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## EXPLORING THE DIFFERENT VERNACULAR ARCHITECTURE IN NIGERIA

## AUWALU, Faisal Koko

College of Architecture and Civil Engineering, Zhejiang University.

**ABSTRACT:** This paper focuses on vernacular architecture and the various vernacular architecture in existence in Nigeria. Nigeria as a country is heterogeneous in both its sociocultural structure and ideological perspective because of its ethnic diversity. This study therefore examines the vernacular architecture of Nigeria with focus on the three major ethnic groups which are the Hausa's in the Northern Nigeria having Hausa Vernacular Architecture, the Yoruba's in the South-Western Nigeria having Yoruba Vernacular Architecture and the Igbo's in the South-Eastern Nigeria having Igbo Vernacular Architecture with focus on their culture, region and identity in order to have a proper perspective on the vernacular architecture of Nigeria. The vernacular architecture of the different ethnic groups in Nigeria are reflected through their culture, region and identity. Ethnic groups with similar culture, region and identity share similar architectural characteristics as it relates to their building layout, size of family, space organization, openings and fenestration, decorations used, roofing type adopted as well as the nature of Building materials used. As such, this paper suggest the classification of the vernacular architecture in Nigeria be considered from the cultural, regional and identity aspect due to the environmental, cultural and historical background in which vernacular architecture exist.

KEYWORDS: Architecture, Culture, Nigeria, Traditional, Vernacular

## **INTRODUCTION**

The term Vernacular is derived from the Latin word 'vernaculus', referring to 'indigenous, native, or domestic'. Vernacular architecture is a word used to define construction methods which adopts the use of locally available materials as well as traditions to address the needs of the local (Fernandes, 2014). Vernacular architecture reflects the historical, cultural and environmental setting to in which it exists over time. It is an architecture that is indigenous with specific time or place. Rashid (2015) is of the opinion that vernacular architecture integrates the combination of local climatic conditions, locally available materials, simple construction techniques, traditions, living style as well as the socio-economic conditions of a region. According to Lawrence (2006), vernacular buildings serve as human constructs which results from the relationship between ecological, material, economical, and social factors. Due to the fact that vernacular architecture has evolved through trial and error methods, vernacular buildings and site planning depend significantly on experience, surrounding conditions, and local available materials such as adobe, stone and timber. Specifically, vernacular architecture is given priority in terms of its continuity. The book of Encyclopaedia of Vernacular Architecture of the World published in 1997 by Paul Oliver of the Oxford Institute for Sustainable Development defined vernacular architecture as that which involves the dwellings and all other buildings of the people which relates to their environmental contexts and available resources, they are customarily owned or community built while utilizing traditional technologies. Frank Lloyd Wright expressed vernacular architecture as "Folk building growing in response to actual needs, fitted into environment by people who knew no better than to fit

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them with native feeling". Bernard Rudofsky first used the term vernacular in an architectural context and labelled it "vernacular, anonymous, spontaneous, indigenous, and rural, as the case maybe". The above mentioned architects have used vernacular architecture as an inspiration for innovations in environmental and socio-economically sustainable design and planning. Vernacular architecture as a style of architecture takes into consideration all the needs and requirements of the people, their nature, available construction materials as well as the traditions and culture (Sarkar, 2015). It develops over time to resonate the culture, traditions, history, environment, resident desires as well as the needs and economy of the locality. Though vernacular architecture seem to be diverse from the popular outlook towards the built environment, the use of indigenous materials, design and construction techniques plays an important role in architecture of a society. Vernacular architecture is influenced by diverse features of human behaviour and environment which leads to differing building forms for almost every different context; even neighbouring villages may have subtly different approaches to the construction and use of their dwellings with significant similarities in structural forms. The way of life of building occupants and the usage of shelters greatly influences building forms. The size of family units, spatial usage, and preparation of food, interaction of people and many other cultural considerations affects the layout and size of dwellings.

Despite the important role vernacular architecture plays towards the understanding of the traditional architectural settings of every society. So far, there has been little discussion with regards to the vernacular architecture of Nigeria especially with respect to the three main ethnic groups of Nigeria with very few studies which seeks to compare the different vernacular architecture of Nigeria. This study therefore aim to develop an understanding of the different vernacular architecture in existence in Nigeria.

The objectives through which the above stated aim will be achieved are:

- i. To study vernacular architecture and its features.
- ii. To study the various vernacular architecture majorly found in Nigeria
- iii. To compare the various vernacular architecture predominantly found in Nigeria

## AN OVERVIEW OF NIGERIA

Nigeria is a country located in Sub-Saharan Africa, in the West of African region which lies between latitudes 4° and 14° to the North and longitudes 3° and 14° East of Greenwich mean time (GMT). The total area of the country is about 923,768 square kilometres, and about 13,878 square kilometres of water (National Bureau of Statistics, 2010) with a population of 198 million (National Population Commission, 2018). Nigeria is divided into Northern and Southern parts, its distance from the Northern to the Southern regions covers about 1400 kilometres, and 1100 kilometres from the Eastern to the Western regions (Federal Ministry of Culture and Tourism, 2007). Ayeomoni (2012) suggest that there are more than 250 ethnic groupings, speaking over 500 local dialects and upholding highly-varied social practices and concepts. However, the predominant tribes of Hausa-Fulani's occupy the Northern region, the Yoruba's occupy the South West region and the Igbo's occupy the South East regions (Demographics of Nigeria, 2018).

## METHODOLOGY

This study seeks to contribute to existing knowledge on vernacular architecture and the various vernacular architecture that are existing in Nigeria, which are predominately found in the three major ethnic groups of Nigeria as well as the regions in which the ethnic groups dominate. This was achieved through studying existing literatures on the vernacular architecture of Nigeria. In the process of carrying out this study, problems were defined and redefined, objectives stated and theories formulated, new approaches developed, solutions and conclusions were drawn. As suggested by Rajasekar, Philomin, & Chinnathambi (2006), this method also involves the use of strategic and organized approach in the quest of knowledge so as to arrive at a logical conclusion and develop a problem solving theory. The exploratory research tool was used for collecting data from existing literatures on the research. Most of the Literatures were derived from books, journals, articles and reports on related topic as well as personal knowledge about the study area was also applied.

## VERNACULAR ARCHITECTURE OF NIGERIA

Vernacular architecture as described by Chukwuali (2004) is an expression of the people's way of life and traditional values (culture). The vernacular architecture of Nigeria can be given a description of the building materials, forms and techniques leading to the traditional forms of architecture especially with respect to the architecture of the three major ethnic groups which are namely the Hausa's in the Northern region of Nigeria, the Yoruba's in the South western region of Nigeria and the Igbo's in the South eastern region of Nigeria. Therefore, architectural forms within this context is tied to different ethnic cultural practices. The Hausa's are found in the Northern region of Nigeria, and constitute the largest ethnic group in that part of the country. Traditionally, they are characterized by large social aggregations as evidenced by cities like Kano and Zaria in Northern Nigeria and are predominantly arable farmers growing cotton, groundnuts and food crops as well as large scale traders trading in agricultural produce, leather work textiles, and basketry. They are mostly Muslims with religious dictates conditioning mode of dressing, social interactions, and even affecting spatial disposition in their vernacular architecture. The Yoruba's are predominately found in the Southwest region of Nigeria, they have traditionally lived in large urban social groupings, even before colonization (Ferguson, 1970; Eades, 1980; Laitin, 1986). They are famous for their works of art especially bronze-casting, terracotta and wood sculpting. They are traditionally animists and have mostly embraced Christianity. Due to the fact that the southern parts of Nigeria were readily penetrated by the British colonialists, Yoruba land profited early by western imports such as formal education and trade in cash crops. Whereas the Igbo's are predominately found in the South-eastern region of the Nigeria and are largely recognised for their industrial activities and for being particularly enterprising in the area of trade and general business. Traditionally, the Igbo's lived in small, clan-based settlements with de-centralized political administration. The "indirect rule" system of the British applied in other regions of country did not work with them (Laitin, 1986), they also enjoy the same immediate benefits generally enjoyed by the South western Nigeria. Even though the Igbo's are traders, they are also prolific farmers, producing yams, cassava and palm-oil in large quantities.

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### Northern Nigeria Architecture (Hausa Vernacular Architecture)

Hausa Vernacular Architecture can simply be defined as the art of shaping the environment to serve the requirements of Hausa traditions comfortably and efficiently. The Hausas are one of the prominent ethnic group in West Africa and are among the three largest in Nigeria (Arenibafo, 2016). Hausa Land is located in Nigeria between latitude 3.5° east to latitude 11.0° east, and from longitude 10.5° north to longitude 14.0° north as shown in Figure 1. The Hausa's predominantly believe in Islam as their religion. Their religion has significant influence on them and permeates almost every aspect of their life and culture such as their dressing, social interactions and even architecture. Agboola and Zango (2014) are of the opinion that the Trans-Sahara trade coupled with the new religion of Islam had the most enormous impact on the settlement pattern and local building practices of Hausa land in Northern Nigeria. Some of the effects can be seen reflected in the facades of their buildings as a number of the designs employed were borrowed from other parts of the Islamic world.



Figure 1. Map of Nigeria showing Northern Region of Hausa land (Source: http://www.mynigeria.tripod.com)

Hausa vernacular architecture is significantly influenced by religion, socio-cultural practices, available material as well as climate. The layout patterns of settlements as well as family compounds are affected by the culture and social practices. There are three important focal points within the settlement. These are the emir's palace, mosque and market. The emir's palace serves as the administration centre of the community while the market draws people from within and around the community once a week for trade and social interactions. The Hausa's build family compounds around these three focal points. According to Sa'ad (1996), "A typical Hausa compound as maybe found in some major cities in Northern Nigeria displays a high degree of complexity and marked hierarchy of spatial privacy as one moves from the outside to the inside. It is often surrounded by a mud wall, a grass matting fence called "Zana" or more recently, by a concrete block wall. The main entrance hall opening to the street is known as the "Zaure" as seen in Figure 2 which creates a separation between an outside public zone and a private inside zone for the extended family.

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Figure 2. Compound Layout of the Hausa's in Northern Nigeria

As had been observed earlier, the Zaure is an important space due to the security and control measures it offers to the compound. After the zaure, is the first courtyard of the house known as "kofar gida" (literally meaning entrance door to the house). It is an 'opening' or 'space' through which one accesses the interior of the compound, according to Sa'ad (1996) this is a semi-public domain often enclosed by buildings and parts of the compound wall. The space defines the access limit adult male visitors have to the compound except for close relatives and intimate friends of the household head. An inner reception hall known as "Shigifa" opens into this outer courtyard as seen in Figure 2. Saad (1996) is of the opinion that, the "shigifa" is a smaller inner zaure used as a more private male social space where the house head (Turaka) can relax in private with intimate friends and members of his family. The "shigifa" opens into the inner courtyard (cikin gida) of the compound and adjacent to the 'shigifa', is the domain or private sleeping quarter of the household head which often opens into the inner courtyard. In other words, the "shigifa" is a transitional space between the outer courtyard (Kofar gida) and the inner courtyard (cikin gida). In a more prosperous compound, it is observed that the head may have a section of the "shigifa" consisting of a room and parlour, with the parlour having two external doors, one opening to the outer courtvard (Kofar gida) and the other opening to the inner courtyard (cikin gida). This gives the head the vantage position of viewing and controlling the goings on between the outer courtyard and the inner courtyard.

Traditionally, the "cikin gida" is considered as the women quarters and constitute the major part of the compound. The married women spend most of their day within this part of the house especially. In this part of the compound, facilities that will help in the wellbeing of the women are located there. For instance, sleeping quarters (for the women, their young children and female visitors or relatives), children play area, kitchens, storage, granaries, chicken coops, bath rooms and toilets, and a number of other functional spaces. The materials of construction of the traditional Hausa compound are mud, thatch and split palm trunks known as "Azara". These materials according to Sa'ad (1996) are reusable thereby allowing evolutionary changes in the compound in response to changes in family size and structure to be reflected in architectural space. Studies by Prof. F.W. Schwerdtfeger (1982) covering 50 years (1915–1965) and Trevor Marchand (1994) covering 40 years (1952-1992) with respect to the

Vol.7, No.1, pp.1-12, February 2019

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development of a number of compounds in Hausa land revealed the physical space growth dynamics of the compounds, the evolution of spaces within the compound, changes in architectural forms and preferences. According to Sa'ad (1996), initially, residential buildings mainly consisted of mud round huts with thatch roofs but gradually through natural decay and changes in taste and forces of urbanization which made thatch more scarce, these architecture forms had to be changed to rectangular structures of conical shaped sun dried bricks (Tubali) to be roofed with "Azara" as well as reinforced mud roofs in the form of domes or flat roofs as shown in Figure 3.



Figure 3. A typical Hausa Vernacular residential building

### South Western Nigeria Architecture (Yoruba Vernacular Architecture)

The Yoruba vernacular architecture is an architecture owned by the Yoruba's, one of the principal ethnic group in Nigeria occupying the south-western part of the country which lies within the tropical rain forest. The south-western land consists of a Plateau of Yoruba land as well as the lower Niger and the western coastal lowlands as represented in Figure 4. Their land is one of the most densely parts of Nigeria with a land area of about 142,114 square kilometres (Adedokun, 2014). The Yoruba's are homogenous in their culture, religion and language though with variants of dialect. Their population spread over the entire south western part of Nigeria and the neighbouring Benin Republic (formerly Dahomey) (Umoru-Oke, 2010).



Figure 4. Map of Nigeria showing South Western Region of Yoruba land (Source: http://www.mynigeria.tripod.com)

Fadipe (1991) is of the opinion that the Yoruba's are the second largest ethnic group next to Hausa of the Northern Nigeria. The progenitor of the Yoruba race was believed to be the Oduduwa Olofin. Their several years of existence have fostered a culture that is unique to the tribe, yet intriguing. In spite of this integration of modern culture, the Yoruba's still maintain their strong ties with tradition. This is for example the case with their vernacular architecture, Idowu (1996) maintained that Yoruba hardly build magnificent temple for their divinities. The Yoruba's build courtyard

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architecture having the basic cuboidal form with a rectangular impluvial courtyard, placed in the rectilinear compound. A typical Yoruba compound has only one entrance (Enu Ilo, Ilo) into the compound which leads to the colonnaded courtyard. The rooms are rectangular or square and arranged in a linear pattern to surround the courtyard, which acts as the centre of activities or point of focus as shown in Figure 5. The head of the family occupies the room near the entrance to provide surveillance and security, and show hierarchy from the eldest to the youngest. The elder ones also occupy the corner rooms because they are bigger than the other rooms, which are allocated to the wives and their children. These rooms have small windows and doors, which open to the veranda and the immediate courtyard.



Figure 5. Compound Layout of the Yoruba's in South Western Nigeria

The wall plane is made of courses of mud materials, which are readily available and are usually mixed with vegetative materials such as straw, as additives and adhesives in order to enhance bonding having a small window openings which are usually above the door lintel-level. A little above the small window openings, the wall plane is germinated and a ceiling made of mat from palm fronds or split-bamboo is placed on wood beams (lowering room and veranda) acting as reinforcement; mud is then placed on the mat as a decking material. Construction of buildings usually takes place mostly in the dry season to accelerate dryness and curing. The buildings have a pitched pyramidal wood structure placed to cover the ceiling (locally known as 'Aja' using rope fibres as a tying-member. The ceiling space usually serve as a storage area for items such as valuables like clothes and other preserved foods such as yam flour, beans, dried corn, pepper etc. Woven thatched-mat is then used to cover the structural roof frames.

#### South Eastern Nigeria Architecture (Igbo Vernacular Architecture)

The Igbo's are found in the South-eastern part of Nigeria located on both sides of the lower parts of the River Niger, with the bigger portion lying on the Eastern side of the river as seen in Figure 4.8. This portion covers major states like Enugu, Abia, Anambra, Enugu and Imo. They live in scattered towns and villages speaking the common Igbo language. Igbo people are very industrious and engage in a wide range of commercial activities (Chukwu, 2015).

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Figure 6. Map of Nigeria showing South Eastern Region of Igbo land (Source: http://www.mynigeria.tripod.com)

According to Dmochowski (1990), communality is an important aspect of Igbo cultural life and is ingrained into the layout of the settlement pattern with their buildings seeking to integrate spiritual, cultural and lifestyle values into their architecture. Settlements typically have community spaces at the centre with these spaces being places for public gatherings, discussions and meetings as well as other community interactions. Some important activities in the Igbo community are the festivals and displays by masquerades which are done in the village squares. A typical family compound contains a number of huts or building units, each having a separate building. The Igbo compounds are built having a single entrance gateway and surrounded with an earthen wall. Okoye (2002) states that this entrance gateway indicates the status and power of the family and the importance of the head of the compound. The Igbo building forms are usually of two types: the rectangular and the circular. Roof forms are also built in accordance with the building form, thus, rectangular buildings had hipped roofing while circular buildings had conical roofing with few windows and having the veranda in front of the houses (Dmochowski, 1990). A typical Igbo compound have the men's section usually separated from that the women, and the children section usually grouped together. Clay, grasses and bamboo are the predominant building materials used for construction. These are used to address local weather conditions, clay is used for building adobe walls in order to sufficiently regulate temperature between the indoors and outdoors because of the hot humid conditions prevalent in south-eastern Nigeria. Nsude (1987) is of the opinion that the hot humid climate of Igbo land and its tropical rainfall dictate the use of steeply pitched roofs which are thatched with palm leaf fronds and grasses commonly available in that part of the country.



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Figure 6. Igbo Vernacular Building Style

(Source: Ikebude, 2009)

4.4	Comparison between Hausa, Yoruba and Igbo Vernacular Architecture
Tabl	e 1. Comparison between Hausa, Yoruba and Igbo Vernacular Architecture

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	Hausa	Yoruba	Igbo
Community	The Emir's palace, Market and Mosque are the 3 Focal points in the community	The Oba's palace and the Market are the 2 Focal points in the community	The Village square and Shrines are the 2 Focal points in the community
Decorations	The Entrance is highly decorated with reliefs, murals and engraved decorations.	The Entrance, Windows, doors, pillars and posts are highly decorated with reliefs, murals, pebbles, seashells, cowries and carvings	The Entrance, doors, pillars and posts are highly decorated with reliefs, murals and carvings
Compound	The buildings are in round or square shaped huts and are built having different functions which are repeated throughout the compound. Privacy and gender separation are highly emphasized. Non male members of the family are not allow to have access into the inner compound.	The buildings are rectangular or square in shape and arranged in a linear pattern to surround the courtyard, which acts as the centre of activities or point of focus. No gender separation. Inner compound is accessible to both male and female visitors.	The buildings are in round or square shaped huts and are built having different functions which are repeated throughout the compound. Little gender separation. Inner compound is accessible to both male and female visitors.
Size of Family	They have large family size due to extended family practice and influence of religion which permits up to four wives marriage	The have large family size due to extended family practice and the practice of multi- habitation	They have large family size due to extended family practice and socio-economic reasons.
Courtyards	The have open spaces within the compound which make up the courtyard.	They have open spaces within the courtyard which are used for various activities	They have open spaces within the compound which make up the courtyard.
Openings	They have few and small size windows	They have few and small size windows	They have very few and small size windows
Building Materials used	Mud, Grass, Cornstalks, Timber	Mud, Grass, Palm fronds, Thatch materials	Mud, Grass, Bamboo, Raffia palms

Vol.7, No.1, pp.1-12, February 2019

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Roofing	Flat mud roof	Pitched thatched roof	Hip thatched roof
Adopted	Conical thatched roof		Pitched thatch roof

Table 1 which compares the vernacular architecture of Hausa's, Yoruba's and Igbo's provides an important overview in advancing the understanding of the various vernacular architecture of Nigeria especially with respect to the ethnic and regional diversity. Findings from the study suggest that the three main ethnic groups in Nigeria which are the Hausa's in the Northern region, the Yoruba's in the South western region and the Igbo's in the South eastern region have different focal points in their communities which results to the differences in spaces provided for their activities, this conforms to the earlier assertion by Chukwuali (2004) who conceptualised vernacular architecture an expression of the people's way of life and traditional values. The decorations on Entrances, doors, windows and columns are all unique and represented according to the ethnic diversity having also large family, this conforms with the argument of Theodore (2006) who suggested polygamous family system, multi-habitation and socio-economic factors as that which contributes to these large family and usually results to buildings have many rooms and open spaces for various activities of occupant. The use of building materials, building form adopted and roofing types of every ethnic group largely depends on the locally available material of the region, this goes in conformity with the assertion by (Sarkar, 2015) who considered vernacular architecture as a style of architecture takes into consideration available construction materials. Findings this study contributes to the existing knowledge on the different vernacular building layouts, decorations, courtyards, openings, building materials as well as roofing method adopted by the three main ethnic groups of Nigeria which further translate to the vernacular architecture of Nigeria.

## CONCLUSION

In conclusion, this study explored the vernacular architecture of Nigeria, its concept and features as it relates to the ethnic diversity which focused on the three major ethnic groups in Nigeria which are predominately the Hausa's in the Northern region of Nigeria, the Yoruba's in the South western region of Nigeria and the Igbo's in the South eastern region of Nigeria. The literature reviewed in this study were derived from secondary sources such as journals, conference papers, text books, newspapers, magazines and the internet etc. This study has contributed to the existing literatures and knowledge about the vernacular architecture of these three main ethnic groups and showcased the different architectural patterns and layout of the three major ethnic groups in Nigeria as well as identified, tabulated and compared the differences in the vernacular architecture of these three predominate ethnic groups. The findings of this study suggest that the vernacular architecture of Nigeria like any other country in the world is characterized by certain features which are shaped by the people's culture, tradition, religion, artistry and the materials available within the various region of the country.

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