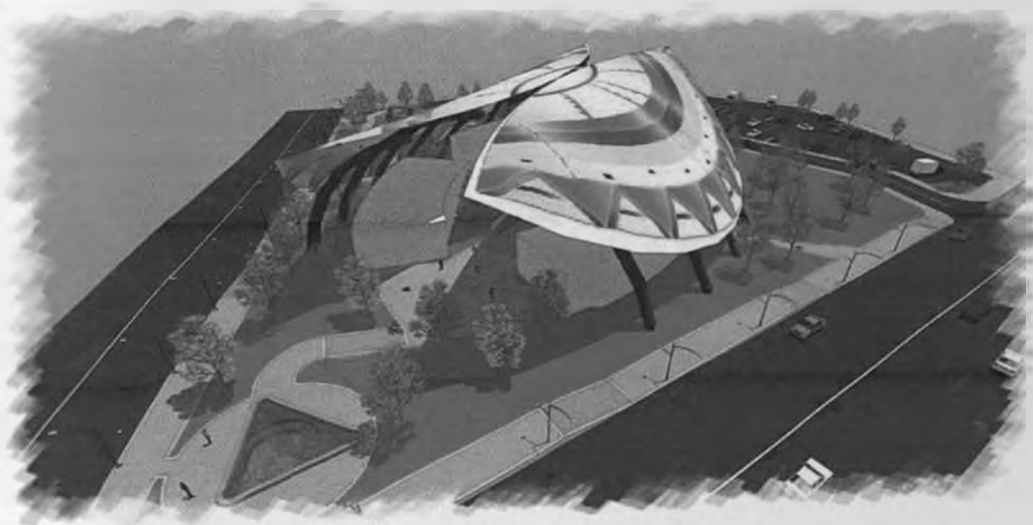


Illustration 5. 42 – Aerial view from the roads' junction. Source: Author, 2013.

5.7 Recommendations

Discussions around nation building and national identity have just started in Kenya, and the process of developing the sensibility towards this subject is still in its initial stages. However, the thesis is intended to help in the solidification of these discussions and create in Kenyan people the desire to have an identity as one people. There is the need to understand and respect the importance of each other in this process of nation building, and also a need to preserve from degradation or loss cultural materials and traditions along this path of modernization and globalization.

In order to respect and appreciate each other's intangible and tangible cultures, people have to learn about each other and have to develop this curiosity and desire to preserve what they still have. This can be achieved through educational process. From primary schools up to universities Kenyans need to learn about one another in any major subject. And through the spreading of proper literature written by Kenyans, open speeches, lectures, public discussions and even informal conversations, people will develop a consciousness toward the nation building subject and their differences as people and understand that they still live in one territory.

Universities have to take up their role as knowledge propagators and lead Kenyan people towards a social and political continuity in creating a country for all: a developing country that envisions first its people needs, values its people identity and its diverse culture, putting an end to stereotypes and favoritism.

This Cultural Center project was just the first step toward a Kenyan identity in architecture and design. Further details would need to be developed so that the concept of the Cultural Center would actually become a project to be implemented. The guidelines of this project were explained and conceptualized by the researcher, but it is

important to mention that the stage achieved here went as far as its concepts and provides patterns to be followed in further researches.

The researcher understood its limitation and the final result of the Cultural Center design desires to generate discussion around the subject and does not insist or force its image as the image of the country. However, it is on path to achieving that position.

Each and every building on the site area of the Cultural Center was deeply thought out and developed having the data analysis and literature review as guiding principles. Nothing that was created by the researcher was produced without direction or without study; all the concepts have their foundation. That is why the values of the data analysis and world precedents are highlighted throughout the text. In order to comprehend the architectural identity created it is important to go through the thesis and understand where Kenyans stand on the subject.

The researcher found many limitations, and one of them was related with proper literature about Kenyan culture and people. There is a need of creating the literature and spreading it, and making it available to researchers and to the larger audience. Kenyans need to develop research on Kenya. In this way international researcher will understand what Kenyans think of themselves, which will result in knowledge about what is Kenya and who they are, instead of their own interpretation of what they might think is Kenya. There is no one better than Kenyans to speak of Kenya.

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APPENDIX

1. Drawings: Layout Plans, Technical Plans, Elevations, Section and 3D models.
2. Questionnaire Pilot: there was no need of modification.
3. Design students' questionnaire.
4. Focus group summary – Architecture students.
5. Interview guidelines.
6. Interviews summary:
 - a. Professor Robert Rukwaro.
 - b. Professor Odoch Pido and Dr. Donna Pido.
 - c. Mr. Mayenga.
7. Time table.

QUESTIONNAIRE PILOT

The pilot used on 10 students was well answered and the students' comprehension of the theme was enough and well explained. So there was no modification.

This questionnaire is indented to discuss with design students the issue of national identity as related to design and architecture. Design identity in this context means the image symbol of a nation as a collective identity related to a nation-state, which means the creation of a design image that represents Kenya as a country.

1. In your opinion which of these 3 buildings best represent Kenyan culture within its content?
 - Bomas of Kenya ()
 - Kenyatta International Conference Centre ()
 - Nairobi's National Muscum of Kenya ()

2. Do you think that they (above buildings mentioned) have a design/architectural identity that represent Kenya as a country?
 - YES ()
 - NO ()

3. If YES please explain how it represents the country?

4. If NO may you please explain your point of view?

5. Do you know of any public/private building in Nairobi that has a Kenyan architectural image?
 - YES ()
 - NO ()

6. If YES please write the name and its location.

7. Do you think that it is possible to translate the traditional tribal design patterns and construct a national design symbol in the form of a building?
 - YES ()
 - NO ()

8. If YES please explain yourself. How do you think this could be achieved?

Thank you!

Questionnaire – first year design students at University of Nairobi

This questionnaire is intended to discuss with design students the issue of national identity as related to design and architecture. Design identity in this context means the image symbol of a nation as a collective identity related to a nation-state, which means the creation of a design image that represents Kenya as a country.

9. In your opinion which of these 3 buildings best represent Kenyan culture within its content?

- Bomas of Kenya ()
- Kenyatta International Conference Centre ()
- Nairobi's National Museum of Kenya ()

10. Do you think that they (above buildings mentioned) have a design/architectural identity that represent Kenya as a country?

- YES ()
- NO ()

11. If YES please explain how it represents the country?

12. If NO may you please explain your point of view?

13. Do you know of any public/private building in Nairobi that has a Kenyan architectural image?

- YES ()
- NO ()

14. If YES please write the name and its location.

15. Do you think that it is possible to translate the traditional tribal design patterns and construct a national design symbol in the form of a building?

- YES ()
- NO ()

16. If YES please explain yourself. How do you think this could be achieved?

Thank you!

FOCUS GROUP

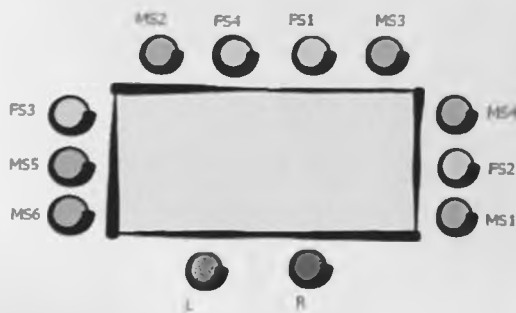
February, 28th 2013

A discussion group involving first year architecture students from the University of Nairobi, a group of 10 students being 6 males and 4 females, was gathered for research purpose. It started at 14:20 and went on until 15:05 (45 minutes).

Researcher comments and questions below (recorded meeting):

Researcher (R) Architecture Lecturer (L)

Male student (MS) Female student (FS)



R: Then I got three references from Nairobi. I'm not going to talk about my own impressions of them, because I want to hear from you. They are Bomas of Kenya, Kenya National Museum and KICC. They intent to represent Kenyan architecture, but I personally don't know if they got there, and that is one of the things I want to discuss here. Do you know any place in Nairobi where you can found a relation to the 42 tribes, not only one of them? It is easy to realize that for intense KICC has its African elements, but still, is this all? What is Kenya national architecture? What I want to accomplish is one building where Kenyans would look and say: "This is me, as a Kenyan, and I am proud of this, I want to bring people here, families and foreigner friends, and I want to show them that this represents Kenya.

R: (KICC) I can understand that it became Kenyan because everyone was part of it, but I don't know if the architecture is symbolizing the entire country as one? I can understand the importance behind it, I didn't know that everyone had to pay and it is interesting, and that makes you own it. But what I want to see is if the architecture really represents all?

R: What do you think? Is it possible to think outside of the box? Is it possible to go beyond this idea of the hut and come up with something Kenyan apart from this one?

R: Which colours do you think represent Kenya?

R: Do you think that I could bring different material that could also represent Africa apart from what you already use? Do you think that depending on the concept, that I could use glass or aluminum and could it also represent Africa?

R: If it were you that were given this task to make one building representing the 42 tribes, how would you study the 42 tribes? How would you get the 42 tribes' ideas?

R: I would like to ask you as Brazilian: where are you from? I don't want you to reply: I'm kikuyu, I'm luo, I'm kamba. But I want you to reply: I'm Kenyan. And at the same time I want you to be proud of being luo, being kamba, being maasai or other I want to preserve the culture, because it is too rich to let it die. And I have seen it die in Brazil so that is my main idea. Maybe outside what I intent to do, as I have showed you these buildings. I want you to see this building (Cultural Center) from far away and say: "Let's go there, because this is Kenyan and I want you to see." This will bring people around. And I also want that when you come inside you be able to show the different tribes for someone that don't know, like me (foreigner) and also for someone from another tribe. I'm in a process and I know that is difficult to represent the 42 tribes under one roof, as we said.

INTERVIEW GUIDELINES

Prof. Robert Rukwaro, Prof. Odoch Pido, Dr. Donna Pido and Mr. Mayenga:

- Discuss the issue of creating a physical symbol of national identity.
- Argue the vision of Kenya as “one nation”.
- Discuss the 42 tribes in relation to Kenya’s nation-building concept.
- Discuss architectural/design identity, and the creation of a national image that represents Kenya in total, with its 42 ethnic groups representing “one country”
- What guidance can you offer on tribal design patterns that might help the author of this project to find the architectural image that represents Kenya?
- Discuss the possibility of finding one final design that might speak to all people in terms of unity and also celebrate their differences.
- Discuss, based on their field of expertise, the image of Kenya and extract from them their knowledge on the topic.

PROF. ROBERT RUKWARO INTERVIEW

March, 11th 2013

Professor Robert Rukwaro an expert in Kenya architecture, he has articles and books published about the subject, he is a professor at the Department of Architecture and Building Science at the University of Nairobi. The interview was undertaken at Professor Rukwaro's office at University of Nairobi, it took 50 minutes, starting at 15:00.

Researcher questions and comments below (recorded meeting):

Researcher (R)

Professor R. Rukwaro (PR)

R: My master thesis topic is a Cultural Center here in Nairobi, an architectural design symbolizing national identity. So what I'm seeking to do is to find this architectural national identity in Kenya letting to a building outside and inside I will do interior design to showcase the differences.

R: But do you think that KICC for instance represents the 42 tribes? I can see that it represents the majority of the tribes.

R: Do you think it is possible to create a building with new materials, modern materials that could also represent Kenya? I can see for example in KICC a lot of African patterns or only Kenyan, it could also represent more than one country around, it could also be related to African culture because of the shape and the form. But I'm trying to bring something different, not that typology of the thatched roof, something that could also be related to Kenyans and bring the identity but with a different and modern perspective.

R: I'm trying to get out of what is usual by what is African architecture, what people see and relate to it, but not running away from their traditions. I'm not there it, but I'm trying to find a way to bring other things, not only the architectural forms that they have as traditional, but also jewelry, clothing or something that could also represent them but on an architectural way of building it.

R: But you still think it is possible to create this Cultural Center with a Kenyan identity?

R: In your article (Form making in architecture, 2012) you talked about one of the issues that you have found in your research that is architecture education here (Kenya). People are coming and bringing Western ideas and type of architecture and not bringing as much traditional elements to help the students to come up with something more related to what is Kenyan or what is African in their projects. Do you still think that that is the issue right now?

R: I can tell that this was one of my main issues to find articles and books about Kenyan architecture. Kenyan talking about it, because I can find something written by someone from Germany or France about Kenya, but I think that the only ones that can talk about Kenya and really express the meaning of that is actually the Kenyans. So I'm still managing how to figure out my research material, but I'm finding a lot of difficulty in finding proper published material for me to rely on.

R: I'm not doing specifically about Maasai, but I got your book with Maina and your PhD thesis.

R: Architecture with some kind of meaning. It is very talkative, you go close to the building and you already feel like proud of it and you want to explore, you want to know about that place history and what is going on there. I want to ask you, you already

talked about KICC, and do you think that NMK and the Bomas of Kenya also represent Kenyan architecture?

R: Do you think is missing this place like a cultural place that also in the architecture itself represents Kenya? We talked about KICC that is more for international conferences and events, we have talked about Bomas of Kenya they have the content but it is still missing the architecture and also the Museum that is also missing the architecture. Do you think that there is a place here in Nairobi that has the architecture and the content to showcase what is Kenya?

R: I think these buildings have different functionalities.

R: So do you think that is missing a place to show the culture inside and also the architecture and the structure itself represents Kenya? A place where you can find information about the culture, where you can see the differences of the 42 tribes, how they live, what they do, where they came from, how many are they now, what they speak, these things.

R: It is true, I don't have the roots.

R: *And I also think that by being a foreigner I have different expectation of the building I want to create and sometimes it can be not related to what Kenyans will think of it, because they are used to some type of colours, or some type of buildings and I will probably think that this buildings might be Kenyan, on my perspective that might be Kenyan and in the end it turns out not to be Kenyan because of people not really relating themselves with it.*

R: Everything has to be placed but it has to have the meaning, it has to have the why I choose that.

PROF. ODOCH PIDO AND DR. DONNA PIDO INTERVIEW

March. 13th 2013

Professor Odoch Pido expert in Kenya/East Africa design and Professor Donna Pido expert in East Africa design and anthropology, both are teaching at the Kenya Polytechnic University College Department of Art and Design. The interview was undertaken with both at the same time; it started around 16:00 and went on for 1 hour and a half.

Researcher questions and comments below (recorded meeting):

Researcher (**R**) Professor Odoch (**PO**) Professor Donna (**PD**)

R: So the topic of my research is “Kenya Cultural Center: a proposed architectural design symbolizing national identity”. I’m seeking for the architectural national identity; this is the main issue that I want to discuss. So do you think that this national identity exists already? Or do you think is possible to reach a building or a construction that can represent and express Kenya culture and also Kenya as an image?

R: So what you (**PO**) are saying that there is no one building that can represent the 42 tribes in one. But do you think it is possible to reach this point?

R: Don’t you think that with the Vision 2030 and all these trends they are trying to bring the country as one instead of all the tribes? Do you think that is time for them to realize that they have these differences, and they are very rich in their tribe differences, but they also need to become one?

R: Every time I talk to experts about the idea that I brought together they always say that is very difficult because “we are many and we are very distinct from each other”, but they never point out that they don’t care about what the other tribe is, they don’t say that they don’t want to know about each other. That is a new view for me right now (PD opinion about the Kenyans not being interested in each other) Will they accept if the language got lost or if the culture is lost because they don’t really care about each other?

R: It is desirable to have one building with the national identity, but do you think somehow possible to reach his point of translating the 42 tribes in one?

R: I want to run out of this kind of translations. Thatch roof was the way they sold Africa to us, but that is not all and that doesn’t really represent them. And it is going to be like that for 100 years from now, but I don’t want that, I want to go out of that and apart from that.

R: I’m just planning to do something not only like a museum or an exhibition place where people go look and go out. But I want something that could bring people together where I can talk about me being a Brazilian and you can talk about you (PD) being American and some else come can talk about being a Kenyan. We can eat, we can be together, and we can watch someone’s dance, or hearing someone speaking their own languages, telling a story or something like that.

R: What colors would you say that represents Kenya? What inspiration would you suggest to be studied in this sense?

R: Do you think that modern materials/techniques can be applied in a representation of Kenyan architecture?

MR. MAYENGA INTERVIEW

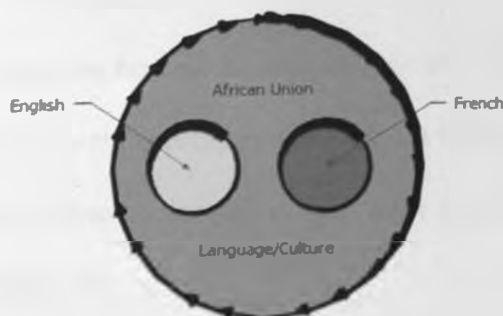
March, 21st 2013

Professor Stephens Mayenga expert in textile design, lectures at the Department of Arts and Design of the University of Nairobi. The interview was undertaken at his office from 13:50 until 15:15 (1:25 minutes).

The interview wasn't recorded but the researcher took notes and some of the main ideas and discussions will be described below, which is not following the proper time frame or even the exactly quotation.

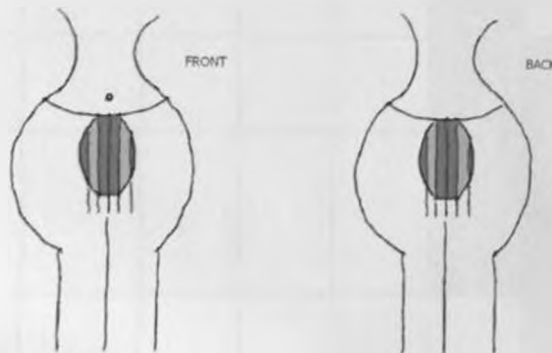
National identity (notes):

- In Kenya there is a problem of identity. People are free and diversity reigns.
- National identity in Kenya has to be addressed on multidimensional and holistic way.
- The identity question can be found in different aspects such as language, food, artifact, architecture, religion, ceremony and so on.
- Unifying language you can unify people.
- There is a cultural barrier in Africa mainly because Africa is divided in basically two main linguistic domains: the English and the French.



African design (notes):

- African artifacts or cultural material are not simply art, but it is design. Design is in service of function, it has a meaning and its production serves the functionality.
- There is no such a thing as African arts, instead there is African design.
- For instance the Maasai female dress, it is one sided mainly because people coming on ones direction can see only one side and then when they pass through the Maasai lady and check her behind, she just turns the clothing around and it serves both ways.



National dress committee (notes):

- The national dress was not a successful experience because it remained so much on the intellectual discussion rather than listening the artisans or people who make the traditional dresses.

The researcher paper work (notes):

- Your work is interesting because it wants to keep the culture that has been lost.
- It is important to show the identity and culture lost in this country.
- It is important to listen to people, as you have been doing, and also to get supervision to finalize it.

TIME TABLE

	June/ 2012	July/ 2012	August /2012	Sept./ 2012	Oct./ 2012	Nov./ 2012	Dec./ 2012	Jan./ 2013	Feb./ 2013	March /2013
Topic research										
Concept paper										
Site's observations										
Surveys										
Proposal research										
Field work										
Case study										
Site's observations										
Questionnaires' application and analysis										
Interviews										
Project concepts sketches										

	April/2013	May/2013	June/2013	July/2013	August/2013
Project concepts drawings					
Discussions around the ideas					
Thesis Writing					
Final project					