



ARCHITECTURAL ICONISM AND URBAN REGENERATION IN NIGERIA: A CASE STUDY OF AGUIYI IRONSI MEMORIAL CENTRE, UMUAHIA

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Abstract

This paper examined Iconism as when a building itself becomes meaningful to a community, a region, a country or globally. The study focuses on iconism in architecture with key iconic components: scale, recognisable form, impact and lasting impression. Aguiyi Ironsi memorial centre, Umuahia should be able to convey the message of both heroic achievement of Late Maj. Gen. J.T.U. Aguiyi Ironsi. The architectural problems addressed in the course of this study include: the ability to create an iconic building that is instantly recognisable and the challenge of creating an aesthetically appealing structure that produces a "wow-effect". As a result the main objective of this research is: to examine the impact of architecture on the urban regeneration and growth of the city, the impact of architecture elements on iconic building, adopting local and sustainable building materials and methods that are unique and iconic to the people, the use of iconic building to improve the tourism of the city, to create an instantly recognizable structure with a lasting architectural heritage and using architectural iconography to create a symbol for Umuahia, Abia State. Data collected through primary and secondary source will be reviewed and used as bases for concept generation and analysis. A study of iconic buildings from different countries in the world is however carried out so as to bring to light elements of iconism in the various iconic buildings. On the basis of the findings, a memorial centre should however be symbolic in design and represent the iconic status of the man it is dedicated to using the principle of iconism: scale, recognisable form, impact and lasting impression which encourages sustainability and green innovation through the use of recycled building material thus making it unique and iconic.

Keywords: Aguiyi Ironsi, architecture, iconism, memorial centre, urban regeneration.

1.0 Introduction

Iconic architecture is a term used to describe a figure or structure as a landmark in a place that makes it instantly recognizable. Iconism is enhanced when a building itself becomes meaningful to a community, a region, a country or globally. Various cities have created buildings that capture the imagination to become a powerful tool in branding such towns. Such structures have managed to become iconic and are guided by the principles of iconism. These principles have been adopted by renowned architects in the creation of these iconic buildings with principles of iconism: scale, recognisable form, impact and lasting impression.

While discussing Burj Al, Arab Ludbrook (2002) stated that:

"Personal interpretations of the form can also aid in the lasting impression of a building. It would be seen that some of the most iconic buildings have at a point a metaphor attached to its ability to relate a building to something which helps us to remember the form and make them instantly recognizable".

Christopher Alexander, as cited in F. Stitt (1999) assets that:

"When you build a thing, you cannot merely build that thing in isolation, but must also repair the world about it, and within it and the thing which you make takes its place in the web of nature."

Cleo (2001) states that "Iconic architecture is a large-scale structure with cutting-edge design that is instantly recognizable to the general public. It should also be commissioned by a renowned architect".

From these comments, it could be deduced that the most discussed view is the principle of recognisability of iconic buildings. As such, cities have adopted the concept of iconism in the

branding and improvement of their city image, which has also served as a machine of investment in tourism and employment.

1.1 Statement Of The Architectural Problem

Buildings tell stories; their life span makes them better preservers of historical and cultural information. The Aguiyi Ironsi memorial centre is intended to be an architectural masterpiece that will tell the story of the man, Late Maj. Gen. J.T.U. Aguiyi Ironsi. There are problems associated with the design of a memorial Centre, which will be solved through this design. The major problems that may be associated with this design are the acceptance of the structure by the people as an iconic building, ventilation, circulation and security. But for the purpose of this research report, the major architectural problem that the study intends to solve is to portray and represent the personality of the national hero in the person of Maj. Gen. J.T.U. Aguiyi Ironsi.

1.2 Aim Of The Study

The aim of this study is to identify the language of architecture that would truly be iconic and at the same time represent the philosophy of the icon - Aguiyi Ironsi.

1.3 Objective Of The Study

As a result, the main objective of this research are:

1. To explore the language of Iconic architecture to immortalize the life of Maj. Gen. J.T.U. Aguiyi Ironsi and also the will in urban regeneration in Nigeria.
2. To explore the possibility of integrating iconic architecture on the design of a memorial monument for the people of Umuahia and Nigeria at large.
3. To combine monumentality and aesthetics to design a structure that will protect the life of Maj. Gen. J.T.U. Aguiyi Ironsi as a National Hero.

1.4 Motivation Of The Study

The incentive and motivation of this project stem from a personal desire to immortalize the name of a fallen hero who, in one way or the other, contributed his quota to nation-building and also to enhance urban regeneration in Nigeria. This will further encourage those who are currently serving both in the military, police or any other Para military whose work is to protect and defend the territorial integrity of this great nation, Nigeria.

1.5 Significance Of Study

The study will provide information for applying the principles of iconic elements in buildings and creating an iconic building that is instantly recognizable with a lasting heritage.

This study will thus break new grounds for the evolution of architecture, unique and native to the people, portraying the values statues of the late national hero, Major Gen. J.T.U Aguiyi Ironsi.

1.6 Scope Of Study

The study scope will be restricted to the study of iconism in architecture and applying the principle in the design of a memorial centre in Umuahia for Maj. Gen. Aguiyi Ironsi will accommodate the following facilities: Memorial (Museum) Facilities, Recreation Facilities, Multi-Functional Facilities and Administrative Facilities.

2.0 Literature Review

➤ **Iconic buildings an overview:** Cleo (2001:111) viewed iconic architecture as a structure representing the cutting edge design of a large-scale structure that will be seen instantly recognizable by the general public.

In public view, iconic buildings are those buildings that have specific features and are unique for a part of the world. The Big Ben Tower represent London, and Eiffel Tower is a representation of Paris, while the Great Pyramids are represent Egypt.

Over time, the features of iconic buildings have been changed. During each time period, the architecture of the building has special aspects. Therefore, the philosophical definition of an icon must communicate the sign to the object that it signifies. Iconic buildings have an impact on the community and the place in which they are created with their durable impression on all visitors of the place. Yildiz Emine (2018), identify a set of special characteristics elements that should be present in any iconic building. This list contains, but is not restricted to, Unique design, Large scale, High level, Specific message signified by the building.

However, the existence of an iconic building in its location inaugurates an endless circle of interactions and impacts. The place in which an iconic building is found is often identified by a special power, which is always carefully chosen for strategic purposes. The purpose of the building itself is not ever a separate feature of the iconic building, although the iconic building may provide its type for a long time.

According to Jencks (2006), an iconic building must give a strikingly new impression to viewers that might be caused by its height or shape or even its unique location. It should also be noticed that some cities create icons not only for the purpose of creating income but also to attract attention by creating an amazing landmark.

Anthony D. King, (2008) affirms that the iconic building may affect its environment by giving benefit to the place, which is already dominant. Creating a building with the natural characteristics of an iconic building will make it glow and emerge it to a higher status. The famous iconic buildings have a significant reputation mostly driven by the media, which attracts attention to the city and makes it well-known.

➤ **Early Modern Iconic Architecture :** Some iconic buildings that readily come to mind and are identifiable with some cities are as follows: Paris, the Eiffel Tower comes to mind, New York, the Statue of Liberty and Sydney, the Utzon's Sydney Opera House etc. All these buildings have become icons for their respective cities. What makes these buildings icons are their individual and highly recognizable peculiar designs, so when people see a picture of them, they know exactly what city they are identified with.

An iconic building must have the key components of iconism such as scale, recognizable form, impact and lasting impression. An iconic building could either be big or small; for example, the Guggenheim museum in New York is relatively small considering its context; however, the greater the size, the greater the impact made. Obviously, the use of the space is equally important; a well-designed building that is probably small in size can still make more impact than other buildings that are bigger in size. However, the use of scale can be vital when using the building as a symbol. This idea implies that for a building to be an icon, it has to be more than just a building: it has to expand into an idea or symbol.

An iconic building, Jencks argues, is an unstoppable feature of the new paradigm in architecture, and metaphases' are one way by which the gene is to be Arbitrated. Tracing the appearance of the icon from early examples such as the AT & T building and Sydney Opera House to the assembly that has risen since the Bilbao Guggenheim Museum, Jencks is never afraid to deliberate a building in terms of its figural associations.

Unlike so many architects and critics, for Jencks, the icon is not a regrettable development in contemporary architecture. Rather than hollow, egotistical formalism, it represents a freeing of the

imagination; it is the inevitable generation of a new symbolic language in the absence of religion or any prevailing ideology. As architecture's pre-eminent trend spotter, Jencks wants to write the rules of the icon. It is time for him to tell us what it is and what makes a good or bad one. He tries to be dispassionate, but then this will happen: "This rocket inspires a kind of cosmic awe that makes Christianity look a bit like yesterday's faith".

The iconic status of a structure relies on physical elements and representational elements. These physical elements, such as design principles of space, scale, proportion etc., building materials and technology, and urban design principles, help to create the physical presence of an iconic structure. Essentially, icons are images with which people associate. These images are used to have a psychological effect on society. They have the power to manipulate, intimidate, inspire and unite people and therefore provide identity to many different spheres of life, social, political and economic (Sudjic, 2005).

Moreover, iconic buildings are capable:

Providing higher wages for operational employees mainly due to the fact that iconic buildings are homes for "more prestigious" businesses with better work conditions.

Positive impact on revenues generated by the building construction and its operation.

Greater contribution to the local government budgets in the form of taxes and duties.

Capability to attract more investments and other resources to the local communities. For example, universities see great potential in having an iconic building as a part of their campuses. Signature buildings not only make campuses prettier and provide a place "to remember forever" for their students but also become facilities that increase the university's reputation, boost enrolment, and so tuition fees.

Among key indirect economic impacts, it is worth highlighting the following aspects:

Additional employment in manufacturing for the businesses or organizations in the iconic buildings.

Improvement of the urban infrastructure and employment generated by its development.

Revenues generated from businesses located around iconic buildings. For example, hotels and restaurants in the areas near the Seattle Public Library, the iconic building of Seattle, noticed a boost in their sales in the first eight months after the library's opening.

Better image for the businesses located in the iconic building and boosted motivation of the employees working in such a building. Businesses that move to iconic buildings might pay much higher rents per square meter than they would pay to occupy the space in a traditional building.

➤ **Iconic Architecture And Tourism :** Architecture today is accountable for a great part of the tourism industry. Egypt is symbolized by its pyramids, India is symbolized by the Taj Mahal, and France is symbolized by Eiffel Tower. But what is it that makes a structure so iconic that the public will go to travel miles just to visit it?. Agreeing to the magazine Malaysian Business, there are several key factors that cause a structure to be iconic. These include forms, concept, meaning that a structure is "architecturally brilliant" and unique", innovation, reception (become a tourist attraction) and sustainability.

➤ **City Branding And Iconism :** Buildings and built infrastructure have power and tangible symbolic value. Throughout history, monarchs, governments, churches, businesses and soon have attempted to use the iconic power of buildings to suit their own purposes. By accident and by design, various places have managed to create buildings that capture the imagination to such an extent they become the most powerful symbol of what the place stands for.

Architecture plays an important role in urban I regeneration projects and place marketing, and in this sense, architecture becomes a form of advertising. According to Crilley (1993), architecture is an integral part of the incorporation of cultural investment and policy into urban growth strategies as cities struggle to attract inward investment.

➤ **Iconic Or Signature Buildings As Branding Strategies :** As mentioned above, iconic or signature buildings are often used as marketing tools to express and symbolize new urban images. This trend is starting to take hold in Nordic cities or municipalities. Recent examples in the Nordic

countries include the newly built Opera House in Copenhagen, the redevelopment of the Oslo harbour around a new opera house and the Turning Torso' in Malmo. These projects have attracted tremendous national and international media coverage during planning and construction phases.

3.0 Methodology

The primary data were collected by the author via interviews, case studies and physical observations.

3.1 Primary Data collection

Some existing Memorial Centres were visited E.g Shehu Musa Yar'Adua Center, Abuja Nigeria and data were gathered by interviewing the staff of higher cadre and also going through deliberate observation.

3.2 Secondary Data Collection

The secondary data collection method was used to collect information from the internet sources, literature materials, to have a better knowledge on how to improve during implementation of proposed project.

4.0 Data / Design Presentation and Analysis

4.1 Geography of Umuahia

Umuahia, Abia state's capital city is located in the middle of the state. The State Capital Territory Umuahia North is a Local Government Area of Abia State, Nigeria. Its headquarters are in the city of Umuahia. It has an area of 245 km², which is about twenty times the size of Abuja, the capital of Nigeria. Umuahia capital is bounded on the north by Isukwuato LGA, on the west by Umunneochi LGA, on the east by Ikwuano LGA, and on the south by Isiala Ngwa North LGA. Umuahia is in tune with nature with gentle hills, plain lands and other distinguishing features that makes it a delight to behold. This marriage of nature has ensured that Abia capital is endowed with fertile land for agriculture and at the same time a yearly climate that is neither too hot nor too cold. Its Southwest area has the lowest elevation where flood plain of Im River is at an elevation of about 70m above sea level.

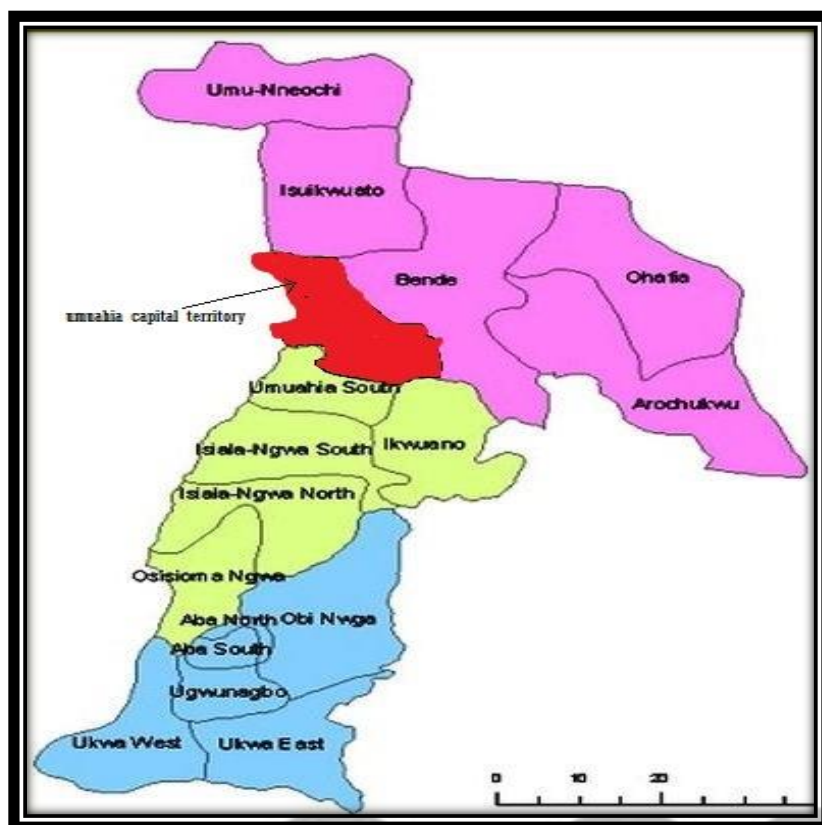


Fig. 1 Map of Abia state Showing Umuahia state capital

Source: www.fao.org (2021)

4.1.1 Geology, soil and land capability

The two main types of soils in Umuahia are the sedimentary belt in the southern and south-western extremities of the territory and the pre-Cambrian Basement complex rock country which accounts for more than 30 percent of the territory. The sedimentary formation, and also abundant river sand from Imo River crossing the expressway between ofeme village and Umuagu, consists mainly of fine-grained sands with inclusions of grits, siltstone and clay soil and the Basement complex consists of a wide variety of rock types which can be seen around Ohuhu villages naturally abundant. The presence of such finely grained stones endows the landscape of some part of the capital city.

4.1.2 Temperature And Relative Humidity

Table 1: Mean Temperature and Rainfall, Mean Number of Rain Days.

Month	Mean Temperature ⁰ C		Mean Total Rainfall (mm)	Mean Number of Rain Days
	Daily	Daily		

January	20.4	34.7	1.7	0.1
February	25.5	36.8	5.4	0.2
March	24.3	36.9	11.3	1.3
April	24.7	35.6	62.8	4.2
May	19.5	32.7	134.1	9.4
June	18.3	30.6	164.2	12.3
July	21.9	29.1	217.5	14.0
August	17.7	28.9	262.7	15.9
September	17.5	30.0	253.4	15.9
October	21.4	32.0	103.2	8.0
November	15.7	34.4	3.7	0.3
December	15.5	34.6	1.2	0.1

Source: World Metrological Organization:worldweather.org (2011)

4.2 Site location analysis

Umuahia lies roughly between longitude 050 31' North and on Latitude 070 31' East. The proposed site is located in Okwuta isieke ibeku. The ikot ekpene Express Way provides the major access into the site. From ikot Ekpene road to secretariat/ CBN linkway leads to the new government house where the site is located. The site lies 5° 26.16 "N and 5° 37.86 "N of the equator and 7°23'.46 "E and 7°36'.46 "E of the Greenwich Meridian.



Fig 2. Map of New Umuahia in state capital Territory with the chosen site marked out in Magenta.

Source: Google earth search 2021

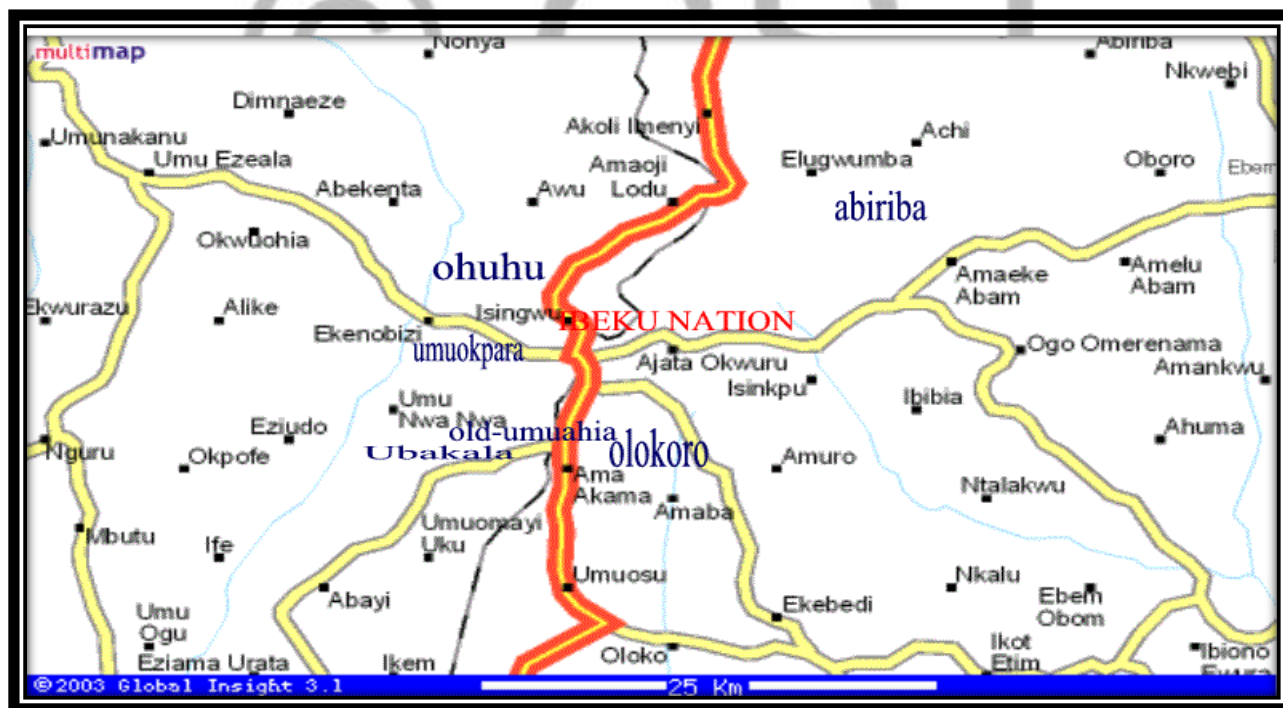


Fig 3 Map showing roads in Umuahia from other towns

Source: Google search 2021

4.3 The Site Study

- **Climatic Analysis: Rain Forest Zone (Humid):** The wet season starts in April and stays till October, with yearly rainfall changing from 1,500mm to 2,200mm (60 to 80 inches). An average yearly temperature exceeding 20 °C (68.0 °F) makes an yearly relative humidity of 75%. With moisture reaching 90% in the raining season. The dry period experiences two months of Harmattan from late December to late February. The warmest months are among January and March.
- **Temperature and Humidity:** Highest average monthly is 29 °C and occurs in March. The lowest is 20 °C which happens in August. In Umuahia, high temperature is prevalent; the mean average annual temperature above 20 °C. A temperature of about 35 °C occurs around February and March, which is the highest average monthly temperature. The lowest average monthly minimum temperature of 20 °C occurs around December or January.
- **Site Vegetation:** The Vegetation presently on the proposed site is grassy. There are some low trees on the site as well as shrubs and grasses all over the site. The soil appears firm and strong. The proposed site falls within the rain forest zone, which is characterised by thick forest; this is seen around the proposed site in okwuta isieke which is the host community of the proposed memorial centre.
- **Site Topography:** The natural slope of the site readily falls towards the southwest axis when a section is cut across the site.

4.4 Effective design solutions to the climatic zone

- **Rain forest Zone: (Umuahia)** The climate of this region, requests design results that can vitiate cold and raw winds while providing a cool interval from the intense heat of the mid-day sun and coldness after rains at night. The impact of solar heat is massive and has to be resisted within achieving comfortable room temperatures. Temporarily, the main plan and design task in this region is to decrease the influence of solar fallout vis-à-vis heat gain, glare and cold as a result of prevalent rains in the area.
- **Ventilation:** Though, it is essential for ventilation in this zone, but it is not a main design attention as seen in the northern zone of the country. Agarwal and Komolafe (1983) viewed that the effort should be made to reduce the inflow of air into the structure because inflow air introduces sand into the building interiors.
- **Forms and Orientation - Site Planning:** The design of buildings should be compact and inward-looking. These should be minor in order to attain full shading and maintain coolness inside the compound. Air movement is not a precondition for comfort.
- **Choice of Appropriate Construction Materials:** The choice of suitable building materials is vital in Architectural design. Opoko (2001) supports that good information of thermal properties is essential before collection of materials for this zone. What is vital are materials which can reduce heat transmuted into the structure interior, this is owing to the detail that the planned site is sitting in an open place where it is bounded by coal tar roads which in no small measure causes heat transfer to buildings because of solar radiation. These are fundamentally materials, which are poor anodes of heat or have decent reflective abilities. Also worthy of note is to use building materials that will

protect and shield the building away from excessive rainfall which the zone is characterised with. The abovementioned had clarified why mud has been used indigenously for barriers and walls in hot Northern and in some southern Nigeria, because of its hotness resisting properties.

- **Possible Psychological Impact Of The Building On The People Of Umuahia:** Psychology is the technical study of the behaviour and mind. Psychology is a complex discipline and includes many sub-fields of study, such areas as human growth, social behaviour, clinical, sports, cognitive processes and health. Every building has a statement to make, the response of the people to it, how and what they think about it; the main purpose of this study is to find a way through architectural means to solve the problem of memorials in Nigeria through the study of iconism.

The innovative architectural buildings, which is known as an iconic building, has a key role in identifying and creating a new perception of a place. In fact, to design the iconic building and create the place has a significant relationship to each other. Architecture as a mother of art is a tool that is used to create places, making them meaningful and beautiful. The iconic buildings are the innovative achievements of architecture that design human places.

The theory of the philosophical definition of an icon must relate the sign to the object that it represents. This innate relationship presents the simple notion that icons habitually have some factors in common with the things they represent. The research considered an architectural context realized that an iconic building stands out from the city with a conspicuous form and style, and sometimes in high contrast with its surrounding. Related to the iconic definition, aesthetic is the basic aspect that has been examined through other particular characteristics of iconic buildings such as uniqueness, concept, innovative design, symbolic values and also the time when they were built.

4.5 Site Selection Criteria

- Availability of road providing quick and easy access into the site.
- Availability of land within the area, which provides for expansion for the project and the related activities attracted by the Memorial center.
- Availability of public utilities and infrastructure.
- The site is a virgin land and will be accessed through ikot expense, Express Way.
- The site is close to the New Government House Umuahia.
- The site is mapped out for institutional and public function.

5.0 Interpretation And Discussion Of Findings / Design Discussion

5.1 Synthesis And Design Concept

Concepts play a vital role in the growth of original design solutions for numerous architects and engineers. Even though there is no harsh distinction between the method of production and the method of explanation of designs, an "intended" explanation usually guides the movements of the designers. Concepts are used to frame some general design approach.

Concept development is a procedure determined by a set of idea and target product stipulations, which are then transformed into a set of conceptual designs and potential technological answers.

These solutions represent an approximate description of form, working principles, and design features.

5.2 Design Concept

Concept in architecture refers to the central idea used to solve the problems in the design. Although there are various approaches to architectural concepts, they all seek to achieve a common result, which is to communicate the functionality of the design.

The Nigeria armed force is a major part of Nigeria history from the era of colonialism to this new era of independence. Owing to the uniqueness of the military especially the Nigeria Army, this Memorial Centre is proposed in honor of one their fallen Heroes who was the first Military head of state, in the person of major gen. J.T.U. Aguiyi Ironsi.

5.3 Circulation/Way Finding In Architecture

Good architectural wayfinding design is significant to general design because it enables user access, increases approval, and decreases the stigma and separation of users with disabilities.

Legibility of space: Ease of use in organizing visual information in space into a coherent basis for action.

Boundary: The separation between the interior and exterior space.

Clear articulation

Coherent grouping

Integrated communication systems:

Objective	Components	Elements
Clear articulation and coherent grouping of exterior and interior spaces.	Shaping site and setting	Landscaping, beaming Roadways, entrances/exits Pedestrian routes sidewalks, pathways
	Building form and architectural features	Building form Building volumes Physical separation or clustering of components Roof design Placement of openings Cladding (skin) - textures, materials, Colors Decoration, ornamentation
	Articulating interior spaces	Programmatic organization Defining spatial units Defining destination zones Interior design

Creating legible circulation systems design	External and internal circulation systems	Design concepts (paths, markers, nodes/ intersections, edges/links) Approach from street Roadways Parking External paths and walkways Entrances and exits Connection to mass transportation
	Level change devices	Elevators Staircases Escalators
	Internal transportation	Mobility aids People movers Fixed rail systems
Integrating communication systems	Information way finding design	Environmental graphics Sign systems Orientation devices You are there maps Real-time information devices

Table: 5.3 Summary of way finding in Architecture

Source: DESIGN RESOURCES DR-01 Architectural Way finding (Susan Hunter, Ph.D., M.Arch. IDeA Centre, University at Buffalo)

5.4 Psychological Impact Of The Building On The People

Psychology is the technical study of the behaviour and mind. Psychology is a complex discipline and includes many sub-fields of study, such areas as human growth, social behaviour, clinical, sports, cognitive processes and health.

Every building has a statement to make, the response of the people to it, how and what they think about it; the main purpose of this study is to find a way through architectural means to solve the problem of memorials in Nigeria through the study of iconism.

In the process of designing a building or in the programming of a design problem, there is no one specific point or order that the designer should think about concerning the psychological aspects of building. Utilizing the knowledge at any time that a designer is designing a building most put into consideration the following below;

- The manner in which a person reacts to a building and its environment
- The manner in which he acts on it.

5.5 Study On Iconism In Architecture

In defining iconism in architecture, an iconic design is typically a design that is 'crushed breaking' and one that sets new standards in its field. It is a design that extra designers and manufacturers follow, as it develops a bench mark for other similar products. Furthermore, an iconic design is one

that attitudes up to the test of time, lasting good design, notwithstanding the passing of years, decades and even centuries.

When someone mentions New York, London, Paris or Sydney, like many people you'll immediately associate the city with its famous structures – the Empire State Building, Tower Bridge, the Eiffel Tower or the Sydney Opera House.

5.6 Design Contribution

This research work is focused on immortalizing fallen heroes in the Nigerian military through architectural means. Iconism in architecture is that which is widely accepted as an icon. The design will strike out to stand as an icon for a Memorial Centre in Nigeria and help in urban regeneration in Nigeria.

Conclusion And Recommendation

The innovative architectural buildings, which is known as an iconic building, has a key role in identifying and creating a new perception of a place. In fact, to design the iconic building and create the place has a significant relationship to each other. Architecture as a mother of art is a tool that is used to create places, making them meaningful and beautiful. The iconic buildings are the innovative achievements of architecture that design human places.

The theory of the philosophical definition of an icon must relate the sign to the object that it represents. This innate relationship presents the simple notion that icons habitually have some factors in common with the things they represent. The research considered an architectural context realized that an iconic building stands out from the city with a conspicuous form and style, and sometimes in high contrast with its surrounding. Related to the iconic definition, aesthetic is the basic aspect that has been examined through other particular characteristics of iconic buildings such as uniqueness, concept, innovative design, symbolic values and also the time when they were built.

The design will represent one of the major symbols of the military, which is the military hat. To achieve an iconic structure, society must accept it as an iconic building.

As a further step, to discover the theory to create a significant iconic building as an architectural tool to advance the perception of a place and society will be considered. The thesis explored the phenomenological approach of architecture and an iconic characteristic via a place attributes to create a new perception to do an excellent design that would represent all the efforts of our past and present heroes, especially the armed forces, in keeping the unity and sovereignty of the nation intact.

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