

The Transformation of Aesthetics in Architecture from Traditional to Modern Architecture:

A case study of the Yoruba (southwestern) region of Nigeria

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ABSTRACT

Aesthetics is the philosophical study of art and natural beauty and it is indicated by the feelings of pleasure or displeasure which comes from visual and aural elements and artifacts. Hence, aesthetics depends on animate or inanimate organization which can be perceived either subjectively or objectively. This aesthetic element is uniquely present in the traditional buildings and modern buildings of southwestern part of Nigeria. This study is set out to evaluate and bring into lime light the aesthetic characteristics of traditional buildings and that of the modern buildings, how one style or aesthetic element gradually prevail over or transform to another, reasons and consequences of one completely predominating another in Yoruba region of Nigeria. Moreover, this study therefore, is divided into four parts, which are: (a) overview of the history of modern and traditional Architecture of Yoruba land (b) aesthetic characteristics or indicators of traditional and modern architecture in Yoruba land, (c) the differences between the aesthetic of both style of Architecture and what is responsible for this change or transformation in their aesthetic value. The research concludes with recommendations of synchronizing both style of architecture design in getting an optimum aesthetic value, and offers a room for further research and development of a consistent and notable architectural typology for southwest Nigeria.

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1. Introduction

Architecture and indeed, the building, is referred to and thus described as an embodiment of the cultural heritage of people (Rapaport, 1969; Kalilu, 1997). Culture is dynamic, architecture as a cultural phenomenon changes as culture does. Nigeria architecture in general has been very dynamic due to the social, cultural, economic, technological advancement and political changes which has a

significant effect on the aesthetic output of the building styles. Fortunately, an inevitable transformation occurs which negate a consistent representation of the cultural heritage of

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southwestern Nigeria. This transformation is that of the aesthetic elements in traditional buildings to aesthetic elements in modern building with little or no connection between both styles. Furthermore, to be able to fully point out and understand how this aesthetic transformation came about and its effects, this study therefore, will aim at gathering in depth understanding on what both styles of Architecture encompasses in the context of southwestern part Nigeria, bringing to surface the aesthetic characteristics of both styles. Moreover, this study will elaborate the aesthetic effect when both styles of architecture are synchronized in any Architectural piece to give optimum aesthetic value.

Granted, Aesthetic achievement has been the sole or chief end in any form of Architectural style. An architectural edifice must give delight and perceived beauty continuously regardless of its age. Therefore, in a significant way, the study will definitely enlighten the academic world, the design continent and the general audience on the Aesthetic movement or its transformation process from traditional architecture to modern architecture as far as the southwestern region of Nigeria is concerned. The in-depth study will help address what is at stake in completely ghosting our historical heritages due to unmonitored proliferation of modernity through international influence. To practically and concisely achieve the aforementioned aims, this research focused on the architecture of southwestern part of Nigeria. A documented comparison between the traditional architecture prior to 18th century through to modern architecture in the eve of 20th century in Yoruba land. Southwestern states in which the study was carried out are: Lagos, Ibadan, Osun, Ondo and Ogun. This study closely examines the aesthetic characteristics of both residential and commercial buildings in this zone over the above stated period; determining the aesthetic perception of individual on some selected buildings.

2. Aesthetics and Architecture

Aesthetics as applied to architecture is a reference to a particular style or design element that makes any form of architectural edifice appealing and

pleasant. Moreover, aesthetic is based on taste and judgment of human sensory feelings. And speaking of judgment, aesthetic judgment is greatly influenced by what the environment represents to us. In other words, the emotional associations that develop by certain design elements, attributes and order of arrangements can be a good source of aesthetic pleasure. Form, colour, materials, shape, lightings and spatial configuration all have significant meaning in aesthetic judgment. These meanings may have a historical affiliation to an individual or may represent a shared association of a cultural group. For example, a culture that uses a motif roof, wood or any other natural material through many areas of design and function can be said to appreciate or adhere to a specific aesthetic.

Architecture in the context of aesthetic is the act of exhibiting concept of things that are possible through art and design, things whose form has a chosen purpose (functionality), and of doing so in order to achieve that aim, yet have aesthetics purposiveness (Edwin, 2007). In architecture, the main concerns in connection with Aesthetics as stated by Vitruvius (15bc); His definition of good architecture depends on three criteria as *vestas* (beauty), *utilitas* (utility) and *firmitas* (firmness). Recently, these aspects of architecture were interpreted as form, function and construction.

In this regard, Vitruvius claims that the features that indicate or make an Architectural piece to be perceived or characterized as an Aesthetic design are:

- a) Beauty (its exterior form)
- b) Functionality/utility
- c) Firmness/Construction
- d) Unity

a) Beauty

Beauty is studied as part of aesthetics. It is the property, the quality or state of being perceived as pleasurable, pleasing, and attractive to an individual which is subjective to one's ways of seeing and partly depend objectively on what has been seen. Beauty in relation to form in an Architectural context of "first" perceived experience suggests physical external outlines that unite the entire image of an architectural piece.

The word often is used to relate to a well-defined structure, the manner of display and its coordination with other elements to form either part or the whole of and image in a consistent fashion that makes aesthetic sense (Ching, 2007). Philosopher Aquinas mentioned that the beauty is not an inexperienced one; he describes beautiful as that which satisfies when human see objects and experience it. These objects satisfy the viewer when they have the elements of beauty; such as excellence, neat, rhythm, balance, proportion and brilliance or clarity (Miller E. 2004). Therefore, the ambiguity of beauty is understood by architects who attempt to discover a method of design with the aim of making the exterior form pleasurable and a sense of adventure into the entire piece. In this study, beauty will be predominantly explained by the exterior form or envelope of a building and the transformation from traditional architecture to modern architecture in Nigeria.

b) Functionality (Utility)

The original word: "functus" means performance, occupation, role, duty, work; use, purpose, behavior, operation, activity. Function in the context of architecture is the embodiment of concept, and definition of structural interfaces among objects, hence assigning physical/informational function to elements of form (objects). A building is a product of it function if it best facilitate or represent the purpose meant for – The use of the building. The most relevant type of character in architecture is that which results from the purpose of the building or the reason why it was designed or created. The utility of an element or a piece of Architecture is an aesthetic in its own context; for the aesthetic (beauty) of a design cannot be limited to it size, shape and proportion but entails the practical meaning of it – function (Winter 2007).

c) Firmness/Construction

This denotes how well structured, solidly in place an Architectural design or idea is erected or interpreted in reality. In construction process, when walls and building elements are been built, quality workmanship plays a significant role in the resulting aesthetic value. For an Architectural design not to lose it perceived beauty or aesthetic value over

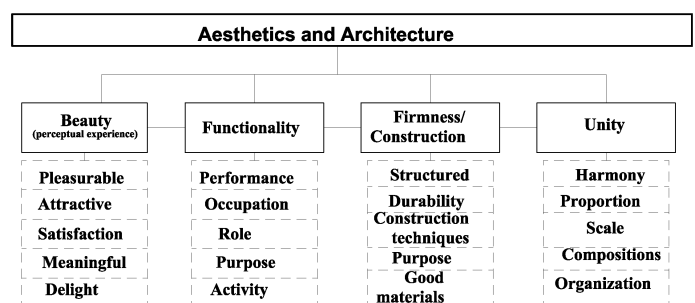
time, the choice of good materials, construction techniques and durability are important.

d) Unity

All the unrelated parts of architectural features are brought into proper relation to each other so that a satisfactory composition is obtained. Unity suggests that there is harmony in the entire design. If unity prevails, all the trivial parts must be kept in their places and be made simply to assist the major units in the roles, which they are to play in the development of the structure.

In doing so, the following table illustrate the interrelation between aesthetic and its indicators in architecture.

Table 1. The direct relationship between aesthetic and architecture with aesthetic indicators. (Developed by author).



3. Methodology

Qualitative research method was used during the course of this research; here by drawing facts from academic scholarly researches and exploratory study. Having selected southwestern part of Nigeria as the central case study, this is aimed at understanding the process of transformation in architectural aesthetic of southwestern part of Nigeria. The components of this research will be grouped in stages ranging from the collection of fact about the history of Architecture in southwestern Nigeria, the aesthetic indicators of Architectural typologies, how these indicators shifted in relation to the change in architectural style from traditional to modern and how individual judge or perceive each style of Architecture.

4. Case Study: Southwestern zone (Yoruba) of Nigeria

The Yorubas, occupies the south-western part in the tropical rain forest of Nigeria (Fig1). A principal tribe and densely populated part of Nigeria. This land consists of Plateau of Yoruba land, the lower Niger and the western coastal lowlands.

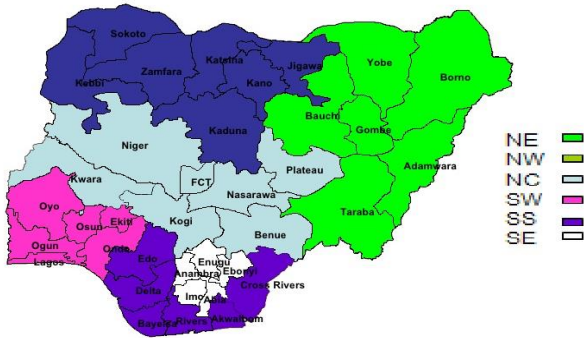


Figure 1. Map of Nigeria showing the South West Zone (Yoruba).

It's an area characterized by tropical climate with annual rainfall of about 130 to 180 cm and relatively high humidity round the year of over 60-80%. The mean temperature is usually more than 25°C. The maximum Temperatures are typically more than 30°C while minimum temperatures are between 21°-25°C. There is an environmental difference which reflects in the mode of life and the economy of the Yorubas. An average Yoruba man settles in a village or town as a farmer, a trader, an artisan or a professional. The Yoruba are one of the largest cultural groups in Africa. It is estimated that there over 40 million Yoruba world-wide. The Yoruba have been living in advanced urban kingdoms for more than 1,500 years (Mullen. N 2004). The urban population represents more than 40% of the total population of the area. They predominantly live in compounds inhabited by members of the same family and lineage. Thus, the Yoruba compound is a physical expression of the genealogy traced from the ancestor; it is usually of rectangular construction made up of bungalow and one-storied buildings enclosing a courtyard like space. However, there are two or more storied buildings which are due to the proliferation of international style or foreign influence. They are highly industrious individual that, build dwellings

that accommodate some of their indoor activities (Adedokun 2014).

5. Traditional Architecture in the Southwestern Region

Traditional architecture in Nigeria find it's root when some towns emerged as meeting points for wandering immigrants who used any favorable locations as spiritual or cultural bases for subsequent territorial expansion. As regards the Yorubas, ile life in osun state became spiritual impetus for the establishment of widening empires. The basic house walls and perimeter walls were often made of mud, and roofs in the towns were built of mud, grass, matting or corn stalks. Until the early twentieth century, most of the compounds as well as the Oba's palace were roofed with thatch. (Adedokun. 2013). The thatched roof was subsequently replaced by zinc and aluminum roofing sheets.

In the Yoruba zone, the people lived in compounds each of which had a large house set in a square-shaped space bounded by a high wall. Some were more than a half-acre in size and provided living space for a large family and kinsmen. There was only a single entrance (Fig 2). The interior spatial organization is usually of a divided numerous typical size rooms. The climatic condition, human physiology and geography led to the development of a high pitched or steeped thatch-roof and mud houses of the South (Awotona ,1986: 55).

6. Assessment of Aesthetics in Yoruba Traditional Architecture

• The House form and characteristics.

The house form ranges from single family house on one plot to large complexes with many apartments, housing different families. The Yoruba house form is a rooming house where by definition; the building is divided into separate rooms. This house form represents the more traditional lifestyle in West Africa in general and Yoruba cities of Nigeria in particular. The room is the unit of accommodation in a rooming house of Yoruba culture and it is multi-habited by extended families. It has an open plan whereby residents live in full view of one another; however, this does not mean that they do not have some privacy. Several

literatures on housing in the Third World or developing countries have concluded that housing for the urban poor in sub-Saharan Africa has been made largely possible through multi-habitation (Amole et al., 1993). Schlyter (2003) described multi-habitation as a way of coping with poverty and that by means of this concept more people benefit from urban services than was planned, and that by sharing water, toilets and roads, services become affordable for the poor in cities of developing countries.

Functionality

Yoruba's compound, as a whole is clearly functional, evident from the various lucrative activities going on in them, and how easily they connect. The compound is purposely designed to meet the various functions, according to the needs of the people.

The Yoruba traditional architectural buildings are adapted to the socio-cultural characteristics. The living areas play specialized roles, with the rooms for sleeping and storage having small fenestrations, which satisfy the climatic need in allowing for lighting and keeping the place at a normal temperature. The thickness of the wall, the material mud and the ceiling, all act as thermal control regulating the thermal conditions especially during the cold *Harmattan* season and the hot humid months. The verandah, an open-colonnaded space, allows a greater amount of light and air, which make indoor activities possible throughout most of the day and with favorable weather conditions, the courtyard is available to share part of the socializing and commercial activities (drying, weaving, carving) domestic (outdoor cooking) and recreational activities. Concept wise, there is a well-defined organization of spaces, which can be said to be a hierarchy of spaces from the sizes and arrangement of the rooms.

Functionality in term of "spatial organization", There was very little spatial distinction between personal, sacred, and communal 'zones'. The bedrooms are generally accessible to close friends. Some goats and chickens are reared in the courtyard; pens, cages and rooms may be sometimes adjacent to the main structure.

Unity

The corridor running through the inner part of the building is a unifying factor and is a well thought solution for the circulation and exchange of air within the compound and surrounding rooms (Fig.2). The spatial flow of the corridors in relation with the rooms is very well defined and harmonious. The consistency design of the roof overhang (Fig.3) above the corridors tends to reduce the rays from the sun. The hierarchical order in the spatial arrangement of the rooms in between husband, wives and children is a reinforcement of close family ties, respect for headship and represents a physical expression of genealogical order. Conceptually, a sense of unity is created by the courtyard space (Fig. 2) for ceremonial activities, during which time the members of the household come together as one in this courtyard. The central space of the courtyard literarily enhances the interaction and sense of unity of the people, which further strengthening the respect and cultural values they have for one another.

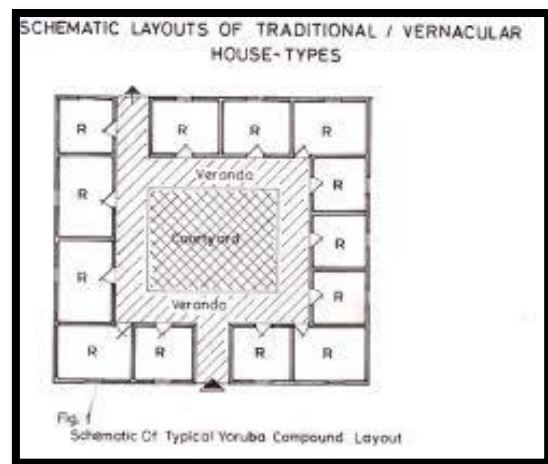


Figure 2. Sense of unity in Yoruba traditional design.



Figure 3. Entrance façade of a traditional building.

Aesthetically, in a general sense, the texture of the walls is pleasing to the eyes. The harmonics effects created by the color of the ground to the walls and the brownish thatched roof are captivating. Decorative ornamentation that emphasizes the entrance to the rooms are equally gorgeous and the highly aesthetics carved motifs on doors and roof supports is the trade mark of Yoruba's traditional architecture.

7. Modern Architecture in Nigeria

The term modern Architecture is often applied to modernist movements, which is brought about by an effort to level up the principles guiding and underlying architectural design with rapid technological advancement and the modernization of society.

The combination of three factors makes a spontaneous transformation of the Nigerian scene in the 20th century - the Muslim jihads and Yoruba civil wars, foreign influences, and a revolution in trade Nigeria. These factors prompted the modern movement such as the flat roof or clean forms became popular by the late 1930s. The first modern houses were built in Ikoyi, Lagos (southern state) even before the Second World War (Kostof, 1995). These styles of houses were of imported idea or design houses of the English countryside or prefabricated constructions with deep terrace and cantilever sometimes supported by decorative stilts. As regard the opening, they are characterized by continuous horizontal band of windows. The aesthetic in building changed mainly due to the

introduction of new materials and techniques from Europe; such as Corrugated iron sheeting and cement have had perhaps the greatest effect. This style was able to satisfy the Nigerian consumer in an important way. It was basically used as a symbol of progress, civilization and smooth transformation. The buildings with asymmetrical composition, absence of moldings and large windows often in horizontal bands became a part of the architectural landscape. The foreign influence was strong because the manpower was not sufficient in Nigeria and because there were many foreign architects. The 'Oil Boom' in the late seventies had undisputable influence on developments in Nigerian architecture. At that time the competition and the race for modernity was at its climax. The building industry depended a lot on imported building materials and finishes. (Kostof, 1995).

7.1 Aesthetic Assessment of Modern Architecture in Southwestern (Yoruba) region of Nigeria

- **Shape and Form:** The building design exhibit rectangular forms, horizontal and vertical lines. Occasionally, the houses are linked boxes depending on the size and shape of the land. High horizontal massing, flat roofs, and concrete enclosed parapet walls emphasis the southwestern Nigeria buildings as a city monument and evident of modern movement. Modern homes tend to be on generous sites due to availability of more vacant land space in the southwestern region. They therefore experiment with free forms and horizontal and vertical elements or shading devices in their façade (Fig 5). High pitched roof is used in modern residential houses due to the region's high amount of rainfall; for quick run off of rain water.
- **Ornamentation and materials:** Traditional decorative moldings and ornamentations are nearly eliminated, paving way for a clean aesthetic where materials meet in simple, well-executed joints against horizontal elements for delightful effect and positive aesthetic judgment. Use of Materials such as wood, brick and stone are used in simplified ways to emphasis only a particular aspect of the building; reflecting a modern aesthetic.

Traditional use of bamboos and leafs are replaced with simple vertical board claddings, steel trusses and sections are largely used. Brick and stonework are unornamented, plainly used, and it is used in a well arranged planes and surface area.

- **Firmness/construction:** In modern commercial buildings in Lagos, there is a celebration of modern materials and mechanized systems of construction in deep foundation of buildings (pile, raft, deep strip foundation). Steel columns, long-span steel trusses and iron rod reinforcements are used in exposed and closed applications respectively, extensive use of concrete, hollow block reinforced concrete floors for long term durability, are and permit open column-free spaces.
- **Functionality:** Architecture must seek its essence in its content to which the external appearance must wholly adapt to. Relationship between interior spaces and sites is evident in modern Architecture of the south western region of Nigeria. Emphasis on open, flowing interior spaces in commercial buildings while in modern residential buildings spaces are well defined with walls for privacy and security (Fig 6) which is more paramount to individual. There are additional spaces such as: ante room gym, study, patio, guest bedroom and conveniences, and garage are visible in the design of modern houses in southwestern part of Nigeria. These Spaces tend to flow together with doors and hall ways as part of one contiguous interior space, but with obvious sand and cement block walls (Fig 7). Over all, live-in spaces tends to serve its purpose in respect to the users modern interest.



Figure 4. Senate Building at UNILAG in Lagos, built in 1962.



Figure 5. Eagle house Lagos, built in 1962.



Figure 6. Façade of modern residential building, (Ekhaese, 2011).



Figure 7. Façade of modern residential building (Ekhaese, 2011).

8. Overview of the Transformation of Traditional Architecture to Modern Architecture in Southwestern Nigeria and their Aesthetic characteristics

The documented history of traditional architecture in Yoruba land dates back prior to eighteen century, a period before the arrival of the colonialist and later, the Brazilian slaves. The local trend of creative craftsmanship and reliance on natural materials like mud/adobe, bamboo and wood characterized the buildings in southeastern states of Nigeria. Furthermore, the return of the slaves in late 80's from Brazil brought about another unique style of Brazilian architecture; popularly known as "face me i face you". It is characterized with a new form of architectural style, often bungalows or storey buildings built with mud and plastered with cement and sand, which is different from the local trend style or vernacular style. The buildings were embellished with ornamental decorations and pillars in connection with the existing local trend. Moreover, the spread of Islam from the North Africa in the eighteen century undoubtedly have a great effect on the evolution of architecture in Nigeria. The North African style applies some amateur form of geometry, evident in its dome shaped mud roof which was adopted in mosques and houses with a more elegant decorative painting in figurative patterns (Ekhaese et al. 2014). All the above mentioned styles of architecture can be collectively characterized as traditional Architecture for they were

chronologically visible in prior to eighteen century to the early nineteen century. And in general, they are styles that treat materials according to their nature and with self-workmanship.

Furthermore, in the late 1930's, modern movement in architecture has become popular in Nigeria. The first set of modern commercial and residential buildings appeared in Lagos, southwestern Nigeria. Those buildings were characterized by flat roofs, free plans, exposed parapets, long horizontal windows, extensive use of glass and concrete. This style was frequented by the architects of older generation trained abroad with modern design ideas. Therefore it is somehow referred to as international style; for modern architecture or contemporary Nigerian architecture is a dominated imported motifs and design ideas that have little links with the socio-cultural heritage of the country. The new West African style is another style of architecture that emanate during the era of modern architecture. It came into existence in 1960's. It is more original in its approach; for it is more suitable to the climatic condition. A style characterized by deep overhang, exposed concrete roof gutter and high pitched roofs for quick run off rainwater. Moreover, at the eve of 19th century into 20th century, in the pick of modernism, architecture in Nigeria took a modifying turn. This style is referred to as late modern style. It is in general not different from the modern movement ideas, but it was modified, for example, the large glazed and long horizontal windows was covered with a concrete shading devices to avoid breakage and the direct penetration of sun into the interior space.

In summary, as discussed above, six significant styles of architecture with an attributed aesthetic design has been practiced in Yoruba region of Nigeria prior to 18th century through 20th century. Which has been classified under traditional and modern architecture as shown below in Fig 8.

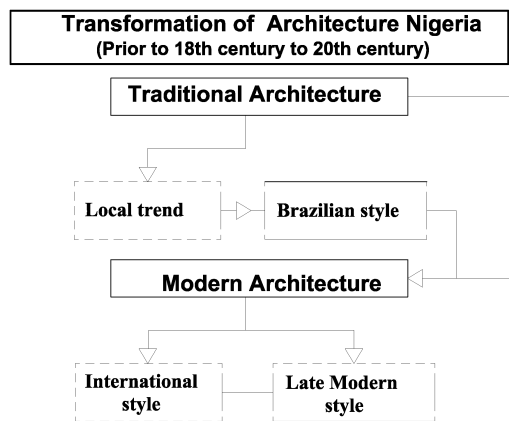


Figure 8. Showing the evolution of Architecture in Yoruba land (Developed by author).

8.1. Analysis of Traditional Architecture and Modern Architecture in Southwestern Nigeria from Aesthetic point of view

In retrospect, southwestern part of Nigeria has a lot of architectural heritage, but, for a complete analysis of these classified architectural styles, aesthetic design indicator of both styles is necessary. The table below shows the aesthetics characteristics and indicators of Traditional and Modern Architecture.

Table 2. Traditional and modern architecture and aesthetic design indicators.

Aesthetic Design indicators (Edward 2004)	Traditional Architecture	Modern Architecture
Form and shape	Restricted to solid and void shapes (Amole, 2000)	Flexible shape – High vertical and Rectangular design. Free geometry of curves. (Ogunsote, 1993)
Firmness/ construction	Shallow foundation, hand molding, and prone to wash due to high level of rainfall. (Ogunsote 2007)	Mechanized, Deep foundation and reinforcement
Interior Functionality	High permeability and open courtyard system. (Atolagbe 2012)	Internal Wall restriction in residential and free flow spatial organization in commercial buildings.
Materials	Mud, brick, Adobe, thatch roof, bamboo, wood and stones. (Adekun 2007)	Steel, block wall, aluminum roofing sheet, concrete, glass, paint, tiles. (Adeyemi, 1999)
Unity	Consistency in form, shape, room sizes and façade	Mixed use of form, shape, colour in building
Contrast (colour, light, texture)	Natural colour and texture of the materials used, use of natural lighting through fenestrations. (Ijatuvi et al 2012)	High contrast for emotional stimulation through varieties of colour, texture and artificial lighting. (Ijatuvi et al 2012)
Scale (size, magnitude) and proportion	Size is limited by the structural ability of building and openings not designed to human scale. (Umoru oke, 2012)	Desirable size and magnitude, consideration for human scale and proportionate in openings and façade. (Adekeye, 2013)
Characters/expressiveness	Free and Creative expression of ornamentation in interior and façade	Principled characteristics.

In retrospect, the both style of design and aesthetic elements and characteristics are practical and workable based on the epoch and available techniques. Nevertheless, from the above table, the aesthetic indicators distinctly show a complete transformation of traditional architecture to modern architecture with little or no unifying or connecting factor.

9. Conclusion

This paper has been able to assess the aesthetic of traditional and modern architecture in Yoruba land and how it transformed over time. It is therefore, obvious that factors like Urbanization, colluding cultural values, survivor of the colonial experience and adoption of western education made what is imported from other cultures part of what is now transferred through generations. This explains the reason of disappearance of the indigenous design of courtyard system and other aesthetic characteristics in building development, urban centers and settlement pattern in modern Yoruba land. There is very little or no nostalgic effect of the traditional style and even to the past. It may be said that the architecture is now too eager to jump into the future in the quest for modernity and neglecting the need to give consideration to the terrain, culture and climatic condition of the context and the need obviously incorporate elements that our ancestors aesthetically perfected and that worked! Granted, each style of Architecture has its own distinctive aesthetic design and values as shown from the above analysis; the both style can easily be synchronized so as not to completely forget city of the past which may eventually render the present city with no future too.

Therefore, it is necessary to emphasis the need to incorporate one into other or synchronized the both style of architecture in any architectural piece. For example, The court layout concept in traditional architecture reinforce respect for cultural values and preservation of family ties which is often destroyed completely in modern architecture design and layout system which equally lacks social interaction spaces and with its emphasis on individuality and solitude in it spatial organization; solitude destroys community spirit, encourages social disequilibrium through residential segregation. Social immoralities like crime, drug abuse, sexual, misconduct are often permeates and associated with such informal life exhibited in the urban centers where traditional life has been abandoned. The use of local materials like bamboo, mud, wood and the likes are well adaptable to context and does more so since the mud used in the wall plane is a good insulator in this relatively hot region. However there are shortfalls

and structural limitation of these materials and traditional aesthetic designs, but this can be improved upon as professionals are willing to re-connect with past in modern times with their design. Further research is opened on how this seemingly weak traditional aesthetic can be limitlessly used in modern architecture for optimum aesthetic value.

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