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From Traditional (Vernacular) to Contemporary (New) Architecture: A Lesson from Southwest Nigeria

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Abstract

Every cultural group in the globe has its own peculiarity of its own traditional Architecture, though the approach may differ from places to places. This paper looks at the vernacular architecture of the Southwestern Nigeria as practices by the indigenous Yorubas who have a peculiar climatic and socio-cultural and religious practice. The approach to architecture by this ethnic group was looked into with the intention of finding positive values in the traditional way which can be applied to the contemporary one. It was deduced that local building materials are cheap, easily to come by and are able to meet housing needs without having negative effects on the local climate and the natural environment. It was recommended that more emphasis should be given to the use of locally-sourced building materials in the building industry. The paper concluded that traditional values which apply to the cultural and climatic needs of an area should be given adequate priority when contemporary architecture is the choice in order to create an eco-friendly environment to meet the needs of man.

Keywords: traditional architecture, southwest nigeria, contemporary, building, environment.

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1. Introduction

Traditional architecture is not a blind repetition of the past but increases the possibilities for artistic expression making it as relevant as contemporary architecture. Le-Corbusier, the pioneer of modern architecture quoted that ***"the past was his only teacher"***. Sadly, little or fewer measures had been done in the documentation of traditional architecture by African Architects. There is a need to retain the settlements patterns, forms, and techniques of the traditional architecture of Africa and incorporate useful characteristic into contemporary architecture. Adeyemi (2008, 8), describes traditional architecture by citing Professor Zibgniew Dmochowski, a great scholar, visionary and a researcher, to have perceived it as "technical activity by poets". Poetry, according to him is an attributes of a true architecture patterning to a culture must grow out of its own root and analyses in its own language, if not, it loses in worth and significance. Vernacular architecture is an expression of the people's life and traditional values (culture).

According to Elleh (1996, 19), the word traditional architecture evolves several images to different professionals regardless of their nationality as mere huts made of mud and roof with grass but there is more to it, because it reaches back to the monumental building of ancient times and construction activities of the earlier time, similarly, Umar (2008, 72) stated that African traditional architecture is an ingenuity method of construction that dates back to earlier times. An architecture that has survived through knowledge pass down from generation to generation refers to as the world oldest and richest tradition.

Similarly, Amole (2000, 17-18), termed vernacular or post-traditional architecture as a style that evolves gradually from selective borrowing from external source embraced by the community, resulting in changes in the traditional forms, morphology, and material but the pre-cursor traditional dwellings are sustained. Vernacular architecture, according to Osasona and Ewemade (2009), is a mixture of traditional architecture and external influences that emanate from the political and economic forces. Although, there is no evidence of trained professional or apprentice but there still exist usage of local materials and traditional design.

However, it is rather hard to discuss the diversity of African architecture due to conflicting publications, African traditional architecture is a collective idea or techniques defined by social status and religious and has been passed down through oral instructions, perfected over many generations to suit the need of an individuals or group, as a result, no trained builder or architect is evidence in the building process and feast is the only of

remuneration for the assistant renders by the community.

Traditional houses don't only house its owner but express the stage and status. It is a direct invocation of the physical environment and conforms to his or her societal needs, accommodates different traditions orientations and climatic conditions. In the same way, Opaluwa, et al (2007, 98) asserted that African architecture construction approach not scientifically documented does not mean it fails to please situation such as usage, suitability, and luxury. Hence, the traditional building cannot be under rate to be short of architecture, it has culturally evolved to fulfill aesthetics, comfort, and sustainability.

The vernacular architecture of Nigeria can be given a description of the building material, forms and techniques leading to traditional forms of architecture especially with respect to the architecture of the three major ethic groups. The vast ethnic groups in Nigeria include Southwest zone (Yoruba), Northern zone (Hausa) and the Eastern zone (Igbo). Therefore, architectural forms within this context are tied to different ethnic cultural practices.

Over the years, many occurrences have led to the changes in the traditional structures of regions in Nigeria. These include: British colonization and the return of repatriated slaves from Brazil and North America (Afro-Brazilian / Brazilian architecture) in the southwest regions, Islamic influence in the Northern region (The mosque, palaces and city gates, ornamentation and house form) and colonialization or westerners which abolished the existing traditional beliefs and establishing principle of individualism in the eastern region.

Today, indigenous Nigeria's traditional architecture is becoming outdated; Non-Africans that have produces measures of its revival are mostly from non-architectural perspectives, their background made it agitated for them to capture the socio-cultural and socio-spatial importance of African built-form.

The need for a revival of traditional architectural value to be blend with contemporary architecture is crucial and of great importance, according to William Morris (1889), that historic building represents the true concept of history and that 'our past is part of our present'.

This paper is focused at understanding the rationale behind the traditional dwellings and significant motives behind the construction of the *"Yoruba"* southwest traditional architecture, in order to explore the possibility of incorporating useful traditional architecture characteristics in the contemporary architecture. The aim is to examine and analyze distinct characteristics features and factors (Physical, Environmental and Cultural aspects) adopted in the formation of geometric forms of traditional Yoruba architecture in southwest, Nigeria. In that sense, this research will help to reduce substitution of Nigeria's creative traditions and heritage cultures with external styles and explores the possibility of incorporating its characteristics into the contemporary architecture to evolve new construction techniques that does not neglect various considerations on culture, climate, security, privacy and communal living.

2.STUDY AREA.

2.1 Nigeria

Nigeria lies between Latitudes 4° 16' and 13° 53' north of the Equator and Longitudes 2° 40' and 14° 41' east of the Greenwich Meridian Line. It is bordered by Niger Republic in the north, Chad in the northeast, Cameroon in the east, Benin Republic in the west and to the south; it is bordered by approximately 850 kilometres of the Atlantic Ocean, stretching from Badagry in the west to the Rio del Rey in the east. Its total land area is 923,768 square kilometres. Nigeria is the fourteenth largest country in Africa. The country came into existence as a nation-state in 1914 through the amalgamation of the Northern and Southern protectorates. Nigeria became fully independent in October 1960. It is made up of 36 administrative states and a Federal Capital Territory (FCT) (see figure 1).

Figure 1 The three major zones of Nigeria.

Source: Authors' compilation.

The country is entirely in the tropics. The climate is semi-arid in the north, gradually becoming humid in the south. Overall relief is gentle, but there is a gradual loss of height from the north to the coast. The climate of Nigeria is classified into two. These are the Southern part of the country, where the Igbos and Yorubas are found is mostly hot and humid and has a high annual rainfall of between 1500 to 2000mm a year. The Northern part of the country, where the Hausa predominate, is characterized by hot, dry climate and extremes of temperature between day and Night. Rainfall is minimal and often less than 500m per year. The vegetation is made up of mangrove swamp forest in the Niger Delta and Sahel grassland in the north resulted from the varying climatic condition. The three major ethnic groups in the country are Hausa, Yoruba and Igbo.

Meanwhile, Nigeria is the most populous country in Africa and the tenth in the world. The 2006 Population and Housing Census puts Nigeria's population at 140,431,790, with a national growth rate estimated at 3.28 per cent per annum. With this the current population of Nigeria is estimated to be over 200,000,000 million people. Nigeria is a multi-religious country made up of two predominant religions, i.e Christianity and Islam, while the population is divided roughly in half between these two major religions.

2.2. The Southwest Zone, Nigeria

The Yoruba occupies the southwestern part of Nigeria comprising of six states namely, Ekiti, Lagos, Ogun, Ondo, Osun and Oyo (see figure 2). They practiced Islam, Christianity and traditional worship. According to Dmochowski (1990, 1-5), demographically, Yoruba lies within the tropics with high temperature and humidity and remains the second largest ethnic groups in Nigeria.

They are subsistence farmers as similar to the Hausas, they cultivate the land only for family consumption and the need for more hands-on farm lead to them having many wives to have more children, as farming to the2m is considered a way of life and not a means of earning.

Figure 2 Southwest Nigeria within the National Context

Source: Adapted from Adeoye

2.3 Nigerian Traditional Architecture

The history and development of traditional architecture have been opined as a way of life that has given way to the introduction of new building techniques and expressions through adaptation and rigorous study of the environment. Nigerian traditional architecture is similar in many ways; reflecting the different culture and traditions of the people, as well as the climatic factors. This diversity ranges from Hausa traditional earth architecture of wattle and daub walls in the North, to the thatch roof houses of the South, as well as the 18th century royal houses or palace in the eastern parts of Nigeria.

2.4 Yoruba Settlement Patterns

The factors influencing the construction of dwellings of Yoruba include; socio-cultural factors, spatial characteristic of the building, extended family, materials and previous laid down construction methods. In the year 1990, Ralph assumed the Yoruba town as a 'wheel or circular in shape. He observed that the Yoruba town radiated from the Oba's palace. This could be found in the Palace of Oyo located at the center or hub (core) of the town and links other parts (See Fig 3).

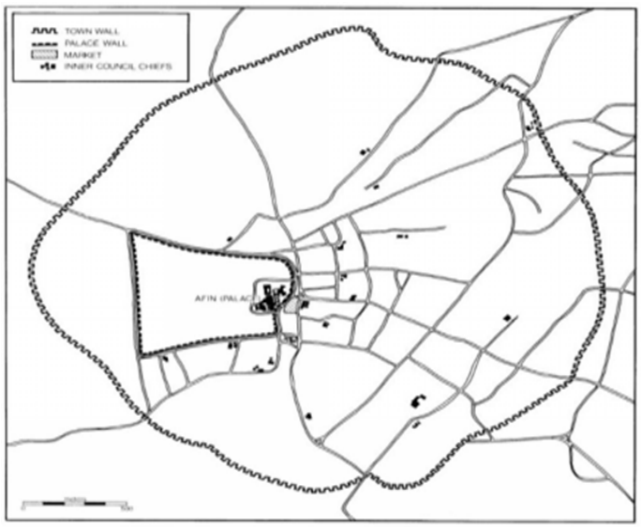

Figure 3: Typical Circular Plan of Yoruba City Settlement Pattern.

Source: Ojo, (1966)

3. METHODOLOGY

The aim of carrying out a research is to add to the existing body of knowledge in a particular area of research. This can be achieved through the processes of identifying problems, defining them and refining it, develop hypothesis and theories formulation. By these, new approaches are developed and possible solutions are suggested. However, the process can involve the use of strategic and systematic methods to arrive at a logical solution and develop a problem solving problem (Rajasekor et al., 2006).

This study adopted the exploratory research method to collect data from existing publications on the research from journal articles, books of related topics, reports, personal observations and case studies. The case study was carried out by focusing on the selected traditional dwellings in cities of Ogbomosho, Ile-Ife and Ibadan among other towns located in Southwest zone of Nigeria. Hence, a lot of site appraisals and descriptive survey was done to select houses within the study area. In this case, qualitative analysis was used, in which sketches of the floor plan and elevation were produced with a means to describe the built-forms cutting across the physical and cultural attributes of the selected buildings. The field work focuses on traditional compound houses and Afro-Brazilian/Brazilian. This was considered in order to study the values of traditional architecture and gives the influence of Afro-Brazilian / Brazilian style on the contemporary architecture of Southwest Nigeria with a view to integrated into the proposed design concepts.

4. FINDINGS

4.1. Case Studies

I. Yoruba House Form – Creating Factors

Yoruba house form can be classified into three (3) categories on the basis of the complexity, namely commoners compound, Quarters for the Chief and Afin (traditional palace).

Plate 1:A Commoner's compound.

Source: www.pinterest.com

Plate 2: Quarters for the Chief.

Source: www.pinterest.com

Commoner's compound is the genesis of others and is usually headed by 'Baale' (compound head). Whilst quarter for the chief is of the same pattern as those of the ordinary extended families with fairly large courtyard depending on the chief's rank in the traditional government. 'Afin', traditional palace, is the most complex among the three classes. It is usually designed to conform to the status of Oba (King) of a town as the arch-priest of the living members of the society. He needs an utmost security as he is regarded as unseen, unheard and untouched except on few occasions when he performs his spiritual and political duties.

In line with the above 'Afin' design has to take into consideration enhancement of cultural values, norms, and effective social interaction among the members of the lineage. In support of these, Afolabi Ojo wrote in one of his books that traditional Yoruba 'Afin" housing unit is a compound type (akodi),. the architecture of which fully takes into consideration of circumstances of life. 'Afin' is also influenced by the role of Oba as the social head and his spiritual leadership functions. On the other hand, physical factor is classified to be the secondary form generating forces to which the house responds through the use of certain materials, building structure and its orientation.

Plate 3: Yoruba Architecture with Islamic ArcYhes (Afin, Oyo, Nigeria)

Source: www.pinterest.com

Plate 5: The Palace of Ooni of Ife, Nigeria

Source: www.pinterest.com

II. Materials for Construction in Yoruba House Form of South west Nigeria

Yoruba houses in south west, Nigeria are constructed using the limited available resources of the environment at their disposals; the soil, forest trees and the grasses of the savannah are used; the adoption of these materials is postulated by their traditions, religious activities, durability, and location. Generally, materials selection is characteristic with belief and norms attributed by religious and lineage taboos, some materials are considered

unwise to use due to believed that it brings bad luck to any household that uses them. Yoruba traditional architecture are constructed locally using sourced materials in abundant, this material includes adobe or clays of laterite soil used in walls and floors, wood used in making doors, windows and support, juice extract from locus beans used for wall plaster, thatch is use on roof and mud plastered with lattice palms are used as ceiling materials to prevent fire. The local materials for roofing consist of wooden poles of varying sizes, commonly used as girders, beams, rafters, and joists.

Furthermore, the choice of mud is due to the high resistance to erosion, weathering process, climatic effect of mud that makes the interior space to be cool and dark all day, while the choice of roofing depends on the hardness, durability and high resistance insects The materials use in traditional Yoruba house and its properties is listed as follows.

a. Earth: This is the most popular traditional building materials used in walls and sometimes in roofs, as stated by Srinivas (2007), earth has great values and regards as the most sustainable and ecologically balanced materials. Its greater advantage is the completely recycled properties that don't leave any environmental footprint in comparison to other construction materials.

Likewise, Dobson, (2000, 3) earth has a good thermal, sound insulating and fire resistant properties, this property necessitate its used in the tropics. They moderate between the interior and the exterior humidity and temperature and has been regards as having the ability to breath. Table 1 summarizes the attribute of earth materials.

Table .1: Attribute of Earth Materials.

ATTRIBUTES OF EARTH	EVALUATION
Authenticity	Traditional
Compressive Strength	Good
Heat Retention	Good
Water resistance	Poor
Torsional Strength	Poor
Cost	High
Design flexibility	Good
Insulation	Poor
Acoustic separation	Good

Source: Authors' Compilation.

The common example or method of the usage in walls includes adobe blocks (mud bricks), rammed earth, pressed bricks and cob. Definition of each method listed above is explained below.

i. **Adobe Blocks:** It's also known as mud bricks, an air dried brick made from foot kneaded earth mix formed in a mould; its constituent includes clay and silt and sometimes contains stabilizer and straw.
ii. **Rammed Earth**: It's made from damp or moist soil, with or without stabilizer that is kneaded using temporary movable formwork, it has good thermal properties as compared to other examples.
iii. **Pressed Earth Bricks**: It's an earth bricks formed using a machine operated or hand operated mechanics.

Plate 6: Bricks Made with Earth Materials.

Source: (www.desertphile.org)

iv. **Cob:** It's an ancient technique used in the erection of monolithic walls, this involves using of moist earth mix with straw and has similar thermal properties with adobe and rammed earth bricks. The processing involves mixing the subsoil with clay and straw or other fibrous materials to stiffing the mud formed into small loaves. This is thrown to the builder during construction and mashed together to form a monolithic wall that built on a solid foundation of either stone or concrete, each layer during construction are left to sun dried before the successive layer is laid.

b. Thatch: According to Kennedy (2008) hatch is a generic name for \vegetative material, including straw, palms leaves, grass and reeds, used in roofing. It's an environmentally friendly material and can be breath; this reduces its susceptibility to rotting. As seen in Plates 7 and 8 respectively.

Plate 7: The Example of a Thatch Materials Used In Roofing.

Source: www.mastergardenproducts.com/thatchroofingandmore

Normally, an accurately constructed thatch roof can withstand up to sixty years. Thatch roofs are weather resistant if well maintained doesn't absorb a large amount of water; it is a natural insulator with pocket of air on

grasses found on their stems; This characteristic gives a building the insulating ability needed to insulate a building in both warm and cold weather. It's a versatile and flexible material and an organic material and this makes it decomposes and attack by rodents.

Plates 8: A Thatched Roof Building.

Source: www.bbc.co.uk/blogs/africahaveyoursay

c. **Wood**: Wood is a strong, easily processed and beautiful building material. It has been regard as a non-maintainable material in its purest state unless on few cases when treated. Timber is bio-degradable and by no means harmful to the environment, it is an elastic material and incredibly strong while bending and flexible under load.

III. Procedures for Construction of Yoruba House

As stated by Osasona (2005, 11-13) construction of Yoruba dwellings is mostly a community issue, the best season selected for construction is November to March of each year. Ojo (1966, 147) indicated that during this period the rains began to cease and coincide with when there is reduced farm work resulting into more hands available for construction of shelter than food.

The water needed for the construction are gotten from streams and puddles and the continuous prospect of sunshine helps the mud bricks use for construction in this period to dry easily as they are piled up on each other. The construction of shelter begins by the clearing of the proposed site and digging of huge amount of laterite from a deep pit located close to the site.

The first approach to construction regard as slow is explained by Osasona (2005, 11-13) that after an adequate quantity of laterite earth has been excavated, further processing is puddling done by adding pressure using the underfoot as water is added simultaneously, this done until a malleable and homogenous state of soil is achieved. After puddling, the processed earth is covered with leaves and left to cure for few days, before additional water is added and massaged once more, the next stage is the construction of the shelter, creepers, and vines branches are used for the setting out and building configuration are marked out, the walls are built in about seven layers of swish-mud, each layers roughly one foot and one-foot-thick as found mostly in traditional Yoruba houses. The earlier layers are left to dry before the successive course is added in a means for it to be adequately hardened to bear the weight of the next layer due to wet earth not able to support its own weight. The window and door positioning are reserved as the construction is done.

The second approach is messaging the laterite earth with foot after excavation and it's molded into bricks using rectangular molds and consistently left to sun-dried for two weeks. The sun-dried bricks are stacked together to form a kiln and set on fire to burn for a couple of days, this done for increase the strength and compactness.

Furthermore, the bricks are later laid in course and joined with mortar until the desired height is achieved. The roofing and thatching materials to be used are readily available due to the period of the construction when the trees are adequately vegetated. The common materials used for roofing includes the coconut or fan palms or other termite resistant trees are used as a rafter, purlin, and cross beams. The roofing is completed mostly within the intervals of two or three days. Ojo (2005, 147), stated the most important part of their building is the wide verandah, supported with carved post spaced at intervals to each other use for numerous form of activities and shaded by the cantilevered eaves from the sun. It is devised for activities such as sleeping and access to rooms, privacy, and storage of goods this afforded by the saddled back construction easing the use of ceiling as storage. The saddle-back roof in most rectangular compounds of the Yoruba's house helps to connect or collect rain water into the courtyard that is collected in jars and surplus water is drained out through a hole beneath the hallway of the entrance door.

IV. Building Types

The building types found in different geographical regions in Nigeria is caused by factors such as regional difference, culture, owners' status, ethnic diversity, socio-cultural activities, western influence, and indigenous traditional beliefs and newly introduced one, such as Islam and Christianity. However, the beginning of technology, slave trade by the British colonials, the establishment of Islam and Christianity beliefs and improved skills of workmanship lead to more diverse building types found in geographical locations in Nigeria. Examples of indigenous traditional house found among the Yoruba are Farmhouses, compound house and rooming house, custom built due to their polygamous nature and large family.

a. Compound House: This can also be referred to as traditional courtyard house characterize with one or multiple courtyards that defer on the ethnic built form approach, the building knowledge is passed down from generations and practice due to the need to accommodate large family and multi-habitation. This building type is devoid of ornamentation except few pattern found on timber window and doors, evidence of materials uses includes, mud bricks, thatch and corrugated iron sheets. An example of the compound house is shown in Fig 4 and 5.

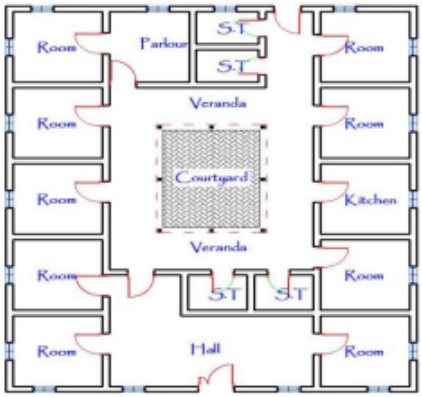

Figure 4: A Typical Yoruba Compound House Layout.

Source: Author's compilation.

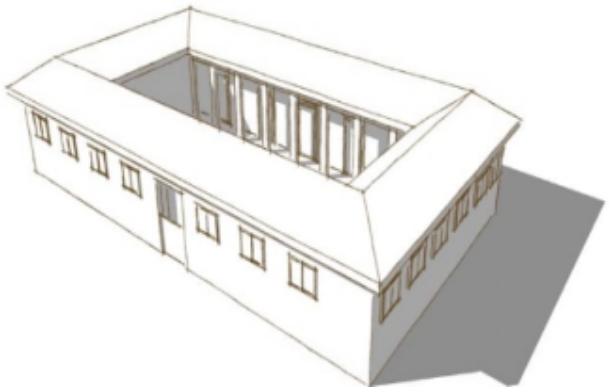

Figure 5: A Model of a Traditional Compound House Type.

Source: Authors' compilation.

b. The use of Courtyard

This is an important aspect of regional traditional architecture in Nigeria and exists among the three ethnic groups.

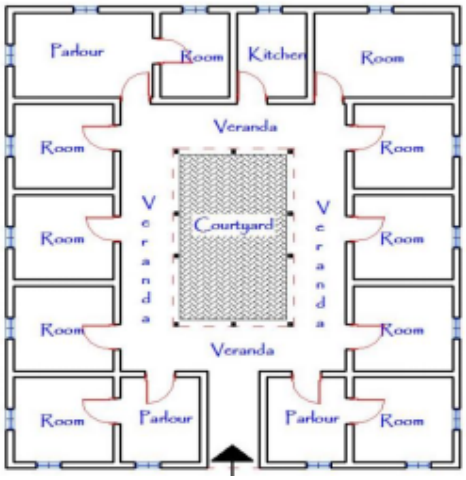

Figure 6: A Typical Yoruba Compound House showing the Courtyard Location.

Source: Authors' compilation.

The courtyard has been deviced culturally by traditional pre-cursor for unity, communal living, security, socio-cultural activities, privacy, seclusion and a means to curb crimes and insecurity. Furthermore, Adedokun (2014, 42) stated that the courtyard to the Yoruba is (Agbala) an open space within the compound, devised for entertaining visitors, rearing of domestic animals, cooking and collection of rainwater, sleeping, night story tales area for children and ease of extension for newly married men (See Fig 6).

c. Farm & Tent House: This is a temporary house form found among various ethnic groups in Nigeria, the nomadic Hausa-Fulani device the tent house made with shrubs or grass and tree trenches, while Yoruba made theirs with mud and roof with shrubs, as shown in Fig 7 and Plate 9.

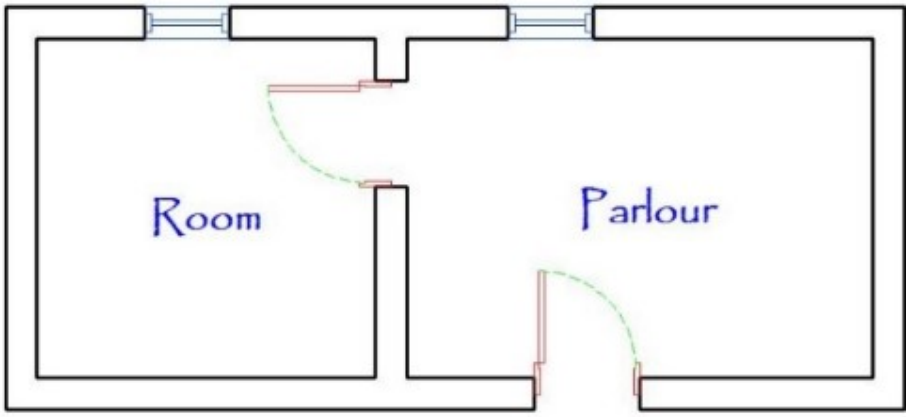

Figure 7: A Typical Yoruba Farm House Plan.

Source: Authors' compilation

Plate 9: A Typical Yoruba Farm House.

Source: Osasona,(2007)

d. Brazilian House: This can also be referred to as the rooming house, it is an influence that dominates southwest part of Nigeria, shaping the construction technique and high ornate features of building in Lagos island and some parts in Ogbomoso township at the turn of the twentieth century. Major changes occur after the repatriation of African slave from Bahia in Brazil, Cuba, and other Latin American countries.

According to Osasona and Ewemade (2009, 60-61), the two groups of repatriated slaves that settled in Lagos Island are the Agudas (slaves repatriated from Brazil and other Latin America) and the Saros.(returnees from England who first settled in Freetown, Sierra Leone and later moved to Lagos Island,) The Agudas were trained craftsmen who designed specialized Hispano-Portuguese style of building, commonly refers to as Brazilian Architecture, characterize with a complex roof, and highly ornate craftsmanship portraits on the column, staircase, balustrade and dormer windows. They also feature elaborate forms and large space verandahs covered by projected roofing supported with the aid of timber post placed at a respective distance apart. While the 'Saros'

were smart businessmen that popularized the construction of two-storey building archetype, their adopted style is the British Colonial building practice, distinguished by the use of timber framed and boarded houses frequently with en-framing verandah with features like, carved fascia, attics, dormer windows and broad timber framework at the eaves (Plate 10).

Plate 10: Brazilian House.

Source:www.pinterest.com

This building style was favored and widely accepted because of its embellish decoration which has common characteristics with art that was primarily practiced by the Yoruba builders. Another reason for its acceptance is the non-imposing lifestyle and the introduction of a central hallway in the middle that can be likened to a compressed courtyard with the possibility of using local materials for its construction. Studies into resemblances in mythical representation between the Yoruba and Brazilians showed that Yoruba language is spoken in some part of Cuba and Brazil. Marafatto (1983) describes five examples of Brazilian House. These include;

i **The Detached House or Bungalow:** This idea is copied from early Portuguese bungalow house. The space arrangement is often rooms planned along with a central hallway (see Fig 8 and Plate 11).

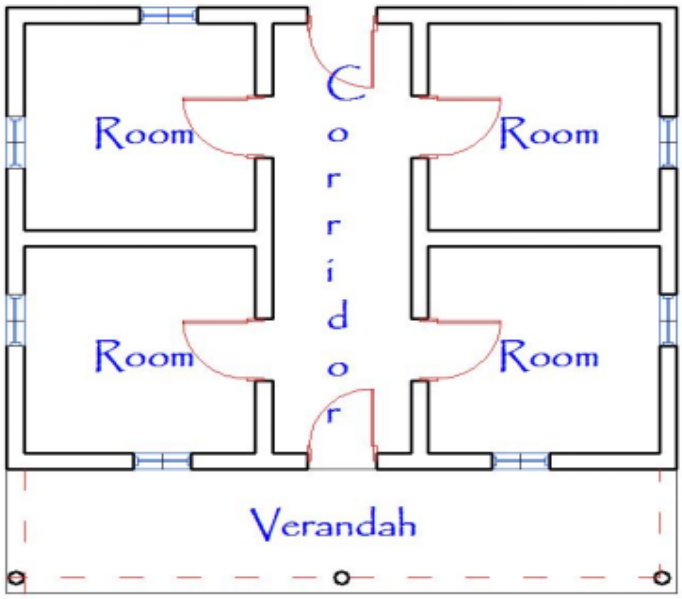

Figure 8: A Typical Yoruba Rooming House (typical of Portuguese house) Layout.

Source: Authors' compilation

Plate 11: An Afro-Brazilian (Rooming) House at Ipetumodu, Nigeria.

Source: Authors' compilation.

ii. The Upper-Floored House: They are mostly two floors or more and the staircase made of timber is placed at the end of the central hallway as mostly found in Brazilian houses. The spaces on the ground floor are sometimes used for commercial and residential use, while the rooms on the upper floor spaces are routine for sleeping and relaxing at night (see Plate 12)

Plate 12: A Brazilian Upper-Floored House in Osogbo, Nigeria.

Source: www.pinterest.com

iii. **The Modified Upper-Floored House:** The significant qualities of this type is the lavish ornamentation and decorations done on its exterior, the external positioning of the staircase and inclusion of galleries further differentiate it. This house type portico is always leveled with the road (see Plate 13).

Plate 13: A Modified Upper-Floored House, Nigeria.

Source: www.pinterest.com

iv. The Typical Upper-Floored House: The ground floor plan and the first floor have typical floor plans and this leading to the presence of external balconies above, the staircase is located at the hallway end close to the back door of the building as seen in Plate 14.

Plate 14: A Modified Upper-Floored House, Nigeria.

Source: www.pinterest.com

v. The Complex Upper-Floored House: This technique is recent of all and mostly linked to the 18th and 19th-century Brazilian house, the internal space organization is complex and the use of rich ornate on windows and ribbed pillars and stuccoes are found under this example, as shown in Plate 15.

Plate 15: A complex Upper-Floored House in Ogbomoso, Nigeria.

Source: Authors' compilation.

vi. Afro-Brazilian House: Osasona (2007, 61) described Afro-Brazilian house as a progressive form of Brazilian style or a technique derived from the marriage of cultural heritage with Brazilian style. It is less expensive and easily replicated due to fewer ornamentation and simplicity of model similar to the pre-cursor buildings. The style becomes a noticeable building typology in Lagos Island and progressively to the hinterland of other towns. According to Vlach (1984, 12), the major foremost builders of the Afro-Brazilian House are poor relatives of rich repatriated 'Saro' that have become wealthy from trading in Brazil (See Plate 16).

Plate 16: An Afro-Brazilian House, Nigeria

Source: www.pinterest.com

e. The House of Adebisi Giwa of Idikan, in Ibadan Nigeria

The mansion of Adebisi has been portrayed in the Ibadan world view as a structure like the Mapo hall in grandeur, elegance and splendor (Adeoye, Akande, Oladiti, 2018;). The prevalent belief at the time the structure was built was that materials for the construction of the building could only have come from Europe. The building demonstrates the importance attached to the brilliance of human creativity (Plate 17).

Plate 17: The Approach View of the house of Adebisi Giwa of Idikan, Ibadan, Nigeria

Source: Adeoye et.al (2018)

The building symbolizes the wealth of Adebisi as cultural metaphor and a significant historical connotation for the Oyo Yoruba groups in Southwest Nigeria. The building takes on a dual role of residence and court in the manner that contest with the loftiest abodes of Ibadan royals.

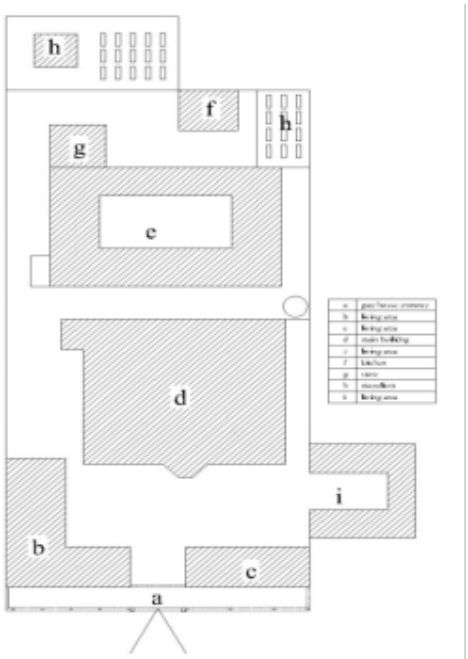

Figure 9: Site Layout of Sanusi Adebisi House. Figure 10: Ground Floor Plans of Sanusi Adebisi House. Source: Adeoye et.al (2018)
Source: Adeoye et.al (2018)

The annotations as shown above are: a. Entrance façade; b. Living area 1; c. Living area 2; d. Main Building; e. Living area 3; f. Kitchen; g. Store; h. Cemetery/mausoleum (See Figure 9 and 10).

f. Transformation in Yoruba House Form

There are a lot of transformation that had existed over the years due to intervention of colonialism, technology improvement, new means of transportation, the evolution of new styles by immigrants, new materials and a boost in money economy leading to changes in the social status of individuals and taste in the choice of house form. These listed factors contribute hostile result on the Yoruba kinship and family authority.

i. Influence and Effect of Colonialism: This comprises of missionaries, colonial administration and repatriated slaves from Brazil and Latin America. The Yoruba house form has been weakened as a result of socio-economic contact with the western world. This includes usage of imported building material, new architectural styles, and religion as collectively weakens the socio-cultural factors. The Christianity idea of one man and one wife suggested the building of a new individual house in distance to the lineage compounds. Other factors include western education, intra-ethnic war and migration that emerges by new means of transportation.

ii. Boost in Money Economy: In the year 1990, Nigeria experience a boost in economy due to the exportation of cocoa, palm oil, and palm kernel, this creates good incomes to farmers and many individuals and initiate the sprinkling of new (foreign) designs and use of new materials. The indigenous materials are termed inferior while the new incomes give rise to distinctive taste among members of the lineage willing to improve their portion of the compounds to taste. This contributes unpleasantly result on the kinship and family pedigree.

iii. The Invention of New Building Materials: According to Mabogunje (1969, 118), the American Baptist missionary replaced the mud wall with baked clay. The use of cement to plaster was used on walls and floors. The mid-nineteenth century witnessed the introduction of corrugated iron sheets used for roofing. The introduction of these new materials although weakened the cultural values but assisted the buildings to withstand tropical climate and making it more durable.

5. CONCLUSION

Traditional (vernacular) architecture has undergone numerous changes over the years as a result of modernity which has led to the emergence of contemporary approaches to building construction in Nigeria. However, the values of vernacular nowadays are still very relevant to our contemporary buildings. The advantages of vernacular architecture are numerous and are not limited to the use of eco-friendly material to accommodate local climatic conditions. The use of adobe as a traditional building material characterised with its natural thermal regulating qualifies and no detrimental environmental effects is a good example here. Most of the modern building materials are not eco-friendly compared with the local building materials causing a lot of threats to the natural environment especially with the issue of climate change and global warning. Thus, there is need to revisit the use of our locally available building materials. These materials could be improved upon and made to be functioning in the same capacity just as the modern building materials and with no harm to the environment. Creative means of expressing culture needs to be encouraged since cultural practices and values define the practices of traditional architecture in Nigeria which is absent in the contemporary architecture. The use of yet attractive traditional wall finishes for instance can be applied in the contemporary buildings rather than the expensive ones with no cultural expression being used. The introduction of courtyard system helps to resolve ventilation problem in buildings. Preserving these forms and styles, will promote cultural heritage as well as be an economical way of saving cost of building construction.

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