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Traditional Igbo Building Architecture: An Historical Perspective

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Abstract
Some European writers like David Hume, George Hegel and Hugh Trevor – Roper, among others have in their respective works presented a poor picture about the Africans. According to them Africans lacked any ingenious indigenous industry, arts and science. As a result of this Africa lacked development, culture and thus was no historical part of the globe. This view point is punctured by the work "traditional Igbo building architecture", which reveals a gradual but steady growth and development of the shelter needs of the Igbo from the pre-colonial to the post-colonial era. The major influences that acted as catalysts in the development of this basic need of man, the change and continuity in this aspect of Igbo tradition are discussed. Finally, the general impact of this cultural development is highlighted.

INTRODUCTION

There are basic necessities of man here on earth. These include food, clothes and shelter. Among these, shelter would appear to rank second in importance after food.[1] Nature was kind in copiously providing leaves, fruits, seeds, tubers and stems of plants, cooked or raw, for human consumption. Animals, birds and fishes are also among the edibles for raw food needs. Water, too, one of the consumables for man is relatively free and affordable to man. It was the search for food that "propelled" man from one location to the other during the wandering stage of man's existence.

The wandering stage of man came to a virtual end when he developed a settled life. Man's settles life was invariably marked by agricultural revolution. Agriculture which involved crop cultivation and animal domestication is said to have independently evolved in the tropics (which encompasses Igboland) about 10,000 years ago.[2] It is pertinent to note here that although the exact date of agricultural revolution in Igboland or even in Africa in general is not yet known, early knowledge and practice of iron smelting and smithing must have in a large way aided the agricultural revolution. Iron implements used by farmers as agricultural tools aided the early farmers to successfully clear the bush, till the land and fully exploit the resources of the land[3].

In addition, the use of iron tools enabled early settlers to embark on hunting, defend their settlements against attacks and also improve on the quality and nature of their settlement structures. For instance the Rop Rock shelter on the Jos plateau provides evidence of continuity of occupation from Late Stone Age to Early Iron Age.[4] In Igboland, places like Abiriba, Nkwere, Awka and Nsukka were early centers of Iron working.[5] Smiths from these centers traversed other parts of Igboland as itinerant professionals serving the farming societies by providing their metal tools.[6]

Any discourse on early Igbo settlers or even the pattern of their settlement would appear abstract and incomprehensible without clear knowledge and understanding of the peoples house-types from the pre-colonial to the post-colonial times. Like in other parts of Africa or even world over, patterns of Igbo building architecture reflected the cultural, environmental and defense needs of the people at any given period.[7] For instance, societies in cold areas would evolve building architectural designs that would provide warmth to the occupants. Similarly, in traditional African society like Igboland where polygamy was the practice, a man built multiple houses to take care of himself, his wives, children, and dependants.[8] This essay is an attempt to discuss patterns of building architecture in the Igbo society over the centuries, from the pre-colonial to the post-colonial period. In addition, the various factors that influenced and or determined patterns of building architectural designs over time will be discussed.

PRE-COLONIAL BUILDING ARCHITECTURE

Although virtually every people here on earth share certain common cultural traits with others, as humans, there were indeed certain distinctive and peculiar qualities that characterized each people. Apart from the Igbo language which was the number one distinguishing factor, the traditional Igbo society was both theophorous and communal. These two traditional indices of the Igbo society namely, the religious and communal life traits were always expressed and represented in the building architectural designs of every Igbo society. For instance, in a typical Igbo society, two distinct areas were discernible – the public quarters (*ama*) and the kindreds (*ezi*). The public quarters (*ama*) housed the assembly building and the shrines of the various deities of that community. The other part of the community was made up of kindreds. Within a given kindred, there were individual compounds. The number of houses in a given compound depended on the number of wives married by the man owning the compound. Agriculture was the mainstay of the people's economy[9] and for one to actually be a successful farmer, he married many wives to raise many children and increase the labour force for his farming

enterprise.[10] Although there were other sources of labour open to the Igbo farmer according to A.G. Hopkins, the most important economic unit in virtually all West African societies was and still is the household.[11]

The traditional Igbo building architecture was practically an offshoot of the cave environment inhabited by the Igbo ancestors prior to the development of house building culture. Hence the essential requirements at the cave habitat were provided in the house environment. For instance the cave provided warmth, shelter and defense against animals particularly the creeplings and the wild animals. Similarly, the house was fashioned to provide these basic necessities of life for the inhabitants.

As noted above, the house building structure reflected the basic components of the cave. The wall of the house at this period was essentially round. This was designed after the architectural structure of contemporary caves whose walls were usually virtually round in shape. The house had thatched roof. It was pre-dominantly these round-wall houses with thatched roofs that were available in the traditional Igbo societies in the pre-colonial era. Our discussion will subsequently focus on the method of constructing the walls and roofs of traditional Igbo houses in the period of our discussion.

CONSTRUCTION OF A ROUND-WALL HUT/HOUSE: CLAY REQUIREMENTS:

The walls of a round house in the pre-colonial Igbo society were constructed with any particular soil type available in any given environment. The soil types included clay, an admixture of clay and sandy soils and the third type which comprised loamy, sandy and humus soil. There was only one method of preparing each of these soil types for use in wall construction. This method involved excavation of a heap of soil needed for puddling at a time. Subsequently, some quantity of water were poured onto the heap of soil to make it wet enough before puddling took place. At the end of puddling the mud was ready for use in wall construction. It is worthy of note that although clay soil was scarce and thus was not commonly available in some parts of Igbo land, it was the best suited for the task of mud wall construction for certain obvious reasons. Clay as a term generally refers to a soil, or rock which under wet conditions appears to be sticky and tenacious, but when dry hardens, shrinks and cracks.[12] Clay too has been described as a form of metamorphic rock characterized by extreme fineness of particle size of earth.[13] Clay varies in colour; there are black, red and white clay types. The texture of clay also varies. Some are almost as soft as butter, while others are as hard as hard cheese or wax. They show few or no signs of bedding.[14-

ORIGIN OF CLAY MINING/USES IN IGBOLAND

It is almost impossible to say exactly when clay mining commenced in Igboland. However, it is germane to note that this enterprise cannot be discussed effectively in isolation of the traditional uses of clay. The two appreciable uses of clay in Igboland were for house construction and pottery industry. It is not certainly known which of these uses of clay pre-dated the other. Archeological reports indicate the use of pottery items in parts of Igboland at least since the Late Stone Age. For instance, the archeological sites at Ukpa Rock shelter Afikpo,[15](in the present day Ebonyi State), Ugwuagu, Rock shelter, Abakaliki[16] (also in Ebonyi State), and the Igboukwu site of the 9th century A.D[17], reveal evidence of pottery sherds, which point to the fact that pottery materials were used in parts of Igboland at such an early period.

But there are no such archaeological reports on clay wall buildings.[18] Availability of such records would have been very helpful in dating the culture of clay-wall building in parts of Igboland. However, absence of such archaeological reports on clay-wall culture in Igboland may not justifiably lead to a conclusion that pottery predated clay-walling culture in Igboland. Pottery items would appear to have some advantages over clay wall in terms of durability and preservation. For instance, in the process of manufacturing a pottery product, firing took place at the last stage, transforming the weak texture of pottery product, thus hardening the clay particles and making it almost impossible to be disintegrated by flood or any thermal condition.[19] Conversely, clay-wall building, lacked such a durable capacity; once it was exposed to rain or flood, it absorbed water, then collapsed and ultimately got washed away by flood[20]. But no matter the pool of archaeological artifacts in favour of pottery, one thing is clear: House (shelter) was an inevitable essential of life, while pottery product was only a technology of a settled man. Thus, clay-wall culture must have pre-dated pottery culture in Igboland.[21] Based on the above premise, one would be right to establish a claim that by the Late Stone Age the Igbo had established or adopted the culture of living in round wall houses constructed with clay or mud and roofed with thatches. Our preoccupation now is a discussion on the following: mechanism for clay/mud preparation (puddling), wall laying process, tools for the enterprise and finally the process of roof formation and thatching, in our period of discussion.

PREPARATION OF MUD FOR HOUSE BUILDING

Rev. G.T. Basden tried to paint a common and blanket picture of the traditional system of building clay houses among the Igbo, stressing the value and premium the Igbo attached to his house. According to him,

The arts and crafts of the Ibo manifest themselves first in his house. The ideas and tastes of

> **both husband and wife are indicated by the care bestowed in the building…. of the house. About the middle of the wet season, clay puddling begins….. The clay is broken up into clods with hoe, and left in readiness until the next fall of rain… After a shower, young men go down into the hole and puddle the loosened clay with their feet, more andmore being added or more and more water being thrown into the mixture as required to, bring to a proper consistency.[22]**

One cannot be certain about the part of Igboland Rev. Basden had in mind. But certainly, clay puddling in the technical sense of the word did not apply to all parts of Igboland. Rather, the type of soil in a particular area largely determined the type of soil needed and used for building houses there.[23] There were various types of soil as noted above. In the southern part of Igboland where sandstone was prevalent, sandy soil existed there whereas the central and northern parts of Igboland had shales as predominant rock and soil.[23] The method of preparing these soil variants for a typical traditional Igbo round hut was virtually the same. Our subsequent discussions focus on source(s) of labour, tools used and actual technique of wall-laying.

LABOUR

The task of mud puddling in the pre-colonial era demanded the services of family labour force. This involved the man, his wife or wives and grown up children[24] . He could also make use of the labour from the extended family members. Besides, as a communal society, anybody that demanded the services and assistance of the kindred or even entire village members received it, even though he should be prepared to provide food and wine to the workers during the day and evening at the end of the work.[25]

MUD-PROCUREMENTS AND PROCESSING:

Mud was the most important raw-materials for the building. So, the first step taken by a prospective builder was to embark on soil excavation. G.T. Basden stated that soil excavation took place in the dry season and tunnels were built for water to stream down to the clay mud well before building could take place.[26] This assertion by Basden is untenable because Igboland was and still is in the tropical rain forest zone. There was always rainfall for more than half of each year. Even when dry season set in, there were natural sources of water such as streams, ponds, springs and wells where people could go to fetch water for the purposes of puddling.

The quantity of the puddled earth required for a building was produced gradually over time. At the end of puddling each day, the produced quantity of clay was packed at a particular spot. Excavation and puddlling could take any number of days or weeks until the needed quantity of mud was accumulated. At the end of puddling exercise each day during the rainy season, balls of the puddle mud were cut and heaped at a particular spot.[27]

Leaves of cocoyam were used to cover the heap to prevent erosion or rain from washing away the heaped mud. The purpose of heaping the mud was to ensure some sort of filtration, dryness or even evaporation of particles of water from the heap of the puddled clay. Reduction in the quantity of water in the heap of the mud would increase the adhesive and gummy property of the heaped mud. During dry season, a shorter period was required for the puddled mud to reduce its moisture content. [28] Normally, a full sunny week would reduce the amount of water in a heap of puddle earth to an appropriate level. During dry season, too, actual wall construction (mud-laying process) by local masons was faster.[29] For hard-working and serious minded masons, a week was enough to start and complete a building of about two rooms or two rooms and a parlour which was the commonest kind of house built by the people.[30.]

In the pre-colonial period, people did not bother about plastering their houses. Plastering of mud houses was a recent development, dating from the colonial period. An investigation into reasons why the buildings of the pre-colonial period were not plastered revealed that;

> **No one had the trowel and other plastering tools to embark on such assignments. Besides, the people were most often engaged in their farming activities either within the homestead or at their farm settlements. Perhaps, that was why they felt they did not have need and time for such luxury.[31]**

TOOLS FOR EXCAVATION OF EARTH(SOIL) FOR PUDDLING:

Two types of tools were used to excavate soil which was puddled for the purposes of building the traditional Igbo house. These were the local digger and shovel. A stem of hard-wood with about a radius of 2cm in size and about 1 metre in length was cut from a forest. One end of this length was peeled to a sharp pointed end. This was locally referred to as *odu-osisi* or *ngwu-osisi* (meaning wooden digger). This was the principal tool for digging the soil.

Digging the soil, using wooden digger was easier during rainy season than dry season. Most often, using the wooden digger in the dry season would result to the tip of the digger becoming blunt, possibly inflicting blisters on the palms of the user.[32] However, continuous use of such tools hardened the palms of the

farmer, making them virtually immuned to blisters. To overcome the problem of his wooden digger tip getting blunt, he made use of two or more diggers so that any damaged digger could readily be replaced. [33]

Even though these tools served the Igbo in the pre-colonial, colonial and even post-colonial eras, metal tools existed in Igboland in these three eras. We have noted above the activities of the Awka, Abiriba, Nkwere and Nsukka smiths in Igboland. These group were itinerant smiths who traversed the entire Igboland manufacturing and selling iron made tools to farmers, and hunters for the enhancement of agriculture and defense operations in Igboland. Iron tools manufactured by the smiths included digger tips, knives, cutlasses, guns, and spear among others.[34]

WALL-LAYING TECHNIQUE

Among the various soil types used for traditional Igbo round house, clay was not only the best, but had some advantages over other mud types. For instance, clay had five particles; it was gummy and the compatibility of its particles was comparatively high. It is noteworthy that the technique for wall-laying was the same for virtually every traditional Igbo round hut in the pre-colonial period.

Solid foundations for their buildings were well undertaken by the people. The foundations were broad. The thickness of the foundations were between forty and sixty centimeters (two feet), while the lengths and breaths were dependent on the size of the partitions.[35] A broad-based foundation of a building provided the stability and strength required by the building to sustain the entire force and weight of the building. As the wall-laying exercise progressed upwards in the case of a particular building, it (the wall) gradually reduced in thickness, so that at its lintel level, its thickness had reduced to just about one foot (thirty centimeters).[36]

Wall-laying was never done in a hurry. It was never a day's job. An informant, Ndukwe Uche, was of the opinion that if a house was hurriedly concluded, the mason (builder) should be prepared to start the building all over again, because the building would not fail to crack and then collapse. [37] A building of about two or three room apartment would take a minimum of five native weeks (20days) to conclude. [38]

ROOFING PROCESS

It is interesting to note that the common name for the traditional Igbo man's house was "thatch house". This derived from the common material with which his house was roofed.[39] There was a common pattern of roofing traditional Igbo buildings in the pre-colonial period. Pitch roofing was the commonest design at the time. First the skeletal framework of the roof was weaved, using bamboo poles and 'slices' of bamboo poles. [40] A number of bamboo poles were used as rafters which slopped from the roof apex and rested on the walls of the building. These bamboo rafters were criss-crossed with purlins (Palm fronds or lengths of 'sliced' bamboo poles). At various points, the sloping bamboo rafters and the purlins (horizontal palm fronds) were knotted or tied to ensure a formidable roof strength. [41] This was necessary to avert incidence of the building or the roof being blown down by the wind. At the end of the networking process of the roofing, the entire skeletal framework of the roof was hooked at various points at the walls of the building, using strong loops and pegs to ensure a common central force for the entire edifice.

Next was the process of grassing or thatching. The commonest types of materials used for the roofing were pill-grass (*imperata cylindrical* or ata in Igbo and roofing mat (raffia mat) quantities of grasses were cut using the machete; sometimes they were uprooted with bare hands when machete had not been produced by Awka, Abiriba, Nkwere and other itinerant smiths in Igboland.

The grasses were collected in little bundles and tied to the purlins (horizontal poles on the skeletal framework of the roof). There was hardly any gap between one pinch of the grass bundle tied on a particular spot on the purlin (horizontal framework) and the pinch of the bundle next to it. The grass on the upper layer (or rung) of the roof overlapped the ones underneath them. A successfully completed roof had a conical shape.

Thatch houses had some advantage and disadvantages. One of it's advantages lay in its cooling quality. Thatches generally were poor conductors of heat. On the other hand it was easily gutted by fire especially during dry or hamattan seasons. Apart from members of a family being responsible (out of their carelessness for their house catching fire, careless attitude of hunters could set surrounding bushes including thatch houses on fire. It is necessary to indicate here that this technique of roofing traditional Igbo houses in the pre-colonial period with thatches was not restricted to the period. Some of these techniques and skills survived into the colonial and post-colonial periods with some modifications as subsequently revealed.

TRADITIONAL IGBO BUILDING ARCHITECTURE IN THE COLONIAL ERA

Colonialism in Igboland came with some absolute realities. First it came with the principles of individualism, abolishing the age-long practice of communalism in Igboland. Through the agency of Christianity it dealt a serious blow to traditional religion including its various categories of deities. As a result, the traditional architecture of the village public place (*ama*) was disfigured. In so many communities, the normal hut for the deity, the public rest house which housed the big wooden drum was phased out. Also phased out was the defense

wall constructed by the head of a family or kindred round his family or kindred house. That was not because the Igbo desired it that way, but simply because the white man was against such practices.

The colonial or western architectural design at the time was the model which greatly influenced the Igbo traditional building design in the colonial period. [43] The extent of the colonial influence on the traditional Igbo house types, the types of wall constructed and the roofing pattern shall be discussed subsequently.

HOUSE TYPE: CONSTRUCTION

The tradition of Igbo round house still survived into the colonial period. At the same time the Igbo rectangular wall house design was in practice also. [44] This architectural design was patterned after colonial buildings built with cement blocks or with burnt bricks. There were two broad types of this rectangular house. One type was entirely constructed with mud while the walls of the other were formed with cut poles used to form the partitions of the building. The sharpened end of the wooden poles were driven into the earth. The next stage was the wattling process. Wattling involved the use of slim-size wooden poles of about 2cm diameter and lengths of wooden poles of about 6m for the exercise. In the process the wattles were used to criss-cross lengths of the wooden poles right from the base to the uppermost level of the walling skeletal framework, providing about 2.5cm spacing between one horizontal level and the other. The vertical wooden poles and the slim horizontal wooden poles (wattle) were knotted or tied together at various points to produce a solid and compact building skeletal framework. The gaps between one vertical pole and the other as well as the gaps between one horizontal wattle and the other were to accommodate balls of puddled mud that would normally be placed there to fill the gap, and flesh up the skeletal framework of the building wall partitions.

LABOUR: Unlike the pre-colonial period when a builder depended exclusively on the family and extended family members for labour, colonialism introduced the use of paid labour as an alternative source of labour. This was a major aspect of capitalist influence – of the colonial system. A builder had the option of using his family members and friends or hiring someone he paid to carry out the assignment for him.

GABLE ROOFING TECHNIQUE

As in the case of wall construction, the traditional conical roofing design was still in practice in the colonial period. Despite this, a modern roofing model came on board. This was the gable roofing plan. Gable roofing design was commonly applied by the colonial officials in building their office complexes and residential quarters. Rafters and purlins were used to design the skeletal framework of the roof of those buildings, while aluminium roofing sheets or asbestor sheets were used for the roofing. [46] The commonest architectural roofing plan at the time was gable roofing. It was probably adopted by the colonial officials[47] due to its relative economic advantage when compared to other roofing designs.

This colonial model of roofing (gable roofing design) advertently and inadvertently influenced the Igbo roofing plan. We had earlier noted above that the Igbo rectangular wall house was modelled after the colonial architectural style and pattern. So was the introduction of gable roofing. It is pertinent to note that the application of gable roofing design by the Igbo, did not automatically mark the end of traditional conical roofing design. Besides, thatches or raffia mats were used by some Igbo people for the roofs of their buildings where they could not afford corrugated iron sheets.

While the colonial gable roofing made use of wooden rafters 2" x 4" x 12' and purlins (wooden poles) measuring 2" x 2" x 12' each, to form the vertical and horizontal framework of the roofing, using nails to fasten them, the traditional Igbo gable roofing made use of Indian bamboos as rafters and raffian fronds, palm fronds or slices of bamboo lengths as purlins for horizontal crossing of the bamboo rafters. The difference between rectangular-wall and round –wall houses was not much. The only outstanding difference was that rectangular-wall houses contained more rooms than round ones.

WALL-PLASTERING/DECORATIONS

The culture of plastering the walls of Igbo traditional buildings would appear to be another influence of the western culture under colonial rule in Igboland. We have earlier noted the reasons why pre-colonial buildings in Igboland were not plastered:

> **The walls were very rough; no one had the trowel and other plastering tools to embark on such assignments. Besides, the people were most often engaged in their farming activities either within the homestead or in their farmsteads.[48]**

But colonial offices and residential quarters were beautifully plastered and sometimes painted. The same was true of church buildings and parish houses where priests lived. It is likely that close contacts between Igbo traders, early Igbo Christian converts, teachers, civil servants, colonial officials and their agents exposed them to those and other influences of the white man. The Igbo thus embraced the culture of plastering the walls of their houses, and of even painting and decorating them.

The traditional tool for plastering walls of buildings among the Igbo in the colonial period was clay

soil. Clay has gloomy and compatible qualities and was therefore preferred to other soil types for the purpose of wall plastering. Clay had the capacity of providing the needed adhesion to the loose soil particles on the walls of a building. Besides, plastering the wall with clay soil gave a special beautification to building. Plastering was better carried out when the walls were still fresh and wet. Bare palms were needed to collect soaked clay from a vessel used for the exercise. Plastering was undertaken also to fill up cracks on the walls of the building, ultimately, smoothening the entire wall surface of a building. Our next discussion will focus on the change and continuity in Igbo traditional building architecture in the post-colonial era.

TRADITIONAL IGBO BUILDING ARCHITECTURE POST-COLONIAL EXPERIENCE

Although the Igbo generally would appear to have indiscriminately admired, copied and imbibed western culture, it is worthy of note that the impact of the western culture on Igboland (especially as it affected the Igbo architectural designs), was not total. The entire architectural package in Igboland in the post-colonial era could be caterogized under two groups. One represented traditional Igbo architectural design virtually untouched. The second reflected a blend of western and traditional Igbo design. While the former represented the taste of the local people, the latter satisfied the interest and needs of the elite group. Particular aspects of the traditional Igbo building architecture affected and thus discussed here include the walling process, roofing and plastering techniques.

WALLING TECHNIQUE

One major development in the walling culture during the post colonial era among the Igbo, was the use of blocks. The culture of using puddled clay or other soil types for forming the walls of buildings was of course not over. Some people, particularly those in the very low income cadre still made use of this alternative. Use of moulded blocks was in vogue at the time in question. Two types of blocks were used namely, “cement” and mud. The so called cement block was moulded from a mixture of sand and cement in a ratio of one bag of cement per seven headpans of sand. Some quantity of water was added to effect a paste and perfect mixture of sand and cement. This mixture produced about thirty blocks. Moulding of mud blocks did not require any sand mixture. The same method was applied by the masons in the course of laying the blocks on the wall. A mixture of sand, cement and water was used to gum/stick the blocks at each joint. Most houses built at this time were weak, fragile and lacked strong foundations. Metal rods were hardly used for laying strong foundations; rods were also scarcely used at the lintel levels to fortify the buildings. Thus, most of the so called modern buildings could not stand the test of time, while the core traditional Igbo buildings lasted for over forty years.

ROOFING TECHNIQUE

The impact of the western influences on the general culture of the Igbo was also reflected in the roofing designs of Post-colonial Igbo houses. We have noted that during the colonial and post-colonial eras, rectangular building plan was in vogue. Pitch roofing plan was also in vogue. There were variants or designs of pitch roofing technique. Commonest designs at the time were the German roofing design, gable roofing design and conical roofing design.

Roofing materials used in the colonial period were still applied in the post-colonial era. For those who could not afford normal wooden rafters measuring 2” x 4” x 12’, purlin measuring 2”x 2” x 12’ and zinc, ordinary Indian bamboo poles were used for rafters while raffian fronds were used as local purlins to horizontally criss-cross the vertically sloping rafters. Good ropes or twines were used to tie the rafters and local purlins at various points to ensure they were well fastened together. Raffian mats or zinc were used to cover the skeletal framework of the roofing, thus providing shade on the building. Apart from raffian mats, straws or hays (*imperata cylindrica* or pill grass) were used for the same purpose.

The actual process of roofing, using grasses or roofing mats in the post-colonial period did not differ much from the practice in the colonial period. The grasses were collected in little bundles and tied to the horizontal poles (local purlins) on the skeletal framework of the roof. There was hardly any gap between the grass bundles tied on a particular purlin and sets of grass bundles tied to the purlin next to I t. The grasses on the upper layer of a particular purlin overlapped the ones on the layers beneath them. The roofing technique applied in the use of hays also obtained in the case of roofing mats. Even when zinc was involved, the same technique was applicable. Corrugated asbestor sheets were equally used for roofing during the period. According to Barry, the earliest corrugated asbestor sheets were first imported in Nigeria in 1910[49] and were manufactured in the country soon after. For the following fifty years, these sheets were extensively used for roofing.[50] This had a life span of forty years or more. It is pertinent to note that round house architectural designs and their conical roofing designs still existed in the area. One’s social status and taste were factors that determined the nature of his building plan.

WALL PLASTERING TECHNIQUE

By the post-colonial era, the culture of plastering walls of buildings was both normative and cultural. Apart from the western aesthetic influences, the Igbo had special love and interest in things of beauty. Even Rev. G.T. Basden testified to this when he remarked that, the arts and crafts of the Ibo manifested themselves first in his house. Basden went further to demonstrate that husband and wife were appreciated and recognized by the care bestowed in the building and decoration of their house.[51]

For plastering, two types of materials were used. One was clay soil which had gloomy and compatible qualities. It was preferred to other soil types for the purposes of plastering walls and for flooring. The other material used was cement which also had soft, gummy and compatible particles. For mud walls, clay was most appropriate and cheapest material for plastering.

Plastering was better undertaken when the walls were relatively fresh and wet. Bare palms were used to collect soaked clay from vessel used by someone (usually a lady) carrying out the task.

For block walls, whether mud or cement, cement/sand mixture was used for the plastering exercise. Plastering was a sure way of not only beautifying a house, but indeed expressing the aesthetic values of the people. It also provided an opportunity for the builder to take care of the cracks on the walls of the building and ultimately smoothen the entire wall surface of the building.

CONCLUSION

This study on the traditional Igbo building architecture has revealed an appreciable degree of dynamism in this particular sector of Igbo life over time. The dynamism of this particular aspect of the Igbo culture bordered on the traditional Igbo attitude of adapting to the changing environmental conditions at any given time, while, in addition striving to conserve some of her sterling identities. To this end, this study indicates that the traditional Igbo building architecture exhibited a high degree of resilience in its quest for independent cultural identity. It is clear and evident that prior to the cultural contact with the Europeans in the colonial period, the determining factor that influenced the traditional Igbo building architecture had social, environmental and religious undertones. The type of soil, hay or grass and shrubs among other raw-materials in an area indeed had a lot of influence on the type of building architectural design in an area. [52]

In the colonial and post-colonial periods, environmental and other social factors also played major roles but the colonial influences occasioned or typified by the western architectural designs played dominant roles in determining and shaping Igbo building architecture. This was made possible by the adaptive attitude of the Igbo people to influences around them. They were neither religiously nor socially resistant to western architectural designs. A critical assessment of the impact of the western building architecture on the people would reveal two opinions. On a positive note, this opened the way for various splendid and sophisticated western-type building designs to emerge and spread across the length and breath of Igboland, making Igboland another Europe in Africa. On the negative note, it introduced a bad spirit of capitalism among the people expressed in people's inordinate ambition to set up costly and sophisticated buildings through any available means. This indeed is the bane of the society and capitalist ideology of the people.

Despite the avalanche of the incursions of the western building designs among the Igbo, the traditional Igbo building architecture still survived in many communities for certain categories of people. Reasons ranging from its conduciveness and appropriateness to the environmental conditions of the area, its low cost advantage and easy availability of the materials for its construction account for its survival over time.

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