

Research article

TRANSFORMATION AND CONTINUITY OF ARCHITECTURE IN KADUNA CITY, NIGERIA, FROM 1900 – 2000

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ABSTRACT

Kaduna City was established by the colonial government in 1912 as an administrative headquarters. Since then, Kaduna has maintained its initial function as an administrative headquarters passing through various administrations; colonial, military and civilian respectively. The architecture of the town has passed through various transforming experiences. This paper reviews the context of the architectural development of Kaduna, from 1900-2000 identifying the factors that have shaped it, styles, elements of transformation and continuity and architects involved in the process. A questionnaire as well as structured interviews and building survey have been used to articulate opinions, perceptions and views of a carefully selected sample of respondents. The paper concludes that the major factors that affected the development of architecture in Kaduna city include its growth as primate city, diversity of people that flocked into the city in search of the opportunities, the choice of the city as an administrative headquarters, the work of the expatriate architects that laid the foundation and the indigenous architects that built on their works. Great transformation is seen in the progression from various

architectural styles from the neoclassical style of the colonial period to the enhanced modern/postmodern architecture of the 2000s while continuity manifests in the elements that appear in the traditional architecture such as dome and arches and in the climate consciousness of the plan with courtyards.

Keywords: Modern architecture, enhanced modernism, postmodernism, colonial, classical, neoclassical

1.0 INTRODUCTION

Kaduna city, which is located in Northern Nigeria has served as the capital city of the colonial administration in Nigeria in 1912 and subsequently as the capital of Northern Nigeria. This, along with its strategic location has attracted diverse inhabitants to the city. Consequently, its architecture has developed from the colonial architecture of the early 20th Century to modern architecture in the later part of the Century. The development of architecture appears to have been influenced by the history of the city. Spiritually, the factors of colonial architecture, as well as the desire to respond to weather pervaded in both institutional and residential architecture, whereas the response to modernism has driven a transforming of architecture.

This work identifies the lines of transformation and continuity in the architecture between 1900 and 2000. It attempts to establish the factors that have shaped the development of architecture and their relationship with the historical reality of the city. The period of 1900 to 2000 is chosen in order to give a wide latitude for the selection of samples. It is observed that from 1900 the production of buildings was largely along the dominant Neoclassical style brought by the colonialists. However, by the Seventies when Nigeria witnessed improved revenue, mobility became more and Kaduna city was one of the major destinations. The production of buildings became more intense (both institutional and residential). This continued to the end of the century and was subsequently, briefly interrupted by series of social and religious crises. It seems justifiable therefore to consider the period 1900 to 2000 for the work.

2.0 TRANSFORMATION AND CONTINUITY IN ARCHITECTURE

The two major concepts used are transformation and continuity. Transformation is defined simply as change. He (2009) surmises that “in nature there is an element of constant change, a relentless updating of the present condition”. This applies to architecture. Architecture is dynamic and thus vulnerable to time and change. The need for change comes as people seek new ways to adapt to their environment using the ever changing technology. Elgaard (2013) and Dormus (2009) point to the fact that the need for sustainability, globalisation and technology facilitate change. Dormus (2009) cites Hacıhasnolu (2005) that “architecture must anticipate transformations and focus on designing life and spaces of the future.”

The history of architecture is a history of change and transformation in styles, individual expressions, technology and desires. The architecture of major cities of the world experienced transformation at various periods. For example the architecture of Paris was predominantly classical in style until 1815 when neoclassical architecture

took

over.

Paris was hitherto thought to be a hub that does not change. From the Beaux Arts August Perret, with buildings such as Le Havre and Rue Franklin Apartments, to the modernist Le Corbusier who designed buildings such as Villa Savoye and Unite d'Habitation, and the postmodernists, Jean Nouvel, with postmodern buildings such as Tour Horizons and the RBC Design Centre, all helped to change the face of architecture in Paris. The city of London has had a traditional look until the works of Sir Norman Foster transformed its architecture drastically with buildings like the City Hall, Millenium Bridge, Canary Waff Underground Station, Moore House, 30 St Mary Axe. Renzo Piano's Shard, Richard Rogers' Lloyds Building, Leadenhall Building and Millenium Dome all contributed to the transformation of the architecture of London by breaking the conservative posture of the city's architecture to contemporary aesthetics.

Dubai is one of the cities that has witnessed great transformation in architecture within a few decades. In the 1960s and 1970s, Dubai was a town with few significant buildings. In recent times Dubai has witnessed a great transformation with buildings such as the Burj al-Arab Hotel, Dancing Towers by Zaha Hadid, and the Dubai National Bank. These technology based buildings have given Dubai the face of innovations and technological success.

Continuity is defined as a succession of flow, a coherent whole. The element of continuity as opposed to transformation exists in architecture. Continuity in architecture implies the maintenance of architectural identity. It is that thing that makes architecture of a place a conned whole; whether it is the recurrence of styles, of ideas, use of materials and concepts. Preservation and reuse are a part of continuity.

The aim of this study is to establish the relationship between the growth and development of the city and architecture. The main objectives of the study are to:

- i. Identify the nature of the development of Kaduna City
- ii. Identify the characteristics of some key public buildings
- iii. Categorise buildings according to typology
- iv. Identify styles and movements
- v. Identify architects that had major influence in shaping architecture in Kaduna

Following the Tucson Context Study (Evans & Jeffry, 2005), the major instrument of data collection was through building survey, documented by photographs, literature review and questionnaire.

3.0 DEVELOPMENT OF KADUNA TOWN

Bryant (2009) explains that the British took over the control of Northern Nigeria from the Royal Niger Company in 1900 and Sir Fredrick Lugard (later known as Lord Lugard) hoisted the union Jack at Lokoja, replacing the flag of the Royal Niger Company. Not satisfied with Lokoja as the capital Lord Lugard moved the capital temporarily to Jeba, later to Zungeru in 1902 and finally to Kaduna in 1917 because of its central location to all parts of the North, and moderate climate.

Kaduna town, unlike other major cities in Northern Nigeria, was set up by the British from an almost virgin territory as a garrison town to serve as the capital of the Northern Protectorate. According to Haruna (n.d.), after the decision to make Kaduna the capital, road construction to the area and other activities in preparation for the move had started in 1900. Kaduna was laid out as a grid pattern with houses well-spaced from each other and having a spacious compound. The town was planned to have a balance of its various functions as a government capital, military garrison and an industrial town (Lock, 1967). The administrative functions were located at the central core along with Government Reserved Areas (GRAs) and Africa Staff Quarters, the military function was mainly in the North and the industries to the south. The town thus attracted many settlers. From a population of 3,000 in 1991, 39,000 (1952), Kaduna grew to about 250,000 (1963), 1.3m (1991) and 1.65m (2007) (Falola, n.d and Haruna, n.d).

Kaduna experienced colonial architecture from inception. The first building type to be constructed was residential; built to house railway workers (describe them). The Niger Company subsequently established a trading station near the railway, and in 1928 a new Government House was built.



Old Government House (1928)

Other public buildings were built such as the Nursing Home in 1930, Technical Institute (1938), Sacred Heart (1940) and Queen Amina College (1949). The most outstanding building, Lugard Hall Complex was built in 1951, while the buildings that house the Secretariat were completed in 1953. The architectural landscape of Kaduna is dotted by all types of buildings; residential, institutional and industrial structures. It is therefore necessary to analyse these buildings from colonial to modern architecture to identify the trend, placing emphasis on the elements of transformation and continuity identified.



Lugard Hall (1951)



Secretariat Complex (1953)

4.0 MODERN ARCHITECTURE IN KADUNA (1900 -2000)

The main study was conducted through physical inspection of the buildings, review of existing literature and a questionnaire administered to a sample of practicing architects.

As earlier discussed, Kaduna from inception has been a centre of administration. It witnessed different administrations from the colonial to the military and the civilian administrations, each period witnessing differences in approach to architecture. Thus it is significant to see the architecture of Kaduna under the different administrations.

4.1 Kaduna under Colonial Administration (1900-1959) - Neoclassicism

Kaduna started as a colonial town established on almost virgin land and as a result was free from traditional architecture unlike other major towns in Nigeria in which the old cities which were walled and inhabited by the locals were isolated from the new cities which housed the colonial masters. Construction of buildings was started by the British colonialists in 1917 with the importation of designs and materials from Britain which were assembled in Kaduna. Many of them were residential buildings meant to serve the railway workers and British colonialist. Houses were also built to house workers of the textiles and civil service. The houses were built with spacious compounds and large verandas, with overhanging eaves to give shade from the harsh tropical sun.



I House No. 30 Yakubu Avenue (1930) to be respo House No. xx (1956)

were the Government House (1928), Trade Centre (1938), Lugard Hall (1952), Kaduna Club (1952), Institute of Trypanosomiasis (1951), Regional Secretariat (1951), Kaduna General Hospital (1957), Technical Institute (1938), Capital School (1957), Broadcasting House (1951). Kaduna Polytechnic (1959), Queen Amina College, QAC (1949), Kaduna General Hospital (Mental Hospital) (1956), Sacred Heart (1940), Nursing Home (1930). Early industries in Kaduna were the textile industries. These included the Kaduna Textiles Limited (1957), Arewa Textiles Limited and United Nigerian Textiles Ltd. Some of these buildings are shown below:



Nursing Home (1930)



Magajin Gari (1939)



Ahmadu Bello Stadium (1965)



New Nigerian Newspaper (1977)

Generally, the architecture of buildings between 1917 and 1959 was Neoclassical in style. The designs were linear expressive, simplicity of geometric form, use of columns, symmetrical balance and functionality. The Lugard Hall, arguably the most outstanding landmark in Kaduna, exhibits these characteristics and is aesthetically pleasing with a dome, arches and columns. The colonial architects designed in a style described as Tropical Modernism aimed at solving climatic problems using imported building materials.

4.2 Kaduna under Military Administration (1967-1979) – Simple Modernism

After the civil war, General Gowon in 1967 broke the country into 12 States with Kaduna as the capital of the North Central State under the first military administrator, Abba Kyari who administered the state until 1975. Usman Jibrin took over from 1975-1977, Muktar Mohammed 1977-1978 and finally, Ibrahim Mahmud Alfa from 1978-1979 when he handed over to the first civilian administration. This Military era saw the continuation of massive infrastructure with buildings designed in the style of modern architecture.

The major characteristics of modern architecture as summarised by Jones (2011), are lack of ornament, emphasis of rectangular forms and horizontal and vertical lines, low, horizontal massing, flat roofs, emphasis on horizontal planes and broad roof; use of modern materials and systems; use of traditional materials in new ways; emphasis on honesty of materials; relationship between interior spaces and sites; emphasis on open, flowing interior spaces; generous use of glass and natural light; use of sun shading to enhance human comfort.

In Kaduna, modern architecture was dominated by public buildings such as Federal Library Complex, Federal Secretariat, Ministry of Agriculture, Murtala Square, Kaduna State House of Assembly, Hamdala Hotel, Kaduna State Library, and public residential such as Malali and Barnawa Lowcost. The buildings respond to tropical architecture with emphasis on solving the harsh tropical climate as the main element of continuity with colonial Neoclassical architecture. Some examples are shown below.



Hamdala Hotel (1961)



Murtala Square (1977)



Kajuru Castle (1978)



Bank of Agriculture (1976)

Buildings in this period tended to be functional and conformed with modernism, which had reached Nigeria. The buildings had low roofs with parapet walls and were hooded to serve as protection from the sun. Economy was booming giving rise to new class of bourgeois who developed modest residential houses.

4.3 Kaduna under Civilian Administration (1980-2000) - Enhanced Modernist/Postmodernism

During the period 1980-2000, five (5) Civilian Administrators headed the government of Kaduna State; Abubakar Balarabe Musa (1979-1981), Abba Musa Rimi (1981-1983), Lawal Kaita (1983, October to December), Mohammed Dabo Lere (1992-1993) and finally Ahmed Makarfi (1999-2007). The civilian administrations were interrupted by the military from 1984-1992 and from 1993-1999.

During this period there was relative peace and period of prosperity and innovation. Businesses boomed and this offered opportunity for Nigerian Architects to participate in dramatically transforming the architecture of Kaduna. Generally low rise buildings were designed for institutional use and duplexes for residential. The architecture of this period showed clear, bold conceptual expression of modernism



Savanna Bank (1981)



Investment House (1982)



Federal Secretariat (1980)



Federal Library (1981)

Residential buildings adapted the neoclassical architecture of the colonial period in the exhibition of continuity. They were characterised by large patios with columns emphasised and stretching the whole length of the building.

The buildings mostly designed in an enhanced modernist style with emphasis on verticality, use of concrete and glass, application of building elements for sun-shading and the provision of cross ventilation. Examples are Savannah Bank, Investment House, NIDB Building and Ministry of Agriculture. Some of the buildings were Postmodern; sculpted, ornamented with unique exterior aesthetically pleasing, extravagant facades and unique forms. The Bank of Agriculture Building is a good example of postmodern architecture. Others include the Kajuru Castle, Geodesic Dome at the Kaduna International Trade Fare Complex and the Sultan Bello Mosque shown in the pictures below.



Assembly of God Church (1990)



Geodesic Dome, Kaduna International Trade Fair Complex (1997)



National Board for Technical Education Headquarters (1988)



Ship House Residential Building (1987)



Sultan Bello Mosque (1994)



Nigerian Industrial Development Bank (1983)

5.0 FIELD SURVEYS

As indicated, field surveys were used and the main source of data collection was questionnaires, structured interviews and building surveys.

5.1 Findings from the Questionnaires and Structured Interviews

A questionnaire aimed at establishing the opinion of respondents who are mainly architects who were thought to have been familiar with Kaduna City was distributed to respondents. In addition structured interviews were conducted with a sample of respondents who were selected on the terms of their length of stay in Kaduna City. Three tiers were considered, that is those that had lived for upwards of 50 years, below 50 years but more than 20 years below 20 years.

The following findings were made:

5.1.1 Administrative and Social

1. Kaduna was founded as an administrative headquarters of Northern Nigeria and since then, the function of the city has remained largely administrative.
2. Kaduna's favourable location at the centre of Northern Nigeria made it a centre of attraction to different people and caused an influx into the town.
3. The employment opportunities offered by the railways, the breweries, armed forces and government ministries was another source of attraction of people to Kaduna.
4. The most influential persons in Northern Nigeria owned property including houses and businesses in Kaduna.
5. Kaduna enjoyed relative peace before the late 80s and so attracted an inflow of people and businesses.

5.1.2 Architectural Development

1. Neoclassical Colonial Architecture dominated up to the late 70s with deep roofs, overhangs, thick walls, wood finishes, and climate consciousness.
2. After the 70s, modernism took firm roots, many of the wealthy settled in Kaduna, making it the operational headquarters of many companies.
3. From the 80s-90s there were intense religious crises that fragmented the city and stalled its growth leading to religious segregation in residential settlements, with Christians moving south of the city while Muslims stayed in the north.

4. 90s-2000 opened a window of peace thus bringing new innovations and competition in residential houses.

5.1.3 Contribution of Architects

1. Colonial Architects mainly from Britain were the first to shape the architecture of Kaduna with interesting buildings such as Lugard Hall, Ahmadu Bello Stadium, State Secretariat, Government House, State House, Nursing Home and so forth. Most of these buildings were designed to solve the problem of intense solar radiation with the application of sun-shading devices and motifs that reflected those used in traditional architecture such as domes, arches and open courtyards. The colonial architects wanted to retain the character of Neo-classical architecture as well as show some sensitivity to tropical architecture.
2. Indigenous architects who were trained by the colonial architects, took over from their colonial masters and have since then been helping to stir the architecture of Kaduna in a new direction in line with modern trends, achieving a blend between traditional and modern architecture. Some of the indigenous firms that influence architecture in Kaduna include ARCON Ltd, Habitat Associates, Interstate Architects, Multi-systems Ltd and individual architects.

6.0 ANALYSIS OF ARCHITECTURAL STYLES

A functional survey of buildings was conducted to capture buildings according with the administrative periods of the city. The architectural styles with which they were designed, were identified along with designers were possible. Below is an analysis of some selected buildings representing the Colonial Administration period 1900 -1959.

S/N	Building	Year of Construction	Architect/Contractor	Key Characteristics	Conclusion
1	Lugard Hall	1951	T.Scott Esq (FRIBA)&W. Corbett Esq (ARIBA)	Use of dome, arches and columns, utilitarian	Typical Modern/Neoclassical
2	Secretariat Complex	1950/51	C. Hayes Esq.	Columns and beams	Neoclassical
3	Nursing Home	1930	PWD	Use of arches, roof high pitched	Neoclassical

4	Kaduna North Local Government Secretariat (Magajin Gari)	1939	Undocumented Colonial Architects	Use of screen walls for sun shading	Tropical Modernism/Neoclassical
5	Colonial Residential House 30 Yakubu Avenue	1956	Undocumented Colonial Architects	High pitched roof, spacious rooms	Tropical Modern

From the above it might be concluded that buildings of this period were of the neoclassical style in view of their simple geometrical forms, dramatic use of columns, utilitarianism, and in some cases symmetrical.

An analysis of some selected buildings representing the Military Administration period 1960 – 1979 is shown below:

S/N	Building	Year of Construction	Architect/ Contractor	Key Characteristics	Conclusion
1	Hamdala Hotel	1964	Undocumented Architects	Medium rise , concrete and glass	Modern Architecture
2	Federal Library	1981	Adebayor & Adebayor Associates, Lagos	Two storeys, dramatic use of screen walls and hoods for sun shading	Modern Architecture
3	Murtala Square	1977	Undocumented Architects	Use of precast slanted columns as main structural members, emphasized facade	Modern Architecture
4	Malali Low Cost House	1977	Federal Housing Authority	Utilitarian, simplicity of materials	Modern Architecture
5	Kaduna Capital School	1957	Undocumented Architects	Dramatic use of screen to shade veranda	Modern Architecture

6	Kaduna State Library	1963	Undocumented Architects	Cantilevered upper floor, dramatic use of vertical screens for sun shading	Modern Architecture
7	Federal Government College Malali	1974	E.M.Michell etti & Sons Nig Ltd	Use of semi-circular form, concrete and glass	Modern Architecture
8	Ahmadu Bello Stadium	1965	Jane Drew & Maxwell Fry	Precast concrete columns and beams, use of screen wall for sun shading	Modern Architecture
9	New Nigerian Newspaper Building	1965	Godwin and Hopwood	Blend of circular and rectangular geometric forms, horizontal fins for sun shading	Modern Architecture

From the analysis above, it may be seen that buildings of this period tended towards the simple modernists style which as discussed, has simplicity of form, absence of decoration, honesty of material and other characteristics. Shading devices form part of the aesthetics.

An analysis of some buildings of the Civilian Administration period 1980 - 2000 is shown below:

S/N	Building	Year of Construction	Architect/ Contractor	Key Characteristics	Conclusion
1	Kaduna Trade Fare Complex	1997	Archcon	Structural - Geodesic dome of steel and membrane	Enhanced Modernism
2	NIDB Building	1983	Yusuf Mohammed Associates	Medium rise, concrete and glass, sculpted window hoods	Enhanced Modernism
3	Savannah Bank	1981	Archcon	Concrete and glass, sculpted window hoods, emphasized facade	Enhanced Modernism
4	Kajuru Castle	1978	German Architect	Sculpted, dramatic use of arches and vaults	Post Modern

5	Sultan Bello Mosque	1994	New Methods	Domed, arches, minarets well emphasized	Post Modern
6	Investment House	1982	Benna Associates	Medium rise, concrete and glass,	Enhanced Modernism
7	Bank of Agriculture	1976	Interstate Architects	Sculpted, dramatic use of vaults	Post Modern
8	Federal Secretariat	1990	Fola Alade Prototype	Medium rise precast columns, emphasized façade	Enhanced Modernism
9	NBTE	1988	Inter Design Partnership	Emphasis on pointed arch	Enhanced Modernism
10	CBN Staff Housing Estate	1988	Habitat Associates	Utilitarian low rise in concrete and glass	Modern

The analysis above shows that most buildings in the period reviewed had the characteristics of enhanced modern/postmodern architecture

It can be seen that architecture in Kaduna has experience transformation from the colonial era with its neoclassical architecture characterized by simple linear forms with arches, hoods and heaped roofs to the modern and enhanced modernism. These have transformed the cityscape of Kaduna completely. The low rise buildings have given way to medium rise buildings and resulting in the vertical outlook of the town. In general architectural growth has been relatively steady inspite of serious social and religious crises, bringing about and architecture of free expressions, clear and bold.

Continuity has been maintained through the use of structural elements such as the dome, arches and vaults, columns and beams to give external aesthetics. Plan shape has been defined by the need to provide natural cross ventilation and proper orientation of windows away from the direction of the sun. Sun shading devices and window hoods which have become a constant feature in their various shapes and sizes are used to provide shading from the direct solar insolation.

Residential architecture has undergone transformation from the simplicity and spaciousness of the Government Reserved Areas (GRAs) to the postmodern, sculpted palatial private residences of the rich with the Ship House being one of the outstanding examples.

7.0 CONCLUSION

The study has found out that Kaduna was established as an administrative town developed by the colonial governments and has passed through various administrations; colonial, military and civilian. Each of these administrations had an impact in the development of Kaduna City and by implication, its architecture. The colonial administration brought the Neoclassical Architecture which was modified to be responsive to the hot tropical climate using motifs from the traditional Northern architecture. These included domes, arches, hoods and columns. Residential houses were spacious with large verandas for outdoor relaxation. At this time most of the architects were expatriates. The military administrations continued along the line of the colonial masters and using expatriate architects to produce buildings which were more in line with modern architecture that had set in globally. Since the economy was better public buildings were more elaborate. However, residential buildings were more compact than what obtained in the colonial administrations. By the time democracy brought in civilian administration, there was an air of self-expression which made architects to explore new possibilities after learning from the expatriates. This brought about enhanced modernism with some of the buildings tending towards the sculptured postmodernist style. Thus there was remarkable transformation in the architecture of Kaduna City from neoclassical style of the 1900s to the postmodern style of 1980s stretching to 2000. There was a renaissance of neoclassical style in residential buildings, with emphasis on the entrance and the use of columns that spanned the whole height of the buildings.

While architecture has shown great transformation from Neoclassical style to enhanced modernist and postmodern styles, certain elements have remained in all of these styles showing continuity and giving identity to the architecture of Kaduna. External aesthetics have continually been defined by the use of structural elements such as columns, domes, arches, and sun shading devices. Plan shape is defined by the need for the provision of natural cross ventilation and orientation of windows away from the sun.

Being an administrative headquarters has made Kaduna predominantly a civil service town. Many government establishments exist and employ many workers in the army, police, hospitals, schools and ministries and parastatals. As a result most residential architecture were government quarters meant to house the civil servants who could not afford to build their own houses. Economy was therefore a factor that has affected the growth of architecture in Kaduna. The job opportunities caused an influx of different people, mostly from the North who brought in various styles of buildings, creating a diversity of styles and a rare unity amongst the residents. However this diversity was to become a hindrance in the growth of architecture of Kaduna city with a series of social and religious crises that led to the destruction of lives and properties, including buildings. This brought slow development of architecture as people feared that their investments would be destroyed. Crises in Kaduna have caused residential segregation along social and religious lines: the Christians generally live to the south and the Muslims to the North. Finally, technology and culture have prevented the town from growing vertically; Kaduna has few storey buildings with the highest being 10 storeys high. Even at that it has been difficult to maintain lifts for transporting people up. Despite this draw backs, there has been remarkable growth of architecture in Kaduna city within the period of the study.

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