

From Vernacular to Modern: *Transitioning East African Traditional House Design to Contemporary*

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Abstract

Looking at the present through the perspective of the past is not a new idea (Kamenju, 2013). This paper involves insights into the traditional house design transition in East Africa. It entails the process of development of African house design from traditional design to contemporary design. The paper discusses a brief background of African traditional house designs. Using desk study methods, it analyzed in depth - from a design perspective - three key cases of three East African communities; the Agikuyu of Kenya, the Swahili of Kenya and Tanzania and the Buganda of Uganda. From the research, it is evident that East African architecture has evolved and has been influenced by foreign cultures. However, significant African elements still remain testimony to the enduring nature of East African traditions. The traditional African houses play a significant role when it comes to trying to understand African roots. It is extremely important that East Africans embrace and uphold traditional houses and get inspiration from them.

Keywords: Contemporary, Current trend, House design, Traditional African, Vernacular African.

INTRODUCTION

House design in East Africa has been transitioning slowly and progressively. As people become more educated and as the economies grow, there has been a rise in western inspired house designs. It has been observed that economic status determines the type of house for an individual's life (Dowsing, 2016).

This is unlike in ancient East Africa where houses were built depending on climatic conditions, topography and geographical location, cultural beliefs and availability of building materials. Nowhere is this transition exemplified as with the Agikuyu of Central Kenya. The Agikuyu is a community in Central Kenya whose housing culture has evolved over time. They had a specific design which has been changing gradually (Hess, 2013a). Currently, as a result of this gradual change, a big percentage of the Agikuyu has been using modern and contemporary designs to build their houses. Other communities, such as the Swahili at the East African Coast (Kenya and Tanzania) and the Buganda are affected as well. Studying these three communities helps understand the transitioning process from the ancient period

to the current. However, there are individuals who have incorporated the traditional African design to contemporary designs whose outcome is positive, functional and acceptable to human beings (Aliyu, 2015).

The objective of this study was to establish the diversity of available traditional architectural styles domiciled in East Africa. It was also to analyze the design, materials, shapes and sizes, and cultural influences informing such designs. Finally, it was the paper's objective to draw parallels between the old and the contemporary to document the extent of such transition from vernacular to current western influenced architecture of East Africa.

THEORY

Ideally, traditional African houses are associated with low income households. In Kenya, African traditional houses are only found in rural areas where they are associated with poverty. These types of house designs are cheap to construct as materials are readily available in rural areas. However, other regions embrace the traditional houses, such as the coast of Kenya and Tanzania

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where we find the Swahili community (Patsanza, 2016). Institutions such as the Bomas of Kenya have preserved the African traditional houses. Bomas, a cultural center in Nairobi, provides a platform where locals and tourists can experience different cultures from all over Kenya. Among the exhibits, there are different traditional houses such as huts, homesteads and granaries as shown in **Figure 1** (Wairimu, 2013).



FIGURE 1
Maasai manyatta
Source: Keyonzo 2019

Themes:

Materials

The materials were environmentally friendly since they never had severe environmental impacts. This could be because traditional Africans did not have the technology to produce artificial materials that would harm the environment. Most of the materials were easily available and were sourced right from the environment itself. They included; mud (mixture of water and soil), grass (thatch), animal waste (dung and urine), rammed earth, wild coconut leaves, wood sticks and bamboo, leaves and tree barks, and stone (Adekunle, 2008).

Size, form and shape

The African traditional houses were mostly huts that were either round or oblong. The Agikuyu and the Buganda huts were built from a circular foundation and erected up to the top in the same mannerism. Different communities used different shapes and forms depending on their cultural beliefs and climatic conditions. Design elements used in African architecture include form, shape and texture (Tetteh, 2010). For instance, the

Maasai of Kenya and Tanzania are pastoralists who migrate often in search of pasture for their livestock. They constructed an oblong low-dome shaped hut using thin *leleshwa* sticks and sapling called *manyatta*. They used cow dung and urine to plaster which is a deterrent to termites. The huts were ideally constructed in a circle around the cattle enclosure. These manyattas were designed in that manner to resist strong winds since the manyattas acted as a defensive barrier (Maimai, 2018).

Geographical location and topography

The physical location of a community determined the type of materials they used. For example, the Kikuyu used mud because their settlement areas had clay soil. They used mud and sticks to construct walls and a thick layer of thatch for the roof (**Figure 2**).



FIGURE 2
Kikuyu hut
Source: Mtamu 2014

Climate

East Africa is a tropical region with a cool and dry climate. However, there are seasons when rains are experienced. Traditional house designs in East Africa were highly influenced by climatic conditions in that, different areas of East Africa experience different climatic conditions. Therefore, the houses were constructed with the aim to solve issues that arose from extreme climatic conditions. For instance, in the Coastal region, the climate is tropical with high humidity levels and high temperatures. Therefore, they

used thatched roofing that acted as a natural heat insulator (Maimai, 2018).

The Swahili from the Coast use coconut leaves to construct their roofing because they are located along the coast, hence coconut leaves suit them. They used and still use these natural materials to provide natural air-conditioning due to the passive heat of the coastal region (Figure 3).



FIGURE 3
Swahili house
Source: Keith 2019

Culture

In some cultures, beliefs in the spiritual life after death were elaborated in the burial chambers. The Buganda of Uganda buried the royal family in grass-thatched tombs at a place known as Kasubi. They carried out rituals and religious activities at the tombs. The architecture of the tombs signified the spiritual and social significance of Ganda traditions (Figure 4).



FIGURE 4
Kasubi tombs
Source: Phs 2018

Depending on the availability or unavailability of property, there is a question of what was the ideal size of the traditional house. The techniques applied in the building of traditional houses is also another theme. Whether the traditional people applied certain skills and whether they had particular styles was to be reflected.

Early man craft

The early man created dwellings for need and due to belief. Man used what was in the environment to create structures which acted as shelter from harsh climatic conditions that occurred at different times of the year. Materials such as mud, timber and stone would be used since they were within man's reach. Man developed a craft overtime to improve functionality and add décor to the dwellings (Adekunle, 2008).

East African Architecture

The Swahili

East African traditional houses show that East Africans had different architectural styles. Arabic architecture influenced the Coastal region's architecture where there was a strong presence of Islam. When the dhow trade began, it linked the East African ports to the Arabian and Persian Gulf ports. An island known as Kilwa, for example, thrived in the 12th and 15th Centuries. It was constructed using stone. It influenced architecture of mosques in Zanzibar, Dar es Salaam, Mombasa, and other coastal parts. However, when the Portuguese arrived in East Africa, all the ports were burnt except for the port of Lamu, Kenya (Hess, 2013b). The coastal houses were characterized with use of coral stone, mangrove poles covered with lime mortar for roof, fine plaster, decorative niches and detailed curves on doors (Aswani, 2018).

The Agikuyu

Thereafter, Christianity emerged in the 19th Century when the British colonized East Africa. In Central Kenya, the Agikuyu had flourished for years in farming. The British had seen potential of their land; and they took it away from them and settled there. Soon enough, they began to make the Agikuyu work for them (by force) and

in the process, they introduced education to the Agikuyu. With education, came Christianity (Gikuyu, 2019).

Christianity and education affected the Agikuyu housing design in that the British had come with new styles of design. In an attempt to hasten this process, the British burnt Agikuyu homes which were made of mud, sticks and thatch. Once Kenya gained independence, the Agikuyu had to rebuild and this time their houses were unavoidably inspired by the British. The Kenyan Government took over under the leadership of Mzee Jomo Kenyatta who had already embraced the new ways of British house design (Kamenju, 2012).

Rural settlement

In Gikuyu building design, a group of houses made up a homestead. It consisted of the extended family. A group of homesteads made up a village. A village had communal structures that were shared by all members. Building was a communal activity (Kamenju, 2012). The houses were either circular, semi-circular or rectangular (**Figure 5**).



FIGURE 5
Agikuyu village
Source: Keith 2019

The Agikuyu adopted the education system and started schools in their communities while others sent their children to missionary schools. Soon enough, the urban areas began to gain popularity. The educated and the financially stable were the only ones capable of going to towns such as Nairobi. However, education played a big role in urbanization which affected the traditional African house design, both negatively and positively (Kamenju, 2012).

The Buganda

The Buganda is a community from Uganda located along the shore of Lake Victoria. They are a Bantu speaking community that was formed in the 14th Century. The Kabaka was the ruler of the community, possessing power over the entire region with a sizeable army at his disposal by the 19th Century. The Buganda community live in huts which they referred to as *obusisila*. These huts were circular in shape, built out of mud plastered on wood wattle and a thatch roof. The Kabaka had a special hut design as his hut was meant to signify stature and importance. During the reign of Kabaka Mutesa I, foreign influences such as Christianity and Islam began creeping in. The British declared it a British colony by 1900 (Buganda, 2008).

RESEARCH METHODS

This is a qualitative research relating to East African architecture. There are three case studies that were conducted. The Agikuyu study was a desktop study combined with observation of a village known as Gabugi in Gilgil, Nakuru County. The area is inhabited by the Agikuyu speaking group and has traditional houses due to its remote location. The Swahili and Buganda case studies were done through desktop research due to limitation of resources and time.

Purposive sampling was used. This sampling method allowed for exploration of East African art which was the scope for this paper. The Agikuyu community was picked due to the researcher's affiliation to the community, proximity and location that allowed for observation to be done. The Buganda is one of the biggest communities in Uganda calling for an interest in the community. The Swahili community was picked due to the connection it creates among the East African fraternity as a whole in terms of culture, language and architecture. The data is analyzed qualitatively in line with the themes present in this paper.

RESULTS

Similarities of The Agikuyu, Swahili and Buganda Houses

The commonality of place, culture and climate

seems to have conspired to determine East African architecture. The following is a discussion of their effects and their manifestation.

- i. All three communities used sustainable materials such as thatch, wood and earth.
- ii. The house designs were inspired by their traditional beliefs and religion.
- iii. All communities had a sort of hierarchy where the aristocrats had better houses than the commoners in the community.
- iv. All the communities were influenced by other parties when it came to building their houses over time. The Swahili were influenced by the Arabs, Persians and the Europeans, the Agikuyu were influenced by the missionaries and the British while the Buganda were influenced by the Indians and the British.
- v. The shape of the African traditional houses was circular for all communities.

Differences between Agikuyu, Swahili and Buganda houses

While there are many similarities, likewise, differences are also far apart from each other. The following are the differences observed from the findings of this study. Mostly, from findings, the differences are occasioned by location and local climate.

- i. The geographic location of communities affected the method in which the houses were constructed. For instance, the Swahili used *makuti* as a coolant while the Buganda and the Agikuyu used elephant thatch to prevent water from leaking during the rainy season.
- ii. Materials used: the Agikuyu used mud, sticks and thatch; the Buganda used mud, wattle reed and elephant grass while the Swahili used coconut leaves, mangrove sticks and mud.

DISCUSSION

The Agikuyu

Ancient Agikuyu people

The Agikuyu belong to the North-Eastern Bantu ethnic group. From the 15th to the 18th Centuries, this community migrated from Central Africa through Tanzania and settled in Central Kenya.

They settled around Mount Kenya, Nyandarua and near Nairobi. The Agikuyu's economic activity was farming. Their land was rich when it came to agriculture. The Agikuyu constructed their houses communally (Droz, 2017). The houses were circular and were made of mud, sticks and thatch (**Figure 6**). When the Agikuyu interacted with the Maasai, they adopted a couple of things; one of which was rearing livestock. They now kept livestock for trade and food. They also learnt the art of plastering mud walls and floors with animal waste and urine from the Maasai.



FIGURE 6
Gikuyu traditional huts
Source: Macharia 2018

Different age groups and genders lived in different houses. The homestead compound consisted of a man's house, his wife(ve)'s house(s) and son's house(s) (**Figure 7**). The traditions and beliefs of the Agikuyu stated that men and women could not live in the same house. A woman would sleep in the same hut with her daughters and her younger sons. Once the son was initiated into adulthood through circumcision, he would move into his own hut known as *thingira* (Mukuyu, 2014). **Figure 8** shows the woman's hut.

The missionary influence

In the beginning of the 19th Century, Christian missionaries arrived in Kenya with the aim of introducing Christianity to curb the growth rate of Islam. The missionaries set up missionary centers where they started missionary schools. The missionaries begun to get concerned about the health of the Agikuyu. They associated the

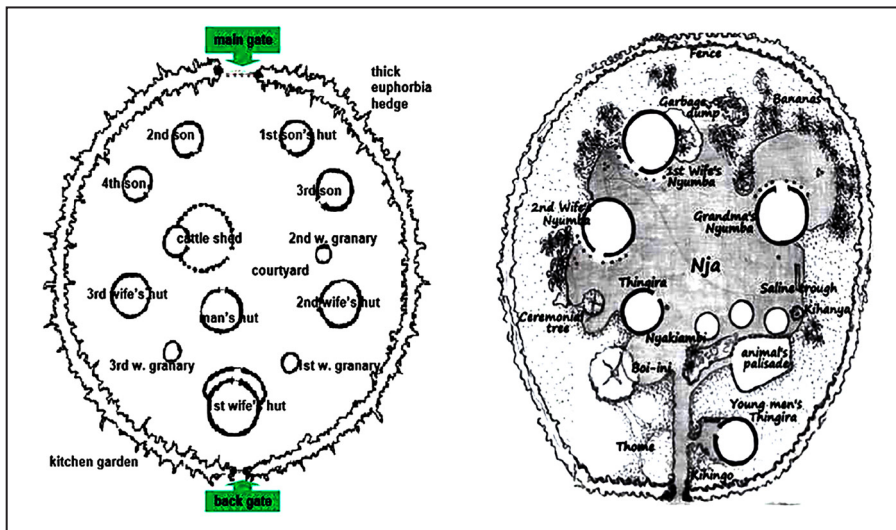


FIGURE 7
The Agikuyu homestead
Source: Kamenju 2012

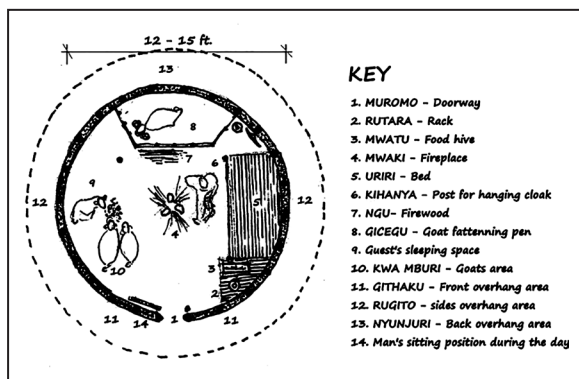


FIGURE 8
The Agikuyu woman's hut
Source: Mukuyu 2014

cause of diseases with poor hygiene in the way their homes were set up. They first began to encourage the Kikuyu people to build latrines in their homesteads. Since the Agikuyu children were already going to missionary schools, it was easier to use the young learners to spread the word about hygiene. The missionaries also taught young men carpentry, masonry and construction skills while the ladies were taught domestic science, child care and physical and moral training. The missionaries involved these trainees in building churches and schools that they were setting up (Kamenju, 2012).

The British influence and the effects of colonization

Around the time the missionaries gained popularity among the Agikuyu, the British came to Kenya and took the Agikuyu's land, naming it the white highlands. The Agikuyu were displaced while others migrated to other parts of Kenya. The British then introduced the hut tax which required rupees from each hut of the Agikuyu community. Those that could not afford the levy were forced into hard labor. This later on triggered the Mau Mau rebellion which fought for independence and liberated the people from British rule (Kamenju, 2012).

Agikuyu house designs after independence

During the war period, Agikuyu homes had been burnt down by the British. Therefore, at the end of the war, they had to rebuild. Since some Agikuyu people had carpentry and home science skills, the houses they rebuilt seemed to have a more sharpened look. They built rectangular houses with latrines, a fence and the land had been subdivided into portions. The elite started to go to live in towns for purposes of education and work.

While coming back to their homes they would bring new technology, such as the use of iron sheets for roofing. Soon enough, the Agikuyu began to use wood for walls and iron sheets for

roofs (Figure 9). In the 20th Century, some people were still living in mud houses while the more privileged ones lived in new houses. Some Agikuyu, such as Mzee Jomo Kenyatta who was then the president of Kenya, managed to build stone houses. Others who were in government or had positions of power also managed the same (Kamenju, 2012).



FIGURE 9
Agikuyu transitioning house design
Source: Author 2019

Agikuyu houses in the 21st Century

In the 21st Century, a lot of the Agikuyu begun to use iron sheets. A decade later the Agikuyu started building masonry houses. Western civilization hit its pick and stone houses were associated with status and privilege. Currently, the Agikuyu still use the western way of constructing houses. Figure 10 shows a modern house in Ruiru, Kiambu County, an area traditionally occupied by the Agikuyu community.



FIGURE 10
Contemporary Agikuyu houses
Source: Jacent 2019

The Swahili

The Swahili are a community found along the East African Coast. They settled in areas such as Lamu, Takwa, Pemba, Zanzibar, Dar es Salaam, and other coastal areas. Due to the ease of access to the Indian Ocean, the Swahili got their livelihood through trade with the Arabs and the Persians. This interaction influenced the Swahili house designs.

Traditional Swahili house

The African traditional houses were made of mud, sticks and thatch known as *makuti* (Figure 11). With time, a new form of house design emerged. This style consisted of Arabic and Persian culture mixed with the traditional African culture. This occurred due to trade with Persians and the Arabs which was aided by the monsoons winds which lead them to the East African coast. Since the ports were the main source of livelihood, the coastal people flourished and so did their architecture (Aswani, 2018).



FIGURE 11
Traditional Swahili house
Source: Aswani 2018

Swahili mosques

Due to the influence of trade, some Arab traders intermarried with the local Swahili people. They then settled and begun to introduce the Islamic culture to the Coastal people. With time, they started building mosques and stone houses. The traditional African people then adopted the stone houses but they still kept their artistic features. The mosques were made of stone. There were columns and the designs of the mosques had

vaults at different intervals (**Figure 12**). In the 19th Century, the Portuguese came into the East African Coast and also built their own houses. When the British colonized Kenya and Uganda, they constructed the railway which began from the Kenyan Coast all the way to Uganda. This had an impact on the people's livelihoods and curbed the Islamic religion which was growing at an alarming rate all over East Africa.



FIGURE 12
Swahili mosque
Source: Hirst 2019

Foreign traders influence on the Swahili

Most buildings at the coast are traced back to the 18th Century. The architecture of these houses shows Arabic, Persian, European and African influences.

Characteristics of Swahili houses;

- **Curved doors:** The Swahili curved intricate designs on the wooden doors. There were different carvings for different towns.
- **Beautifully styled balconies:** These were made so as to provide a chilling effect to the house due to the heat.
- **Thatch roofing:** This acted as natural heat insulators
- **Courtyards:** The houses contained courtyards that cut through different oblong rooms to provide a cool environment in the house (**Figure 13**).



FIGURE 13
Swahili houses
Source: UNESCO 2019

Development of the Swahili house design

The Swahili Coast was small and compact and only comprised of the mosques and the flat roofed stone houses. However, after independence in Kenya, population grew along the East African Coast. The town became congested and was only separated by narrow and huddled paths along the coast. However, the more privileged lived in houses that were cuboid in shape and had a flat roof with a crenellate parapet. The houses had shuttered windows facing the open space in order for the breeze to cool the occupants.

The open balconies would serve the purpose of cooling the occupant as well as giving privacy to the women who wanted to relax without mingling with other people. The walls were rich in plaster decorations while the balconies were supported by mangrove poles with beautiful carvings. In the 19th Century, the Swahili introduced geometric form in their style. They also used leaf abstracts as well as floral patterns as inspiration to carve on the doors and other items. The ornamental carving on main entrance doors became a style. The Swahili walls were made up of coral stone bonded with slake lime and mud. Coral remains were used on external walls which gave a white smooth finish. The ceilings were made up of mangrove wood slates and coral blocks. The roof was made of thatch (**Figure 14**).



FIGURE 14
Swahili houses in the 21st Century
Source: Aswani 2018

The Buganda

The Buganda are a Bantu speaking community located in present day Central Uganda. Buganda was founded in the 14th Century when the ruler of the community, known as the Kabaka, gained dominance over the Ganda people. By the 19th Century, Buganda had become the largest and most powerful territory in the region. The Buganda lived in circular huts known as *obusisila*. It is to be noted that the Kabaka's hut was much bigger and more adorned as compared to the rest of the huts. The general hut shape was circular and built of mud that was applied to a wooden wattle of reed and thatch. Thick woven rings were built around the house and a straight pole built at the center to hold the roof together. This kind of hut did not require a foundation as the long straight pole at the middle of the hut was strong and firm (Figure 15).

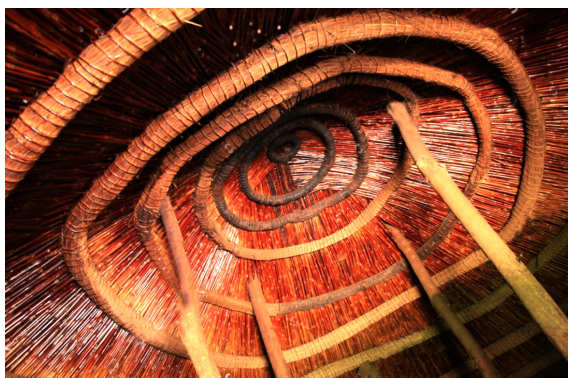


FIGURE 15
Interior structure of the roof
Source: Dcruz 2019

Construction of the hut started with the poles being erected then the thatch was placed from the roof heading to the ground. The thatch used was elephant grass mixed with mud. The royal hut was built with 52 'rings' made of reed as shown in Figure 15. The rings represented 52 tribes of the Kabaka. The front porch was circular and faced east. It was believed that the Buganda ancestors came from the East and this was therefore a way of paying respects to the ancestors. However, the huts of the commoners could face any direction. The thatch is about 300 millimeters thick for the purpose of waterproofing the hut. The roof widens downward so that during the rainy season, the water would flow downwards.

In the 19th Century, Ssekabaka King Ssuna II built the biggest hut known as the Kasubi tombs. It was the largest hut in the world and the Kabaka were buried there. King Ssuna II hired an architect from India to construct the hut. The hut was recognized as an African heritage until it burnt down in 2010. However, efforts to build another hut are ongoing. The hut being built is estimated to take ten years to be complete. The Buganda kingdom still exists in Uganda and some people still live in African traditional houses (Figure 16).



FIGURE 16
The Kabaka's hut
Source: Ugandasafaristour, 2019

Contemporary buildings in Buganda

The demand for better housing in the country led to a vibrant real estate market. For instance, the establishment shown in Figure 17 is just 9km away from Kampala, which is the Buganda hotspot. The houses embody Spanish, Swahili, Cape Dutch and modern styles.



FIGURE 17
Contemporary houses in Uganda
Source: Wambui 2011

Buildings in Kampala are mostly modern. They were conceptualized as modernist and post-modernist design styles, for instance, the Uganda Coffee Marketing Board Complex, Uganda Complex Headquarters, and Charm Towers buildings (Figure 18).



FIGURE 18
An example of contemporary buildings Uganda
Source: Mushoborozi 2019

Contemporary Buildings Inspired by Traditional African Housing

Overtime, these communities have adopted modern house design styles. However, building design inspired by African traditional culture is still evidenced to date. Some examples are discussed below.

African Heritage House

The African Heritage house is situated along

Mombasa road, Mlolongo, Kenya. It was designed by Alan Donovan who is also the owner of the house. The house has artistic and architectural elements from all over Africa (Figure 19).

The house overlooks the Nairobi National Park and is meters away from the railway. There is a combination of mud architecture inspired by the Great Mosque of Djenne in Mali, along with other cultures from all over Africa. The house has a section styled with the inspiration of African traditional Swahili designs, especially near the pool. Several rooms also have the Swahili beam ceilings, the coral stone wall finish and the Swahili furniture. There is also a display of Ugandan sculpture that seems to be made and inspired by African traditional art. The house also has a Moroccan influence in the bathrooms and windows. Both the interior and exterior spaces of the house generally give an African traditional feel (Munene, 2017).



FIGURE 19
African Heritage house with Swahili design
Source: Munene 2017

The Kenya National Library

The Kenya National Library located in Upper Hill, Nairobi, was inspired by the iconic African drums (Figure 20). Drums were musical instruments used to communicate over long distances in the traditional African setting. These instruments were also used in ceremonies and festivals. The use of drums in the library design signifies the social interaction in the society and the preservation of knowledge for future use (Kakulatombo, 2017).

Kenyatta International Convention Center (KICC)

This building is easily spotted in the Central Business District of Nairobi (Figure 21). The building was designed by the Norwegian architect

Karl Nostvik and a Kenyan architect named David Mutiso. There are different analogies on the inspiration of the tall structure. For instance, Jackie Lesley, who was Nostvik's partner, said that Nostvik used the idea of the open and closed flower. In a certain newspaper article, it was recorded that the top symbolized the African Baraza. In an interview with Citizen Television, Mutiso said that the design was inspired by a donkey's penis. As these theories went around, the commonality they had is that they revolved around East African traditional culture (Shiundu, 2018).



FIGURE 20
Kenya National Library, Upper Hill, Nairobi
Source: Kakulatombo 2019



FIGURE 21
Kenyatta International Convention Center (KICC)
Source: Shiundu 2018

Bird Nest

The Bird Nest is the most luxurious retreat centre in Kenya. It is located in Laikipia, a region between Mount Kenya and the Great Rift Valley (**Figure**

22). The Nest was designed by an architect named Daniel Pouzet. The owners Segera Retreat and Nay Palad wanted an accommodation that was elevated above the trees, near a river and around wildlife. The resort was constructed using timber, wood, sticks and branches woven by the local people. The roof is thatched using sticks and provides a 360-degree view. All the materials were sourced locally. This house is a good example of modern African house design. It uses sustainable materials and the design is inspired by the environment (Herz, 2017).



FIGURE 22
The Bird Nest, Laikipia
Source: Herz 2017

CONCLUSION

It is evident that East African architecture has transitioned overtime, influenced by foreign cultures. However, African elements still remain testimony to the enduring nature of East African traditions. The traditional African houses hold a lot of weight when it comes to trying to understand African roots. It is extremely important that East Africans uphold these houses and get inspiration from them. The future generations need to be able to understand what the culture is all about and that can only be done by preserving this culture. As the design field transitions, designers should be able to incorporate the traditional African house design along with the new designs.

RECOMMENDATIONS

The following are recommendations on how African traditional architecture and culture can be preserved;

i. Encourage the government to impose laws that require Kenyans to have East African elements when constructing their houses.

ii. Introduce East African traditional design, art and crafts in the school curriculum so that as the new generation comes, they may still be able to uphold the culture.

iii. Introduce awards that recognize African houses and their designers.

iv. Reduce import of building materials and encourage the use of readily available and sustainable materials for building houses.

These recommendations are meant to encourage East African people to incorporate African architectural culture and design in their lives. It is noted that the African culture may be slowly fading away, therefore there is need to uphold the culture for the sake of African identity.

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